Appendix 9A
Ornithology Survey Report

November 2025

NGED

UPPER OGMORE GRID CONNECTION

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EXECUTIVE SUMMARY

WSP UK Ltd. (WSP) was commissioned by National Grid Electricity Distribution (NGED) to undertake bird surveys during the 2025 breeding season (April to August 2025 inclusive) at the proposed Upper Ogmore Grid Connection (the 'Proposed Development'). The 'Site', is situated in South Wales, to the south of Croeserw, and centred at British National Grid SS879948. The Proposed Development is approximately 9km in length, split into sections of Overhead Line (OHL) and Underground Cables (UGC).

During the Preliminary Ecological Appraisal (PEA) carried out in 2024 by CSA Environmental Ltd, suitable habitats for nesting birds were identified. Furthermore, three key issues likely to affect birds as a result of OHL installation have since been identified. These included direct habitat loss, disturbance/displacement of birds, and effects of collision with the OHL. As a result, WSP were commissioned to undertake; Vantage Point (VP) flight activity surveys, Moorland Bird Surveys (MBS), breeding raptor surveys; and breeding nightjar surveys. Target species have been defined in the methodology section of this report. These species were targeted during the survey programme. The surveys also recorded secondary species (also defined) and non-target species where appropriate.

The areas surveyed surrounding the Site were assessed as having high potential for nesting raptors, commuting, sheltering, and foraging birds particularly within the woodland, scrub, scattered trees, bracken and riverine habitats present. It was concluded that there is potential for the Proposed Development to cause disturbance to nesting birds if works are conducted during the breeding season (March to August inclusive). During the surveys, breeding activities were confirmed for common kestrel, nightjar, peregrine falcon and sparrowhawk. Collision risk with the OHL, once in operation, has been identified as a risk to common kestrel, peregrine falcon, red kite, buzzard and raven. Further details are provided in the report relating to these species, as well as relating to additional species identified, which included the target species; goshawk and marsh harrier and the secondary species; oystercatcher and sparrowhawk; and non-target species.

No further ornithological survey requirements are recommended following on from the survey effort, however, avoidance, mitigation, compensation and enhancement measures are provided to include:

- Avoidance of the removal of high value habitats suitable for nesting birds;
- Avoidance of vegetation clearance during the main bird nesting season (March to August inclusive);
- Where avoidance of vegetation clearance cannot be achieved, a suitably qualified ecologist should be employed to inspect the area within 24 hours prior to clearance. Where works are carried out during the breeding period, Natural Resources Wales (NRW) licences to disturb Schedule 1 nesting birds including peregrine falcon may be required;

- Measures to mitigate to collision/electrocution risk to birds once the OHL is in operation, including ‘bird-friendly’ design measures to powerlines;
- Measures to mitigate habitat loss, including habitat natural regeneration/habitat enhancement/creation.
- Further ecological enhancement measures to encourage compliance with planning policy (PPW, 2024).

1 INTRODUCTION

1.1 PROJECT BACKGROUND

WSP UK Ltd (WSP) was commissioned by National Grid Electricity Distribution (NGED) to undertake bird surveys during the 2025 breeding season (April to August 2025 inclusive) at the proposed Upper Ogmore Grid Connection (the 'Proposed Development'). The 'Site' lies within Bridgend County Borough Council (BCBC) and Neath Port Talbot County Borough Council (NPTCBC). This report describes the methods and results of the surveys, which were designed to be suitable to support an Ecological Impact Assessment (EcIA) for the Site in relation to the Proposed Development.

The Site, shown on **Figure 1**, is situated in South Wales, to the south of Croeserw, and centred at British National Grid SS879948. The Proposed Development is approximately 9km in length, split into the following sections:

- 1.1 km western Overhead Line (OHL);
- 1.7 km western Underground Cables (UGC);
- 3.0 km eastern OHL; and
- 3.2 km eastern UGC.

1.2 ECOLOGICAL BACKGROUND

Various ecological surveys have been completed by CSA Environmental Ltd in 2024 in support of the Proposed Development, including a Preliminary Ecological Appraisal (PEA) (CSA Environmental, 2024) and other protected species surveys.

The PEA identified habitats that are present within the Site. The western OHL section predominately travels through a mix of gorse scrub, modified grassland and upland acidic grassland. The western UCG travelling through Caerau is predominantly through built environment, consisting mainly of residential properties. Once the cable transitions back to the eastern OHL, it traverses through a mosaic of several habitat types. Initially, it passes through purple moor-grass and rush pastures for approximately 0.81km to the south of Brynheulog Road. The eastern OHL then passes through an area of broadleaved woodland for approximately 0.13km, to the south of Croeserw, before continuing through areas of upland acidic grassland and upland rush pasture. Coniferous woodland was also recorded throughout the surveyed areas, with areas of clear-fell suitable for nightjar *Caprimulgus europaeus* identified within 500m of the Site. Small pockets of heathland were also recorded.

Overall, the PEA raised that suitable habitats were present for nesting birds in the form of '*purple moor grass, acid grassland and heath, as well as some tree/shrub habitat*'.

The PEA also comprised a desk study, undertaken in May 2024, to identify nature conservation designations within appropriate search radii around the Site. The desk study identified that no statutory designated sites fall within the Site.

Two statutory designated sites of national importance (designated for ornithological features) are present within 20km of the Site. These are shown in **Figure 9A.2** and listed in

Table 1-1, along with a description of their designatory features/interests. The desk study identified no SPAs or Ramsar sites (designated for ornithological features) within 20km of the Site.

Table 1-1 – Statutory designated sites designated for ornithological features within 10km of the Site

Site name	Designation	Size (hectares (ha))	Approximate distance and orientation from the Site	Description	Potential connectivity with the Site (Connectivity distances reported from Pendlebury et al., 2011)
Mynydd-Ty-isaf	SSSI	322	0.5km NE	This site is characterised by the cliffs and crags of glacial corries which support a mosaic of vegetation types. The high crags also provide nesting sites for a Schedule 1 raptor.	Breeding core range of 2km, with maximum range of 18km for key raptor species.
Eglwys Nunydd Reservoir	SSSI	91	9.46km SW	The largest freshwater body in the county. The reservoir attracts large numbers of wintering waterfowl and passage migrants. Notable species including great crested grebe *Podiceps cristatus,* little grebe *Tachybaptus ruficollis*, mallard *Anas platyrhynchos*, gadwall *Mareca strepera* and coot *Fulica atra* now breed.	Unlikely given the habitats on-Site.

1.3 SCOPE

1.3.1 The key issues relating to birds and OHL are as follows:

- The effects of direct habitat loss due to land take by OHL infrastructure, tracks and ancillary structures;
- The effects of disturbance and displacement of birds from the proximity of the OHL infrastructure. Such disturbance may occur as a consequence of construction work, or due to the presence of the infrastructure close to nest sites or feeding areas or on habitual flight routes; and
- The effects of collision with the OHL (i.e. killing or injury of birds), which is of particular relevance for sites located in areas with high raptor activity or that support large concentrations of waterfowl.

1.3.2 With regards to the first issue, total land take by OHL infrastructure generally represents a small proportion of a site. Therefore, the permanent loss of nesting and foraging habitat for birds tends to be small and will generally have little effect on bird populations. At most OHL sites, it is the latter two issues, collision risk and displacement, that may potentially be more significant.

