



Carno III Tip Height Extension

Further Environmental Information
July 2020

VOLUME 3 of 3
NON-TECHNICAL SUMMARY

Prepared by



Preface

This Further Environmental Information (FEI) has been prepared by Natural Power Consultants Ltd., on behalf of Amegni Renewables Ltd. in accordance with the statutory procedures set out in the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017. The FEI supports the formal Section 73 application for the Carno III Wind Farm Tip Height Extension (THE) and associated infrastructure, Near Carno, Powys, Mid-Wales, which has been prepared for Powys County Council (PCC) under the Town and Country Planning Act 1990 (as amended).

The full FEI comprises the following:

Volume 1: Presents the main written statement of all the further environmental assessments undertaken, and appendices to support the written statement.

Volume 2: Presents the supporting figures and all the visualisations/viewpoints for the landscape and visual assessment of the proposal.

Volume 3: Presents the key information in the bilingual Non-Technical Summary,

Due to Covid-19 restrictions a hard copy will not be available for viewing, as agreed with Powys County Council.

The Section 73 application and supporting documents will be available for viewing on the Powys County Council website using their online 'Search for Planning Applications' facility.

Electronic copies on DVD can also be obtained from Natural Power Consultants Ltd., Harbour House, Y Lanfa, Aberystwyth, Ceredigion, SY23 1AS

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Further Environmental Information, Environmental Statement and Supplementary Environmental Information in PDF file format on DVD £25

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Document History

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List of Abbreviations

Abbreviation	Description
AIL	Abnormal Indivisible Loads
CEMP	Construction Environmental Management Plan
EIA	Environmental Impact Assessment
ES	Environmental Statement
FEI	Further Environmental Information
HGV	Heavy Good Vehicle
LVIA	Landscape and Visual Impact Assessment
MW	Megawatt
NRW	Natural Resources Wales
NTS	Non-Technical Summary
PCC	Powys County Council
PMP	Peat Management Plan
SEI	Supplementary Environmental Information
TMP	Traffic Management Plan
VP	Viewpoint

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1 INTRODUCTION

Overview

- 1.1 This Non-Technical Summary (NTS) summarises the key findings of the environmental studies presented in the Further Environmental Information (FEI) report in relation to the proposal for an increase in turbine tip height at the Carno III Wind Farm.
- 1.2 The original planning application which included an Environmental Statement (ES) was submitted in July 2010, and the layout consisted of 18 turbines. Supplementary Environmental Information (SEI) was submitted in July 2015 with a reduction in turbine numbers from 18 to 13, with no change to turbine dimensions proposed.
- 1.3 Carno III Wind Farm gained consent in May 2017 by Powys County Council. The Carno III Wind Farm (hereafter referred to as the 'consented development') comprises of 13 turbines with a maximum tip height 126.5 meters (m) and a potential capacity of 41.6 Megawatt (MW). The consented development includes external transformer housing, site tracks, crane pads, foundations, underground electricity cables, a permanent anemometry mast, substation, borrow pits, temporary construction and storage compounds and associated works/infrastructure.
- 1.4 The Carno III Wind Farm Tip Height Extension (hereafter referred to as the 'proposed development') proposes an increase in tip height for all 13 turbines from 126.5 m to 149.9 m.
- 1.5 The applicant, Amegni Renewables Ltd. is seeking to increase the height of the turbines to maximise the wind farms efficiency. Since submission of the original application in 2010 there has been considerable change in the onshore wind market. Following the removal of subsidies (Renewable Obligation Certificates), there is an increased need for onshore wind farms to maximise their efficiency and compete in an open market place. Therefore, larger more productive turbines that maximise energy yields need to be considered typical in today's market. As set out by the Cabinet Secretary for Environment (at the time), Lesley Griffiths, a target has been set for Wales to generate 70% of its electricity consumption from renewable energy by 2030. Carno III Wind Farm has the potential to contribute to this target set for Wales but can only contribute if it is financially viable to do so.
- 1.6 This FEI has been prepared for Powys County Council (PCC), in support of a Section 73 application submitted by Amegni Renewables Ltd. for an increase to the turbine tip heights. The number and the location of the consented turbines will not change. The proposed development would differ from the consented development by increasing the tip height of all 13 turbines from 126.5 m to 149.9 m, with associated increase in hub height and blade length proposed. As a result of the larger turbines being proposed, the changes below are also proposed as part of the Section 73 application:
 - Increase height of permanent anemometer mast from 80 m to 90 m;
 - Increase in area for crane pads from 40 m x 20 m to 70 m x 50 m;

