

Ballyfeeny Green Energy Project



Environmental Impact Assessment Report Volume II

Appendix 6.5 – Ornithology September 2025

Ballyfeeny Green Energy Limited

Ballyfeeny Green Energy Project

Appendix 6.5: Ornithology Technical Appendix

September 2025

This report considers the **particular instructions** and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

**INIS Environmental
Consultants Ltd.**

Suite 16,
Block A,
Clare Technology Park,
Gort Road,
Ennis,
County Clare
Ireland.



Notice

This report was produced by INIS Environmental Consultants Ltd. (INIS) on behalf of Ballyfeeny Green Energy Limited (hereafter known as the Developer) to accompany **EIAR Chapter 6 - Biodiversity** for the Ballyfeeny Green Energy Project. The purpose of this report is to assess the ornithology baseline for the Ballyfeeny Green Energy Project (hereafter referred to as the 'proposed Project'), with all reasonable skill, care and due diligence within the terms of the contract with the client, incorporating our terms and conditions and taking account of the resources devoted to it by agreement with the client.

This report may not be used by any person other than the client, without the client's express permission. In any event, INIS accepts no liability for any costs, liabilities or losses arising as a result of the use of or reliance upon the contents of this report by any person other than the client.

This report is confidential to the client and INIS accepts no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies upon the report at their own risk.

© INIS Environmental Consultants Ltd., 2025.

CONTENTS

5	Ornithology Results	4
5.1	Zone of Influence	4
5.2	Ornithological Survey Area	6
5.3	Field Survey Methods	7
5.3.1	Vantage Point Surveys	7
5.3.2	Breeding Bird Transects	11
5.3.3	Lowland Breeding Wader Surveys	11
5.3.4	Wetland Bird Surveys (I-WeBS)	12
5.3.5	Breeding Kestrel & Peregrine Surveys	12
5.3.6	Wintering Hen Harrier (Roost) Survey	13
5.3.7	Breeding Woodcock Survey	13
5.3.8	Breeding Barn Owl Survey	14
5.4	Field Survey Results	15
5.4.1	Vantage Point Watches	15
5.4.2	Countryside Bird Surveys	77
5.4.3	Breeding Wader Surveys	84
5.4.4	Wintering Wetland Bird (I-WeBS) Surveys	88
5.4.5	Breeding Kestrel & Peregrine Surveys	143
5.4.6	Wintering Hen Harrier (Roost) Survey	155
5.4.7	Breeding Woodcock Survey	161
5.4.8	Breeding Barn Owl Survey	170
5.5	Species Assessments	179
5.5.1	Buzzard	179
5.5.2	Sparrowhawk	179
5.5.3	Kestrel	180
5.5.4	Peregrine	180
5.5.5	Hen Harrier	181
5.5.6	Barn Owl	182
5.5.7	Curlew	182
5.5.8	Lapwing	182
5.5.9	Redshank	183
5.5.10	Snipe	183
5.5.11	Woodcock	184
5.5.12	Common Scoter	184
5.5.13	Coot	185
5.5.14	Cormorant	185
5.5.15	Gadwall	186
5.5.16	Goldeneye	186
5.5.17	Golden Plover	187
5.5.18	Great Crested Grebe	187
5.5.19	Grey Heron	188
5.5.20	Kingfisher	188
5.5.21	Little Egret	189
5.5.22	Mallard	189
5.5.23	Mute Swan	190
5.5.24	Moorhen	190
5.5.25	Shoveler	191

5.5.26	Teal	191
5.5.27	Tufted Duck	192
5.5.28	Wigeon	193
5.5.29	Whooper Swan	193
5.5.30	Black-headed Gull	194
5.5.31	Common Gull	195
5.5.32	Great Black-backed Gull	195
5.5.33	Herring Gull	195
5.5.34	Lesser Black-backed Gull	196
5.5.35	Passerines and Other Bird Species	196
5.6	Summary of Key Ecological Receptors (KERs)	200

5 ORNITHOLOGY RESULTS

Bird surveys were conducted on the wind farm Site and survey area which included a focus on Annex I listed bird species (Birds Directive) and other species of moderate and high conservation concern (Gilbert *et al.*, 2021).

5.1 Zone of Influence

The Zone of Influence (Zoi) is defined as *‘the area over which ecological features may be affected by biophysical changes as a result of the proposed Project and associated activities’* (CIEEM, 2024). Zoi, and the study area, is therefore broadly considered as the geographical area over which the Project could affect the receiving environment in a way that could have significant effects on ecological receptors.

Mobile receptors (such as birds) have a ‘range’ for commuting to foraging habitats. The ranges of mobile species vary considerably, from a few metres to hundreds of kilometres (e.g. in the case of migratory wetland birds). Whilst static species and habitats are generally considered to have Zois near the Project, they can be significantly affected at considerable distances from an effect source; for example, where an aquatic habitat or species is located many kilometres downstream from a pollution source. For birds, typical Zois for the range of target species are based upon literature review and Best Practice guidance in relation to their ranging behaviours (see **Table 5.1**).

Table 5.1: List of target bird species Zone of Influence.

Sensitive Receptors Zone of Influence						
Target Group	Species	ZoI Non-Breeding	ZoI Breeding	Reference		
Raptors	Hen Harrier <i>Circus cyneus</i>	300-750m	300-750m	Goodship & Furness (2022)		
	Barn Owl <i>Tyto alba</i>	>50m	100m	Goodship & Furness (2022)		
	Kestrel <i>Falco tinnunculus</i>	>50m	100-200m	Goodship & Furness (2022); RSPB, (2023)		
	Peregrine <i>Falco peregrinus</i>	>200m	750m	Goodship & Furness (2022)		
Waders	Curlew <i>Numenius arquata</i>	200-650m	200-300m	Goodship & Furness (2022)		
	Golden Plover <i>Pluvialis apricaria</i>	500m	500m	Goodship & Furness (2022)		
Waterbirds	White-fronted Goose <i>Anser albifrons flavirostris</i>	500m – 1000m; Foraging Maximum of 10km		Goodship & Furness (2022); SNH 2016.		
	Whooper Swan <i>Cygnus cygnus</i>	200m – 500m; Foraging Maximum of 5km		Goodship & Furness (2022); SNH 2016.		
	General	200m-500m	200m-500m	Goodship & Furness (2022)		
Gulls	Lesser Black-backed Gull <i>Larus fuscus</i> ; Herring Gull <i>Larus argentatus</i> ; Great Black-backed Gull <i>Larus marinus</i>	180m	up to 40km	Goodship & Furness (2022); Kubetzki & Garthe (2003)		
Passerines	General	50-200m	50-200m	Goodship & Furness (2022)		

5.2 Ornithological Survey Area

The survey area was partially designed based on the relevant ZoI identified within the wider environment, but also through Best Practice guidance designed from avian impact assessment for onshore wind farms (NatureScot, 2017). **Table 5.2** lists the targeted surveys undertaken, following Best Practice guidance, to collect data to allow the baseline environment in the proximity of the proposed Project to be determined.

Table 5.2: Avian Surveys and Survey Extents.

Receptor	Survey Type	Survey Area	Reasoning
All Target Birds	VP Survey	Within the red line boundary plus 500m buffer.	Recommended guidance (SNH, 2017)
Breeding Waders	Breeding Waders Survey	500m from windfarm elements.	Maximum distance of sensitivity for wader species (Goodship & Furness, 2022); based upon recommended guidance for moorland birds (SNH, 2017)
Breeding Raptor	Nest suitability and activity Surveys	2km from windfarm elements	Recommended guidance (SNH, 2017)
General Breeding Birds.	Countryside Bird Surveys (CBS)	Suitable habitat in line with CBS guidance. Transects located at least 1 km from each other.	Appropriate coverage for bird species not easily observed through other monitoring methods.
Barn Owl	Breeding Barn Owl	2km	Recommended best practice guidance (TII, 2017, Shawyer, 2011; Lusby & O'Clery, 2014)
Hen Harrier Winter Roost	Dusk Roost Surveys	2km	Recommended guidance (SNH, 2017)
Wintering Wetland Birds (Ducks, Geese, Swans and Waders)	Irish Wetland Bird Survey (I-WeBS)	8km	Recommended guidance (SNH, 2017).

5.3 Field Survey Methods

Surveying methods were guided by best practice guidelines. Surveys were conducted according to the NPWS recommended standard methodologies and the SNH (now NatureScot) (2017) publication titled "*Recommended bird survey methods to inform impact assessment of onshore wind farms*", which provides detailed accounts of the most effective methods for surveying birds in expansive areas.

5.3.1 Vantage Point Surveys

The selection of VP locations was based on viewshed analysis, ensuring adequate coverage of the site area and a 500m buffer around its perimeter. VP locations are shown in **Figure 5.1**, and their grid references are provided in **Table 5.3**.

Table 5.3: Vantage Point locations for the proposed Project

Vantage Point	ITM Grid Reference	
	X	Y
1	599738	781503
2	597549	779968
3	597154	782473

According to the best practice methodology (SNH, 2017), each VP requires a survey effort of 36 hours, spread over the six-month duration of the breeding season. This implies a monthly survey effort of six hours per VP, which is divided into two observation periods of three hours each. As long as the cumulative total of 36 hours is achieved, variations in the monthly effort allocation are acceptable.

For each Vantage Point watch the following parameters are recorded:

- Vantage Point number;
- Date of watch;
- Watch period (including sunrise and sunset times as applicable);
- Weather conditions including visibility, wind - force and direction and precipitation;
- Notes: other birds seen or heard during the survey; potentially disturbing activity on site; etc.
- Notes on other birds' usage of proposed compensatory areas.

When a target species sighting is observed the following information is recorded:

- Sighting number during that watch;
- Time of sighting;
- Species;
- Sex of bird (if known);
- Approximate height of flight (in meters applicable to target 'height bands');
- Habitat over which bird was flying - see **Table 5.4** for habitat codes used;

- The activity of the bird - see **Table 5.5** for activity codes used;
- The duration of activity (recorded in seconds);
- If the bird was on or off site or both;
- Notes. Any more information on behaviour of bird(s).

Table 5.4: Codes used to record habitat type during VP watches

Code	Habitats
G	Grazing
RG	Rough grazing
HB	Heath or bog
DE	Deciduous woodland or scrub
GO	Gorse
CF	Clear fell
NF2	New forestry plantation trees 20-30cm high
NF3	New forestry plantation trees c 1m high
NF4	New forestry plantation trees >2m high
2nd F1/F2	Second rotation forestry plantation trees 20-30cm high
2nd F3	Second rotation forestry plantation trees c 1m high
2nd F4	Second rotation forestry plantation trees >2m high
F	Post thicket forestry

Table 5.5: Codes used to record observed activity or behaviour during VP watches

Code	Behaviour or activity
S	Soaring
D	Displaying
H	Hunting
FL	Flying
C	Circling
P	Perching
FP	Food pass

5.3.1.1 Winter Season 2022/23 and 2023/24 Vantage Point (VP) Surveys

In accordance with NatureScot (2017) guidance, VPs were surveyed for a minimum duration of 36 hours per VP per winter season in 2022/2023 and 2023/2024. The availability of suitable weather conditions for completing surveys (i.e., with good visibility and little wind or rain) was considered within survey scheduling. During the winter seasons 2022/2023 and 2023/2024, three VPs were surveyed per month (VP1-3). These three VPs provided coverage of all the lands within the Project Site plus a minimum 500m buffer around all proposed turbines (**Figure 5.1**). Surveys from these three VPs were undertaken in accordance with best practice survey guidance (NatureScot, 2017). All target species (Annex I listed, red-listed and moderate species of conservation concern) were recorded in addition to common species potentially sensitive to the Project.

VP survey efforts undertaken during the winter seasons 2022/2023 and 2023/2024 are detailed in **Table 5.6** and **Table 5.7** below.

Table 5.6: *VP Hour Count Winter 2022/2023.*

VP No.	October	November	December	January	February	March	Total
1	6	2	6	6	6	10	36
2	6	6	6	6	6	6	36
3	6	6	6	6	6	6	36
Total							108

Table 5.7: *VP Hour Count Winter 2023/2024.*

VP No.	October	November	December	January	February	March	Total
1	-	12	6	6	7	4	35
2	6	6	6	6	7	6	37
3	6	6	6	3	9	6	36
Total							108

5.3.1.2 Breeding Season 2023 and 2024 VP Surveys

During the breeding season 2023 and again in 2024, three VP surveys were carried out per month (VP1-VP3). These three VPs were undertaken in accordance with best practice survey guidance (NatureScot, 2017) and together provided coverage of all the lands under consideration plus a minimum 500m buffer around the proposed turbine locations (**Figure 5.1**). All bird records were allocated to the following height bands: 0-10m, 10-20m, 20-300m, 30-40m, 40-50m, 50-200m, >200m. All target species (Annex I listed, red-listed and moderate species of conservation concern) were recorded in addition to common and widespread species potentially sensitive to the Project.

Following NatureScot (2017) guidance, an average of six hours per VP during the breeding seasons of 2023 and 2024 were surveyed, generating an average of 36 hours per VP for the breeding season. Vantage Point survey effort undertaken during the breeding seasons 2023 and 2024 are detailed in **Table 5.8** and **Table 5.9**.

Table 5.8: *VP hour count breeding 2023.*

VP No.	April	May	June	July	August	September	Total
1	6	9	9	9	6	-	36
2	-	15	3	6	6	6	36
3	-	12	6	6	6	6	36
Total							108

Table 5.9: *VP hour count breeding 2024.*

VP No.	April	May	June	July	August	Total
1	6	6	6	6	12	36
2	6	6	4	8	12	36
3	6	6	4	6	14	36
Total						108

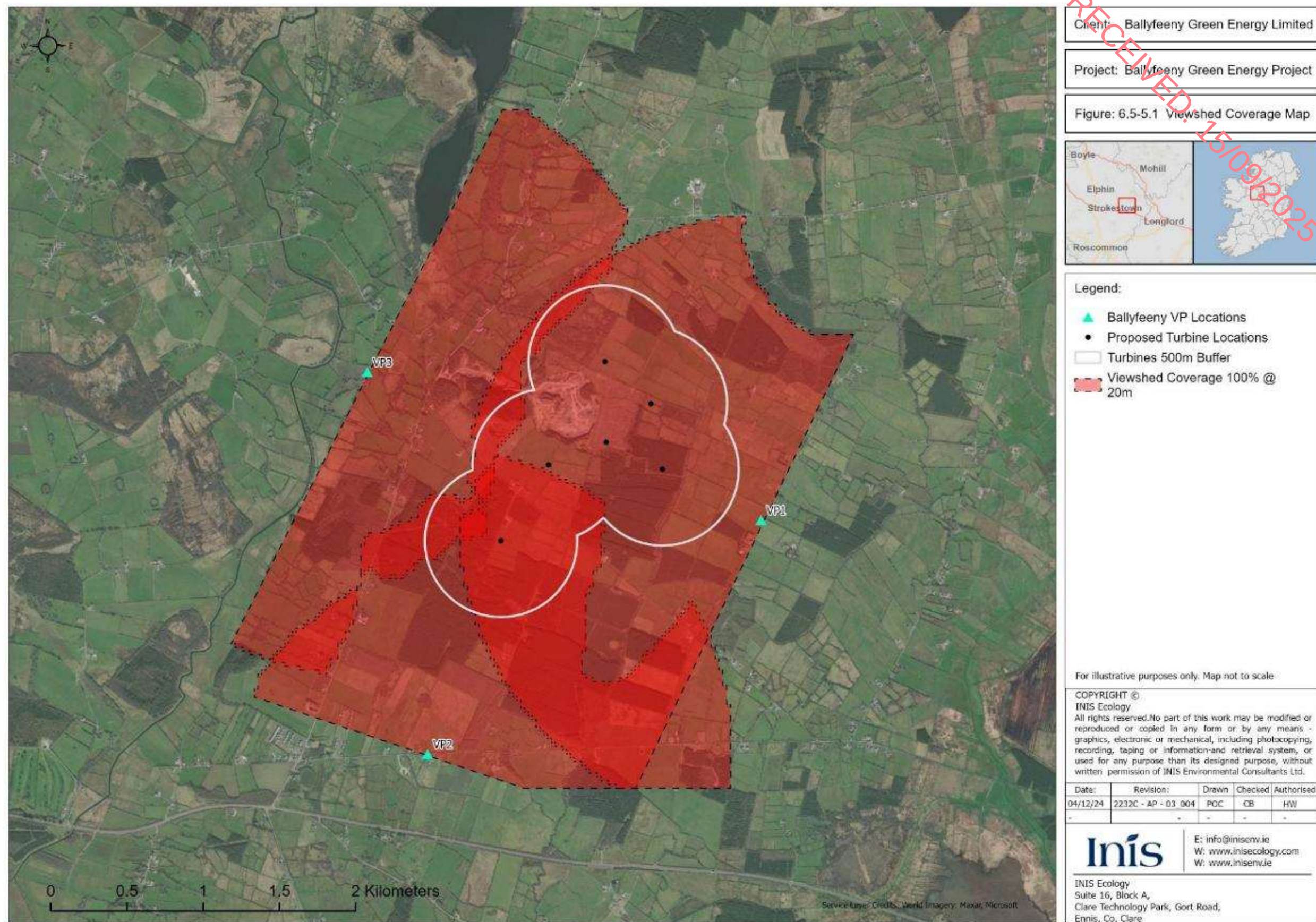


Figure 5.1: VP location and viewsheds for all VP surveys

5.3.2 Breeding Bird Transects

This method follows the latest guidelines for the Countryside Bird Survey (CBS) methodology used to monitor breeding bird populations across Ireland (BirdWatch Ireland, 2012).

Habitat features that require in-depth surveys should be those that have a medium/high foraging/commuting/connectivity factor for birds within the wider landscape, e.g. hedgerows, tree lines, watercourses/bodies, woodland. Transect surveys are designed to ensure that all areas and main features of the site are sampled within the survey.

Two surveys are undertaken on each transect route for breeding bird surveys during the breeding season; an early season visit between 1st April and 15th May, and a late season visit between 16th May and 30th June. All species encountered, visually and aurally, within 0–25m and 25–100m of the transect route were recorded and their abundance noted. All species which occur more than 100m from the transect route, or flying over the site, hence not using it, were also noted, but not included in the abundance analysis. Any ‘flight paths’ of note were recorded and geo-referenced.

The methodology indicated above closely follows the standardised CBS methodological approach and is recommended for use here for a number of reasons, as follows:

- Standardised CBS methods are based on best practice methods developed over many years – the CBS is supported by NPWS as the basis for national bird population monitoring;
- Application of standardised approach allows comparisons between sites and years;
- Adoption of CBS methodology also allows annual variation in bird occurrence from transects to be compared to the national CBS dataset, which may be important in identifying underlying, broad-scale patterns of bird occurrence; and
- Allowing for the calculation of bird-density estimates, rather than simple presence/absence data, thereby permitting the importance of the observed bird community to be determined.

A total of two transects were surveyed during the breeding seasons 2023 and 2024, and winter seasons 2022/2023 and 2023/2024 (see **Figure 5.31**). Two visits were undertaken for each transect during the breeding seasons 2023 and 2024 and four visits for each transect during the winter seasons 2022/2023 and 2023/2024.

