



Parc Ynni Calon y Gwynt

ENVIRONMENTAL STATEMENT

Appendix 5J: Reptile Survey Report





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EXECUTIVE SUMMARY

Wind2 Ltd commissioned WSP UK Ltd to undertake reptile surveys to establish likely reptile presence and habitat suitability to inform the proposed Parc Ynni Calon Y Gwynt windfarm development (hereafter referred to as the 'Proposed Development'). The location of the Proposed Development, hereafter referred to as 'Site', is on the hills to the north of the A470 trunk road, approximately 3.5km east of the village of Carno, 3.5km north of the village of Pontdolgoch and 12km north-west of Newtown, centred on British National Grid (BNG) reference SO 001 983.

It is understood that the Proposed Development will comprise up to 11 turbine locations, a construction compound, a battery storage area, substation and tracks.

A reptile survey undertaken in April 2026, in accordance with recognised best practice guidance¹, assessed the likelihood of reptile presence and the suitability of habitats within the Site.

The Site comprised a mosaic of habitats, including marshy grassland, semi-improved acid grassland, bracken, acid dry dwarf shrub heath, and areas of rock outcrop and scree. These habitats provide suitable conditions for reptiles, offering opportunities for foraging, thermoregulation, and shelter, including refugia and potential hibernacula. On this basis, widespread reptile species were considered likely to be present across the Site.

The Proposed Development is expected to result in impacts to reptile habitat, particularly affecting features such as dry-stone walls, scree, woody debris, and rock outcrops. The most significant impacts are anticipated along the access track between Turbines 3 and 4, and within habitats adjacent to Turbines 5 and 6.

Where practicable, reptile habitat will be retained and integrated into the Site layout and landscape design, with appropriate protection during construction. Where habitat loss is unavoidable, mitigation measures will be required, including exclusion fencing and phased vegetation clearance with ecological site support.

All works are recommended to be overseen by a suitably experienced Ecological Clerk of Works (ECoW) and carried out under an approved Precautionary Method of Working (PMoW). The ECoW will provide toolbox talks and retain authority to halt works if there is a risk of harm to reptiles or non-compliance with mitigation measures.

¹ Froglife (1999) Reptile Survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice sheet 10. Froglife, Halesworth

1 INTRODUCTION

1.1 PROJECT BACKGROUND

- 1.1.1. WSP UK Ltd (hereafter referred to as 'WSP') was commissioned by Wind2 Ltd to undertake a reptile survey for widespread reptile species. The purpose of the survey was to establish likelihood of presence and habitat suitability to inform the proposed Parc Ynni Calon Y Gwynt wind turbine development (hereafter referred to as the 'Proposed Development'). It is understood that the Proposed Development will comprise up to 11 turbine locations, a construction compound, substation, BESS compound, upgrade to existing access tracks, and new access tracks.
- 1.1.2. The location of the Proposed Development, hereafter referred to as the 'Site', is centred on British National Grid (BNG) reference SO 001 983. It is located on the hills to the north of the A470 trunk road, approximately 3.5km east of the village of Carno, 3.5km north of the village of Pontdolgoch and 12km north-west of Newtown.

1.2 ECOLOGICAL BACKGROUND

- 1.2.1. A Preliminary Ecological Appraisal (PEA) of the Site was undertaken in May 2024 (**Appendix 5A: Main Site PEA** of the Environmental Statement). The desk study undertaken for the PEA identified two records of widespread reptiles within 1km of the Site. The nearest record was of one slow-worm 212m south of the Site.
- 1.2.2. An extended Phase 1 habitat survey undertaken to support the PEA identified that the Site was dominated by grassland habitats, including marshy grassland and semi-improved acid grassland with smaller areas of bracken *Pteridium aquilinum*, acid dry dwarf shrub heath and areas of inland rock outcrop and scree.
- 1.2.3. The PEA identified habitats at the Site which offered suitable foraging and basking opportunities for reptiles and therefore having the potential to support reptile species.