- Increase in turbine foundation from 18 m wide base, to 28 m ; and
 - Some additional widening works to the on-site access tracks.
- 1.7 In addition, the following proposed changes are included as part of a separate Town and County Planning Act application:
- Creation of new access track near Pontdolgoch within agricultural fields, approximately 1,546 m length for use of Abnormal Indivisible Loads.
 - Further modifications to route from Carno village to site to accommodate larger turbines.
- 1.8 The access modifications listed, although subject to a separate application and not the Section 73 application, they have been considered in this FEI as they are associated with the wind farm and therefore assessed in this updated Environmental Impact Assessment (EIA).
- 1.9 An alternative off-site grid connection is also proposed, and because of the nature of the works required, this was scoped out of the FEI. Indicative candidate turbines are being considered at this time with component parts, which include hub heights ranging from approximately 83.9 m to 92 m and rotor diameters of approximately 115.7 m to 132 m. The overall indicative capacity of the wind farm is expected to be no greater than 48 MW due to grid restrictions.
- 1.10 A map showing the turbine layout and the above mentioned infrastructure is presented in Figure 1 at the end of this document.

2 APPROACH TO ENVIRONMENTAL IMPACT ASSESSMENT

- 2.1 In order to apply to vary planning conditions for the consented wind farm an Environmental Impact Assessment (EIA) has been undertaken to provide further information to identify the potential significant effects as a result of the increased tip height. The FEI sets out the results of the EIA process and is a detailed document that looks at how the proposed variations will affect the site and the area around it. For the proposed Carno III Wind Farm Tip Height Extension, the EIA can be divided into following stages:
- 2.2 **Stage 1 – Understanding the site:** As the Carno III Wind Farm is a consented development there was a substantial knowledge base available for the site. The first stage of the work, therefore, involved a review of the available information and obtaining an understanding of the potential changes to previous assessments arising from an increase in the turbine tip heights. This included basic information available for the site and information gathered during visits to the site/area.
- 2.3 **Stage 2 – Scoping the assessment work:** The next stage involved Natural Power and their specialist consultants preparing a scoping report and obtaining scoping opinions from the relevant public bodies, including PCC, Natural Resources Wales (NRW), Cadw amongst others, to agree the scope for the FEI report to support the application.

- 2.4 **Stage 3 – Gathering of Existing Data:** Once the assessment work was agreed, Natural Power and the specialist consultants then set about gathering existing survey information, reports and information for the site and surrounding area.
- 2.5 **Stage 4 – Further Survey Work:** Further specialist survey and assessment works were undertaken to add to existing assessments and understand the potential effects of increasing the turbine tip heights at Carno III Wind Farm.
- 2.6 **Stage 5 – Impact Assessment:** The final stage involved completing assessments and considering the effects arising from the increase in tip heights and other minor infrastructure modifications of the proposed development. The EIA process looks at the size and significance of these effects, whether and how they can be mitigated, and how they are balanced against the benefits of the wind farm.

3 PROJECT DETAILS

Site Location

- 3.1 The application site is located on land south of the operational Carno I and Carno II wind farms. The proposed development lies south-west of the A470 and Carno village. The proposed site is located within Powys and the local planning authority is Powys County Council. Vegetation cover is a mixture of coniferous forestry, improved upland farmland, and smaller areas of acid grassland and peatland. The habitat value of the area is generally considered to be low with some discrete areas of higher value; however these higher value areas have been avoided for infrastructure placement.