5.3.3 Lowland Breeding Wader Surveys

Given the conservation importance of breeding waders as a species group (Gilbert *et al.*, 2021), targeted surveys are required by Best Practice Guidance to account for the presence of these species, as they are often not adequately addressed by VP surveys (SNH, 2017). Surveys conducted for lowland breeding waders require the observer to walk to within 100m of all areas of suitable breeding habitat, such as wetlands, grasslands, and peatlands. The main target species are Curlew (*Numenius arquata*), Golden Plover (*Pluvialis apricaria*), Redshank (*Tringa totanus*), and Snipe (*Gallinago Gallinago*), but all wader species and incidental sightings are recorded.

For lowland breeding waders, three visits are recommended (SNH, 2017; O’Brien & Smith, 1992; Gilbert *et al.*, 1998) in the period mid-April to early-July (SNH, 2017). To cover the widest range of species likely to be encountered, surveys are undertaken during the three hours after dawn (O’Brien

& Smith, 1992; Gilbert et al., 1998). As recommended by SNH (2017), the survey area extends to encompass suitable habitats within a 500m buffer outside the indicated project area.

As wetland habitats are covered as part of this study, the survey effort also covers any wetland birds (including wildfowl, rails, gulls, and terns) that may be present onsite. As with the breeding bird transects surveys, any 'flight paths' of note are recorded and geo-referenced.

To assess the presence of breeding wader species within the Project plus a 500m buffer, all suitable wetland habitat was surveyed within the Project and buffer (see **Figure 5.32**). This involved three survey visits during the breeding season in April and May 2023 and in April to June 2024. These were undertaken in accordance with relevant best practice guidance (O'Brien & Smith, 1992), during which the observer walked within 100m of all suitable breeding habitat. All wader species and other wetland birds (e.g., wildfowl, rails, gulls and terns) were recorded, along with any other species of conservation interest, with emphasis on recording any breeding wader activity within 500m of the Project.

5.3.4 Wetland Bird Surveys (I-WeBS)

Irish Wetland Bird Surveys (I-WeBS) are utilized to record, or count, all waterbird species as advised by Wetlands International (Wetlands International, 2006). Species recorded during these surveys are defined as "*species of birds that are ecologically dependent on wetlands*" and include swans, geese, ducks, kingfishers, divers, gulls, terns, shags, waders, cormorants, grebes, heron, crakes and rails (BirdWatch Ireland, 2019). Visitors and vagrants belonging to these species are also counted when seen. The I-WeBS methodology is detailed in the I-WeBS Counters Manual (BirdWatch Ireland, 2012) and these methods are the recommended approach in the SNH guidance documents (SNH, 2017) in relation to assessing impacts of onshore windfarm developments on wintering waterfowl.

Best Practice guidance (SNH, 2017) indicates that geese may forage up to 8km from Designated Sites and swans may forage up to 5km from roosting sites. Furthermore, for other wintering wetland birds, ranging distances of 2km need to be considered. A 5km buffer was used for the proposed Project.

Monthly wildfowl surveys took place during the winter season 2022/2023 from October 2022 to March 2023 inclusive, the breeding season 2023 in April, May and September, the winter season 2023/2024 from October 2023 to March 2024 inclusive, and the breeding season 2024 in April and May. Surveys included all lakes and coastal areas within 5km of the Project Site (see **Figure 5.34**). All wildfowl were recorded (if present) as target species during flight line surveys.

5.3.5 Breeding Kestrel & Peregrine Surveys

Kestrel (*Falco tinnunculus*) is Red-listed on the Birds of Conservation Concern in Ireland (BoCCI) list and are likely to be present, if scarce, in the vicinity of the proposed Project (Balmer et al., 2013).

Best Practice Guidance indicates that four visits, between March and July, are required to determine breeding activity and output (Hardey et al., 2013). To determine the presence of nesting sites, an assessment of habitat is required. This assessment included potential nest sites, such as cliffs, quarries, buildings and man-made structures, and the old tree nests of other bird species (Hardey et al., 2013), within 2km of the proposed project site (SNH, 2017). Potential nesting sites are recorded, although nesting sites are not approached at this stage to avoid disturbance, rather the location is recorded for subsequent visits to determine occupation (Hardey et al., 2013). For breeding Kestrel, up to three visits are required to determine occupancy, which were carried out between April and July 2024. These

surveys are conducted in reasonable weather, as Kestrel will be less obvious if they are sheltering from adverse conditions (Hardey *et al.*, 2013).

Peregrine (*Falco peregrinus*) are an Annex I species of the Birds Directive and are Amber-listed BoCCI. Peregrine is likely to be present, if scarce, in the vicinity of the proposed Project (Balmer *et al.*, 2013).

For Peregrine, nesting sites are often well known because they have been used for many years (Ratcliffe, 1993). To determine the presence of established nesting sites, records were sought from NPWS. Additional surveys were required to identify new or unknown nesting locations within 2km of the boundary of the proposed project site (SNH, 2017). Checks include all potential nest sites, such as cliffs, quarries, steep banks, buildings and man-made structures, and the old tree nests of other bird species (Hardey *et al.*, 2013).

In general, to minimise the risk of disturbance, nesting areas are viewed from distances of 500–750m (Ruddock & Whitfield, 2007; Whitfield *et al.* 2008; Hardey *et al.*, 2013). Nesting territories, known or potential, are visited and checked for occupation. Visits are made in reasonable weather, as Peregrine will be less obvious if they are sheltering from adverse conditions. When checking known nesting territories, priority is given to sites with a history of failure, as these may be deserted by the birds early in the season. Best Practice guidance indicates that four visits, between March and July, are required to determine breeding activity and output (Hardey *et al.*, 2013).

Breeding Kestrel & Peregrine surveys were undertaken during the breeding seasons 2023 and 2024 to record target species including breeding raptors. Peregrine and Kestrel hinterland surveys were conducted in March 2023 and from May to July 2023 and 2024. Based on best practice disturbance buffers and core foraging zones for these species (SNH, 2016; Goodship & Furness, 2022). These surveys covered all suitable raptor breeding habitat within a 2km buffer around the proposed wind turbines (see **Figure 5.39**).

5.3.6 Wintering Hen Harrier (Roost) Survey

The Hen Harrier (*Circus cyaneus*) is listed on Annex I of the Birds Directive and on the Amber-list of BoCCI. Outside the breeding season, Hen Harriers utilise roosts that can be either communal or solitary. The methodology for surveying wintering Hen Harriers is derived from survey (O'Donoghue, 2019), Gilbert *et al.* (2011) and SNH (2017) guidance. Locations in the study area with suitable habitat are surveyed during the period around dusk when birds arrive to roost. The study area was informed by best practice guidelines, which indicate that any roost within 2km of a proposed development should be located (SNH, 2017).

Six winter dusk VPs were conducted, one visit per month from October to March 2022/2023 and 2023/2024. Methods followed Irish Hen Harrier winter. Areas of potential suitable habitat for roost locations within 2km of the Project were identified during daytime walkover surveys (see **Figure 5.44** and **Figure 5.45**). These areas were then observed during a time associated with roost activity, i.e., the last hour before dusk. Details noted during these surveys include identification of birds flying around the potential roost and bird flight behaviour approaching and departing the potential roost.

5.3.7 Breeding Woodcock Survey

During the breeding season, Woodcock (*Scolopax rusticola*) males display by roding (flying) through suitable woodland habitats whilst calling at dusk (Heward *et al.*, 2015). This crepuscular activity means

that Woodcock are typically under-recorded by conventional surveying (e.g., for the Bird Atlas 2007-11 (Balmer *et al.*, 2013)), and the determination of the presence of breeding Woodcock requires targeted dusk surveys at likely habitats (woodland) where they will be displaying (Hoodless *et al.*, 2009).

The standardized methodology for surveying Woodcock (Hoodless *et al.*, 2009; Gilbert *et al.*, 2011; Heward *et al.*, 2015) requires three evening visits to potential breeding habitats in May and June. The scale of survey requirements is based upon the extent of the woodland on, or adjacent to, the project sites. Also, as Woodcock use similar habitats, the presence of Long-eared Owl *Asio otus* in these woodland areas may also be detected during survey work.

Breeding Woodcock surveys were carried out in May and June 2023 and repeated in 2024. Breeding Woodcock surveys were undertaken within a study area comprising suitable habitat within the Project and a 500m buffer (see **Figure 5.48** and **Figure 5.49**). All Woodcocks seen or heard were recorded and mapped, with emphasis on recording any activity suggesting breeding within or near the Project (e.g., roding males).

5.3.8 Breeding Barn Owl Survey

Within and surrounding the Project, buildings and trees were recorded for potential suitability for breeding Barn Owl (*Tyto alba*). A site walkover was conducted within and around the Proposed Development site, with buildings/trees identified as having high suitability for Barn Owls then surveyed. The walkover involved checking for signs of occupation (such as pellets, feathers, etc.). Locations with high potential were surveyed nocturnally to observe potential Barn Owl activity. All Barn Owl surveys were carried out in accordance with *Barn Owl Surveying Standards for National Road Projects*, (TII, 2017).

Detailed surveys for breeding Barn Owl (*Tyto alba*) were undertaken in the breeding season 2023 in May, July and August and the breeding season 2024 from April to August inclusive. Buildings were initially noted for potential suitability for breeding Barn Owls during a walkover survey throughout the Project and a 1km buffer from the Project (see **Figure 5.50** and **Figure 5.51**) (Roads, Buildings, Turbines), with any buildings and other artificial habitats (e.g., quarries) identified as having high suitability for nesting and roosting Barn Owls subject to further surveys (NatureScot, 2017). No other suitable features were identified. The walkover survey involved checking for signs of occupation by Barn Owls such as pellets, feathers and droppings ('whitewash'). Consideration was also given to the extent and distribution of suitable Barn Owl foraging habitat (e.g., rough grassland).

5.4 Field Survey Results

Detailed results for the field surveys undertaken for the Project are presented below.

5.4.1 Vantage Point Watches

5.4.1.1 Winter Season 2022/2023

A total of 53 individuals from eight species were recorded from VP surveys in Winter 2022/23 (see **Table 5.10**). Buzzard was the commonest species observed (20 individuals) followed by Kestrel (13 individuals). Details of survey conditions for all VP survey visits is shown in **Table 5.11**.

A full breakdown of all VP sightings is presented in **Table 5.12**, with flightlines shown for all species observed in **Figure 5.2**; **Figure 5.3** to **Figure 5.9** show the flightlines for selected species separately.

Table 5.10: Winter season 2022/2023 VP Survey Species Count Summary.

Species	October	November	December	January	February	March	Total
Buzzard	9	-	-	5		6	20
Hen Harrier	-	-	-	1	-	-	1
Kestrel	-	4	-	3	1	5	13
Mallard	2	-	-	2	-	1	5
Raven	-	6	-	2	-	-	8
Snipe	1	-	-	-	-	-	1
Sparrowhawk	1	-	-	-	-	-	1
Whooper Swan	4	-	-		-	-	4
Total	17	10	0	13	1	12	53

Table 5.11: *Winter season 2022/2023 VP Survey Conditions.*

Date	VP No.	Observer	Start Time	End Time	Rain	Cloud	Visibility	Wind Speed	Wind Direction	Temp
13/10/2022	3	NC	14:50	17:50	Showers	7/8	5	F3	SW	13
17/10/2022	3	NC	16:00	19:00	Showers	7/8	5	F4	E	13
18/10/2022	1	NC	12:30	15:30	None	6/8	10	F3	E	13
18/10/2022	2	NC	16:00	19:00	None	7/8	8	F4	E	14
19/10/2022	1	NC	7:35	8:35	Showers	8/8	5	F4	E	12
07/11/2022	3	ML	10:55	17:35	Heavy Showers	8/8	15	F3	S	13
10/11/2022	1	NC	08:50	10:50	None	7/8	5	F4	SSW	14
10/11/2022	1	NC	10:50	11:50	Showers	7/8	5	F4	SSW	14
30/11/2022	1	NC	9:50	10:50	None	8/8	5	F3	SE	9
10/01/2023	2	NC	10:35	13:35	Showers	8/8	2	F4	SSW	11
10/01/2023	2	NC	14:05	17:05	Showers	8/8	5	F4	W	11
11/01/2023	3	NC	8:00	11:00	Showers	7/8	5	F4	SW	6
11/01/2022	3	NC	11:30	14:30	Showers	5/8	8	F4	WSW	6
16/01/2023	2	NL	11:45	17:15	None	2/8	4	F1	NE	1
17/01/2023	1	NL	8:10	14:40	None	3/8	5	F1	WNW	-3
17/01/2023	2	NL	15:00	16:00	None	4/8	3	F1	NE	3
20/01/2023	2	NL	8:06	14:36	None	2/8	4	F1	NE	1
27/02/2023	1	NL	12:06	18:36	None	5/8	2	F1	E	7
28/02/2023	3	NL	6:54	13:24	None	5/8	2	F1	NNE	4
28/02/2023	2	HM	9:40	12:40	Dry	8/8	2	F1	NE	6
28/02/2023	2	HM	13:10	16:10	Dry	8/8	2	F1	NE	6
01/03/2023	2	NL	6:51	13:21	None	5/8	2	F1	NNE	4
01/03/2023	1	HM	9:30	12:30	Dry	8/8	2	F2	NE	5

Date	VP No.	Observer	Start Time	End Time	Rain	Cloud	Visibility	Wind Speed	Wind Direction	Temp
01/03/2023	1	HM	13:00	16:00	Dry	7/8	2	F2	NE	6
03/03/2023	3	NL	6:47	13:17	None	4/8	2	F1	NNE	5
20/03/2023	3	ML	12:10	15:10	Dry	8/8	15	F1	S	13
21/03/2023	1	ML	13:00	19:30	Heavy Showers	8/8	15	F2	S	13
22/03/2023	3	ML	11:01	14:01	Dry	4/8	15	F2	SSW	9
23/03/2023	1	ML	9:30	14:00	Dry	5/8	15	F2	SSW	8

Table 5.12: Winter season 2022/2023 VP Survey Sightings.

Date	VP No.	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-160m	>160m	Total Duration (s)
13/10/2022	3	14:50	17:50	10800	Buzzard	1	-	20	8	-	-	-	-	28
13/10/2022	3	14:50	17:50	10800	Buzzard	2	-	-	-	-	61	10	-	71
13/10/2022	2	11:00	14:00	7200	Nil Sightings	-	-	-	-	-	-	-	-	-
17/10/2022	3	16:00	19:00	10800	Mallard	2	9	30	-	-	-	-	-	39
17/10/2022	3	16:00	19:00	10800	Snipe	1	10	-	-	-	-	-	-	10
18/10/2022	1	12:30	15:30	10800	Buzzard	2	-	-	-	360	-	-	-	360
18/10/2022	1	12:30	15:30	10800	Buzzard	1	-	-	20	6	-	-	-	26
18/10/2022	1	12:30	15:30	10800	Buzzard	2	-	-	-	-	265	300	-	565
18/10/2022	2	16:00	19:00	10800	Buzzard	1	14	-	-	-	-	-	-	14
18/10/2022	2	16:00	19:00	10800	Whooper Swan	4	-	52	10	-	-	-	-	62
19/10/2022	1	7:35	8:35	3600	Sparrowhawk	1	7	-	-	-	-	-	-	7
07/11/2022	3	10:55	17:35	21600	Kestrel	1	5	-	-	-	-	-	-	5
07/11/2022	3	10:55	17:35	21600	Kestrel	1	-	5	-	-	-	-	-	5
10/11/2022	1	8:50	10:50	7200	Kestrel	1	-	30	-	-	-	-	-	30

Date	VP No.	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-160m	>160m	Total Duration (s)
10/11/2022	1	8:50	10:50	7200	Raven	2	-	54	-	-	-	-	-	54
10/11/2022	1	8:50	10:50	7200	Raven	1	-	38	-	-	-	-	-	38
10/11/2022	1	10:50	11:50	3600	Kestrel	1	-	30	-	-	-	-	-	30
10/11/2022	1	10:50	11:50	3600	Raven	3	27	-	-	-	-	-	-	27
30/11/2022	1	9:50	10:50	3600	Nil Sightings	-	-	-	-	-	-	-	-	-
10/01/2023	2	10:35	13:35	3600	Buzzard	1	18	500	-	-	-	-	-	518
10/01/2023	2	10:35	13:35	3600	Kestrel	1	-	274	-	-	-	-	-	274
10/01/2023	2	14:05	17:05	10800	Nil Sightings	-	-	-	-	-	-	-	-	-
11/01/2023	3	8:00	11:00	10800	Mallard	2	-	22	-	-	-	-	-	22
11/01/2023	3	8:00	11:00	10800	Raven	2	28	-	-	-	-	-	-	28
11/01/2023	3	11:30	14:30	10800	Buzzard	1	6	50	-	-	-	-	-	56
11/01/2023	3	11:30	14:30	10800	Hen Harrier	1	18	-	-	-	-	-	-	18
11/01/2023	3	11:30	14:30	10800	Kestrel	1	-	200	7	-	-	-	-	207
11/01/2023	3	11:30	14:30	10800	Buzzard	1	4	50	-	-	-	-	-	54
11/01/2023	3	11:30	14:30	10800	Kestrel	1	-	151	-	-	-	-	-	151
16/01/2023	2	11:45	17:15	21600	Nil Sightings	-	-	-	-	-	-	-	-	-
17/01/2023	1	8:10	14:40	21600	Buzzard	1	-	-	30	-	-	-	-	30
17/01/2023	1	8:10	14:40	21600	Buzzard	1	-	-	33	-	-	-	-	33
17/01/2023	2	15:00	16:00	3600	Nil Sightings	-	-	-	-	-	-	-	-	-
20/01/2023	2	8:06	14:36	21600	Nil Sightings	-	-	-	-	-	-	-	-	-
27/02/2023	1	12:06	18:36	21600	Kestrel	1	-	-	70	-	-	-	-	70
28/02/2023	3	6:54	13:24	21600	Nil Sightings	-	-	-	-	-	-	-	-	-
28/02/2023	2	9:40	12:40	10800	Nil Sightings	-	-	-	-	-	-	-	-	-
28/02/2023	2	13:10	16:10	10800	Nil Sightings	-	-	-	-	-	-	-	-	-
01/03/2023	1	09:30	12:30	10800	Buzzard	2					10	290		300

Date	VP No.	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-160m	>160m	Total Duration (s)
01/03/2023	2	6:51	13:21	21600	Nil Sightings	-	-	-	-	-	-	-	-	-
01/03/2023	1	09:30	12:30	10800	Kestrel	1					300	540		840
01/03/2023	1	13:00	16:00	10800	Kestrel	1	-	-	-	-	-	240	-	240
01/03/2023	1	13:00	16:00	10800	Buzzard	2	-	-	-	-	60	-	-	60
01/03/2023	1	13:00	16:00	10800	Kestrel	1	-	-	-	-	-	60	-	60
01/03/2023	1	13:00	16:00	10800	Kestrel	1	-	-	-	-	60	180	-	240
01/03/2023	1	13:00	16:00	10800	Kestrel	1	-	-	-	-	-	120	-	120
03/03/2023	3	6:47	13:17	21600	Nil Sightings	-	-	-	-	-	-	-	-	-
20/03/2023	3	12:10	15:10	10800	Nil Sightings	-	-	-	-	-	-	-	-	-
21/03/2023	1	13:00	19:30	21600	Nil Sightings	-	-	-	-	-	-	-	-	-
22/03/2023	3	11:01	14:01	10800	Buzzard	1	120	-	-	-	-	-	-	120
22/03/2023	3	11:01	14:01	10800	Mallard	1	10	-	-	-	-	-	-	10
23/03/2023	1	9:30	14:00	14400	Buzzard	1	5	-	-	-	-	-	-	5