1.3.3 WSP were commissioned to undertake the following surveys in support of the Proposed Development, in accordance with guidance documents (NatureScot, 2025[a]; NatureScot, 2025[b]; and NatureScot, 2025[c]):

- Vantage Point (VP) flight activity surveys;

- Moorland Bird Surveys (MBS);
- Breeding raptor surveys; and
- Breeding nightjar surveys.

1.3.4 This report details the methodology and results of these surveys, along with subsequent discussion and, if applicable, recommendations for further surveys or mitigation/enhancement within the Site in order to minimise and mitigate for effects on bird assemblages within the Site.

1.3.5 WSP have also been commissioned to undertake winter raptor roost surveys, to comprise two survey visits between November 2025 and February 2026, to identify any communal raptor roosts within 2km of the Site. The winter raptor roost surveys will be reported on separately, and are not mentioned further in this report.

1.3.6 For the purposes of this report, nomenclature follows that of the International Ornithological Congress (Gill, F., Donsker, D. and Rasmussen, P., 2025).

1.4 TARGET SPECIES

1.4.1 Following the initial desk-based study, the following species were targeted during the survey programme:

- Protected raptors and owls: breeding osprey *Pandion haliaetus* and honey-buzzard *Pernis apivorus*; resident red kite *Milvus milvus*, goshawk *Accipiter gentilis*, marsh harrier *Circus aeruginosus* barn owl *Tyto alba*, short-eared owl *Asio flammeus* and peregrine *Falco peregrinus*; and wintering hen harrier *Circus cyaneus* and merlin *Falco columbarius*;
- Waterfowl and waders: all wildfowl species (except feral species, mute swan *Cygnus olor* and Canada goose *Branta canadensis*) and Annex I waders including wintering golden plover *Pluvialis apricaria*; and
- Other species: nightjar and common kestrel *Falco tinnunculus*[1].

1.4.2 The following have been identified as secondary species for the purposes of survey recording:

- All non-Annex I wader species (e.g. oystercatcher *Haematopus ostralegus*, snipe *Gallinago Gallinago*, woodcock *Scolopax rusticola*, curlew *Numenius arquata* and lapwing *Vanellus vanellus*); all non-Annex I/Schedule 1 raptor species (e.g. common buzzard *Buteo buteo*, sparrowhawk *Accipiter nisus*, long-eared owl *Asio otus*, tawny owl *Strix aluco*); and raven *Corvus corax*.

[1] Common kestrel are included as a target species as studies across Europe have demonstrated that kestrel are more susceptible to collision risk than other species, and they are a Priority Species that has undergone considerable decline in Wales (De Lucas et al., 2008; Duriez et al., 2023; Heywood et al., 2024).

2 SURVEY METHODS

2.1 SURVEYORS

2.1.1 All surveys were undertaken by WSP surveyors who have extensive field survey experience, and a detailed understanding of the key methodologies recommended within NatureScot (2025[a]) guidance and experience of monitoring bird activity and distribution at proposed wind farm sites.

2.1.2 VANTAGE POINT SURVEYS

2.1.3 Megan Brenchley has seven years' experience in consultancy, and seven years' experience of bird surveys, including undertaking bird surveys for proposed wind farm developments.

2.1.4 Aaron Davies has 13 years' experience in consultancy, and 18 years' experience in ornithology, including undertaking bird surveys for proposed wind farm developments.

2.1.5 Tara Okon has five years' experience in consultancy, and 25 years' experience in ornithology, including undertaking bird surveys for proposed wind farm developments.

2.1.6 MOORLAND BIRD SURVEYS

2.1.7 Tara Okon led the MBS, and was supported by Natalie Pyatt.

2.1.8 Natalie Pyatt has two years' experience in consultancy, and four years' experience in ornithology, including undertaking bird surveys for proposed wind farm developments.

2.1.9 BREEDING SCHEDULE 1 RAPTOR SURVEYS

2.1.10 Richard Poole is an experienced ornithologist with over 45 years' experience of bird surveys, a former British Trust of Ornithology (BTO) Regional representative and Raptor Study Group Coordinator for Glamorgan. Richard has held a BTO 'A' ringing licence for 33 years and has a Schedule 1 licence to disturb and ring peregrine, red kite and goshawk.

2.1.11 Trevor Fletcher is an experienced ornithologist with over 20 years' experience in carrying out a wide range of bird surveys for the BTO and several ecological consultancies. Trevor has a BTO 'A' ringing licence (including for barn owl) and has a Natural Resources Wales (NRW) Schedule 1 licence to disturb barn owl, peregrine, red kite, hobby, goshawk and hen harrier.

2.1.12 NIGHTJAR SURVEYS

Aaron and Trevor led the nightjar surveys, supported by Megan and Amber.

Amber Martin has five years' experience in consultancy and three years' experience of bird surveys, including undertaking bird surveys for proposed wind farm developments

2.2 VANTAGE POINT SURVEYS

2.2.1 VP watches were conducted in accordance with NatureScot guidance and undertaken throughout the survey period. A target of six hours VP survey for each VP was identified and completed, except on occasions where weather conditions precluded completing surveys in the month, when any shortfall would be carried over into the following month's survey. VP survey methodology focuses on identifying flightpaths of target species and allows any regularly used flight lines to be identified, allowing turbine locations to be altered where necessary to reduce collision risk to birds. The data

generated can also be used to estimate the theoretical risk of collision with turbines by incorporation into a suitable model.

2.2.2 The guidance is that VPs should be chosen parsimoniously to achieve maximum visibility from the minimum number of locations such that all parts of the survey area are within two kilometres of a VP.

2.2.3 Two vantage points were selected as being sufficient to survey the turbine layout, the locations of which were:

- VP1 – BNG SS 84708 94123, view bearing 180°; and
- VP2 – BNG SS 87969 93317, view bearing 0°.

Flights were classified using the following three height bands:

- Band A: <15m;
- Band B: 15 – 100m;
- Band C: 100 – 200m; and
- Band D: >200m.

2.2.4 Vantage Point viewsheds are illustrated in **Figure 9A.3**. It is considered that these VPs provided an appropriate coverage of the Site and will allow a robust impact assessment to be carried out.

2.2.5 VP observation was undertaken between April and August 2025: 30 hours at each VP, equating to a combined survey time of 60 hours. To minimise disturbance, observers took a settling in period of ten minutes before starting each watch. A 180° arc was scanned alternately by eye and with binoculars/telescope until a target species was detected. Flight times of a target species were then recorded (times were synchronised with the other surveyor when undertaking simultaneous watches from two VPs). VP surveys were spread across the full range of daylight hours. Only flights within the 2km viewshed were recorded, with all other target species flights outside of that zone noted as incidental records.

2.2.6 All non-target species were logged in five-minute activity summaries, providing that there was no target species activity occurring which prevented this from happening. Additional appropriate information was recorded, including, for example, the direction and flight height of non-target species.

2.2.7 NatureScot guidance advises that VP surveys should be undertaken in good visibility and can be carried out on showery days providing that the showers are not too frequent or prolonged. The cloud base should be high enough to allow observation of the collision risk height. Ideally observations should be undertaken in a range of wind conditions. Watches should be aimed to target heightened activity periods for the target species likely to be present, and the survey programme adhered to this, with surveys planned for periods of suitable weather. The dates, times and weather conditions of the VP watches are provided in **Annex A, Table A.1**.