Project Description

- 3.2 The layout of the proposed wind farm and associated infrastructure is shown in Figure 1. The key components of the proposed Carno III Wind Farm include:
- 13 wind turbines with an overall height to blade tip of up to 149.9 m;
 - Foundations 28 m base;
 - Crane pads adjacent to each wind turbine (70 m x 50 m);
 - External transformer housing;
 - Site tracks (new and upgrading of existing);
 - Underground electricity cables;
 - A permanent anemometer mast (up to 90 m high);
 - Borrow pits;

- A substation building (contain the switchgear, metering, control and communication equipment required to operate the wind farm) and compound area; and
 - Temporary construction and storage compounds and associated works/infrastructure.
- 3.3 The turbine locations remain the same as the consented layout, as do the substation, control building, borrow pits and construction compound and facilities. (see Figure 1). The proposed larger turbine size would result in an increase in civil infrastructure requirements with regards to crane pad area and turbine foundations, compared to the original proposal. The requirements provided for the tip height extension are an estimate of what is typically required for the turbine models being proposed. Crane pad area for the tip height extension may be approximately 70 m x 50 m (previously 40 m x 20 m) and turbine foundations may be approximately 28 m wide (previously 18 m). Access tracks remain in the same locations, however some minor modification to track widths (e.g. slight further widening on corners etc.) is proposed.
- 3.4 Micrositing allows the exact turbine location and infrastructure positioning to be modified post-consent, following detailed ground investigation and ground clearance. Planning condition 14 of the existing consent requires a micrositing protocol to be agreed with PCC to minimise the development's impact on environmental or engineering constraints, restricting movement to 50 m from the location shown on Figure 1.
- 3.5 The total permanent (25-year operation period) land take of the proposed Carno III Wind Farm, after completion of reinstatement measures, including foundations, control building, crane pads and site tracks has been assessed to be approximately 159,012 metres² (15.9 Hectares).
- 3.6 The proposed access route for the delivery of turbine components, transformers and the cranes would be via A470 exiting the highway onto the existing private road entrance, west of Carno village, using the existing road networks surrounding the site, which is a similar route used for the consented wind farm, and the same as that used for the construction of Carno I and Carno II Wind Farms. The difference being utilising the newly built Newtown bypass and creating a new access route corridor to avoid Bontdolgoch which will be dealt with via a separate planning application (although considered in the FEI).
- 3.7 In line with the consented development, the route from port to site will be defined in a Traffic Management Plan (TMP) to be agreed prior to construction of the wind farm. It is anticipated that all turbine components will be delivered following the majority of the consented route with the addition of the newly constructed Newtown bypass (avoiding passage through Newtown), and a diversion on to 3rd party private land, via a field off the A470 and Wig Lane to avoid the restrictions at Pontdolgoch railway bridge.

4 SUMMARY OF ENVIRONMENTAL ASSESSMENT

- 4.1 In carrying out and presenting the results of the specialist surveys and assessments within the FEI Report, care has been taken to adopt a worst case scenario approach, to ensure that environmental effects are not underestimated. Unless noted, the sections have been prepared by Natural Power Consultants Ltd.