1.3 POLICY AND LEGISLATION

- 1.3.1. Widespread reptiles are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended)², making it an offence to intentionally kill or injure them. In Wales, all widespread reptile species are listed under Section 7 of the Environment (Wales) Act 2016³. Therefore, public authorities and planning decision-makers are required to have regard to these species and take reasonable steps to maintain and enhance their conservation status, alongside the Section 6 biodiversity duty and in line with Planning Policy Wales.

1.4 BRIEF AND OBJECTIVES

- 1.4.1. Wind2 Ltd commissioned WSP to undertake a reptile survey for widespread reptile species at the Site in accordance with good practice guidance⁴ to:

² Her Majesty's Stationary Office (HMSO) (1981). Wildlife and Countryside Act (as amended by the Countryside and Rights of Way Act 2000)

³ HMSO (2016). The Environment (Wales) Act

⁴ Froglife (1999) Reptile Survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice sheet 10. Froglife, Halesworth

- Establish whether widespread reptiles are present or likely to be absent from the Site; and
- Evaluate the importance of the Site for widespread reptiles and make recommendations as to how the Proposed Development should account for these species with respect to legislation, planning and biodiversity policy.

1.4.2. The results of this survey, and subsequent recommendations, are included within this report.

1.4.3. Due to the habitats that are present within the Access Road, extending from the south of the Site, it has not been considered necessary to undertake a reptile survey of the Access Road. Instead, it has been assumed that common and widespread reptiles are present within the Access Road, and the recommendations set out in this report in relation to the Site also apply to the construction of the Access Road.

2 METHODS

2.1 DESK STUDY

- 2.1.1. A desk study was undertaken in May 2024 as part of the PEA (**Appendix 5A: Main Site Preliminary Ecological Appraisal**) to review the existing ecological baseline information available in the public domain, and to obtain information held by relevant third parties. For the purpose of the desk study exercise, records of legally protected and/or notable species were collated within 1km of the Site. This approach is consistent with current good practice guidance published by the Chartered Institute of Ecology and Environmental Management (CIEEM)^{5,6}.
- 2.1.2. Findings of the desk study relating to widespread reptiles have been included in **Section 3** below.

2.2 FIELD SURVEY

- 2.2.1. The Site was surveyed for evidence of widespread reptiles by two suitably experienced ecologists over two days, between 1 and 2 April 2026. The survey comprised a drive-through of the entire Site, with targeted stops to undertake thorough walkover assessments of habitats identified as suitable for reptiles. Particular attention was given to areas containing potential refugia and hibernacula.
- 2.2.2. The field surveys were conducted during optimal daily activity periods for reptiles, namely mid-morning and late afternoon, and during a time when weather conditions favoured basking and movement, in accordance with the standard methodology from the Herpetofauna Workers' Manual⁷ and the methodology within Froglife's Reptile Survey Advice Sheet 10⁸.

2.3 SURVEY LIMITATIONS

- 2.3.1. Due to the scale of the Site, there is the potential that some refugia or hibernacula may have been undetected within the Site. However, areas assessed as being suitable for widespread reptiles were targeted during the survey, and a thorough walkover of all of these areas was undertaken.
- 2.3.2. There were no limitations that prevented a robust and confident assessment of the Site for the presence/likely absence of widespread reptiles.

⁵ CIEEM (2017a). Guidelines for Preliminary Ecological Appraisal, 2nd edition.

⁶ CIEEM (2017b). Guidelines for Ecological Report Writing.

⁷ Gent, A and Gibson, S. (1998) Herpetofauna Workers Manual, Joint Nature Conservation Committee, Peterborough.

⁸ Froglife (1999). Reptile Survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice sheet 10. Froglife, Halesworth

3 RESULTS

3.1 DESK STUDY

- 3.1.1. The desk study undertaken in May 2024 returned two records of widespread reptiles within 1km of the Site over the past ten years. These comprised one record of slow-worm and one record of common lizard, both located to the south of Llyn Mawr Farm (SO 01054 97347).