2.3 MOORLAND BIRD SURVEYS

2.3.1 The moorland bird assemblage was surveyed using an adapted version of the Brown and Shepherd methodology (Brown, A. and Shepherd, K., 1993; and Gilbert, G., Gibbons, D.W. and Evans, J. 1998). The Calladine adaptation, referenced in NatureScot (Calladine, J., et. al, 2009), was followed, with four visits, at least seven days apart, covering the whole breeding season, completed between

08:30 and 18:00. Surveys covered the Site plus a 500m buffer where access was available between mid-April and July.

2.3.2 MBS were undertaken in baseline wind speeds of no greater than Beaufort Scale Force 5 and dry weather. The method involved a search effort of approximately 20-25 minutes within each 500m x 500m quadrat of open land and one minute per hectare for enclosed fields. Habitats within the survey area for moorland bird surveys were assessed for their suitability to host breeding waders and areas with unsuitable land use such as plantations or with extreme gradients were scoped out. All suitable parts of each quadrat were approached to within 100m. Survey routes were varied between visits. Stops were made at regular intervals to scan and listen for birds and the identities and activities of birds were recorded using standard BTO notation. The focus of the surveys was breeding waders, wildfowl and seabird/gull colonies, but all divers, Schedule 1 raptors/owls were also recorded.

2.3.3 Dates, times and weather conditions during the MBS visits are provided in **Appendix A, Table A.2**.

2.4 BREEDING SCHEDULE 1 RAPTOR SURVEY

Schedule 1 raptor survey visits were undertaken in April, May, June and July 2025 and followed species specific guidance detailed within Gilbert et al (1998) and Hardey et al (2013) as described below. Surveys focused on those species identified in the desk-based review and through survey work previously undertaken within the local area and comprised peregrine, red kite, and goshawk. One target species, common kestrel, was also included due to the increased susceptibility to collision (see Section 1.4). Surveys were therefore tailored to these species and were focused on potentially suitable habitat within the survey area.

Dates, times and weather conditions during the Schedule 1 raptor surveys are provided in **Annex A, Table A.3**.

2.4.1 PEREGRINE FALCON

Nest sites were viewed from a distance of 600m to minimise disturbance and to avoid causing distress to nesting birds.

Visit 1 – March to early April:

To check for occupancy. If information from previous year(s) is available, nesting territories where peregrines lay earlier or have poor breeding success should be visited first.

Visit 2 – Late March to early May:

To locate active eyries (incubating birds). Peregrines in montane nesting territories may not lay until May.

Visit 3 – Late May to mid-June:

To check for young and/or for evidence of breeding if no signs were seen on previous visits.

Visit 4 – Mid-June to early July:

To check for fledged young.

2.4.2 RED KITE

Habitats suitable for red kite breeding were viewed from a distance to identify areas where breeding activity was likely to be taking place as red kites can use feeding areas up to 10km from nest sites (Gilbert, G., Gibbons, D.W. and Evans, J., 1998). Locations where red kite activity indicated a potential nesting site were then inspected more closely to establish whether breeding was taking place.

Visit 1 – March to early April:

To check for occupancy.

Visit 2 – Late April to mid-May:

To visit known nests and locate new active nests (incubating birds should not be flushed from the nest unless there is a specific need to record clutch size).

Visit 3 – Late May to late June:

To check for young.

Visit 4 – July and August:

To check for fledged young.

2.4.3 GOSHAWK

Woodland habitats (conifer plantations) containing trees of an appropriate age and size were visited and systematically searched for evidence of nesting. In addition to the presence of nests, other species-specific features such as feeding perches and pluck sites were searched for as these are normally present within 200m of a nest. On sloping ground these are usually found uphill of nest sites giving adults a clear flight-line to the nest (Hardy et al, 2013). Woodland blocks were searched and any nests discovered would have been numbered.

Visit 1 – March to April:

To check for occupancy and (until mid-March) the presence of new nests.

Visit 2 – Late April to May:

To briefly view new nests for activity.

Visit 3 – June to early July:

To check for young at known nests and search for additional active nests.

Visit 4 – Late July to early August:

To check for fledged young.

2.4.4 COMMON KESTREL

To establish occupancy and the presence of a breeding pair, it is recommended that all four visits are made. If the home range appears to be unoccupied on the basis of the first two visits, then further visits to that home range can be omitted (Hardy et al,). Common kestrels are most easily located when displaying early in the breeding season and around the time of fledging when they are active and noisy. Care must be exercised to avoid disturbing pairs while they are displaying and laying; if there is any uncertainty over the stage in the breeding cycle, Visit 2 should be delayed.

Visit 1 – Late March to May:

To check for occupancy

Visit 2 – May:

To locate active nests.

Visit 3 – June:

To check for young.

Visit 4 – July to August:

To check for fledged young.

2.4.5 OTHER BREEDING RAPTOR SPECIES

In addition to Schedule 1 raptor species, the presence of other breeding raptor species together with raven due to their ecological similarity to raptors were noted during survey visits. No repeat visits were made to nests of other raptors identified during survey visits other than to confirm species where unoccupied nests were initially found or to confirm ongoing activity where possible breeding behaviour was being displayed by adult birds.

2.4.6 INCIDENTAL RECORDS

Target species seen outside of formal survey periods were also recorded (i.e. those observed during walks to and from VP locations during breaks in survey work or target species recorded during other surveys e.g. moorland bird surveys or prior to nightjar surveys. Detailed notes of protected or 'target' species were made, and all records mapped. Incidental sightings of Schedule 1 species are documented in the **Confidential Annex, Volume 5 of the EIA Report**.

2.5 NIGHTJAR SURVEYS

2.5.1 Two surveys for territorial nightjar were undertaken in areas of suitable habitat (e.g., clear fell) within 500m of the Site using methods outlined in Gilbert *et al*. (1998). Surveys were undertaken on 16 June, 25 June, covering the entirety of the surveyed area across both surveys, and 3 July and 11 July 2025, again covering the entirety of the surveyed area across both surveys. The weather conditions for each visit are provided in in **Appendix Annex A, Table A.4.** The surveys undertaken in June were dusk surveys, and the surveys undertaken in July were dawn surveys.

2.5.2 The position of all churring nightjars were marked on a map, using a letter code for each visit and a number code for each individual nightjar: thus A1, A2, A3, etc, for each male on the first visit, B1, B2, etc for each male found on the second visit, etc. Field observations from all survey visits were combined to enable identification of clear clusters of records and to provide an indication of likely territory numbers.

2.5.3 Over the course of two visits, the same bird may be recorded as A1 and B1. Simultaneously churring males were marked on the map by joining their positions with a dotted line; these records would be two separate males on different territories. If churring was heard from two locations not simultaneously but up to 30 seconds apart, this was recorded as different males if the two were more than 400m apart, otherwise this was recorded as the same male that had moved.

2.6 LIMITATIONS

All surveys were completed following good practice guidance during the breeding season and therefore no specific limitations with the survey programme were recorded.