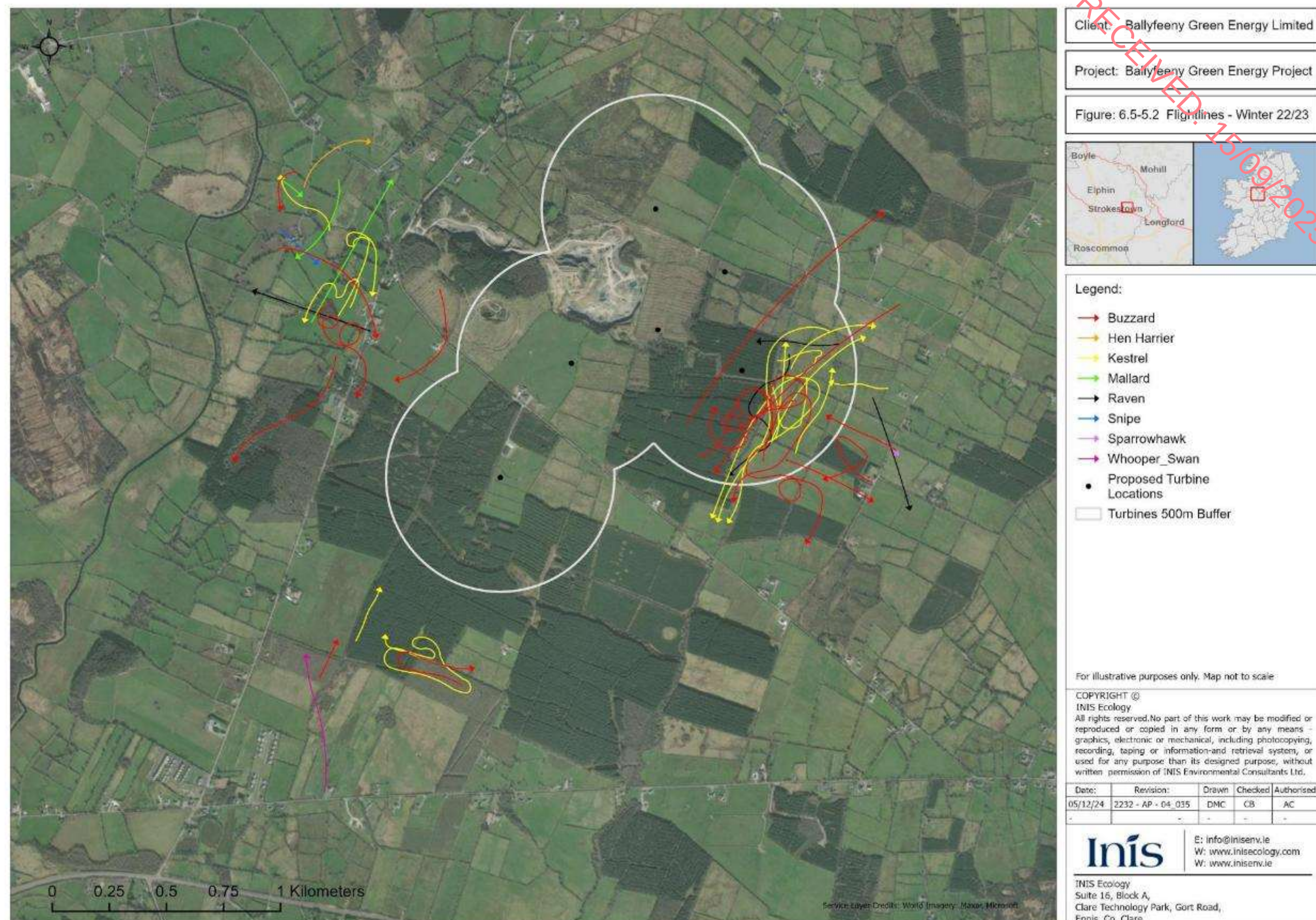


Figure 5.2: Winter season 2022/2023 VP flightlines.

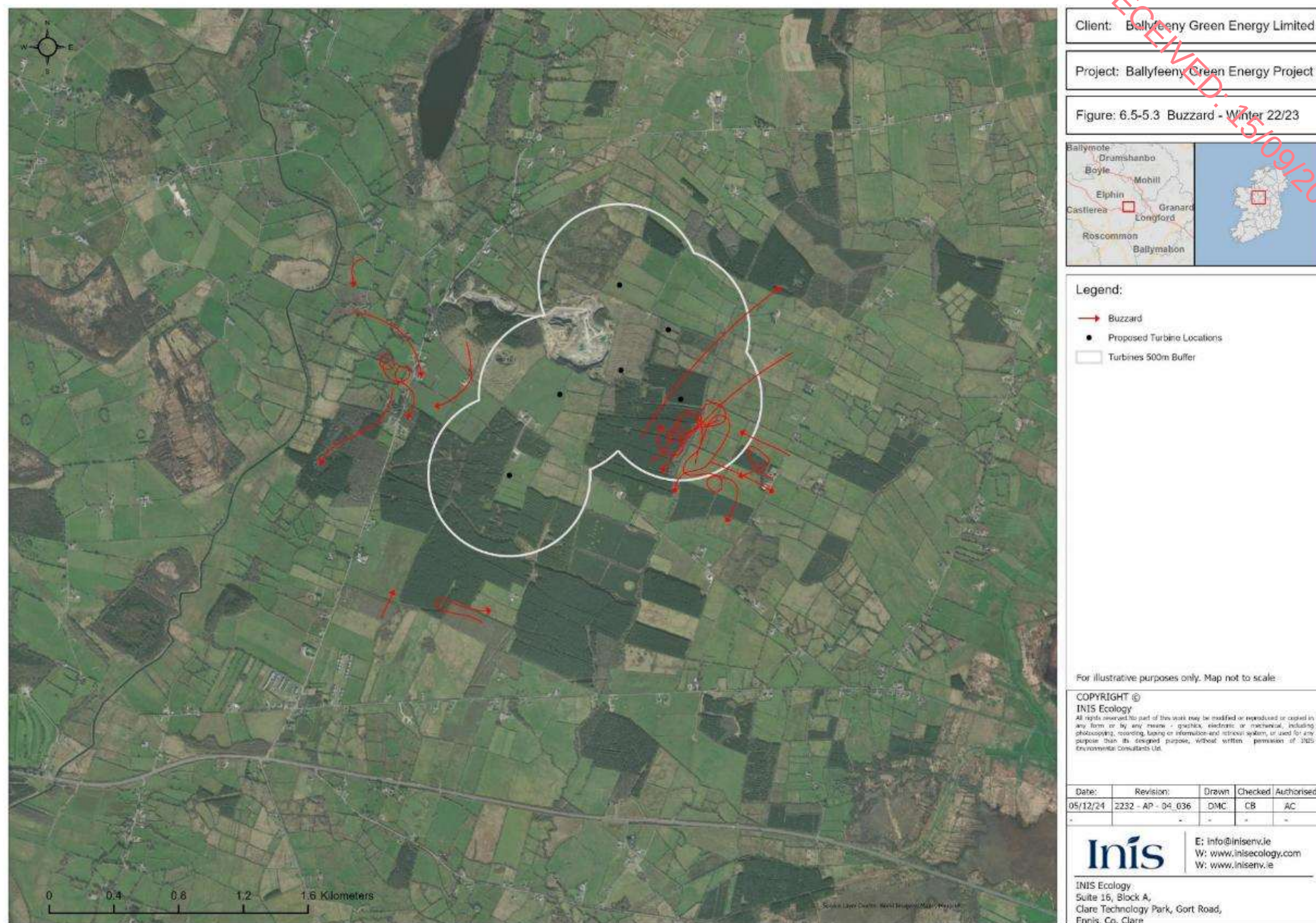


Figure 5.3: Winter season 2022/2023 Buzzard flightlines.

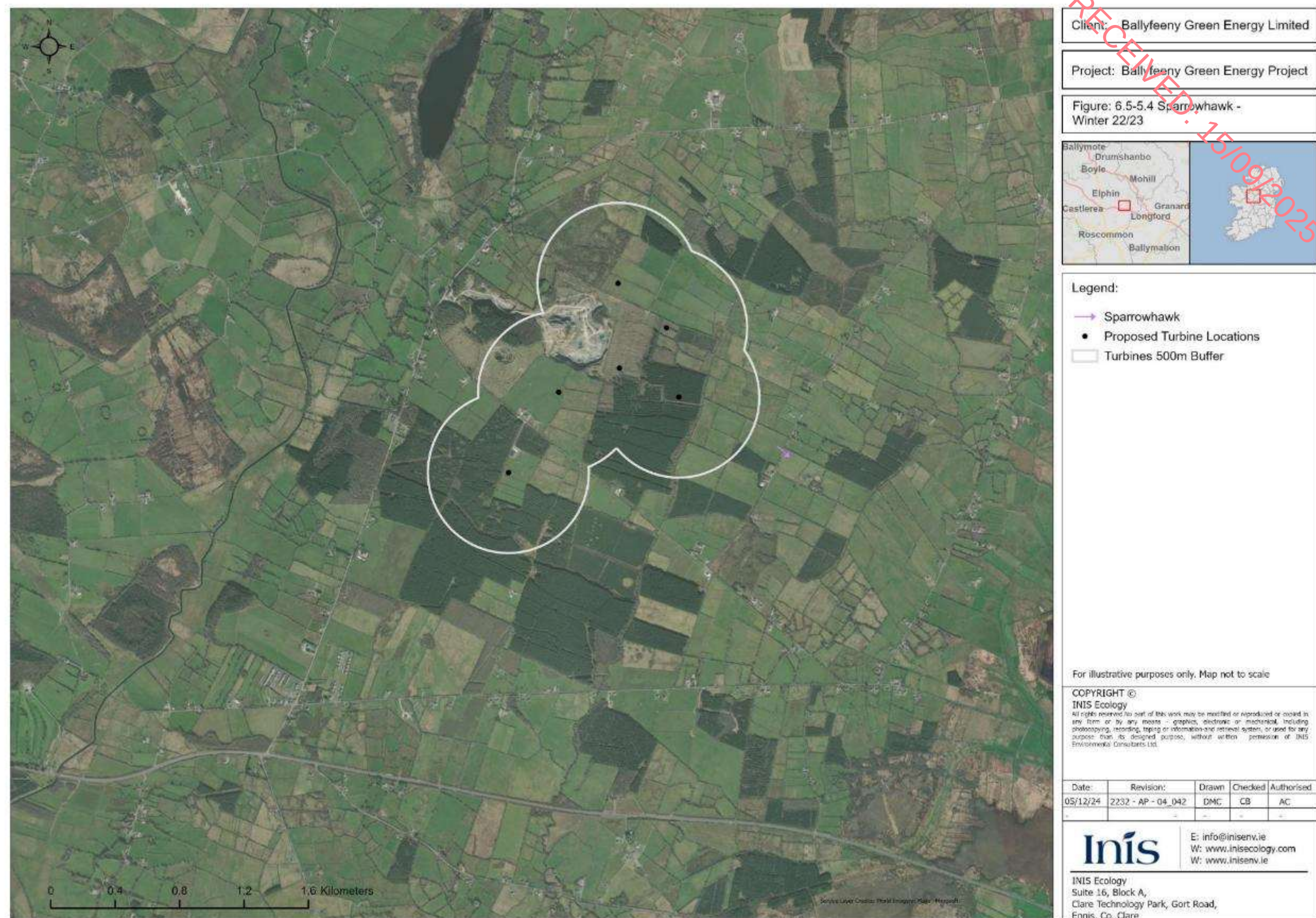


Figure 5.4: Winter season 2022/2023 Sparrowhawk flightlines.

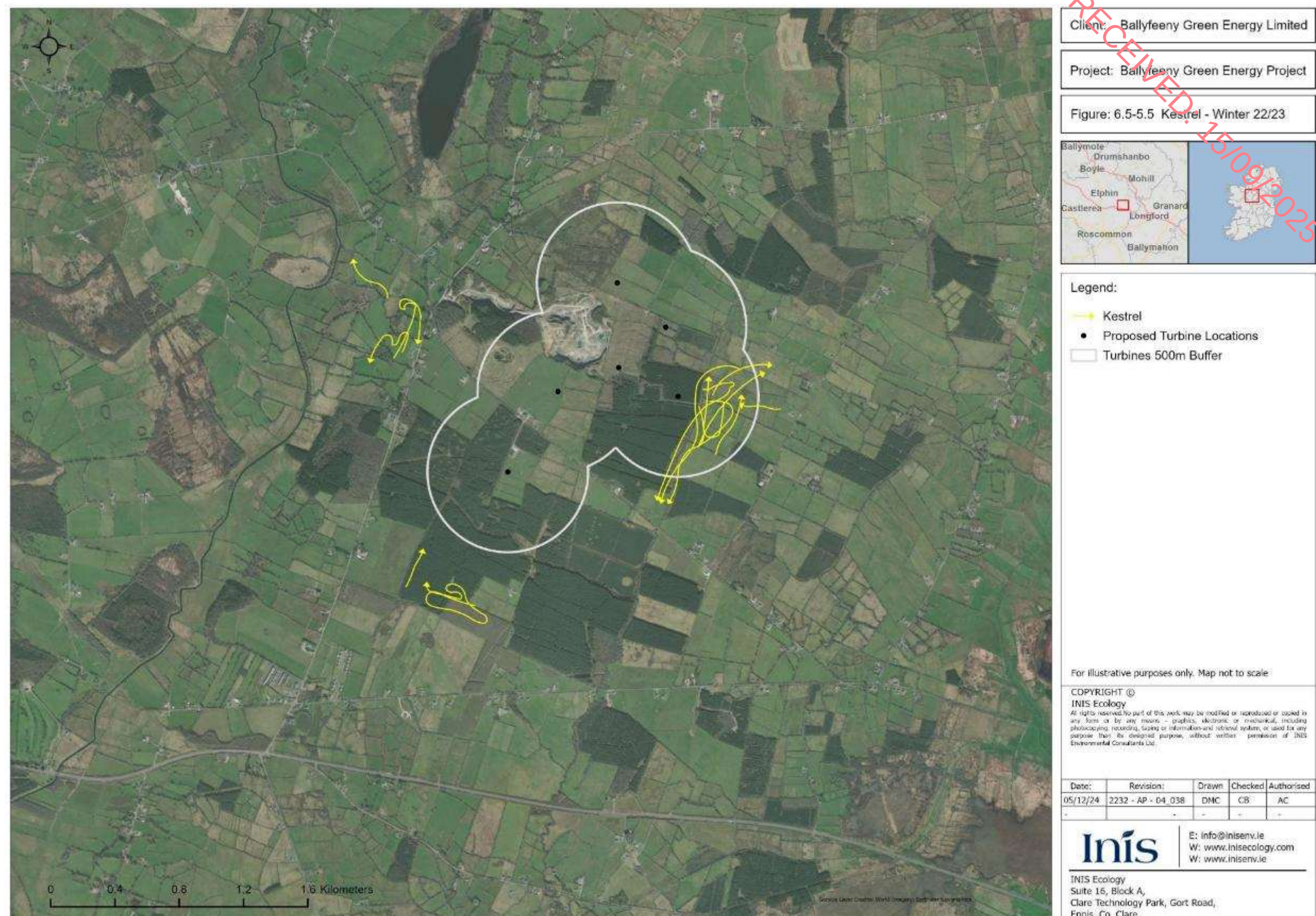


Figure 5.5: Winter season 2022/2023 Kestrel flightlines.

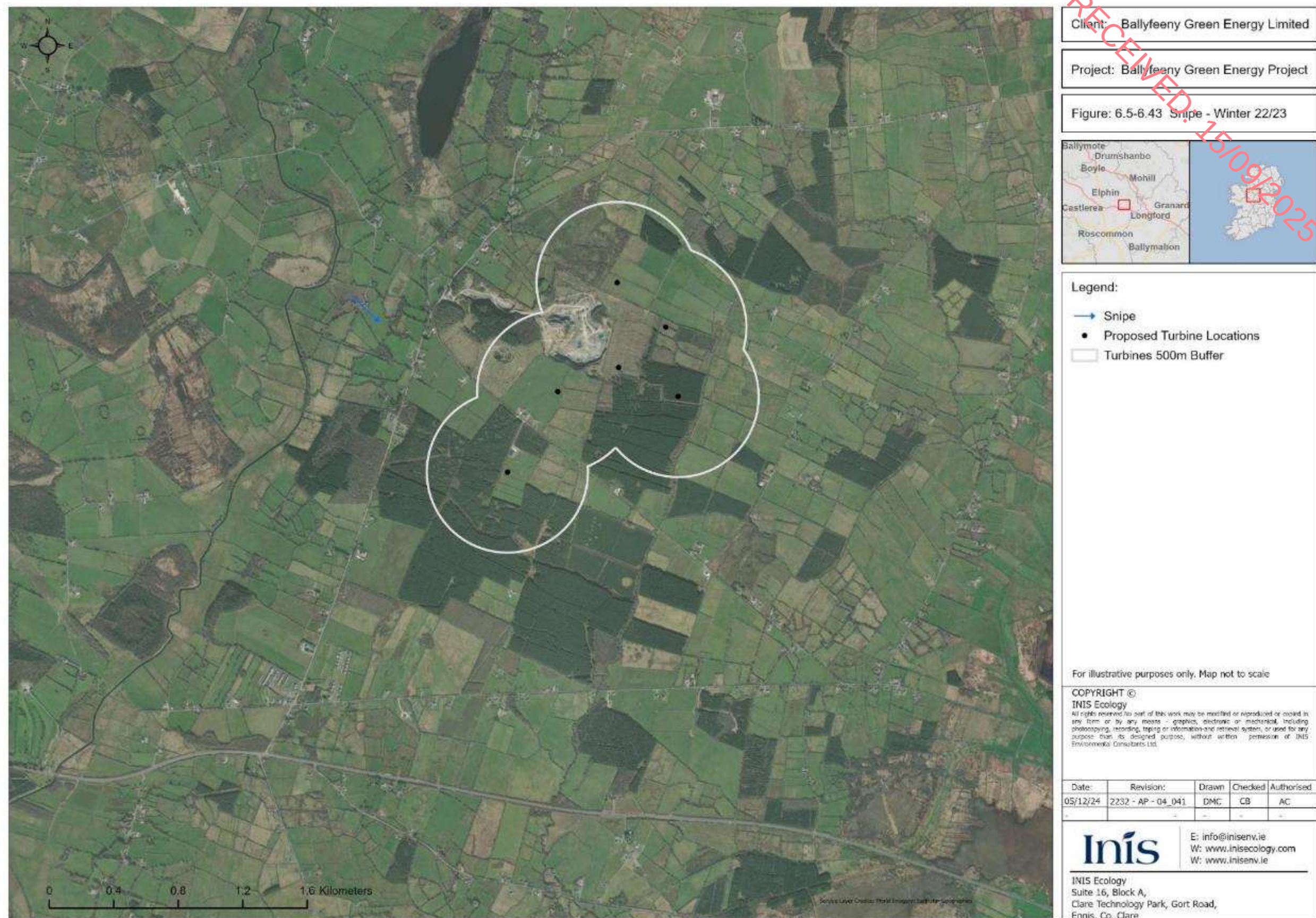


Figure 5.6: Winter season 2022/2023 Snipe flightlines.