Landscape and Visual Impact Assessment

- 4.2 With reference to Section 6 of the FEI a detailed Landscape and Visual Impact Assessment (LVIA) was updated by independent landscape architects, SLR Consulting Limited. It should be borne in mind that all significant landscape and visual effects identified are temporary in nature and would be reversible. A summary of the findings of the LVIA is presented below.
- 4.3 A Zone of Theoretical visibility map was prepared and illustrates that only a number of limited areas of additional visibility within the 15 km study area as a result of an increase in blade tip height from 126.5 m to 149.9 m.
- 4.4 A total of 13 viewpoints were selected through consultation with NRW, PCC and Enplan and considered in the FEI. The viewpoints are located within a 15 km study area and were assessed in order to determine any incremental effects on visual amenity as a result of an increase in blade tip height from 126.5 m to 149.9 m.
- 4.5 The viewpoints (VPs) assessed in the FEI were:
- VP 2, Mynydd yr Hendre, Cwm Llwyd – Text review only.
 - VP 3, Carno Recreation Ground
 - VP 4, A470 Caersws Basin
 - VP 5, Unclassified Road, Bryn Crugog
 - VP 7, East of Trefeglwys
 - VP 9, Llawr y Glyn
 - VP 10, Bryn y Fan, near B4518
 - VP 12, Public Right of Way, North of Llangurig – Text review only
 - VP 14, Glyndwr's Way, Hafren Forest
 - VP 17, Glyndwr's way, Penycrocbren
 - VP 18, Unclassified Road, Lluest Dropyns
 - VP 19, Allt Ddu, Trannon Moor
 - VP 25, B4518 Pennant
- 4.6 Visualisations from selected viewpoints have been produced and included in Volume 2 of the FEI. Out of a total of 13 viewpoints considered in this FEI, 11 significant visual effects were identified in the SEI for the consented development (including different receptors at the same viewpoint). There is no change to the total level of visual effects that would occur as a result of the proposed development and therefore the larger turbines are not predicted to give rise to any higher levels of significance of effect than the consented turbines.

- 4.7 Assessment of effects at viewpoints concluded that there would be no changes in magnitude of change between the consented development and overall magnitude of change, therefore no changes in significance would occur to the various visual receptors e.g.; road users, walkers or residents identified for the consented development.
- 4.8 The detailed FEI assessment of effects on landscape character identifies the additional magnitude of change from the turbines varies from Negligible to Slight, and in all cases, the overall effects on landscape character is not considered to be greater than the effects identified in the SEI for the consented development.
- 4.9 When considering the assessment of effects on landscape fabric, although there is a quantifiable change in the disturbed area (from larger foundations etc.), this would result in a minimal change to the overall effect on landscape fabric and not alter the level of landscape effect recorded for the consented development.
- 4.10 The landscape effects on Caersws Basin and Clywedog Valley, both Landscapes of Special Historic Interest (LSHI), would be no more significant than what was assessed in for the consented development. Additional magnitude of change from the proposed development would not be sufficient to increase the significance level of the consented effects.
- 4.11 The proposed development would not cause an increase in the level of significance of landscape effects on Historic Parks and Gardens at Gregynog and Plas Dinam from what was reported for the consented development.
- 4.12 It is predicted that the effects on landscape designations within the 15 km study area, would be the same level of visual effect as the Moderate magnitude assessed in the SEI for the consented development and therefore would remain valid for the proposed THE turbines.
- 4.13 When considering residential properties, significant effects were identified for four properties in the SEI. Although significant visual effects would still be likely to occur at these properties, close to the wind farm, following the increase in blade tip height to 149.9 m, the proposed development would not lead to higher levels of effect where turbines might become overbearing in nature. Utilising guidance on separation distances between wind turbines and residential properties, no new significant effects are anticipated for the other residential properties examined in the SEI.
- 4.14 With regards to effects on other visual receptors; the conclusions were that for the settlements of Carno, Caersws, Staylitttle and Trefeglwys any additional magnitude of change would not result in a significant effect even for high sensitivity residential receptors. No significant effects or increases in level of effects predicted for the consented development would occur for any of the roads/railways and National Trails/Long Distance Paths considered in the FEI.
- 4.15 It is anticipated that a worst case moderate and not significant magnitude of change would occur to the local landscape as a result of the proposed access track at Bontdolgoch. Mitigation by replanting lost vegetation and strengthening the existing field boundaries would help to reduce the impact in conjunction

with natural weathering and grassland encroachment help the stone track to merge into the adjacent grassland and landscape.