During the MBS undertaken on 28 May 2025, two 500m squares were abandoned. These were both at the eastern end of the Site, adjacent to the A4107. A flock of sheep had been herded for treatment activities into the area next to the gate required for access to the track, and therefore it was not possible to continue the survey into this area. Due to the high level of sheep grazing in this area, it is considered to be of low suitability to support breeding waders and waterfowl, and therefore this is not considered to be a significant limitation. Further, this area had already been subject to an MBS, and was also subject to MBS at a later date.

During the raptor surveys, some areas of forest plantations were inaccessible due to severe windblow impacts resulting from storms that affected the area over the past few years. There were fallen trees, hung-up trees, lifted root plates, and debris within areas of woodland that created areas that were unsafe and too hazardous to survey safely. Areas affected by such wind damage were found to have a more open canopy structure, so woodland blocks were able to be viewed from a distance with binoculars. The lack of access for detailed inspection is unlikely to impact the results of the survey as the more open views allowed most of the trees to be surveyed at a distance. Additionally, species such as goshawk tend to favour woodland with a high density of mature trees with a well-developed canopy cover surrounded by more open woodland, so would be unlikely to be nesting within the wind damaged areas.

3 SURVEY RESULTS

3.1 VANTAGE POINT SURVEYS

3.1.1 The following target species were recorded in-flight during VP surveys: red kite, and common kestrel. Target species flights are presented in **Appendix Annex B**.

3.1.2 Data presented in **Table 3-1** provides a summary of flight activity for all species, including reference to the duration of flight time which occurred at Potential Collision Height (PCH) (i.e. between 15-100m height).

3.1.3 Flight activity maps are illustrated in **Figures 9A.4 and 9A.5**.

Table 3-1 – Summary of target species flight activity

Species	Status	Population (BTO, 2024; Hughes et al., 2020; Welsh Ornithological Society, 2024)	Number of observations	Month(s) of observation	Total flight duration at PCH (secs)	VPs where flights were recorded
Red kite	Schedule 1/1A, and BoCC 4 Wales (Johnstone, I.G., et. al, 2022), Green-listed	UK breeding: 4400 pairs (2016) Wales breeding: 1350 pairs	17	April, June, July	210	1, 2
Common kestrel	BoCC 4 Wales Red-listed, Priority Species	UK breeding: 31,000 pairs (2016) Wales breeding: 1750 pairs	2	April, June	30	1
Peregrine	Schedule 1, and BoCC 4 Wales Green-listed	UK breeding: 1750 pairs (2014) Wales breeding: 141 pairs	1	August	0	2

3.1.4 A summary of the records of these species is provided below, with full descriptions provided in **Appendix B**.

Red kite

3.1.5 Red kite is listed on Annex I of the Birds Directive and Schedule 1 of the Wildlife & Countryside Act 1981 (as amended).

3.1.6 During VP surveys, red kite were recorded on 17 occasions (totalling 18 individual flights). Red kites were observed during April, June and July with observations recorded at both VPs. All kite records were for individual birds with the exception of one sighting at VP2 which was considered a possible pair. Red kite were observed at PCH for a total duration of 210 seconds, out of a total of 1395 seconds flight time.

3.1.7 The majority of the red kites observed were drifting through the viewshed, with high circling over the plantation edge and clear-fell area.

Common kestrel

3.1.8 Common kestrel is listed on Section 7 of the Environment (Wales) Act (2006) and is a BoCC Wales 4 Red Listed species.

3.1.9 During VP surveys, common kestrel were recorded on two occasions at VP1 only. Common kestrel were only recorded in April and June. Both observations were of birds foraging for prey close to the potential collision risk height, with 30 seconds of flight recorded at PCH during the survey period.

Peregrine

3.1.10 Peregrine is listed on Annex I of the Birds Directive and Schedule 1 of the Wildlife & Countryside Act 1981 (as amended).

3.1.11 During VP surveys, a single peregrine was recorded once at VP2 only, on 6 August 2025. The peregrine was circling briefly at a height of approximately 40m, for 30 seconds, which is above the PCH.

SECONDARY SPECIES

3.1.12 The secondary species which were recorded during the VP surveys are shown in **Table 3-**, including which VPs these were recorded at.

Table 3-2 – Secondary species recorded during the VP surveys

Species	VP1	VP2
Common buzzard	Y	Y
Raven	Y	Y

NON-TARGET SPECIES

3.1.13 The non-target species which were recorded during the VP surveys are shown in **Table 3-3**, including which VPs these were recorded at.

Table 3-3 – Non-target species recorded during the VP surveys

Species	VP1	VP2
Barn swallow *Hirundo rustica*	Y	

Species	VP1	VP2
Carrion crow *Corvus corone*	Y	
Coal tit *Periparus ater*		Y
Common blackbird *Turdus merula*	Y	Y
Common cuckoo *Cuculus canorus*	Y	
Common linnet *Linaria cannabina*	Y	
Common starling *Sturnus vulgaris*	Y	
Common swift *Apus apus*	Y	
Common woodpigeon *Columba palumbus*	Y	
Eurasian blackcap *Sylvia atricapilla*		Y
Eurasian chaffinch *Fringilla coelebs*		Y
Eurasian jay *Garrulus glandarius*		Y
Eurasian skylark *Alauda arvensis*	Y	
Eurasian wren *Troglodytes troglodytes*		Y
European goldfinch *Carduelis carduelis*		Y
European green woodpecker *Picus viridis*	Y	
Herring gull *Larus argentatus*	Y	Y
European stonechat *Saxicola rubicola*	Y	
Goldcrest *Regulus regulus*	Y	
House sparrow *Passer domesticus*		Y
Lesser black-backed gull *Larus Californicus*	Y	Y
Meadow pipit *Anthus pratensis*	Y	Y
Mistle thrush *Turdus viscivorus*	Y	
Song thrush *Turdus philomelos*	Y	Y
Western jackdaw *Coloeus monedula*	Y	
White wagtail *Motacilla alba*	Y	
Willow warbler *Phylloscopus trochilus*		Y

3.2 MOORLAND BIRD SURVEYS

TARGET SPECIES

No waders, seabirds or wildfowl species were recorded breeding within the 500m buffer of the Site.

Peregrine was recorded during the MBS on 13 June 2025.

SECONDARY SPECIES

3.2.1 The secondary species which were recorded during the MBS are shown in **Table 3-3**, including which date these were recorded on.

Table 3-3 – Secondary species recorded during the MBS

Species	7 May 2025	28 May 2025	13 June 2025	23 July 2025
Common buzzard	Y	Y	Y	Y
Raven		Y	Y	

Incidental recordings of secondary species

An oystercatcher was recorded, heard from the carpark on Tonna Road, approximately 620m from the Site at its nearest point. Although the individual was not seen, it was presumed to be commuting through the area.

NON-TARGET SPECIES

3.2.2 The non-target species which were recorded during the MBS are shown in **Table 3-4**, including which date these were recorded on.