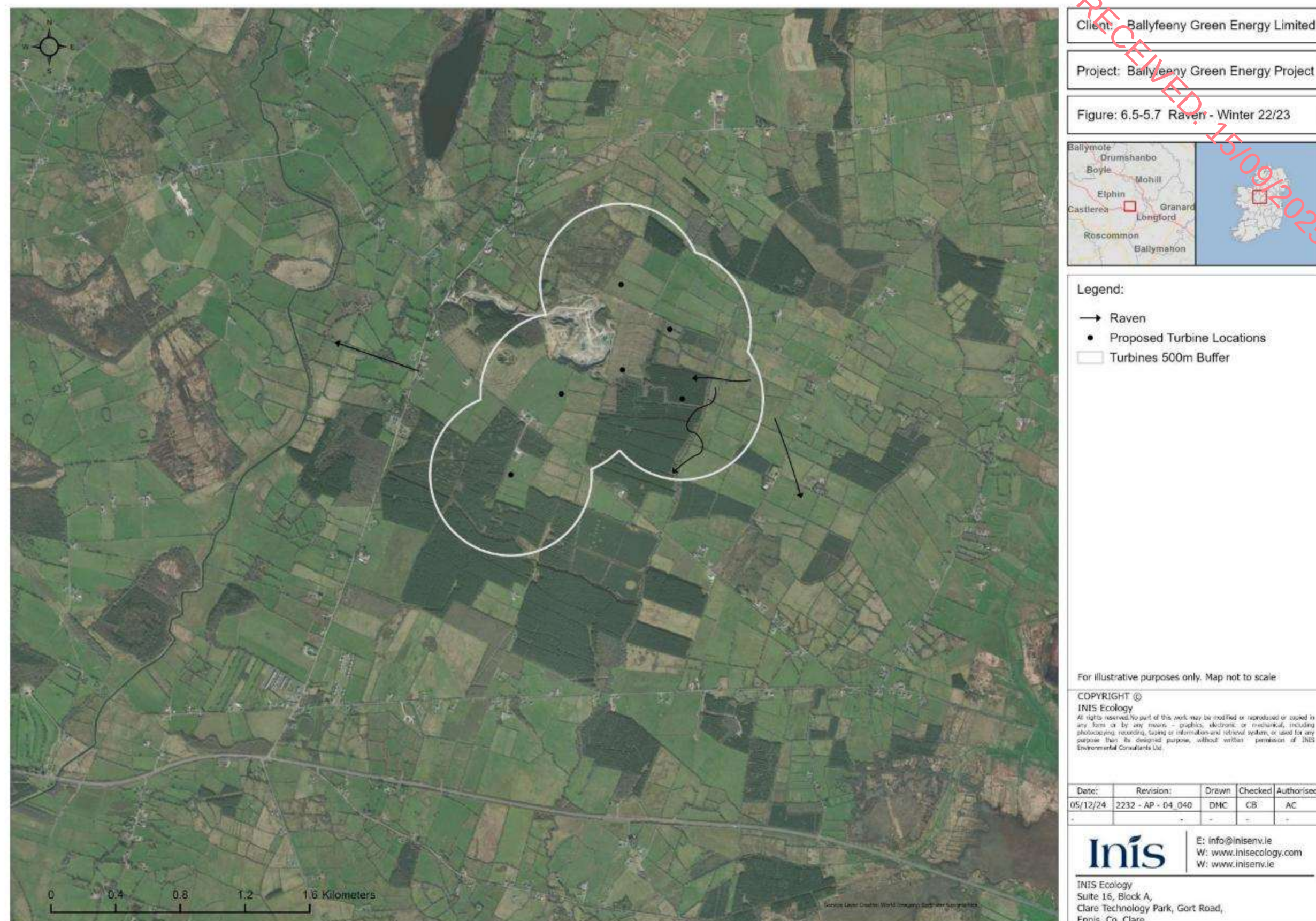


Figure 5.7: Winter season 2022/2023 Raven flightlines.

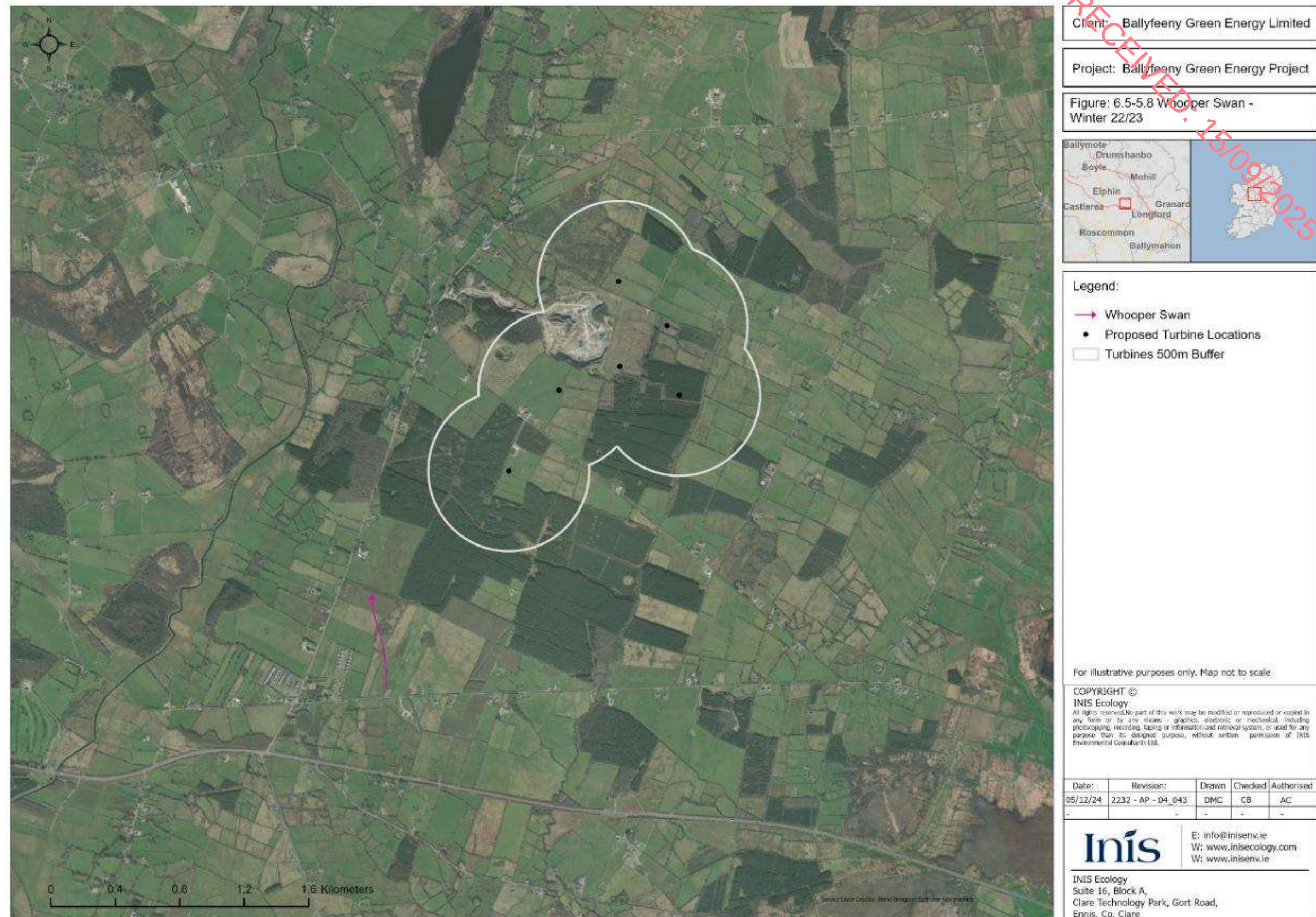


Figure 5.8: Winter season 2022/2023 Whooper Swan flightlines.

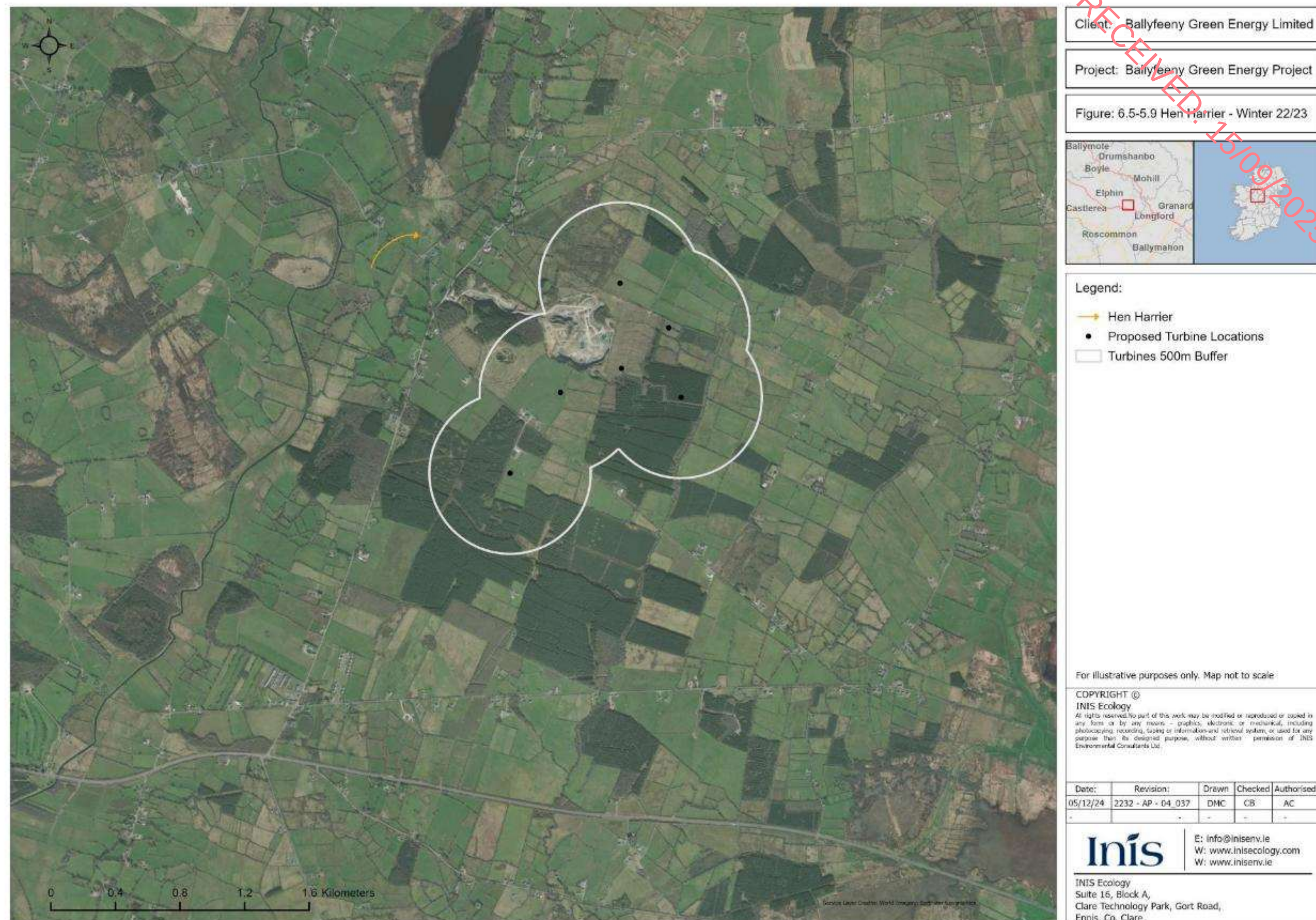


Figure 5.9: Winter season 2022/2023 Hen Harrier flightlines.

5.4.1.2 Breeding Season 2023

A total of 121 individuals from 10 species were recorded from VP surveys in Summer 2023 (see **Table 5.13**). Buzzard was the commonest species observed (35 individuals) followed by Lesser Black-backed Gull (26 individuals), Kestrel (24 individuals) and Cormorant and Sparrowhawk (10 individuals each). Details of survey conditions for all VP survey visits is shown in **Table 5.14**.

A full breakdown of all VP sightings is presented in **Table 5.15**, with flightlines shown for all species observed in **Figure 5.10**; **Figure 5.11** to **Figure 5.15** show the flightlines for selected species separately.

Table 5.13: *Breeding season 2023 VP Survey Species Counts.*

Species	April	May	June	July	August	September	Total
Black-headed Gull	-	3	1	-	-	-	3
Buzzard	7	16	6	4	-	2	35
Common Gull	-	-	2	-	-	-	2
Cormorant	-	5	3	2	-	-	10
Jay	-	-	-	1	-	-	1
Kestrel	3	5	9	-	-	7	24
Lesser Black-backed Gull	2	19	4	1	-	-	26
Peregrine	5	-	2	2	-	-	9
Raven	-	-	-	-	-	1	1
Sparrowhawk	1	4	3	-	-	2	10
Total	18	52	30	10	-	12	121

Table 5.14: *Breeding season 2023 VP Survey Conditions.*

Date	VP No.	Observer	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction	Temp.
24/04/2023	1	NA	14:40	16:40	None	7/8	15	F1	NE	8
24/04/2023	1	NA	17:10	19:10	None	5/8	15	F1	NE	8
25/04/2023	1	NA	10.20	12.20	None	4/8	15	F1	NE	7
08/05/2023	3	SID	12:35	19:05	None	8/8	16	F2	SSW	15
15/05/2023	2	NA	13:30	16:30	None	4/8	2	F2	SE	10
15/05/2023	2	NA	17:40	19:10	None	2/8	16	F2	NW	12
18/05/2023	2	NA	11:00	12:30	None	1/8	16	F2	NW	14
22/05/2023	2	NA	13:00	16:00	None	7/8	3	F2	SE	14
24/05/2023	2	NA	14:00	17:00	None	6/8	2	F2	S	15
25/05/2023	1	NL	06:30	13:00	None	4/8	2	F2	SE	10
25/05/2023	3	HM	09:10	12:10	Dry	8/8	2	F2	NW	14
25/05/2023	3	HM	12:40	15:40	Dry	8/8	2	F2	NW	14
31/05/2023	1	CG	07:45	10:50	None	0/8	12	F2	NE	12
31/05/2023	2	CG	08:30	11:30	Dry	3/8	15	F2	N	21
08/06/2023	1	CD	17:30	20:30	None	2/8	15	F2	W	16
08/06/2023	2	ML	17:30	20:30	Dry	2/8	15	F1	NE	17
22/06/2023	3	CD	13:10	16:10	None	4/8	15	F4	NW	25
22/06/2023	3	CD	16:40	19:40	None	3/8	15	F3	WNW	24
22/06/2023	1	NA	11:55	14:55	None	1/8	16	F2	SE	20
22/06/2023	1	NA	15:25	18:25	None	5/8	16	F3	SE	23
17/07/2023	3	NA	17:17	20:17	None	7/8	16	F3	W	17
18/07/2023	2	NA	15:00	18:00	None	4/8	16	F3	N	18
20/07/2023	2	NA	12:05	15:05	Occasional showers	6/8	16	F3	WNW	16
25/07/2023	2	LK	14:00	17:00	Dry	5/8	10	F1	W	17
26/07/2023	1	HM	15.35	18:35	Heavy Showers	8/8	2	F2	S	17

Date	VP No.	Observer	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction	Temp.
27/07/2023	1	NL	11:50	14:50	None	7/8	2	F2	WSW	18
02/08/2023	1	NL	15:15	18:15	None	6/8	2	F2	NW	17
21/08/2023	3	SID	14:45	17:45	Occasional showers	8/8	>20	F3	SSW	19
22/08/2023	2	SID	14:10	17:10	Drizzle	8/8	>20	F2	WSW	18
23/08/2023	2	SID	14:20	17:20	None	8/8	>20	F2	SSW	17
24/08/2023	1	SID	10:37	1:37	None	5/8	>20	F2	SW	14
25/08/2023	3	LK	12:45	3:45	Dry	6/8	5	F3	WNW	17
07/09/2023	2	DP	09:35	12:35	None	4/8	20	F3	SW	23
13/09/2023	3	NC	09:40	12:40	Light Showers	8/8	10	F3	SSE	14
14/09/2023	2	HM	09:25	12:25	None	3/8	2	F1	SW	13
15/09/2023	3	HM	10:32	13:32	Light Showers	8/8	2	F1	S	12

Table 5.15: Breeding season 2023 VP Survey Sightings.