- 4.16 Visual effects from the new track are generally limited due to the presence of riparian vegetation and the railway line vegetation and embankment but some temporary significant effects would occur during the construction period due to vehicles using the track. These would occur particularly in winter when filtered views through the riparian vegetation would occur and from the two properties with open views (Pertheiryn and Dolerw). These effects would not occur within the operational period. The new access track is considered via a separate Town and Country Planning application and not directly considered as part of the Section 73 application.

Hydrology, Hydrogeology and Geology

- 4.17 Section 8 of the FEI contains assessment of the potential additional hydrological, hydrogeological and geological effects associated with the proposed development. It was agreed with consultees that the scope of this section would cover the proposed access track to avoid Bontdolgoch, and also an update to the Peat Management Plan (PMP) to consider the modifications to the wind farm infrastructure. All other aspects of hydrology, geology and hydrogeology were scoped out on the basis that an increase in infrastructure dimensions would have no impact on the findings of the existing hydrological assessment, in particular all buffers have been maintained and no further mitigation to supplement those outlined in the ES will be required.
- 4.18 Section 8 concludes that providing risks are sufficiently considered, embedded mitigation and a site specific Construction Environment Management Plan secured under the consented development will continue to adequately mitigate against significant adverse effects upon the water environment, species, and habitats arising from the construction and operation of the proposed development including the additional proposed route. Appropriate monitoring and acquisition of permits relating to drainage and flooding are also proposed as part of the mitigation measures.
- 4.19 The updated PMP incorporates the increased foundation and track sizes associated with the increase in proposed turbine heights. Based on the peat balance calculations there is sufficient space for extracted peat as part of infrastructure reinstatement or peatland restoration. Whether the additional peat is used for restoration or reinstatement it will be stored and handled following the guidance in the updated PMP.

Ecology Assessment

- 4.20 Section 9 of the FEI provides a description of the additional ecological surveys that have been carried out at the proposed Carno III Wind Farm in order to assess the potential effect of the increase in tip height.
- 4.21 The majority of the proposed Carno III Wind Farm site is comprised of commercial coniferous forestry, some of which has been felled since the SEI was prepared.

- 4.22 An updated desk study was carried out to obtain additional records since 2015 from Aderyn. An update to the habitat survey was conducted in June 2019, and included the proposed new access route at Bontdolgoch. A full suite of bat surveys was conducted in 2019 following recommendations in the most recent guidance. With respect to birds, vantage point (VP) surveys were conducted from March 2019 to August 2019 (breeding season) and September to February 2020 (winter season). Nightjar surveys and breeding wader surveys were also conducted in 2019 and 2020 respectively. No other additional surveys were conducted as all other protected species were either scoped out within the ES or did not require re-assessment as agreed with statutory consultees during the scoping process in 2019.
- 4.23 The main difference in habitat loss between 2020 and 2015 (when the SEI was prepared) is in relation to the felling of coniferous plantation, which was scheduled felling. There are no significant differences in the loss of the remaining habitats and no impacts are anticipated on sensitive habitats.
- 4.24 The Collision risk modelling was updated using the updated bird survey results. In terms of ornithological receptors, no additional impacts are anticipated. The conclusions that applied to the consented development presented within the ES and SEI remains the same, even in light of changes to guidance and assessment.
- 4.25 In terms of bats, consideration is only given to changes in operational impact, as there is no change to the potential impact on bats during construction. The conclusions that applied to the consented development presented within the ES and SEI remains the same, even in light of changes to guidance and assessment.
- 4.26 In relation to ecological interests the assessment concludes that both the consented development and the proposal for increased tip height will not create any significant effects.

Noise Assessment

- 4.27 Section 10 of the FEI was carried out by Ion Acoustics Ltd. and provides information on the predicted noise impact of the proposed new access route on farmland near Bontdolgoch. Operational noise has not been reassessed as it is proposed the same noise limits would be met as for the consented development.
- 4.28 The construction of the new access route will be a short-term activity carried out during normal working hours only in accordance with condition 24 of the existing consent. Predicted noise levels will be less than the significance thresholds identified in guidance, except for the farm associated with the landowner at Perthairin/Dolerw. A short-term effect is not considered a significant impact in this context. Predicted noise levels from the abnormal movements themselves will be very low. Some vibration may be perceived but only at locations where railway vibration would also be expected.
- 4.29 Best practicable means will be used to reduce noise during the construction of the access route and the construction will be managed in accordance with the Construction Environmental Management Plan (CEMP).

