

Llanbrynmair Access Route – Note on Habitat Surveys

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1.1 Introduction

1.1.1 The adequacy of the botanical surveys has been raised in revised DW 8. It is raised as a generic point (see for example Ch 720-740). The concern appears to focus on the adequacy of the botanical surveys of the roadside verges. This note is intended to respond to the general point that the level of detail contained in the Phase 1 Habitat Survey is inadequate. I consider that the level of detail provided to PCC and to the Inquiry (and therefore the SoS) is more than adequate to permit a fully informed decision on ecological matters to be taken. If necessary, I understand that this issue will be addressed in legal submissions in the Closing Submission of RES.

1.1.2 Surveys of trees, hedges and verges, rivers and riverbanks, along with adjacent fields and other habitats, along the proposed access route for Llanbrynmair windfarm were undertaken for all areas where works are proposed.

1.1.3 Habitat surveys were carried out in August 2010 and repeated in April 2013, with further visits in May 2013 following minor changes to the physical works proposed. In addition further visits have been made through October and November 2013 to address specific issues raised in the evidence of PCC and NRW.

1.1.4 Ecology (non-avian) is addressed in the CSEI at Chapter 5. Appendix 5.3 CSEI Vol II is the Access Ecology Impact Assessment and Mitigation. It gives details of any ecological impacts along each section of the proposed access route. Unfortunately, the summary (not full) Appendix 5.3 was appended in error by

Arup (the compilers of the CSEI). This has caused PCC to suggest that relevant habitat surveys had not been carried out. I can confirm that relevant habitat surveys have been carried out. This is set out in a Phase 1 Habitat Survey report. This full document should have been submitted in the CSEI instead of the summary document. This omission was accepted in my rebuttal proof (see Annex C Rebuttal Proof of Mick Green). It has however been submitted to PCC and the Inquiry. It appears as an appendix to the evidence of Dominic Woodfield (Appendix DWR -1) and is before the Inquiry.

1.1.5 There is one omission in the Phase 1 Habitat Survey. DW 8 identifies that an area of unimproved grassland verge on the southern side of the road has not been assessed in the Phase 1 Habitat Survey (see revised DW 8 at Ch 7250 - 7300 and the response to DW 8 point 38(c)). This is incorrect. This section of the access route was fully assessed. The relevant text assessment has, however, been omitted in error from the final Phase 1 Habitat Survey. The relevant assessment now appears in the RES response to revised DW8.

1.1.6 If necessary, the full Phase 1 Habitats Survey (including the habitat assessment for Ch 7250 - 7300) can form part of the Environmental Statement, as further environmental information can be submitted. I therefore consider that such errors in the presentation of the ecological section of the CSEI are matters of form and not of substance.

1.2 Methods

1.2.1 All sections where works are proposed were visited by an experienced surveyor and the habitats were classified using the categories described in the 'Phase 1 Handbook'¹ (Part 2, Chapter 2). This method is acknowledged as being

¹ JNCC 1990. Handbook for Phase 1 habitat survey.

particularly useful in EIA studies². I consider it to be an appropriate methodology (and the contrary is not argued by PCC in DW's evidence).

1.2.2 This is a standard methodology for assessing habitats. It was used in the 2010 surveys which were included in SEI 2 (2011) and no comments on the methods or results were received from CCW or PCC.

1.2.3 All areas where works are proposed were visited and the habitats present examined. Following close examination the sections of habitat were classified using one of the standard 'Phase 1' categories, and a list of typical species was included where appropriate. The recommended unit for Phase 1 habitat assessment habitat is 0.1 ha or above. In many cases the sections assessed here were in smaller units due to the nature of the works being proposed. Any areas of particular interest were noted and typical species were identified.

1.2.4 The 'Phase 1' methodology aims to assess the habitat overall, and it not intended to be a complete list of all species present. In this case the 'Phase 1' survey method was followed and all sections where works were required were surveyed at least twice. The surveys were carried out by an experienced surveyor with over 20 years' experience of 'Phase 1' surveys in Montgomeryshire. I therefore consider that the surveys are adequate and sufficient to allow the potential of the impacts of the proposed works to be properly assessed.

1.2.5 The results for the original survey were presented in SEI 2 (2011). No significant changes were noted between the surveys in 2011 and 2013, although there are minor differences in the reported results due to changes in the areas and types of work proposed.

² Hill *et al* 2005 Handbook of biodiversity methods, Cambridge.

1.3 Results

1.3.1 The hedges varied from species rich sections to relatively newly planted hawthorn hedge. Two small areas of hazel coppice are also affected

1.3.2 In general, verges were mainly semi-improved or improved grassland with a low diversity of species.

1.3.3 Only two main areas of verge / open habitat were identified as of conservation interest. The first is a section of the proposed Neinthirion bypass that crosses an area of peat. This was classified using an NVC level of survey as U6 derived from M17 Mire but modified by drainage and grazing. The second is an area of unimproved grassland within a longer section of improved and semi-improved verge at Section 2.17.

1.3.4 The hedges and verges are considered typical of roadside habitats found across Montgomeryshire.

1.4 Assessment

1.4.1 The proposed works include the removal of a total of 1532 metres of hedgerows (although, as acknowledged in Mr Martin's Evidence in Chief, these figures, and those given below, have yet to be agreed) of varying quality and whilst hedgerows such as those found along the route are a common habitat in this area, this is still considered a significant impact.

1.4.2 Hedgerows are listed as a priority habitat under Section 42 of the NERC Act 2006. They are also included within the linear habitats plan under the Powys Biodiversity Action Plan. This states (Target 2): "Ensure that there is no *net* loss (their emphasis]) of species-rich hedgerows and verges in Powys. Encourage replacement of hedgerows lost through development or agricultural activity."

- 1.4.3 The proposal to plant 2373 metres of hedge ensures there is no net loss. It is acknowledged that new hedges will not replace lost hedges like for like but it is considered that, using techniques to provide immediate connectivity and with careful management, the new hedgerows will be functioning as hedgerow habitat within 5 years of planting and will continue to improve with continuing management. As many of the new hedges will be separated from the road by a wider verge they will not need to be flailed back each year and can be managed to retain fruiting branches which will enhance their value for wildlife.
- 1.4.4 A total of 21676 sq m of highway widening will be required. Of this, 90.1%, or 19711 sq m is 'soft' widening. Where the ground is firm enough Geogrid will be pushed into the existing soil. This will retain existing vegetation to an extent although it is acknowledged that there will be some compaction of the soil from vehicle passes. Where the ground is softer it will be excavated, a stone base added, and the original topsoil used to infill the Geogrid. This will have more impact with greater disturbance and change in the drainage of the sections but vegetation will re-establish. Many of the overrun sections will establish additional wider sections of verges, separated from the agricultural fields with potential for future sympathetic management.
- 1.4.5 Verges are recognised as having value as refuges for wildlife and can support remnants of higher quality vegetation compared with the adjacent often agriculturally improved fields. PCC operates a roadside verge nature reserve scheme and it is noted that none of the verges along the access route have been designated.
- 1.4.6 Overall, it is considered that, following re-planting of hedges and with management of hedges and verges, there will be no long-term significant adverse impact on the conservation interest of the area. On the contrary, I consider that

there will be a net benefit/neutral impact in terms of the access route alone.

- 1.4.7 The net ecological benefits are enhanced, when the site of the wind turbines is also considered because of the ecological benefits associated with the Habitat Management Plan and the Peat Management Plan.