Table 3-4 – Non-target species recorded during the MBS

Species	7 May 2025	28 May 2025	13 June 2025	23 July 2025
Barn swallow		Y	Y	Y
Carrion crow	Y	Y	Y	Y
Coal tit *Periparus ater*				Y
Common blackbird	Y	Y	Y	Y
Common chiffchaff *Phylloscopus collybita*		Y	Y	Y
Common cuckoo	Y	Y	Y	
Common linnet		Y		Y
Common reed bunting *Emberiza schoeniclus*			Y	
Common starling	Y			Y
Common swift *Apus apus*				

Species	7 May 2025	28 May 2025	13 June 2025	23 July 2025
Common wood pigeon			Y	Y
Dunnock *Prunella modularis*				Y
Eurasian blackcap		Y		
Eurasian blue tit *Cyanistes caeruleus*			Y	Y
Eurasian bullfinch *Pyrrhula pyrrhula*		Y		
Eurasian chaffinch	Y	Y	Y	Y
Eurasian jay			Y	Y
Eurasian magpie *Pica pica*			Y	
Eurasian skylark	Y	Y	Y	Y
Eurasian siskin				Y
Eurasian wren	Y	Y	Y	
European goldfinch			Y	Y
European green woodpecker			Y	Y
European herring gull	Y	Y	Y	Y
European robin *Erithacus rubecula*	Y	Y	Y	Y
European stonechat	Y	Y	Y	Y
Goldcrest		Y	Y	
Great spotted woodpecker *Dendrocopos major*				Y
Great tit *Parus major*				Y
Grey wagtail *Motacilla cinerea*				Y
House sparrow *Passer domesticus*				
Lesser black-backed gull *Larus Californicus*				Y
Meadow pipit	Y	Y	Y	Y
Mistle thrush	Y	Y	Y	Y
Northern wheatear *Oenanthe oenanthe*		Y		Y
Sand martin *Riparia riparia*			Y	
Song thrush	Y	Y	Y	
Tree pipit *Anthus trivialis*			Y	
Western house martin *Delichon urbicum*				Y

Species	7 May 2025	28 May 2025	13 June 2025	23 July 2025
Western jackdaw		Y	Y	Y
White wagtail		Y	Y	Y
Willow warbler		Y	Y	

3.3 BREEDING SCHEDULE 1 RAPTOR SURVEYS

Four Schedule 1 species were recorded during the raptor surveys: peregrine, red kite, goshawk and marsh harrier; only peregrine was recorded breeding within the raptor survey area. The Schedule 1 breeding raptor survey results are detailed within the **Confidential Annex, Volume 5 of the EIA Report**, and shown on **Figure 9A.5**.

3.3.1 OTHER BREEDING RAPTOR SPECIES

While Schedule 1 raptor species were the main focus of the survey visits, records other breeding raptors and ravens and any nesting behaviour were noted:

3.3.1.1 Common kestrel

One pair of common kestrels were identified breeding within the survey area, approximately 1.25km south/southeast of the easternmost extent of the Site.

A female common kestrel was observed displaying territorial behaviour by diving towards a red kite on 28th April as it hunted along the hillside close to a rocky crag. This suggested that a nest site was located nearby, and most likely on an appropriate ledge within the rock outcrop.

On 06 May 2025, a female common kestrel was observed returning to the rocky crag carrying food, indicating the presence of a nest containing young. The male was also observed hunting nearby. The female was again observed diving and chasing a red kite that strayed close to the nest site while hunting.

No further visits were made to the location to establish the outcome of the breeding attempt once the nest location had been established.

Sparrowhawk

A single sparrowhawk nest was identified within a semi-mature larch *Larix decidua* at the centre of a small mixed woodland plantation approximately 400m south of Croeserw. No birds were present at the time of the visit and breeding could not be confirmed due to dense vegetation preventing access to the plantation.

Common Buzzard

No breeding evidence was found for common buzzard within the survey area.

3.3.2 INCIDENTAL RECORDS

There were incidental records of the following species:

- Peregrine

- Red kite
- Goshawk

All details pertaining to incidental records of Schedule 1 listed species are presented within the **Confidential Annex, Volume 5 of the EIA Report**.

3.4 NIGHTJAR SURVEYS

Overall, three nightjar territories were identified within 500m from the Site. These were recorded north of Mynydd Bach, east of Caerau, and are shown on **Figure 9A.6** as B1, A2/B2 and A3/B3. Further details are provided below:

- 25 June/11 July: A2/B2 – one male nightjar was churring at the same location on both dates, approximately 300m south of the Site.
- 11 July: B1 – one male nightjar was churring, approximately 100m south of the Site
- 25 June/11 July: A3/B3 – one male nightjar was churring at the same location on both dates, approximately 500m south of the Site.

An additional five territories were recorded incidentally beyond the 500m survey area, indicating that the habitats surrounding the Site are highly suitable for supporting nightjar. These additional territories are noted below and are also shown on Figure 6, although are beyond the scope of the report and are not at risk of effects from the Proposed Development.

- 16 June: C1 – one male nightjar displaying and churring, approximately 780m south of the Site.
- 16 June: C2 – one male nightjar displaying and churring, approximately 1km south of the Site.
- 16 June: C3 – one male nightjar displaying and churring, approximately 1.2km south of the Site.
- 03 July: D1 (and D2 – female) – one male nightjar displaying, churring and fighting behaviours with D3 (see below), approximately 900m south of the Site.
- 03 July: D3 (and D2 – female) - one male nightjar displaying, churring and fighting behaviours with D1 (see above) approximately 1.2km south of the Site.

Territorial behaviour in the form of churring, fighting and/or wing clapping was recorded during all four of the surveys.

The results are illustrated on **Figure 9A.6**.

4 DISCUSSION

4.1 OVERVIEW

Birds are protected under the Wildlife and Countryside Act (WCA) 1981 (as amended) and it is an offence to damage or destroy a bird's nest whilst it is in use, or to kill or injure a bird, or to destroy an egg. It is also an offence to deliberately disturb any wild bird listed on Schedule 1 of the Act while it is building a nest or is in, on or near a nest containing eggs or young, or to disturb dependent young of such a bird.

The survey area was assessed as having high potential for nesting raptors, commuting, sheltering, and foraging birds particularly within the woodland, scrub, scattered trees, bracken and riverine habitats present.

There is potential for the Proposed Development to cause disturbance to nesting birds if works are conducted during the breeding season (March to August inclusive). During the surveys, breeding activities were confirmed for common kestrel, nightjar, peregrine falcon and sparrowhawk.

Collision risk with the OHL, once in operation, has been identified as risk to common kestrel, peregrine falcon, red kite, buzzard and raven. Further details are provided below for potential effects to target species resulting from the Proposed Development. These are listed in alphabetical order and this order is not indicative of each species' importance.

4.2 POTENTIAL EFFECTS TO TARGET SPECIES

Goshawk

Goshawks are listed as Schedule 1 bird species on the WCA. During the suite of ornithological surveys, goshawks were identified during both the moorland birds surveys on 28 May 2025 and during the breeding Schedule 1 raptor surveys on 28 April 2025.

Sixteen areas of forest plantations were identified within 1km of the Proposed Development that contained trees of suitable maturity and height to accommodate nesting goshawk. One pair of goshawks were observed displaying above a forest block within 400m of the proposed route during the survey carried out on 28 April, but no evidence of breeding was found. A single bird was also observed in flight over the same forest block on 28 May during the moorland bird survey, however, subsequent searches of the forest block found no evidence of breeding.

While no evidence of nesting could be established within the 1km survey buffer during the 2025 season this does not mean that nests will be absent in future years. Goshawks can move up to 2.5km to an alternative nest site if disturbed during the early part of the nesting season (Petty & Anderson, 1996) so have the potential to begin nest building from April onwards. Nest building usually takes place between September and late April so birds may be present and visible throughout the winter months.