4.30 Construction noise levels on the proposed wind farm site are unlikely to be altered as a result of the proposed tip height extension, and noise emitted during the construction and decommissioning phases will be temporary and short-term in nature and can be minimised through careful construction practises. Therefore, the construction noise assessment in relation to on-site noise levels is not being revised for the proposed development.

Forestry Assessment

4.31 Section 11 of the FEI, the forestry assessment, was carried out by Pryor and Ricketts Ltd. and updates the state of the current forest structure and presents the revised forest felling requirements for the proposed development.

4.32 The proposed tip height extension will not increase the impact on the forestry structure as assessed in 2015. In fact, the volume of timber and therefore number of lorries has been reduced due to more premature crop clearance required rather than mature crop clearance.

4.33 A total of 10,650 m³ of timber is expected to be produced, supplying existing timber markets in Wales. A further 2,600 m³ of brash could be recovered from the felled areas, for supply to Welsh biofuel power plants. All felling is proposed to be completed prior to construction, for habitat management, and to secure a stable and productive wind resource.

Cultural Heritage Assessment

4.34 The Cultural Heritage assessment (Section 12) of the FEI was undertaken by SLR Consulting Ltd. This followed an initial phase of comparative analysis and scoping which assessed the difference between the consented development and the proposed tip height extension. This study identified those assets likely to be affected and allowed an agreement to be reached with consultees on the scope of the assessment.

4.35 The scope of the cultural heritage assessment was undertaken in accordance with Planning Policy Wales, where the assessment was designed as a proportionate approach.

4.36 Heritage assets that were most likely to experience any significant effect from the tip height extension were identified through scoping. The assets included one listed building (Grade II*), and six scheduled monuments (remains of Iron age hillfort, earthworks, enclosures, barrow).

4.37 A field visit was undertaken to the seven designated historic assets which had been agreed for assessment, to determine whether the tip height extension would significantly affect them. Wireline modelling was prepared and these were used during the field visits to help evaluate the degree of change and magnitude of impact that might occur from the increased hub and blade heights that would be visible above the current topography, structures and vegetation.

4.38 As part of the separate planning application, the proposed new access track at Bontdolgoch was also assessed. The access track would pass over a listed bridge and near to several listed buildings, including a

milestone and Pertheiryn farmhouse. The construction and operation of the track would result in some changes to the existing visual and acoustic baseline setting but construction and initial use of this would be of a temporary nature. Construction of the new access track has a moderate – high probability of disturbance to buried archaeological remains. The potential impact would be high adverse on assets of local importance, and if remains were found equates to a moderate effect. Mitigation to minimise this risk in the form of archaeological investigation and recording, however, would adequately compensate for the potential harm to the assets as it provides an opportunity to learn more about their significance and the residual effect would not be significant.

- 4.39 The weight and length of the abnormal indivisible loads (AILs) have been assessed in respect to the structural robustness of Wig Bridge which already carries heavy agricultural vehicles, and there is no expected additional load that would damage the structure of the bridge through vehicle weight, width, turning, or vibration. Therefore no significant effect would occur. In addition, it is expected that a planning condition will ensure that a pre-construction survey of this bridge is to be undertaken prior to its use.
- 4.40 The updated assessment concludes that no additional significant effects have been identified as a result of the proposed tip height extension, over and above the significant effects previously identified for the consented development. In addition, the potential for direct impacts along the route of the access track have been assessed, and overall there are no significant effects to the historic environment once the proposed mitigation measures have been implemented.