Date	VP No.	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
24/04/2023	1	14:40	16:40	7200	Buzzard	1					120	240		360
24/04/2023	1	14:40	16:40	7200	Peregrine	1		10	15	20	15	270		330
24/04/2023	1	14:40	16:40	7200	Peregrine	2			20	30	10	360		420
24/04/2023	1	14:40	16:40	7200	Peregrine	1		5	5	5				15
24/04/2023	1	17:10	19:10	7200	Kestrel	1		2	8					
24/04/2023	1	17:10	19:10	7200	Buzzard	1			20	40	40	80	300	480
24/04/2023	1	17:10	19:10	7200	Lesser Black-backed Gull	1			20	30				50
24/04/2023	1	17:10	19:10	7200	Lesser Black-backed Gull	1			60					60
24/04/2023	1	17:10	19:10	7200	Sparrowhawk	1			140	120				260
24/04/2023	1	17:10	19:10	7200	Buzzard	1			10	20	40	100	40	210
25/04/2023	1	10:20	12:20	7200	Buzzard	2						100		100
25/04/2023	1	10:20	12:20	7200	Buzzard	1					40	90		130

Date	VP No.	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
25/04/2023	1	10:20	12:20	7200	Peregrine	1					90	120		210
25/04/2023	1	10:20	12:20	7200	Kestrel	1		20	120	10				150
25/04/2023	1	10:20	12:20	7200	Buzzard	1			20	20	30			70
25/04/2023	1	10:20	12:20	7200	Kestrel	1		5	25	40	100	150		320
08/05/2023	3	12:35	19:05	21600	Lesser Black-backed Gull	1	120							120
08/05/2023	3	12:35	19:05	21600	Lesser Black-backed Gull	4	70							70
08/05/2023	3	12:35	19:05	21600	Buzzard	1	200							200
15/05/2023	2	13:30	16:30	10800	Buzzard	1			10	40	70			120
15/05/2023	2	13:30	16:30	10800	Buzzard	1			30					30
15/05/2023	2	13:30	16:30	10800	Sparrowhawk	1		15	10	15	60	100		200
15/05/2023	2	13:30	16:30	10800	Buzzard	1			10					10
15/05/2023	2	13:30	16:30	10800	Sparrowhawk	1			40					40
15/05/2023	2	13:30	16:30	10800	Buzzard	1				10	20	60		90
15/05/2023	2	13:30	16:30	10800	Buzzard	2						120		120
15/05/2023	2	13:30	16:30	10800	Buzzard	1	50							50
15/05/2023	2	13:30	16:30	10800	Buzzard	1	10	40						50
15/05/2023	2	13:30	16:30	10800	Buzzard	1					40	200		240
15/05/2023	2	13:30	16:30	10800	Buzzard	1		20	30	90				140
15/05/2023	2	13:30	16:30	10800	Buzzard	2					30	130		160
15/05/2023	2	17:40	19:10	5400	Buzzard	1				120				120
18/05/2023	2	11:00	12:30	5400	Lesser Black-backed Gull	1				50	10			60
18/05/2023	2	11:00	12:30	5400	Sparrowhawk	1		5	55	50				110
22/05/2023	2	13:00	16:00	10800	Nil Sightings									
24/05/2023	2	14:00	17:00	10800	Nil Sightings									
25/05/2023	3	06:30	13:00	21600	Nil Sightings									

Date	VP No.	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
25/05/2023	3	09:10	12:10	10800	Lesser Black-backed Gull	2						60		60
25/05/2023	3	09:10	12:10	10800	Cormorant	1						30		30
25/05/2023	3	09:10	12:10	10800	Lesser Black-backed Gull	1					30			30
25/05/2023	3	09:10	12:10	10800	Cormorant	1					10			10
25/05/2023	3	09:10	12:10	10800	Lesser Black-backed Gull	2				10				10
25/05/2023	3	12:40	15:40	10800	Kestrel	1				30				30
25/05/2023	3	12:40	15:40	10800	Cormorant	1				10				10
25/05/2023	3	12:40	15:40	10800	Lesser Black-backed Gull	3						60		60
25/05/2023	3	12:40	15:40	10800	Black-headed Gull	1		5						5
31/05/2023	1	07:45	10:50	10800	Lesser Black-backed Gull	4	95	60						155
31/05/2023	1	07:45	10:50	10800	Black-headed Gull	2	40	10						50
31/05/2023	1	07:45	10:50	10800	Lesser Black-backed Gull	1	25	65	10					100
31/05/2023	1	07:45	10:50	10800	Kestrel	1	5	35						40
31/05/2023	1	07:45	10:50	10800	Cormorant	1		30	15					45
31/05/2023	1	07:45	10:50	10800	Kestrel	1		80	150					230
31/05/2023	1	07:45	10:50	10800	Sparrowhawk	1	70							70
31/05/2023	1	07:45	10:50	10800	Buzzard	1	80	35						115
31/05/2023	1	07:45	10:50	10800	Buzzard	1	30							30
31/05/2023	2	8:30	11:30	10800	Kestrel	1		20	30	50	15			115
31/05/2023	2	8:30	11:30	10800	Kestrel	1					40			40
31/05/2023	2	8:30	11:30	10800	Cormorant	1					70			70
08/06/2023	1	17:30	20:30	10800	Buzzard	1		120	480					600
08/06/2023	1	17:30	20:30	10800	Buzzard	1			90	40				130
08/06/2023	1	17:30	20:30	10800	Buzzard	1				110				110
08/06/2023	1	17:30	20:30	10800	Buzzard	1		70						70

Date	VP No.	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
08/06/2023	1	17:30	20:30	10800	Buzzard	1		20	60	100	400	20		600
08/06/2023	1	17:30	20:30	10800	Buzzard	1		10	120	200	250	20		600
08/06/2023	2	17:30	20:30	10800	Common Gull	1	5							5
08/06/2023	2	17:30	20:30	10800	Kestrel	1	5							5
08/06/2023	2	17:30	20:30	10800	Common Gull	1	20							20
22/06/2023	3	13:10	16:10	10800	Cormorant	1		20	470	10				500
22/06/2023	3	16:40	19:40	10800	Cormorant	2		20	110	20				150
22/06/2023	1	11:55	14:55	10800	Buzzard	1		20	40	80	100	120		360
22/06/2023	1	11:55	14:55	10800	Buzzard	1			20	50	80	450		600
22/06/2023	1	11:55	14:55	10800	Buzzard	1					60	340		400
22/06/2023	1	11:55	14:55	10800	Buzzard	1				40	60	60		160
22/06/2023	1	11:55	14:55	10800	Lesser Black-backed Gull	1		30						30
22/06/2023	1	11:55	14:55	10800	Buzzard	2					60			60
22/06/2023	1	11:55	14:55	10800	Lesser Black-backed Gull	2						40		40
22/06/2023	1	11:55	14:55	10800	Buzzard	1				20	80	380		480
22/06/2023	1	11:55	14:55	10800	Buzzard	1						40		40
22/06/2023	1	11:55	14:55	10800	Buzzard	1					20	40		60
22/06/2023	1	11:55	14:55	10800	Buzzard	1		5	5					10
22/06/2023	1	11:55	14:55	10800	Sparrowhawk	1		20						20
22/06/2023	1	11:55	14:55	10800	Buzzard	1				10	50	180		240
22/06/2023	1	11:55	14:55	10800	Sparrowhawk	1		15						15
22/06/2023	1	11:55	14:55	10800	Sparrowhawk	1	10							10
22/06/2023	1	15:25	18:25	10800	Kestrel	1					300	180		480
22/06/2023	1	15:25	18:25	10800	Buzzard	1					120	300	120	540
22/06/2023	1	15:25	18:25	10800	Lesser Black-backed Gull	1				30	30	80		140

Date	VP No.	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
22/06/2023	1	15:25	18:25	10800	Kestrel	1			60	120	120			300
22/06/2023	1	15:25	18:25	10800	Buzzard	1	10							10
22/06/2023	1	15:25	18:25	10800	Buzzard	1		10						10
22/06/2023	1	15:25	18:25	10800	Peregrine	1			45	45				90
22/06/2023	1	15:25	18:25	10800	Peregrine	1		2	3					5
22/06/2023	1	15:25	18:25	10800	Buzzard	1	7							7
22/06/2023	1	15:25	18:25	10800	Kestrel	1				40	60	140		240
22/06/2023	1	15:25	18:25	10800	Kestrel	1			20	40				60
22/06/2023	1	15:25	18:25	10800	Buzzard	1		2	5	13	30			50
17/07/2023	2	17:17	20:17	10800	Lesser Black-backed Gull	1				20				20
18/07/2023	2	15:00	18:00	10800	Buzzard	2						50		50
18/07/2023	2	15:00	18:00	10800	Peregrine	2						100		100
18/07/2023	2	15:00	18:00	10800	Buzzard	1				70	40			110
18/07/2023	2	15:00	18:00	10800	Buzzard	1			15	15				30
20/07/2023	2	12:05	15:05	10800	Cormorant	1					60			60
20/07/2023	2	12:05	15:05	10800	Cormorant	1					20			20
25/07/2023	2	14:00	17:00	10800	Jay	1	5							5
26/07/2023	1	15:35	18:35	10800	Nil Sightings									
27/07/2023	1	11:50	14:50	10800	Nil Sightings									
02/08/2023	1	15:15	18:15	10800	Nil Sightings									
21/08/2023	3	14:45	17:45	10800	Nil Sightings									
22/08/2023	2	14:10	17:10	10800	Nil Sightings									
23/08/2023	2	14:20	17:20	10800	Nil Sightings									
24/08/2023	1	10:37	13:37	10800	Nil Sightings									
25/08/2023	3	12:45	15:45	10800	Nil Sightings									
07/09/2023	2	09:35	12:35	10800	Kestrel	1		17	30					47

Date	VP No.	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
13/09/2023	3	09:40	12:40	10800	Buzzard	1			52					52
13/09/2023	3	09:40	12:40	10800	Sparrowhawk	1	9							9
13/09/2023	3	09:40	12:40	10800	Raven	1		40						40
14/09/2023	2	09:25	12:25	10800	Kestrel	1			25					25
14/09/2023	2	09:25	12:25	10800	Kestrel	1		10						10
14/09/2023	2	09:25	12:25	10800	Kestrel	1	5							5
14/09/2023	2	09:25	12:25	10800	Kestrel	1	5							5
14/09/2023	2	09:25	12:25	10800	Kestrel	1	5	5						10
14/09/2023	2	09:25	12:25	10800	Kestrel	1			120					120
14/09/2023	2	09:25	12:25	10800	Buzzard	1				60				60
15/09/2023	3	10:32	13:32	10800	Sparrowhawk	1	3	4						7

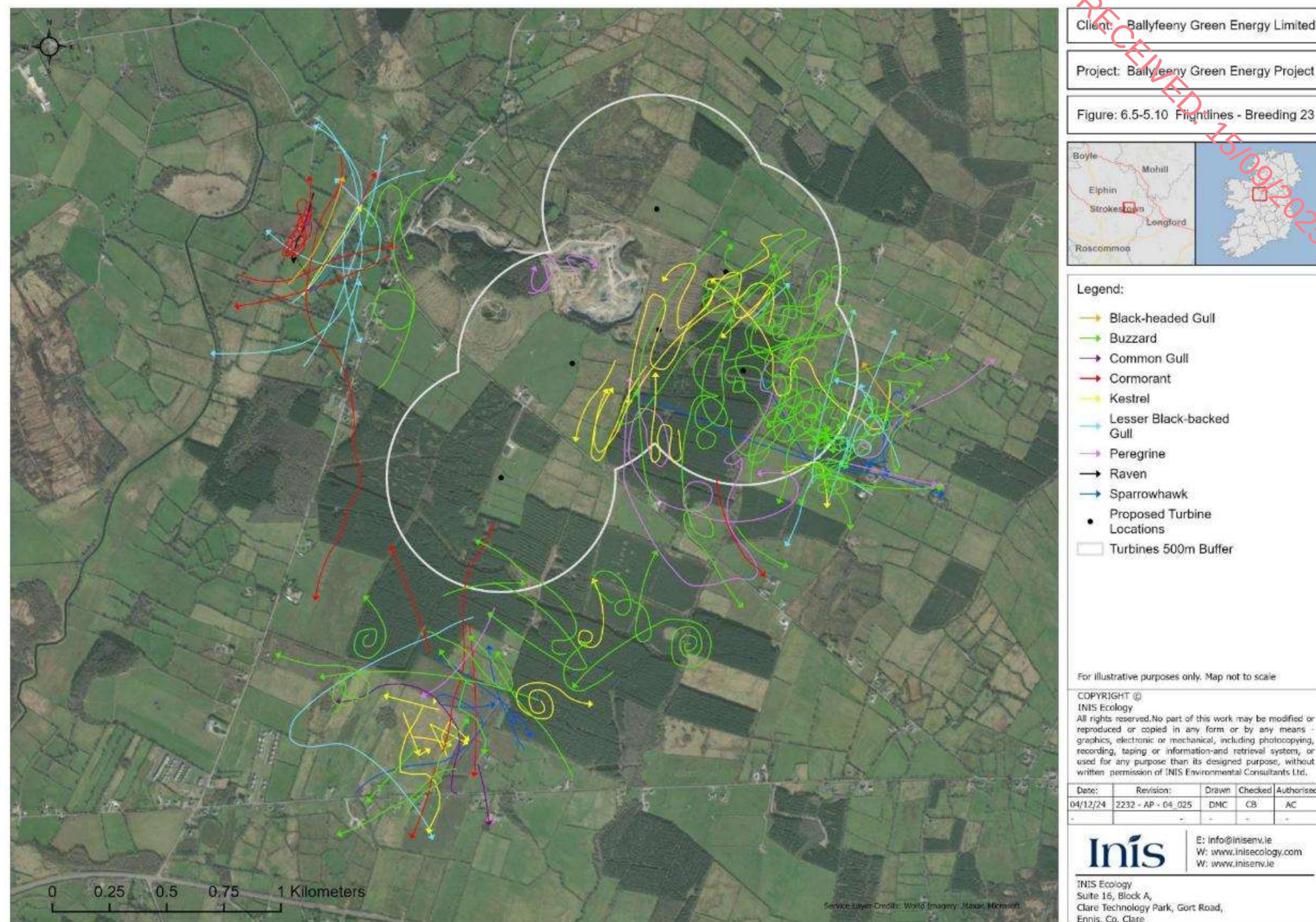


Figure 5.10: Breeding season 2023 VP flightlines.

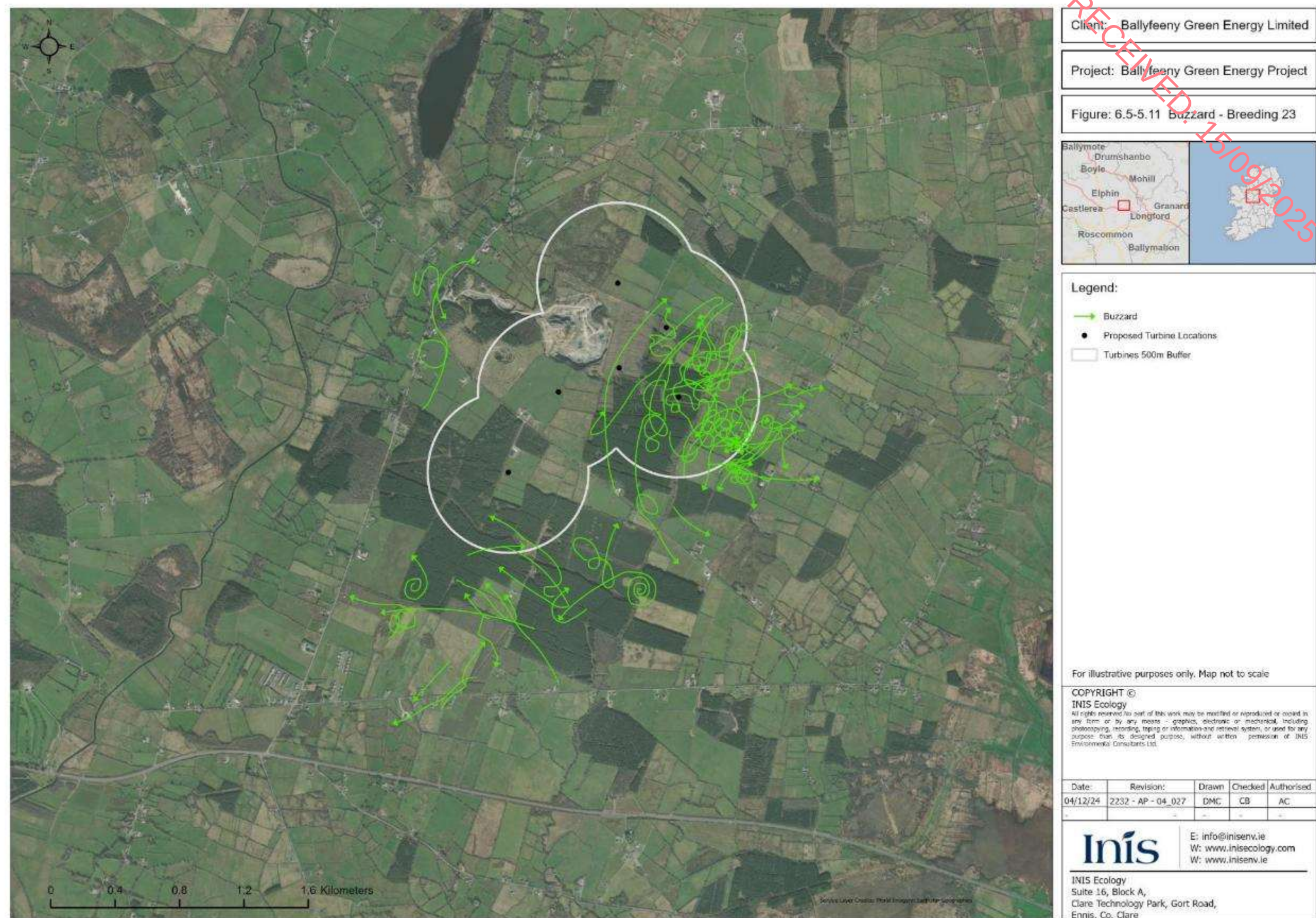


Figure 5.11: Breeding season 2023 Buzzard flightlines.

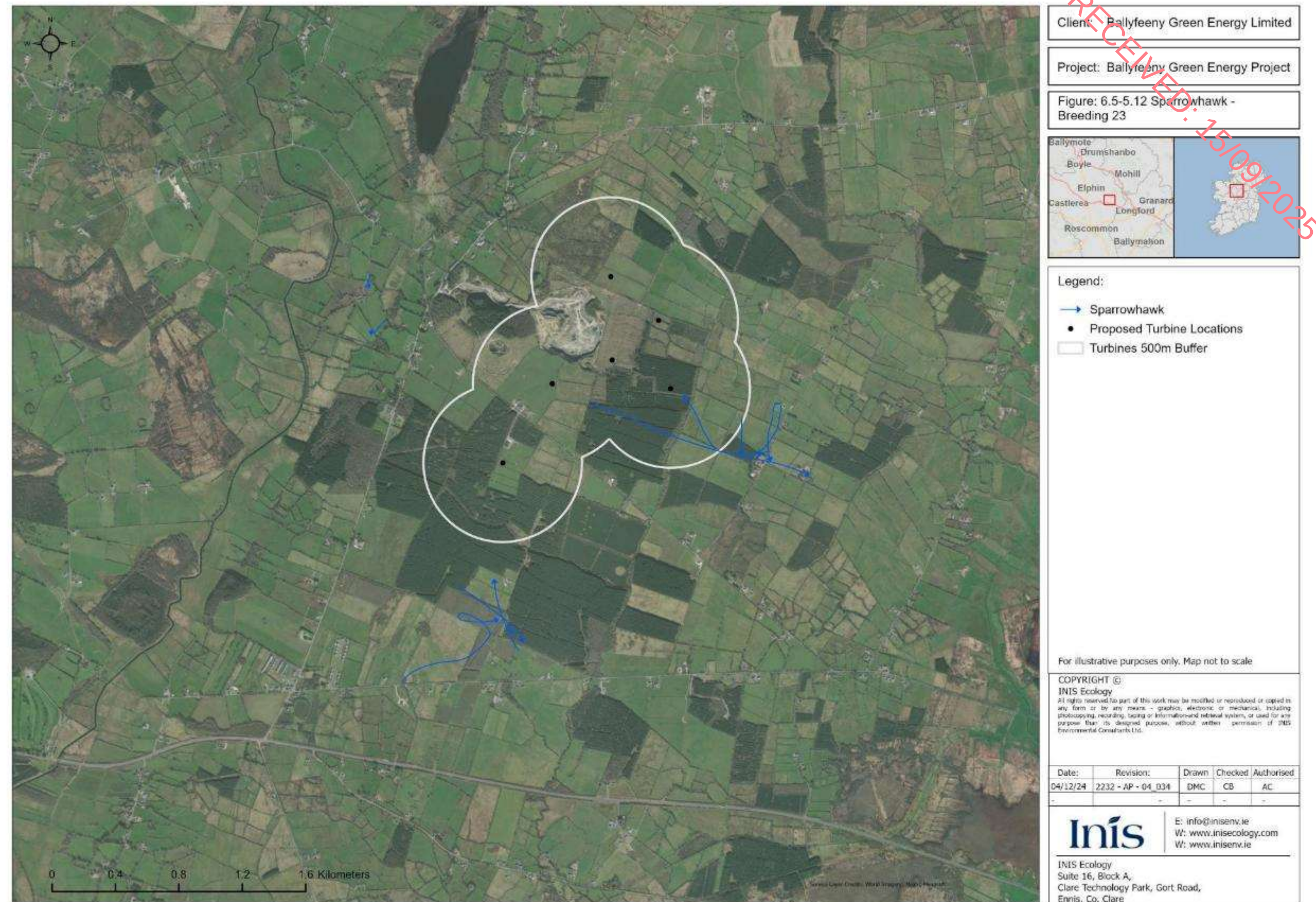


Figure 5.12: Breeding season 2023 Sparrowhawk flightlines.