It is currently unlikely that the Proposed Development will have any impact on breeding goshawk.

Common kestrel

Common kestrel are listed on Section 7 of the Environment (Wales) Act 2016 as a Priority Species. During the suite of ornithological surveys, kestrels were identified during the VP surveys and the breeding Schedule 1 raptor surveys.

During the VP surveys, one common kestrel was observed during each of the visits carried out on 24 April 2025 and 30 June 2025. These were recorded at PCH for a total duration of 30 seconds, putting them at risk of collision with the OHL once in operation.

During the Schedule 1 breeding raptor survey, one breeding pair was identified on 06 May 2025. While breeding common kestrels were found nesting within the survey buffer, the distance between the nest site, and the closest point of the works (approximately 1.25km) suggests that the birds are unlikely to be impacted by disturbance created during the construction phase of the scheme. Common kestrels' foraging range is generally governed by the density of food resources (Hardy et al, 2013) found near the nest site. If food resources are high, then the birds are unlikely to be hunting far from the nest site. During survey visits, both male and female birds were observed hunting close to the nest site and catching food which was then taken to the nest. Birds returned to hunt over the same patches of ground suggesting that food resources were good at the nest location.

Given the distance between the Site and the common kestrel's nest it's unlikely that work carried out in the period discussed above for common kestrel will not have any impact on breeding activities, however, commuting and foraging individuals could be at risk of collision with the OHL, once in operation.

Marsh harrier

Marsh harrier are listed on as Schedule 1 bird species on the WCA. One marsh harrier sighting was recorded during a breeding Schedule 1 raptor survey carried out on 29 April.

As this sighting was recorded approximately 1km from the Site, with no breeding activities recorded, it is currently unlikely that the Proposed Development will have any impact on breeding or commuting marsh harrier.

Nightjar

Nightjar is listed on Annex I of the EU Birds Directive (Annex 1), it is also listed on Section 7 of the Environment (Wales) Act 2016 as a Priority Species.

Targeted nightjar surveys were carried out within suitable habitat within 500m of the Site. Within 500m of the Site, three territories were identified. The closest record of a churring male was recorded approximately 100m south of the Site.

Due to the proximity of active breeding territories to the Site, work to install the Proposed Development within 500m (NatureScot, 2021) of the territory carries a risk of disturbance throughout the nesting period and could result in abandonment of the territory and loss of eggs or dependent young.

Peregrine falcon

Peregrine falcons are listed as Schedule 1 bird species on the WCA. During the suite of ornithological surveys, peregrine falcons were identified during both the moorland birds surveys and during the breeding Schedule 1 raptor surveys.

During the moorland bird surveys, one peregrine falcon sighting was identified on 13 June 2025. On 28 April 2025, 17 June 2025 and 18 June 2025, peregrines were identified during the breeding Schedule 1 raptor surveys, with evidence of breeding activity recorded as further detailed within the **Confidential Annex, Volume 5 of the EIA Report**.

Work to install the Proposed Development within 500m of the nest site used by peregrine falcons carries a risk of disturbing birds throughout the nesting period and could result in abandonment of the nest site and loss of eggs or dependent young. The nest site is approximately 370m from the Site at its closest point.

Red Kite

Red kites are listed as Schedule 1 bird species on the WCA. During the suite of ornithological surveys, red kites were identified during the VP surveys, the moorland birds surveys and the breeding Schedule 1 raptor surveys.

During the VP surveys, red kites were observed across several dates in April, June and July 2025 and were recorded at PCH for a total duration of 210 seconds, out of a total of 1395 seconds flight time, putting them at risk of collision with the OHL once in operation.

Red kite was also recorded hunting, displaying and commuting during each of the MBS.

During the breeding Schedule 1 raptor surveys, there were no nest sites identified for red kite within the 2km survey buffer but habitats within the survey area were deemed suitable for the species to nest. Red kite can travel up to 10km from nest site to foraging areas, so red kites observed hunting over the moorland areas during survey visits may have travelled some distance to reach the Site.

The route of the Proposed Development avoids areas of broadleaved woodland favoured by red kites for nesting so is unlikely to have any direct impact on breeding pairs of birds, however, commuting and foraging individuals could be at risk of collision with the OHL, once in operation.

4.3 POTENTIAL EFFECTS TO SECONDARY SPECIES

Common Buzzard

Common buzzard are Green listed species according to BoCC Wales 4 (Johnstone, I.G., et al 2022), however, as raptor species, they are species which are more likely to be encountered at PCH. Common buzzards were identified across at both VPs, during all moorland bird surveys, and on 29 April, 17 June, 18 June 2025 during the breeding raptor surveys, however, no evidence of breeding common buzzard were recorded.

Oystercatcher

Oystercatchers are Amber listed species according to BoCC Wales 4. An oystercatcher was recorded as an incidental sighting prior to the commencement of a moorland bird survey, heard from the carpark on Tonna Road, approximately 620m from the Site at its nearest point. Although the individual was not seen, it was presumed to be commuting through the area.

As this was just a single record, with no breeding activities recorded, it is currently unlikely that the Proposed Development will have any impact on breeding or commuting oystercatcher.

Raven

Raven are Green listed species according to BoCC Wales 4, however, are species which are more likely to be encountered at PCH and occupy a similar ecological niche to many raptor species. Ravens were identified across at both VPs and on 28 May and 13 June 2025 during moorland bird surveys. No evidence of breeding raven has been recorded.

Sparrowhawk

Sparrowhawks are Green listed species according to BoCC Wales 4. During the breeding raptor surveys carried out on 18 June 2025, sparrowhawk was found nesting approximately 400m from Site. Sparrowhawks are not likely to be impacted by the development as the nest was identified close to human habitation with a number of overhead power lines already present between the nest site and urban area where the Proposed Development is to be located.

4.4 POTENTIAL EFFECTS TO NON-TARGET SPECIES

Several non-target species were identified during the VP surveys and moorland bird surveys. These included several species which typically breed within habitats present within the Site. If works are conducted during the breeding season (March to August inclusive), there is potential for the Proposed Development to cause disturbance to non-target species of nesting birds in addition to the target and secondary species discussed above.

Additionally, the following non-target species are more likely to be encountered at PCH and are therefore at risk of collision with the OHL once in operation.

Herring gull

Herring gull is listed on BoCC Wales Red List, were recorded onsite, and are more likely to be encountered at PCH. Herring gull were recorded in low numbers and only were encountered in small groups during VP surveys.

Lesser black-backed gull

Lesser black-backed gull is listed on BoCC Wales Red List, were recorded onsite, and are more likely to be encountered at PCH. As with herring gull which occupy a similar ecological niche, lesser black-backed gull were recorded in low numbers and only were encountered in small groups during VP surveys.

5 RECOMMENDATIONS

5.1 OVERVIEW

There are no further ornithological survey requirements following from the survey efforts described in detail within this report. The following section sets out measures which are recommended to avoid, mitigate and compensate for effects upon the ornithological assemblage as a consequence of the Proposed Development. These measures aim to enable compliance with the legislation described within Section 4 above and to encourage completion of the Proposed Development in line with planning policy and other guidance wherever possible. Opportunities for enhancement in association with the Proposed Development have also been identified and targeted towards species listed as of conservation concern.