Traffic Assessment and Safety

- 4.41 Section 13 of the FEI supplements the original Traffic Assessment section of the 2010 ES and 2015 SEI, and assesses the impact on road traffic users, identifies any modifications to access route to get the larger turbines from port to site, and updates the Traffic Management Plan (TMP).
- 4.42 The abnormal route will continue to follow the majority of the route previously identified in the ES and SEI, with the addition of the use of the newly constructed Newtown bypass (avoiding passage through Newtown), and a diversion on to 3rd party private land, via a field off the A470 and Wig Lane, to avoid the restrictions at Pontdolgoch railway bridge. An Access Assessment, including swept path analysis of the route, has been undertaken for the abnormal load route based on turbine candidate that fits the tip height criteria. This identified pinch points and details of any upgrade requirements and deviations to the originally suggested route.
- 4.43 The updated assessment undertaken demonstrates the average daily movements assessed in the original ES and SEI has been reduced and is considered a worst case scenario assessment in terms of significance.
- 4.44 The predicted vehicle movements during the construction programme have been amended to reflect the increased construction period from 11 months reported in the SEI based on the 13 turbine consented

development, to potentially 15 months; the increase remains less than the 16 months reported in the original ES programme based on the original 18 turbine scheme.

- 4.45 When considering the general upward trend in traffic levels across Wales, there would likely be a reduction in traffic impact associated with the proposed wind farm due to the higher levels of baseline traffic, including Heavy Good Vehicle (HGV) traffic, expected at the time of construction.
- 4.46 Impact during construction is considered not significant for the A489 and A470, however, as these are the roads that will be utilised most by other road users local residents and people visiting the area will be kept informed of potential traffic issues that may delay or otherwise affect their journey. Typically, the slower turbine delivery vehicles would have the largest effect on other road users on these major routes.
- 4.47 It is expected that during the construction period of the wind farm that there will be a temporarily significant impact on the C2176 (which runs from Carno village to site), as is typical for minor roads at this phase of a wind farm development. This is no greater impact than for the consented development and similar to what would have been experienced whilst constructing the existing operational phases of the Carno Wind Farm. Appropriate measures will be put in place in accordance with an approved TMP to reduce the temporary impact caused by construction of the proposed development and will include correspondence with the local residents by Amegni Renewables.
- 4.48 The use of a short section of the C2068 (Wig Lane) before entering the proposed new access track will be restricted to abnormal loads and will utilise associated escort vehicles delivery only. As such it is anticipated that there will be a low temporary impact during the scheduled delivery period and therefore not significant. To ensure the impact to other road users is kept to a minimum, the delivery of abnormal loads will be managed through an approved TMP.