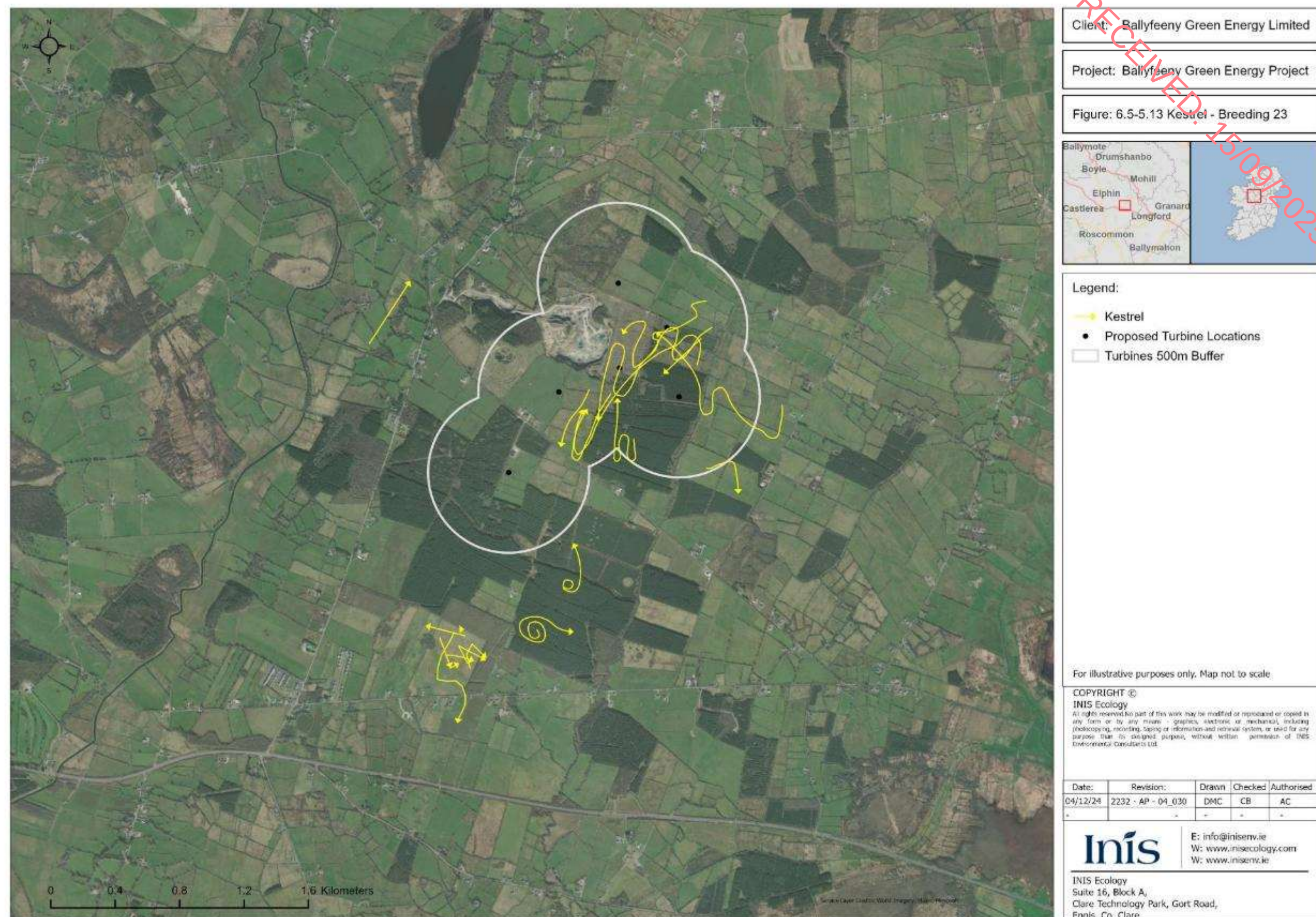


Figure 5.13: Breeding season 2023 Kestrel flightlines.

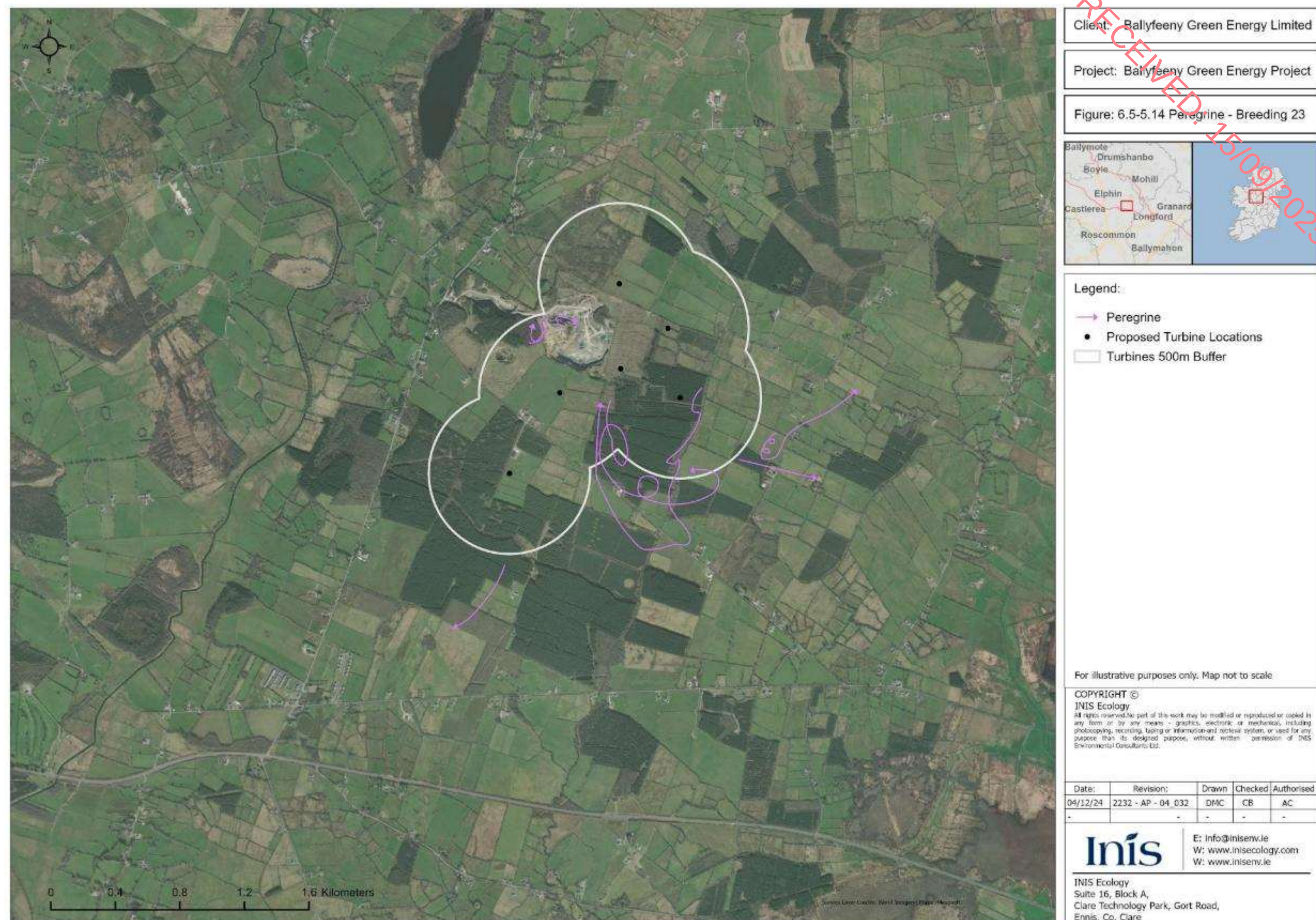


Figure 5.14: Breeding season 2023 Peregrine flightlines.

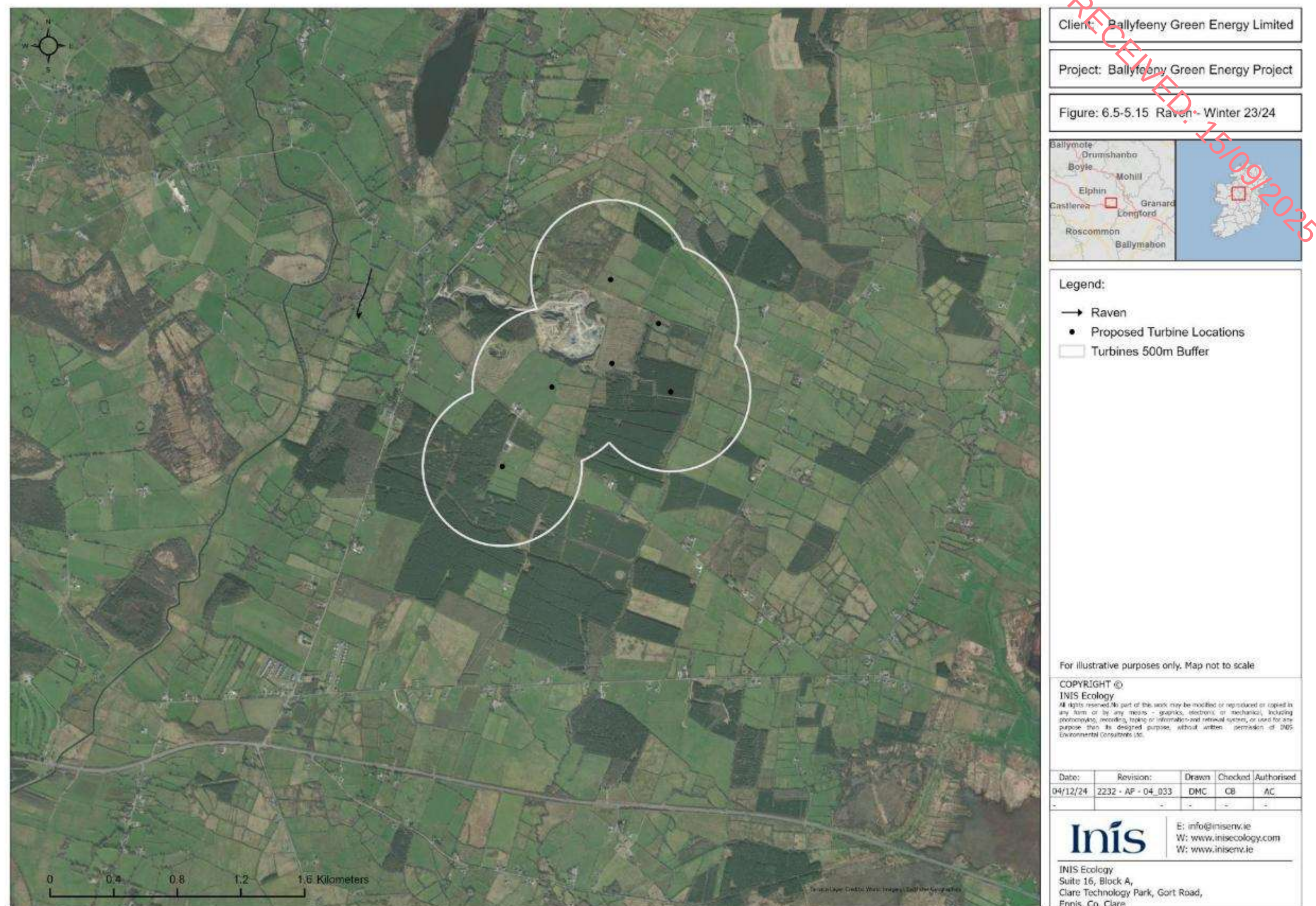


Figure 5.15: Breeding season 2023 Raven flightlines.

5.4.1.3 Winter Season 2023/2024

A total of 116 individuals from nine species were recorded from VP surveys in Winter 2023/24 (see **Table 5.16**). Buzzard was the commonest species observed (34 individuals) followed by Kestrel (20 individuals). Details of survey conditions for all VP survey visits is shown in **Table 5.17**.

A full breakdown of all VP sightings is presented in **Table 5.15**, with flightlines shown for all species observed in **Figure 5.16**; **Figure 5.11** to **Figure 5.22** show the flightlines for selected species separately.

Table 5.16: Winter season 2023/2024 VP Survey Species Count.

Species	October	November	December	January	February	March	Total
Buzzard	1	7	-	2	18	6	34
Cormorant	-	-	-	-	4	8	12
Grey Heron	-	-	2	-	-	1	3
Kestrel	-	14	-	-	6	-	20
Mallard	10	-	-	-	2	6	18
Peregrine	-	-	-	-	1	-	1
Raven	2	-	-	-	4	6	12
Snipe	2	-	-	-	-	-	2
Sparrowhawk	-	8	-	3	1	2	14
Total	15	29	2	5	36	29	116

Table 5.3: *Winter season 2023/2024 VP Survey Conditions.*

Date	VP No.	Observer	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction	Temp.
18/10/2023	2	JOH	12:00	15:00	Constant Rain	8/8	5	F3	ESE	12
18/10/2023	2	JOH	15:30	18:30	Constant Rain	8/8	8	F3	ESE	12
19/10/2023	3	JOH	09:15	12:15	Light Showers	8/8	12	F2	E	11
19/10/2023	3	JOH	13:00	16:00	Mist/light rain	8/8	5	F2	E	14
06/11/2023	1	CG	10:40	13:40	None	1/8	20	F4	W	10
06/11/2023	1	CG	14:10	17:10	None	3/8	20	F4	W	11
07/11/2023	3	CG	10:00	13:00	None	1/8	20	F3	W	9
07/11/2023	3	CG	13:30	16:30	None	3/8	20	F3	W	11
15/11/2023	1	JOH	09:45	12:45	None	3/8	15	F2	W	7
15/11/2023	1	JOH	13:25	16:25	None	4/8	15	F2	WSW	10
21/11/2023	2	JOH	10:00	13:00	None	5/8	15	F2	WSW	6
21/11/2023	2	JOH	14:00	17:00	None	7/8	12	F1	WSW	8
05/12/2023	3	JOH	10:00	13:00	None	1/8	10	F1	NNE	4
05/12/2023	3	JOH	13:30	16:30	None	2/8	10	F1	E	3
06/12/2023	2	JOH	09:20	12:20	Occasional showers	6/8	15	F4	SE	6
06/12/2023	2	JOH	13:20	16:20	Drizzle/rain	8/8	5	F4	SE	8
20/12/2023	1	HM	09:05	12:05	Occasional showers	8/8	2	F3	W	10
20/12/2023	1	HM	12:35	15:35	Occasional showers	8/8	2	F3	W	10
22/01/2024	2	JOH	14:15	17:15	Occasional showers	5/8	8	F4	WSW	5
23/01/2024	3	JOH	10:55	13:55	Constant Rain	8/8	5	F5	SW	13
24/01/2024	1	HM	09:30	12:30	Light Showers	7/8	2	F1	SW	7
24/01/2024	1	HM	13:00	14:00	Light Showers	7/8	2	F1	SW	7
25/01/2024	1	HM	09:10	11:10	Mist/light rain	8/8	2	F2	SSW	11

Date	VP No.	Observer	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction	Temp.
25/01/2024	2	JOH	09:55	12:55	Constant Rain	8/8	3	F3	S	11
08/02/2024	3	HM	09:30	10:30	Snow showers	8/8	2	F1	NE	3
16/02/2024	3	LK	10:15	12:15	Drizzle/rain	8/8	3	F1	WSW	9
20/02/2024	1	NC	12:50	14:50	None	4/8	20	F4	WSW	12
21/02/2024	1	NC	09:30	12:30	Light Showers	8/8	10	F4	W	11
21/02/2024	1	NC	13:00	14:00	None	2/8	20	F3	WSW	10
21/02/2024	2	NC	14:10	15:40	None	6/8	15	F3	WSW	11
21/02/2024	3	CG	08:10	11:10	Mist/light rain	8/8	2	F4	SW	11
21/02/2024	3	CG	11:40	14:40	None	7/8	10	F4	SW	12
22/02/2024	2	NC	08:50	11:50	Occasional showers	3/8	20	F3	WSW	2
22/02/2024	2	NC	12:20	13:50	None	4/8	20	F3	WSW	6
20/03/2024	1	NC	10:50	12:50	None	6/8	20	F2	NNW	9
21/03/2024	1	NC	10:50	12:50	Drizzle	8/8	10	F3	SW	11
21/03/2024	1	NC	13:20	15:20	Drizzle	8/8	10	F4	SW	11
21/03/2024	2	NC	15:30	17:30	Occasional showers	8/8	8	F3	WSW	12
22/03/2024	2	NC	08:30	10:30	None	2/8	20	F3	W	6
22/03/2024	2	NC	11:00	13:00	Occasional showers	5/8	15	F4	W	8
26/03/2024	3	NC	11:40	12:40	Drizzle/rain	8/8	6	F3	NE	6
28/03/2024	3	NC	08:45	10:45	None	7/8	20	F2	NE	3
28/03/2024	3	NC	11:15	14:15	None	7/8	20	F2	NNW	5

Table 5.18: *Winter season 2023/2024 VP Survey Sightings.*

Date	VP No.	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
18/10/2023	2	12:00	15:00	10800	Snipe	2			5	20				25
18/10/2023	2	12:00	15:00	10800	Raven	1				10	10			20
18/10/2023	2	15:30	18:30	10800	Nil Sightings									
19/10/2023	3	09:15	12:15	10800	Mallard	4			25					25
19/10/2023	3	09:15	12:15	10800	Raven	1						80		80
19/10/2023	3	09:15	12:15	10800	Mallard	3				20				20
19/10/2023	3	09:15	12:15	10800	Mallard	3				15				15
19/10/2023	3	13:00	16:00	10800	Buzzard	1			10	30				40
06/11/2023	1	10:40	13:40	10800	Kestrel	1			15	15	60	65		155
06/11/2023	1	10:40	13:40	10800	Kestrel	1			60	60	45	45		210
06/11/2023	1	10:40	13:40	10800	Buzzard	1		5	5	15				25
06/11/2023	1	10:40	13:40	10800	Kestrel	1		5	5	20				30
06/11/2023	1	10:40	13:40	10800	Kestrel	1		10						10
06/11/2023	1	10:40	13:40	10800	Kestrel	1			10					10
06/11/2023	1	14:10	17:10	10800	Kestrel	1					15			15
06/11/2023	1	14:10	17:10	10800	Kestrel	1		5	15	50				70
07/11/2023	3	10:00	13:00	10800	Sparrowhawk	1		5						5
07/11/2023	3	10:00	13:00	10800	Sparrowhawk	1		5	5					10
07/11/2023	3	10:00	13:00	10800	Sparrowhawk	1		5	5	15	15			40
07/11/2023	3	10:00	13:00	10800	Sparrowhawk	2		5	5	5	10	30		55
07/11/2023	3	10:00	13:00	10800	Sparrowhawk	1			5	5	5	180		195
07/11/2023	3	10:00	13:00	10800	Kestrel	1		5	5	15				25
07/11/2023	3	10:00	13:00	10800	Kestrel	1		2	3	5	5	15		30
07/11/2023	3	10:00	13:00	10800	Sparrowhawk	1						140		140