5.2 AVOIDANCE MEASURES

Wherever possible, high value habitat suitable for nesting birds such as dense scrub habitat, woodland and edge habitats, as well as Priority Habitats including upland lowland dry acid grassland, purple moor-grass and rush pasture and upland heathland should be retained within the design of the Proposed Development. Clear-fell habitat suitable for nightjar within 500m from the Site should also be avoided where possible.

Where clearance of vegetation is required, it should avoid the main bird nesting season (March to August inclusive) to avoid damage or destruction of nests. This period also overlaps with the period during which nightjar typically set up territories and breed in the UK (April – August). If unavoidable, a suitably qualified ecologist should be employed to inspect the area within 24 hours prior to clearance; should any nests be identified, it will be necessary for a suitably sized buffer zone in which no works occur to be put in place around the nest until the young have fledged. **Construction of the Proposed Development is unlikely to have any direct impact on breeding birds including Schedule 1 raptors and nightjar providing work is carried out at the appropriate time of year discussed. Where works are carried out during the breeding period, NRW licences to disturb Schedule 1 nesting birds including peregrine falcon may be required.**

5.3 MITIGATION AND COMPENSATION MEASURES

To mitigate to collision/electrocution risk to birds once the OHL is in operation the following is recommended:

- Installation of ‘bird-friendly’ powerlines – these should include perching and nesting detterents to minimise risk of electrocution, and should include insulating components such as air gaps or other such measures.
- Line markers should be utilised to minimise collision risk. These should be spaced closely together, at least every 5-10m apart. Black and white markers have been found to have the best visibility to birds and are the recommended colours to be used in this instance (NatureScot, 2025[b]).
- The above measures should be maintained as elements replaced to ensure that the mitigation is effective for the entire life of the OHL.

It should also be noted that the installation of UGC naturally completely eliminates the risk of collision and electrocution to commuting birds. It is noted that the Proposed Development incorporates UGC in its design at approximately 47%.

Mitigation for loss of suitable habitat will be addressed according to whether the habitat removal will be temporary or permanent. Where habitats are subject to temporary loss, these will be allowed to naturally regenerate as soon as possible following construction, and permanent habitat loss will be compensated for by enhancement/creation of new, like-for-like habitats. This will include planting rush pasture with purple moor-grass and acid grassland species to help recreate Priority Habitat. Removal of trees would be replaced at a 3:1 ratio, as is in line with policy (PPW, 2024). Enhancement of retained habitats for improved biodiversity is discussed below in Section 5.4. These measures will be secured through an outline Habitat Management Plan (OHMP).

5.4 ECOLOGICAL ENHANCEMENT OPPORTUNITIES

The Proposed Development also offers the opportunity to provide nesting provision and foraging opportunities for bird species. To encourage compliance with planning policy (PPW, 2024) the following measures are recommended for inclusion within the Proposed Development:

- Enhancement of retained habitats will be undertaken to increase their conservation value. Wildflower seeding will take place in habitats with low species-diversity, i.e, existing improved grassland. Long-term habitat monitoring of reinstated habitats will ensure that the Proposed Development achieves a Net Benefit for Biodiversity (NBB) in the long-term and when the Proposed Development is in its operational phase. All mitigation and enhancement measures will be agreed with the LPAs (BCBC, NPTCBC and Rhondda Cynon Taf County Borough Council (RCTCBC)). This will provide enhanced feeding opportunities and nesting opportunities for breeding birds within the Site.
- To benefit nightjar, it is recommended that long-term management to prevent succession of suitable clear-fell habitats into a closed-canopy woodland is implemented. Furthermore, interpretative boards should be provided to encourage responsible dog walking to minimise the disturbance of nesting birds within this habitat.
- It is recommended that mature trees are retained wherever possible and that artificial nest boxes for large and small birds are installed within the Site in order to increase nesting opportunities.
- The Site could be enhanced through the provision of an additional waterbody within the landscape plan to provide ecological benefit to a range of bird species (and other fauna) including song thrush, swifts, swallows and waterfowl.

6 CONCLUSIONS

A suite of ornithological surveying comprising VP flight activity surveys, MBS, breeding raptor surveys and breeding nightjar surveys have been carried out of the Site and areas surrounding. Overall, the areas surveyed were assessed as having high potential for nesting raptors, commuting, sheltering, and foraging birds particularly within the woodland, scrub, scattered trees, bracken and riverine habitats present. It was concluded that there is potential for the Proposed Development to cause disturbance to nesting birds if works are conducted during the breeding season (March to August inclusive). During the surveys, breeding activities were confirmed for common kestrel, nightjar, peregrine falcon and sparrowhawk. Collision risk with the OHL, once in operation, has been identified as a risk to common kestrel, peregrine falcon, red kite, buzzard and raven. Further details are provided in the report relating to these species, as well as relating to additional species identified, which included the target species; goshawk and marsh harrier and the secondary species; oystercatcher and sparrowhawk; and non-target species.

No further ornithological survey requirements are recommended following on from the survey effort, however, avoidance, mitigation, compensation and enhancement measures are provided to include:

- Avoidance of the removal of high value habitats suitable for nesting birds;
- Avoidance of vegetation clearance during the main bird nesting season (March to August inclusive);
- Where avoidance of vegetation clearance cannot be achieved, a suitably qualified ecologist should be employed to inspect the area within 24 hours prior to clearance. Where works are carried out during the breeding period, Natural Resources Wales (NRW) licences to disturb Schedule 1 nesting birds including peregrine falcon may be required;
- Measures to mitigate to collision/electrocution risk to birds once the OHL is in operation, including ‘bird-friendly’ design measures to powerlines;
- Measures to mitigate habitat loss, including habitat natural regeneration/habitat enhancement/creation.

Further ecological enhancement measures to encourage compliance with planning policy (PPW, 2024).

7 REFERENCES

7.1 PROJECT REFERENCES

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Annex A

SURVEY DATES, TIMES AND WEATHER CONDITIONS

Table 0-1 – Dates, times and weather conditions during VP surveys

Date	Start time	Finish time	Weather conditions
VP1			
24/04/25	11:00	14:00	Light breeze NW-W, dry, cloud cover 7-8/8, cloud height >500 m, good visibility, 13-14°C
24/04/25	14:00	17:00	Light breeze NW-N, dry, cloud cover 8/8, cloud height >500 m, good visibility, 14°C
09/06/25	09:30	12:30	Light to gentle breeze S, dry, cloud cover 8/8, cloud height >500 m, good visibility, 13-16°C
09/06/25	12:30	15:30	Gently to moderate breeze SW, dry, cloud cover 8/8, cloud height >500 m, good visibility, 15-16°C
30/06/25	08:45	11:45	Light breeze NW-N, dry, cloud cover 1-5/8, cloud height >500 m, good visibility, 20-22°C
30/06/25	11:45	14:45	Light breeze N-NE, dry, cloud cover 0-1/8, cloud height >500 m, good visibility, 22-24°C
18/07/25	10:40	13:40	Light breeze E-NE, dry, cloud cover 8/8, cloud height >150 m, good visibility, 18-19°C
18/07/25	13:40	16:40	Light breeze E, dry, cloud cover 7-8/8, cloud height >150 m, good visibility, 19-20°C
06/08/25	10:10	13:10	Light breeze SW, gusting to a moderate breeze, dry, cloud cover 3-8/8, cloud height >500 m, good visibility, 16-18°C
06/08/25	13:10	16:10	Light breeze SW-W, gusting to a moderate breeze, dry, cloud cover 8/8, cloud height >500 m, good visibility, 17-18°C