3.2 FIELD SURVEY

- 3.2.1. The Site was dominated by pasture grazed grassland which has been closely cropped with some sections of wet/marshy grassland and extensive stands of rush on the field boundary edges. Numerous streams including the Nant Llyn Mawr cross the Site, with areas of tussocky grassland and bracken in ungrazed areas. Inland cliff features were located across the breadth of the Site, with the most prominent clusters located in the central section of the Site. Collectively, these habitats provide general suitability for reptiles.
- 3.2.2. Given the large extent of the Site, it is described in relation to Turbine areas 1–11, to aid clarity in reporting. The suitability of Turbine areas (and associated access tracks) to support reptiles is outlined in **Table 5J-1**, with their locations illustrated on **Figure 5J.1**.
- 3.2.3. No species of reptile were recorded during the field survey, however one common frog *Rana temporaria* was recorded in one stream west of Turbine 5.

Table 5J-1 - Location of potential refugia and hibernacula for widespread reptiles

Turbine Area/Access Track location	Potential Refugia/Hibernacula
Turbine 1	- Turbine 1 comprised an area of heavily grazed, improved grassland, with occasional discrete stands of soft rush <i>Juncus effusus</i>. Two rock piles were present within the area, located approximately 10 m apart. A drystone wall occurred within the footprint of Turbine 1 and provided suitable features for use as reptile hibernacula. - A drystone wall bordered the access track to the east of Turbine 1.
Turbine 2	- Turbine 2 did not contain any features suitable for use as reptile refugia or hibernacula. - Some sections of the access track were bordered by a drystone wall along its western side. A pile of excavated scree with associated wood piles was present adjacent to the track and provided suitable refugia habitat; however, this feature was considered unlikely to function as a reptile hibernaculum. One additional stone pile recorded along the access track to Turbine 2 may provide potential opportunities for reptile hibernation.
Turbine 3	Turbine 3 was located on a rocky outcrop containing occasional crevices. While these features may offer limited shelter opportunities, the area was considered to be of low suitability for use as reptile hibernacula.
Access Track between Turbines 3 and 4	The access track between Turbine 3 and Turbine 4 was situated within a natural depression flanked by stony outcrops containing multiple features that could function as reptile refugia and hibernacula. Suitable habitat for widespread reptiles included areas of tussocky grassland, bracken <i>Pteridium aquilinum</i> and gorse <i>Ulex</i> spp.

Turbine Area/Access Track location	Potential Refugia/Hibernacula
	occurred within the basin. In addition, areas of wet grassland and boggy habitat were recorded, transitioning into a small stream further downslope. A further small, slow-flowing, trickling watercourse was also present adjacent to the access track.
Turbine 4	■ Turbine 4 did not contain any features suitable for use as reptile refugia or hibernacula, with limited suitable habitat close by.
Turbine 5	■ Turbine 5 did not contain any features suitable for use as reptile refugia or hibernacula with limited suitable habitat within close by.
Turbine 6	■ Turbine 6 did not contain any features suitable for use as reptile refugia or hibernacula with limited suitable habitat close by.
Turbine 7	■ Turbine 7 did not contain any features suitable for use as reptile refugia or hibernacula with limited suitable habitat close by
Turbine 8	■ Turbine 8 contained six rocky outcrops that could be suitable for use as reptile hibernacula.
Turbine 9	■ Turbine 9 did not contain any features suitable for use as reptile refugia or hibernacula with limited suitable habitat close by.
Turbine 10	■ Turbine 10 did not contain any features suitable for use as reptile refugia or hibernacula with limited suitable habitat close by.
Turbine 11	■ Turbine 11 contained one rock pile with some suitability for refugia/ hibernacula. ■ The access to the area was heavily grazed with occasional stands of rush. The access track crossed a stream where the surrounding grassland was saturated with run off, this may provide foraging habitat for grass snake.