Date	VP No.	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
07/11/2023	3	10:00	13:00	10800	Buzzard	1			5	5	5	55		70
07/11/2023	3	10:00	13:00	10800	Buzzard	1		2	2	2	2	32		40
07/11/2023	3	13:30	16:30	10800	Kestrel	1			5	20	5			30
07/11/2023	3	13:30	16:30	10800	Kestrel	1		5						5
07/11/2023	3	13:30	16:30	10800	Kestrel	1		10						10
07/11/2023	3	13:30	16:30	10800	Kestrel	1		5	40					45
15/11/2023	1	09:45	12:45	10800	Nil Sightings									
15/11/2023	1	13:25	16:25	10800	Sparrowhawk	1	10							10
21/11/2023	2	10:00	13:00	10800	Nil Sightings									
21/11/2023	2	14:00	17:00	10800	Buzzard	1		5	20					25
21/11/2023	2	14:00	17:00	10800	Kestrel	1	15							15
05/12/2023	3	10:00	13:00	10800	Grey Heron	2		10						10
05/12/2023	3	13:30	16:30	10800	Nil Sightings			70	10					80
06/12/2023	2	09:20	12:20	10800	Buzzard	1			25	40				65
06/12/2023	2	09:20	12:20	10800	Buzzard	1								
06/12/2023	2	09:20	12:20	10800	Buzzard	1		10						10
06/12/2023	2	13:20	16:20	10800	Nil Sightings									
20/12/2023	1	09:05	12:05	10800	Nil Sightings									
20/12/2023	1	12:35	15:35	10800	Nil Sightings									
22/01/2024	2	14:15	17:15	10800	Sparrowhawk	1	15							15
23/01/2024	3	10:55	13:55	10800	Nil Sightings									
24/01/2024	1	09:30	12:30	10800	Buzzard	1			120					120
24/01/2024	1	13:00	14:00	7200	Sparrowhawk	1		30						30
25/01/2024	1	09:10	11:10	3600	Nil Sightings									

Date	VP No.	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
25/01/2024	2	09:55	12:55	10800	Nil Sightings									
08/02/2024	3	09:30	10:30	3600	Nil Sightings									
16/02/2024	3	10:15	12:15	7200	Buzzard	1				6				6
20/02/2024	1	12:50	14:50	3600	Buzzard	1			100	7				107
20/02/2024	1	12:50	14:50	3600	Buzzard	1			54					54
21/02/2024	1	09:30	12:30	10800	Raven	2	5	40						45
21/02/2024	1	09:30	12:30	10800	Buzzard	2			18					18
21/02/2024	1	13:00	14:00	10800	Buzzard	1	25							25
21/02/2024	1	09:30	12:30	10800	Buzzard	1		40	5					45
21/02/2024	2	14:10	15:40	7200	Kestrel	1		4	30					34
21/02/2024	3	08:10	11:00	10800	Mallard	2			5					5
21/02/2024	3	08:10	11:10	10800	Buzzard	1		10	10	15	15			50
21/02/2024	3	08:10	11:10	10800	Cormorant	2				30	30	60		120
21/02/2024	3	08:10	11:10	10800	Cormorant	1		20	15					35
21/02/2024	3	08:10	11:10	10800	Peregrine	1		5	5	10	10	20		50
21/02/2024	3	11:40	14:40	10800	Kestrel	1		5	5	25	10			45
21/02/2024	3	11:40	14:40	10800	Kestrel	1		5	5	20				30
21/02/2024	3	11:40	14:40	10800	Buzzard	1			35	45	60	240		380
21/02/2024	3	11:40	14:40	10800	Buzzard	2		5	5	5	5	165		185
21/02/2024	3	11:40	14:40	10800	Kestrel	2	5	10	20	10				45
21/02/2024	3	11:40	14:40	10800	Kestrel	1	5	5	5					15
21/02/2024	3	11:40	14:40	10800	Buzzard	1		20	20	60	60	35		195
21/02/2024	3	11:40	14:40	10800	Buzzard	3						220		220
21/02/2024	3	11:40	14:40	10800	Buzzard	2				30	60	465	80	635

Date	VP No.	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
22/02/2024	2	08:50	11:50	10800	Raven	2	1	50						51
22/02/2024	2	08:50	11:50	10800	Sparrowhawk	1	16							16
22/02/2024	2	12:20	13:50	7200	Buzzard	1	22							22
22/02/2024	2	12:20	13:50	7200	Cormorant	1				65				65
20/03/2024	1	10:50	12:50	7200	Buzzard	1		9	40					49
20/03/2024	1	10:50	12:50	7200	Sparrowhawk	1				100	74			174
20/03/2024	1	10:50	12:50	7200	Raven	2			34					34
21/03/2024	1	10:50	12:50	7200	Raven	1	17							17
21/03/2024	1	13:20	15:20	7200	Buzzard	1	2	10	20					32
21/03/2024	1	13:20	15:20	7200	Raven	1	1	20						21
21/03/2024	2	15:30	17:30	7200	Buzzard	1	6	50	20					76
21/03/2024	2	15:30	17:30	7200	Raven	2	2	40						42
21/03/2024	2	15:30	17:30	7200	Cormorant	2			47					47
22/03/2024	2	08:30	10:30	7200	Cormorant	1		42						42
22/03/2024	2	08:30	10:30	7200	Sparrowhawk	1		15						15
22/03/2024	2	11:00	13:00	7200	Buzzard	1	4	10						14
26/03/2024	3	11:40	12:40	3600	Raven	2		7	40					47
26/03/2024	3	11:40	12:40	3600	Mallard	6		53						53
28/03/2024	3	08:45	10:45	7200	Buzzard	1				100	72			172
28/03/2024	3	08:45	10:45	7200	Cormorant	1		8	40					48
28/03/2024	3	08:45	10:45	7200	Cormorant	1			41					41
28/03/2024	3	08:45	10:45	7200	Cormorant	1	9	30						39
28/03/2024	3	11:15	14:15	10800	Cormorant	1			73					73
28/03/2024	3	11:15	14:15	10800	Cormorant	1	3	20						23

Date	VP No.	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
28/03/2024	3	11:15	14:15	10800	Sparrowhawk	1	20							20
28/03/2024	3	11:15	14:15	10800	Buzzard	2				20	130			150
28/03/2024	3	11:15	14:15	10800	Grey Heron	1	3	30						33

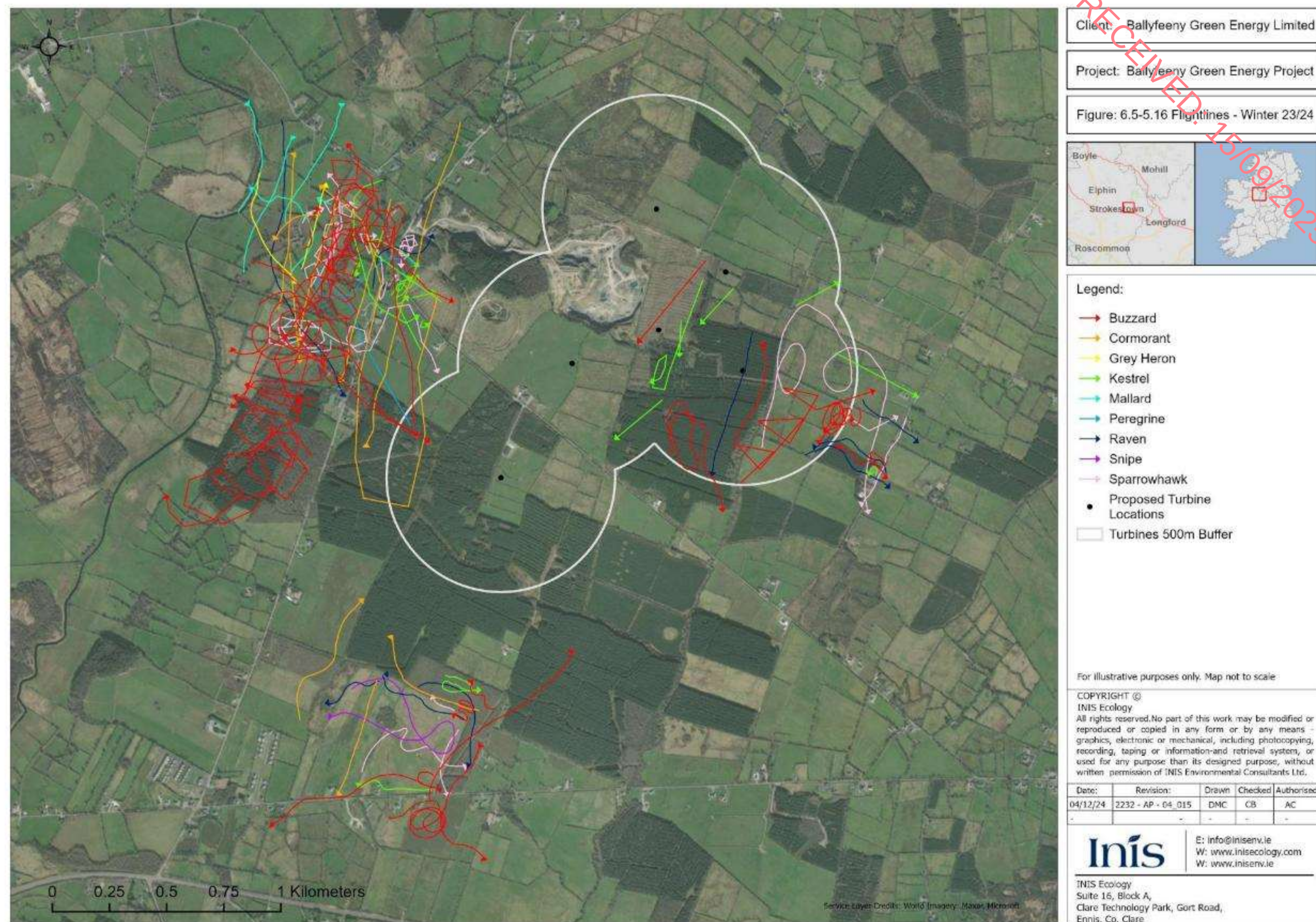


Figure 5.16: Winter season 2023/2024 VP flightlines.

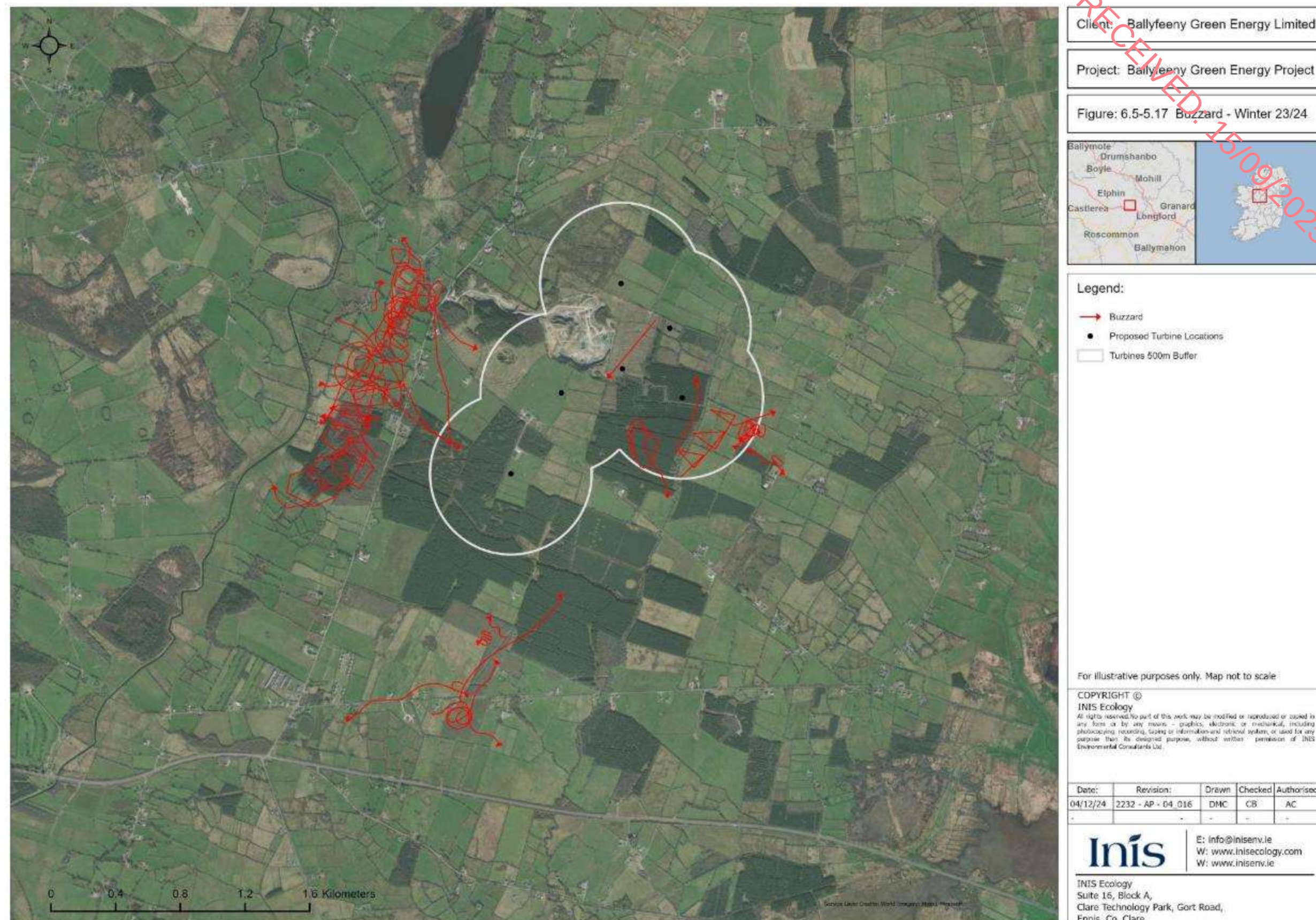


Figure 5.17: Winter season 2023/2024 Buzzard flightlines.

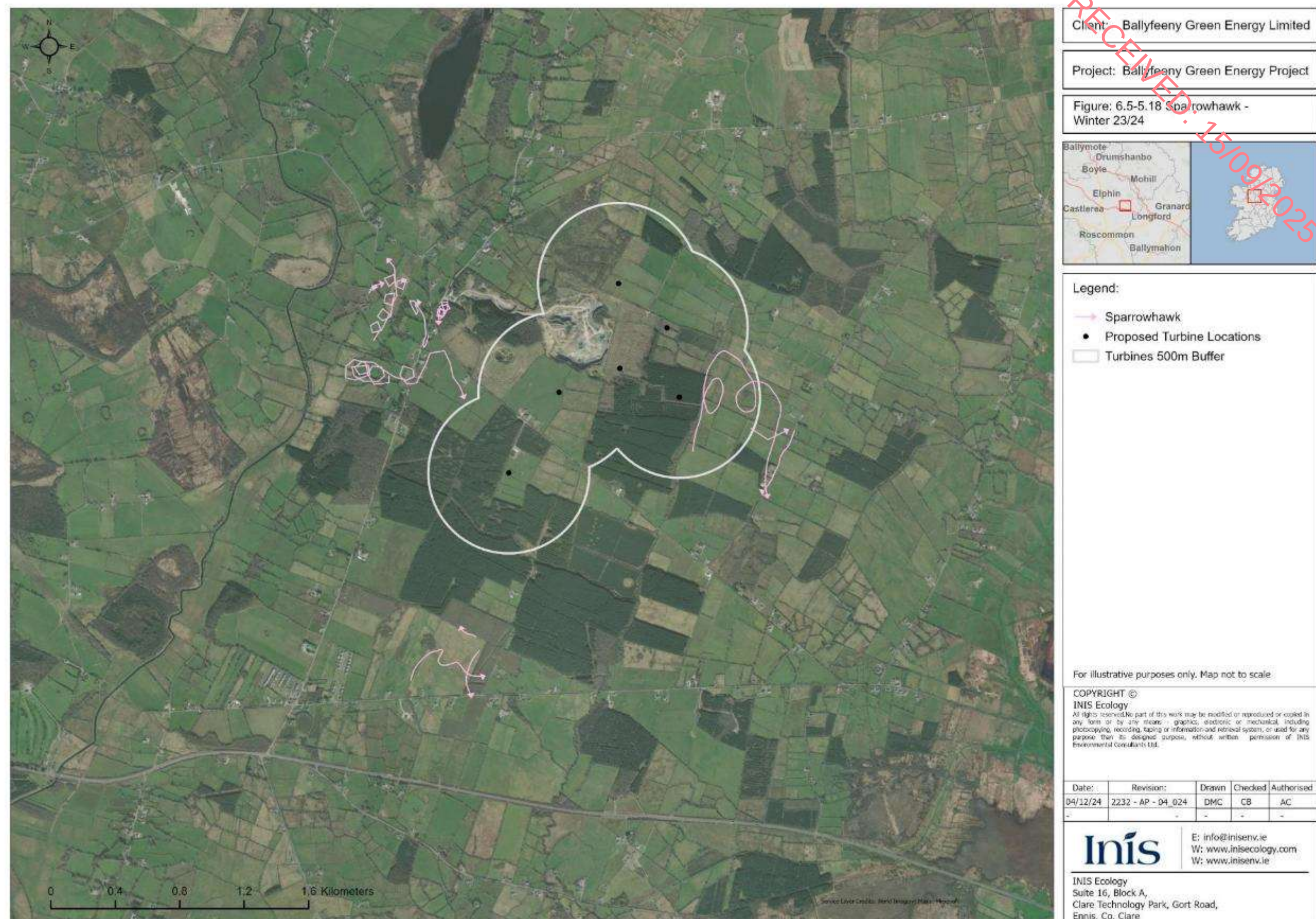


Figure 5.18: Winter season 2023/2024 Sparrowhawk flightlines.