VP2			
24/04/25	11:00	14:00	Light breeze SE, dry, cloud cover 8/8, cloud height 150-500 m, good visibility, 12-13°C
24/04/25	14:30	17:30	Light breeze SE, dry, cloud cover 7-8/8, cloud height >500 m, good visibility, 13-14°C
09/06/25	09:30	12:30	Light to gentle breeze E-NE, dry, cloud cover 7-8/8, cloud height 150-500 m, good visibility, 13-14°C
09/06/25	12:30	15:30	Gentle breeze NE, dry, cloud cover 8/8, cloud height 150-500 m, good visibility, 13-14°C
30/06/25	08:45	11:45	Gentle breeze SE, dry, cloud cover 1-4/8, cloud height 150 m to >500 m, good visibility, 18-23°C
30/06/25	11:45	14:45	Gentle breeze SE-SW, dry, cloud cover 1-2/8, cloud height >500 m, good visibility, 23-28°C
23/07/25	08:15	11:15	Light to gentle breeze NW, dry with some drizzle, cloud cover 3-4/8, cloud height >500 m, good visibility, 17-20°C
23/07/25	11:15	14:15	Gentle to moderate breeze NW, dry, cloud cover 4/8, cloud height >500 m, good visibility, 20°C
06/08/25	10:00	13:00	Light air W, dry, cloud cover 4-6/8, cloud height >500 m, good visibility, 16-17°C
06/08/25	13:00	16:00	Light air W, dry, cloud cover 6-7/8, cloud height >500 m, good visibility, 17°C

Table 02 – Dates, times and weather conditions during MBS

Date	Start time	Finish time	Weather conditions

07/05/25	09:50	17:00	Light to gentle breeze SW to NE though clockwise, dry, cloud cover 3-7/8, good visibility, 14-17°C
28/05/25	09:00	16:30	Moderate breeze W, dry, cloud cover 3-8/8, good visibility, 14-17°C
13/06/25	09:00	16:30	Light air to light breeze SW-W, dry with light showers in last 2 hours, cloud cover 3-6/8, good visibility, 17-20°C
23/07/2025	09:00	16:45	Light air to gentle breeze, W-N, dry, cloud cover 3-6/8, good visibility, 18-21°C

Table 03 – Dates, times and weather conditions during breeding raptor surveys

Date	Start time	Finish time	Weather conditions
Visit 1			
28/04/2025	08:00	16:00	Dry, Wind F2-3 SE, Cloud Cover 0/8, Visibility >3km, Temp 20ºc
29/04/2025	08:00	15:30	Dry, Wind F2-3 SE, Cloud Cover 0/8, Visibility >3km, Temp 23ºc
Visit 2			
06/05/2025	08:00	15:30	Dry, Wind F3 SE, Cloud Cover 0-1/8, Visibility >3km, Temp 22ºc
07/05/2025	08:00	15:30	Dry, Wind F3 E, Cloud Cover 0-2/8, Visibility >3km, Temp 26ºc
Visit 3			
17/06/2025	08:00	15:30	Dry, Wind F4-5 W, Cloud Cover 0-4/8, Visibility >3km, Temp 17ºc

18/06/2025	08:00	15:30	Dry, Wind F2-3 W, Cloud Cover 0-1/8, Visibility >3km, Temp 21ºc
Visit 4			
No visits required – breeding raptors found on site ready to fledge on previous visit.			

Table 0-4 – Dates, times and weather conditions during nightjar surveys

Date	Start time	Finish time	Weather conditions
Visit 1			
16/06/25	21:40	23:15	Light breeze W, dry, cloud cover 4/8, good visibility, 13-15°C
25/06/25	21:45	23:00	Light breeze SW, dry, cloud cover 8/8, good visibility, 16°C
Visit 2			
03/07/25	02:00	04:30	Light breeze N, dry, cloud clover 1/8, clear with good visibility, 10-12°C
11/07/25	02:00	03:50	Light breeze NW, dry, cloud clover 1/8, clear with good visibility, 15-17°C

Annex B

VP SURVEY RESULTS

Date	Time	VP	No. of birds	Height band	Total flight time (secs)	Flight time (PCH) (secs)	Notes
Common kestrel							
24/04/25	15:00	1	1	A	15	15	Male, gliding over acid grassland very close to ground.
30/06/25	14:33	1	1	A-B	60	15	Hunting over grassland
Red kite							
24/04/25	11:54	1	1	A-B	30	15	Gliding northwards, dipped below ridge
09/06/25	10:42	1	1	A-C	180	30	Circling low over fields SW of VP, and then circling/drifting in SE direction/ Continually circling and gaining height

Date	Time	VP	No. of birds	Height band	Total flight time (secs)	Flight time (PCH) (secs)	Notes
							before drifing out of viewshed, SE of VP.
09/06/25	13:16	1	1	B-C	120	0	Flying N to S, E of VP. Circling over fields and clear-fell area, and flew beyond viewshed to the SW.
09/06/25	13:41	1	1	B-C	150	0	Dropped down over clear-fell area SW of VP and drifted off towards the S. Then circled at edge of viewshed (1.5km – 2km) before heading SW of VP, beyond viewshed.

Date	Time	VP	No. of birds	Height band	Total flight time (secs)	Flight time (PCH) (secs)	Notes
09/06/25	15:06	1	1	B-C	105	0	Circled high over fields S of VP, dropping down and drifting SW of VP, heading N.
30/06/25	09:07	1	1	B-C	45	0	Soaring east, commuting
30/06/25	11:51	1	1	B	15	0	Briefly soared over VP
18/07/25	10:59	1	1	B	105	0	Flew from north, flapping, to west of VP. Circled seven times over rough grassland, then flew west.
24/04/25	11:35	2	1	A-B	90	60	N/A

Date	Time	VP	No. of birds	Height band	Total flight time (secs)	Flight time (PCH) (secs)	Notes
09/06/25	10:12	2	2	B-C	75	0	Two birds flying almost together, circling on thermals above the plantation edge.
09/06/25	11:14	2	1	A-B	30	15	Soaring low.
09/06/25	11:51	2	1	B-C	45	0	Soared from E to W, before dropping into the valley and out of the viewshed.
09/06/25	14:52	2	1	C	15	0	Briefly soared into viewshed.
09/06/25	15:15	2	1	C	15	0	Briefly soared into viewshed.
23/07/25	09:54	2	1	B	210	0	Circling above crest of hill east to west, then north

Date	Time	VP	No. of birds	Height band	Total flight time (secs)	Flight time (PCH) (secs)	Notes
23/07/25	10:04	2	1	B	75	0	Commuting east to west
23/07/25	13:24	2	1	A	90	90	Commuting south-east to north-west
Peregrine							
06/08/25	14:03	2	1	B	30	0	Approximately 40m high, circling briefly

Annex C

CONFIDENTIAL ANNEX - BREEDING SCHEDULE 1 RAPTOR SURVEY RESULTS

1 Capital Quarter
Tyndall Street
Cardiff
CF10 4BZ

wsp.com