4 DISCUSSION AND RECOMMENDATIONS

4.1 DISCUSSION

- 4.1.1. Whilst reptiles were not recorded during the survey, the habitats present across the Site were considered suitable for widespread reptile species, providing opportunities for hibernation, foraging, shelter and thermoregulation. The survey type was also not of a variety that could reliably confirm absence. As such, widespread reptile species are considered likely to be present on Site.
- 4.1.2. Rock features identified across the Site offered some potential for use as refugia and/or hibernacula. However, a number of these features occurred within heavily grazed areas and are therefore considered to provide only low suitability.
- 4.1.3. The Site includes areas considered suitable for reptile foraging and basking for thermoregulation, as well as features with potential to function as refugia and/or hibernacula. These areas are likely to be impacted by the Proposed Development and include, but are not limited to, the following:
- Dry stone wall adjacent to the access to Turbine 1;
 - Piles of Scree and wood adjacent to the access route between Turbine 1 and Turbine 2; and
 - Habitat adjacent to and surrounding Turbines 5 and 6.
- 4.1.4. The habitats and rock features along the access track between Turbine 3 and Turbine 4 are considered to provide high suitability for hibernation, foraging, shelter and thermoregulation for widespread reptile species, with good connectivity to adjacent habitats.
- 4.1.5. The Proposed Development has the potential to result in the loss and/or degradation of habitats suitable for reptile foraging, basking and movement. The removal or disturbance of vegetation may lead to the displacement of any reptiles present and could reduce the overall suitability of the Site for reptiles.
- 4.1.6. There is also a risk of killing or injuring individual reptiles during site clearance and construction activities. All widespread reptile species are protected under the Wildlife and Countryside Act 1981 (as amended)², which makes it an offence to intentionally kill or injure individuals.

4.2 RECOMMENDATIONS

- 4.2.1. Clearance of suitable reptile habitat will be required to facilitate the Proposed Development. Where practicable, suitable reptile habitat should be avoided through retention within the Site layout and incorporation into landscaping proposals. Retained habitat should also be appropriately protected during the construction phase to prevent operatives or plant tracking through the habitat.
- 4.2.2. Where avoidance is not feasible, the following mitigation measures will be required:
- Reptile exclusion fencing should be installed for any construction access routes and/or compounds that sit adjacent to habitats with high suitability, such as Turbine 5 and 6, and the access route between Turbine 3 and 4, to create a barrier between the working areas and suitable habitat. Consultation with a suitably experienced ecologist should be made prior to works to determine fencing locations and extent;
 - Any vegetation clearance and removal of refugia should be conducted during the active season (April–September); and

- A suitably experienced Ecological Clerk of Works (ECoW) should be appointed to oversee all works with the potential to affect widespread reptiles, and a Precautionary Method of Working (PMoW) formulated for the Proposed Development. The ECoW would be responsible for implementing and overseeing any reptile mitigation measures, including oversight of capture and exclusion operations (if required), ecological input into vegetation clearance and destructive searches, ensuring works are undertaken in accordance with the approved PMoW. The ECoW would also provide toolbox talks as required and should have the authority to halt works should there be a risk of harm to reptiles or non-compliance with agreed mitigation measures.

4.2.3. Where feasible, excavated and/or recovered materials from the Site (including stone, logs, and brash) will be utilised to create reptile habitat enhancements, providing opportunities for basking, foraging, refuge, and hibernation.