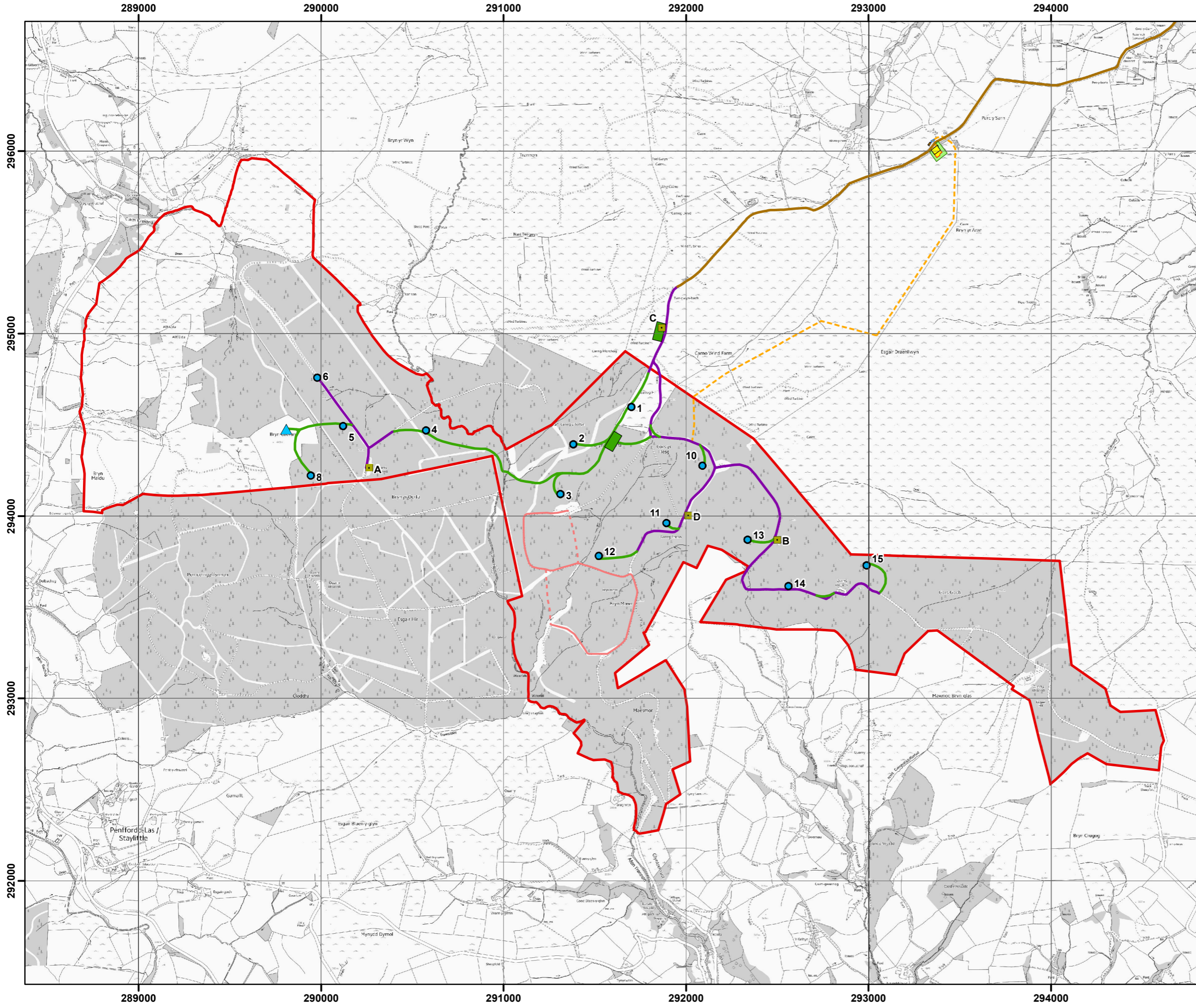
Existing Infrastructure

- 4.49 Section 14 of the FEI summarises mitigation measures proposed to mitigate the impact of the proposed tip height extension on public rights of way.
- 4.50 Powys County Council are in agreement with the additional mitigation proposed on public rights of way which includes construction of additional permissive paths to mitigate the taller turbines proposed on site and that the management of the footpath near Bontdolgoch would be covered by a suitably worded planning condition.

5 CONCLUSIONS

- 1.1 With consideration of the results presented in the FEI, it can be concluded that the proposed development does not introduce any additional significant effects beyond those previously introduced by the consented Carno III Wind Farm. The only exception would be the short term significant visual effects on residents caused by the access track proposals at Bontdolgoch during the construction period which is considered

via a separate Town and Country Planning application and not directly considered as part of the Section 73 application.



Project:
**Carno Wind Farm
 Extension - Phase III,
 Powys**

Title:
**Figure 1: Site Layout
 (13 Turbines)**

- Key**
- Proposed site boundary
 - Proposed turbine location
 - ▲ Proposed anemometry mast location
 - Existing track to be upgraded
 - Proposed new track
 - Existing Carno Phase I & II access
 - Existing track for Rally School use
 - Proposed new track for Rally School use
 - Proposed borrow pit location A - D
 - Proposed construction compound
 - Existing Carno II control building
 - Proposed Carno III control building
 - Existing substation compound
 - Proposed extension to substation compound
 - Proposed substation screening
 - Preferred grid connection route

Notes:
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