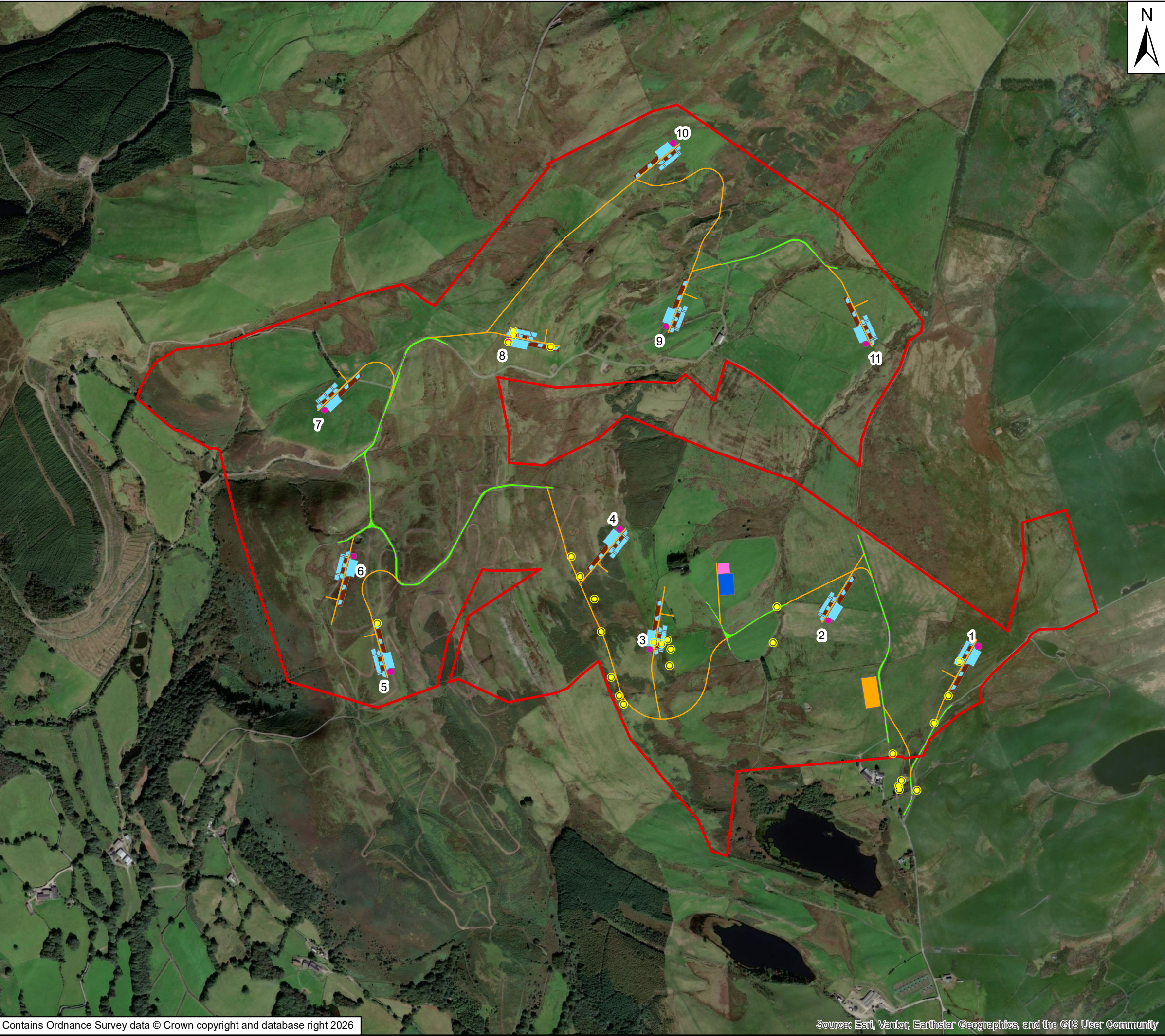
4.2.4. To ensure data validity and appropriate recommendations, updated walkover surveys for reptiles should be conducted if more than 18 months have passed since the last survey⁹, and as a minimum, no later than two months prior to any works.

⁹ CIEEM (2019). Advice Note on the Lifespan of Ecological Reports and Surveys. Chartered Institute of Ecology and Environmental Management.

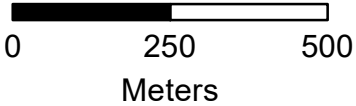
5 FIGURES

Figure 5J.1 - Site Location Plan

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- Key**
- Site Boundary
 - Turbines
 - Existing Access
 - Turbine Crane Pad
 - Substation Compound
 - Temporary Construction Compound
 - Clear Working Areas
 - New Access
 - Reptile Refugia



Client:	Wind2 Ltd.		
Project:	Parc Ynni Calon y Gwynn		
Title:	Potential Refugia and Hibernacula		
Drawing No:	Figure 5J.1	Drawn:	LT
Date:	6/5/2026	Checked:	CB
Scale:	12,000 @ A3	Approved:	MB

Annex 5J.1

PHOTOGRAPHS





Photograph 1 - Example of typical habitat across the Site - grassland



Photograph 2 - Example of typical habitat across the Site - bracken



Photograph 3 - Examples of potential refugia across the Site



Photograph 4 - Scree and wood pile adjacent to access track 2



Photograph 5 – Example of stone wall refugia/hibernacula



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