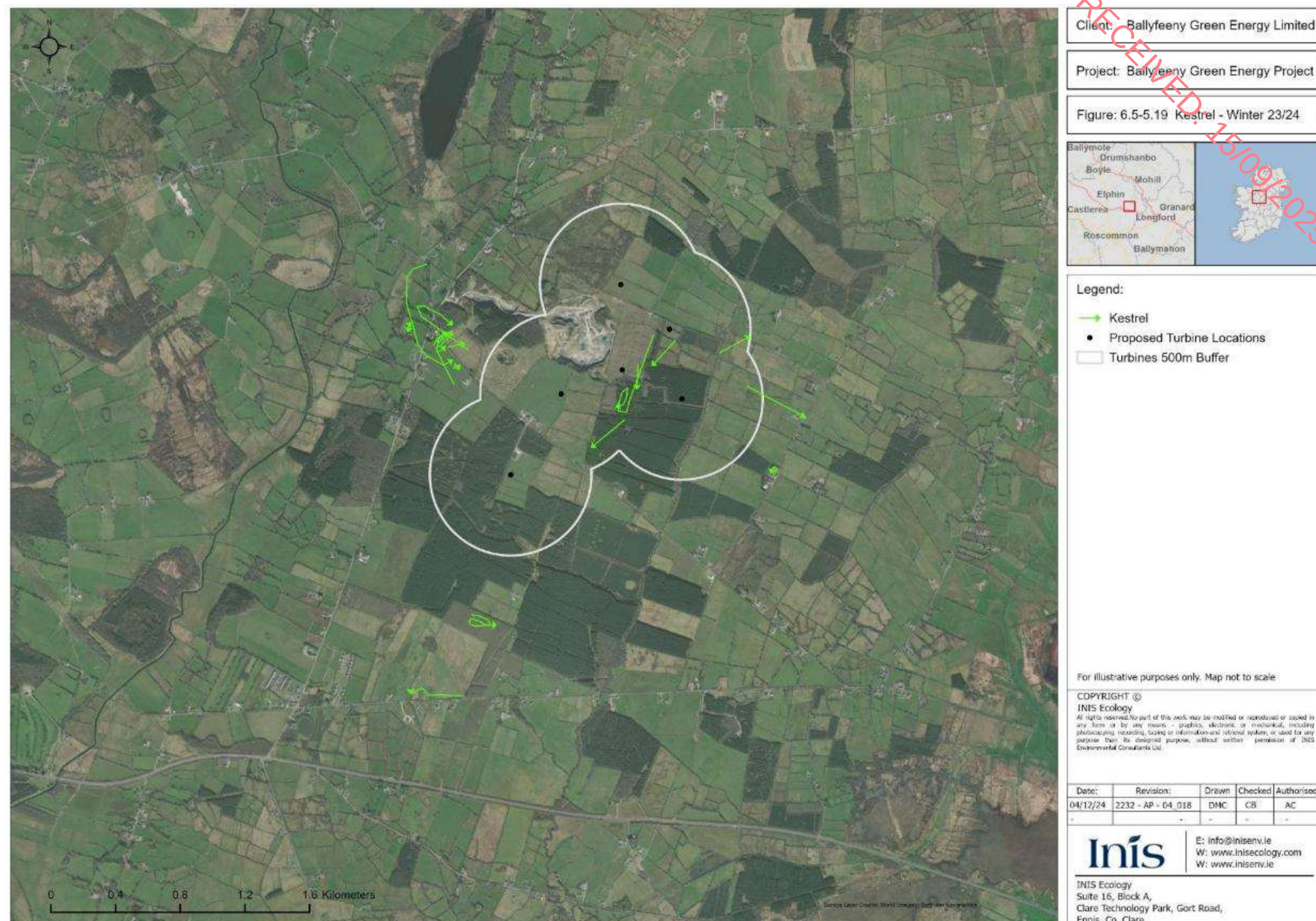


Figure 5.19: Winter season 2023/2024 Kestrel flightlines.

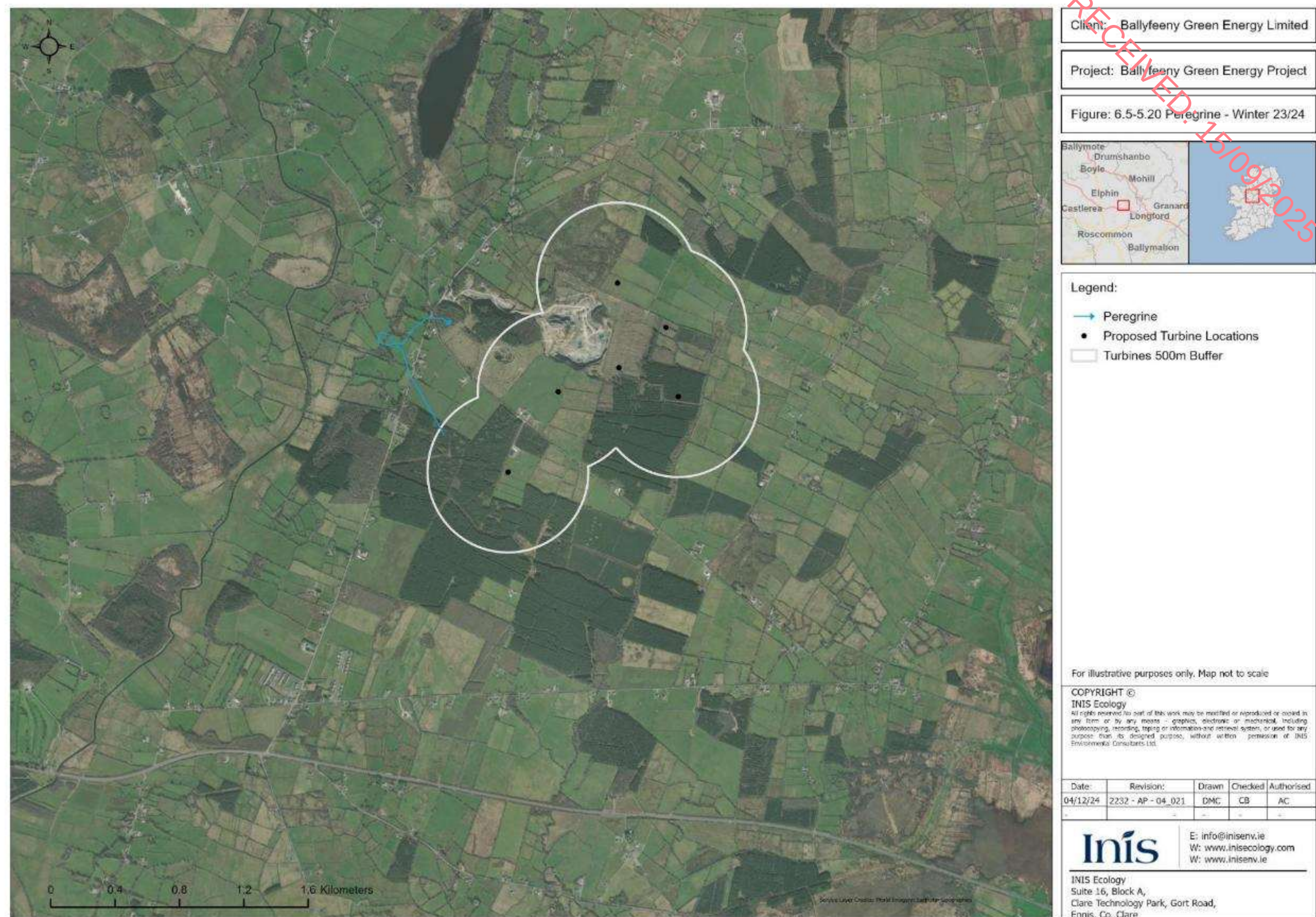


Figure 5.20: Winter season 2023/2024 Peregrine flightlines.

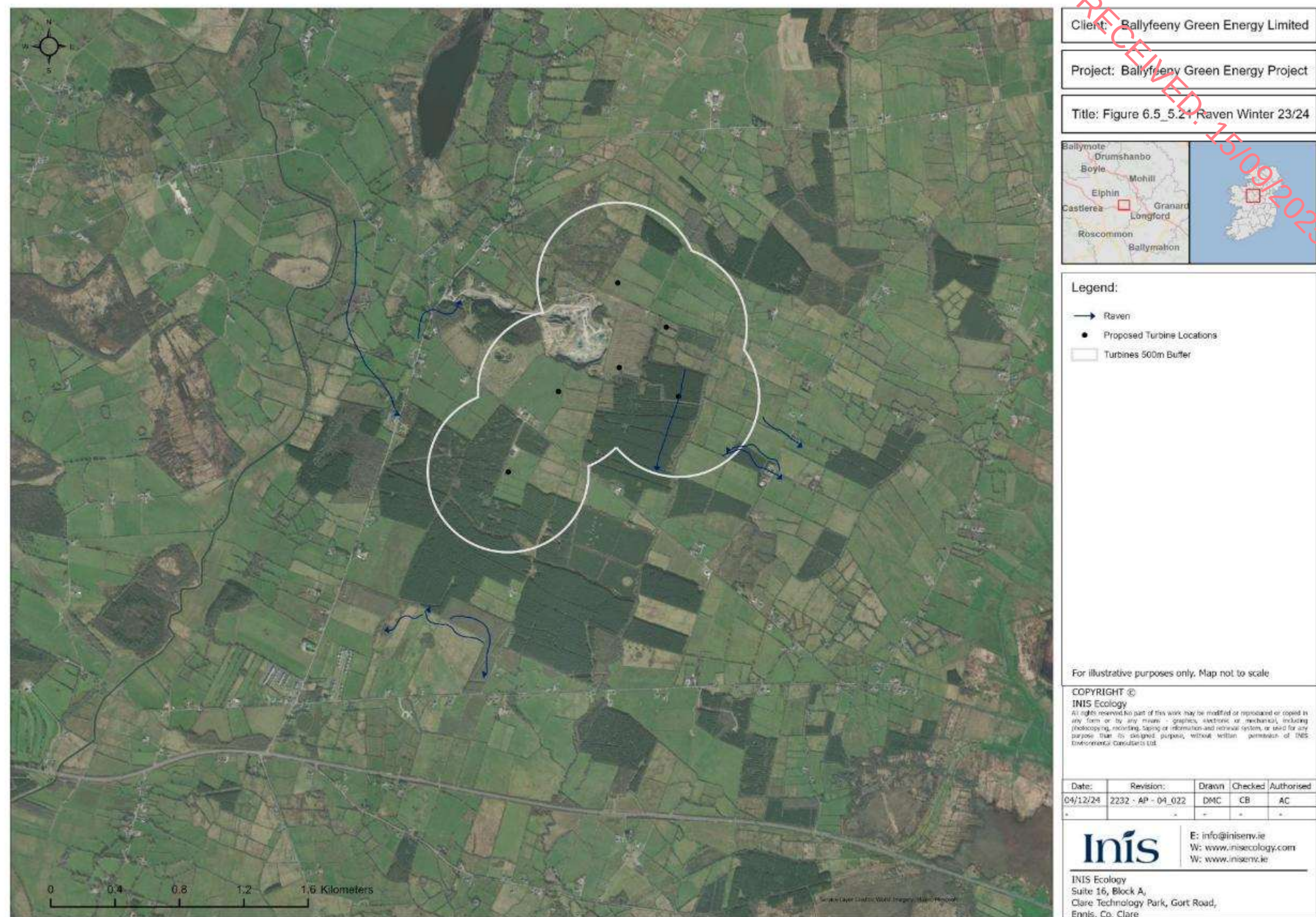


Figure 5.21: Winter season 2023/2024 Raven flightlines

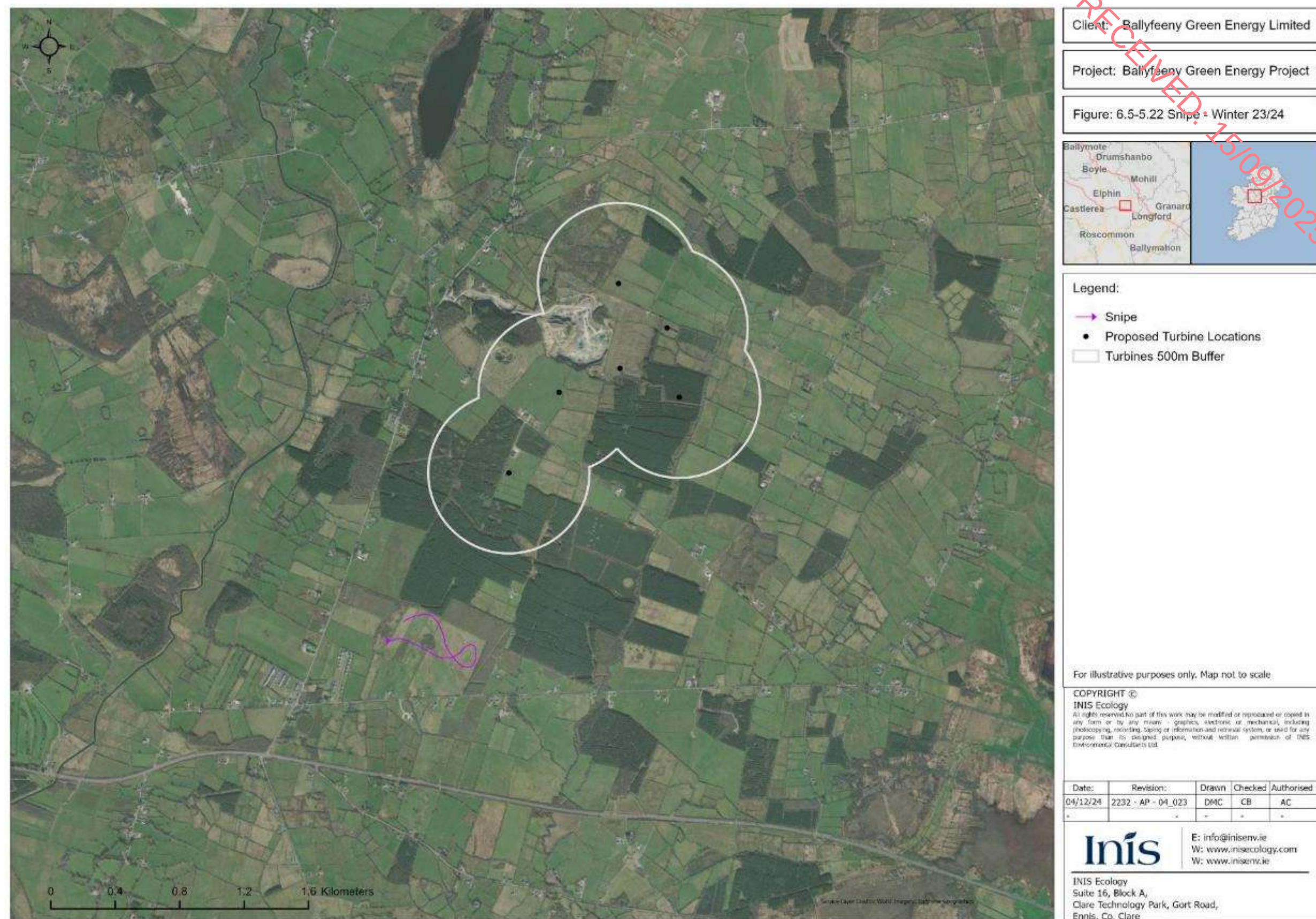


Figure 5.22: Winter season 2023/2024 Snipe flightlines.

5.4.1.4 Breeding Season 2024

A total of 345 individuals from 13 species were recorded from VP surveys in Summer 2024 (see **Table 5.19**). Cormorant was the commonest species observed (67 individuals) followed by Buzzard (51 individuals), Raven (47 individuals) and Lesser Black-backed Gull (43 individuals). Details of survey conditions for all VP survey visits is shown in **Table 5.20**.

A full breakdown of all VP sightings is presented in **Table 5.21**, with flightlines shown for all species observed in **Figure 5.23**; **Figure 5.24** to **Figure 5.30** show the flightlines for selected species separately.

Table 5.4: *Breeding season 2024 VP Survey Species Counts.*

Species	April	May	June	July	August	September	Total
Black-headed Gull	-	4	-	13	20	-	37
Buzzard	2	18	12	10	-	9	51
Cormorant	5	38	2	14	6	2	67
Golden Plover	27	-	-	-	-	-	27
Great Black-backed Gull	2	-	-	-	-	-	2
Grey Heron	-	-	-	-	3	1	4
Hen Harrier	-	-	-	-	1	1	2
Kestrel	3	5	-	1	3	1	13
Lesser Black-backed Gull	3	27	2	5	6	-	43
Mallard	2	3	6	2	22	-	35
Peregrine	-	5	-	1	-	-	6
Raven	-	2	1	4	29	11	47
Sparrowhawk	1	7	-	2	1	-	11
Total	45	109	23	52	91	25	345

Table 5.20: *Breeding season 2024 VP Survey Conditions.*

Date	VP No.	Surveyor	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction	Temp.
08/04/2024	1	NC	15:30	18:30	Mist/light rain	8/8	8	F3	NNW	7
10/04/2024	3	NA	10:00	12:00	Light drizzle	8/8	3	F3	SSE	10
11/04/2024	2	LS	10:26	13:27	Light drizzle	7/8	5	F2	N	11
11/04/2024	2	LS	14:00	17:00	Light drizzle	7/8	5	F2	N	12
24/04/2024	1	NA	09:00	12:00	None	3/8	16	F3	NNW	7
25/04/2024	3	NA	10:25	13:25	None	8/8	5	F2	W	10
08/05/2024	1	NC	13:40	16:40	None	8/8	20	F2	SSW	13
09/05/2024	3	NC	08:45	09:45	None	8/8	20	F1	SSE	10
28/05/2024	2	NA	11:15	14:15	Light Showers	8/8	14	F3	SW	15
28/05/2024	2	NA	14:50	17:50	None	7/8	14	F3	WSW	15
29/05/2024	1	NA	09:30	12:30	None	7/8	14	F2	WNW	13
30/05/2024	3	NA	09:40	12:40	None	8/8	5	F3	NW	11
11/06/2024	2	NC	17:00	20:00	None	7/8	20	F3	NW	13
11/06/2024	2	NC	20:30	21:30	None	3/8	20	F3	NW	11
12/06/2024	3	NC	11:40	14:40	None	7/8	20	F2	WSW	13
13/06/2024	3	NC	11:20	12:20	Constant Rain	8/8	6	F3	SE	12
14/06/2024	3	NC	08:00	11:00	None	4/8	20	F3	SW	11
24/06/2024	1	NC	21:00	21:30	None	7/8	20	F2	WSW	19
25/06/2024	1	NC	19:00	21:30	None	3/8	20	F1	NW	17
01/07/2024	2	NC	12:00	14:00	Occasional showers	8/8	20	F4	NW	14
02/07/2024	3	NC	19:00	21:00	None	8/8	11	F3	SW	15
03/07/2024	1	NC	15:40	17:40	None	8/8	20	F4	W	16
04/07/2024	1	NC	08:00	10:00	None	6/8	13	F4	W	12
04/07/2024	1	NC	10:15	12:15	Drizzle	7/8	20	F4	W	13
15/07/2024	2	NC	13:00	16:00	None	8/8	20	F2	E	18
23/07/2024	3	NC	11:30	13:30	None	6/8	20	F1	NW	18
23/07/2024	3	NC	13:45	15:45	None	6/8	20	F1	SW	19
29/07/2024	2	NC	13:30	16:30	None	8/8	20	F2	SW	20

Date	VP No.	Surveyor	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction	Temp.
30/07/2024	1	NC	15:00	17:00	None	6/8	20	F1	W	19
30/07/2024	1	NC	17:15	19:15	None	8/8	20	F1	WSW	20
13/08/2024	2	NC	09:20	11:20	None	7/8	20	F3	WSW	16
13/08/2024	2	NC	11:35	13:35	None	7/8	20	F3	W	16
14/08/2024	1	LS	12:40	15:40	None	7/8	15	F2	NE	17
20/08/2024	3	NC	12:00	15:00	Occasional showers	7/8	11	F3	W	14
20/08/2024	3	NC	15:30	18:30	Occasional showers	6/8	20	F4	W	15
23/08/2024	1	NC	10:00	12:00	None	3/8	20	F3	WSW	14
23/08/2024	2	NC	12:15	14:15	None	6/8	15	F4	SW	14
26/08/2024	2	NC	12:10	13:10	None	6/8	20	F3	SW	17
26/08/2024	2	NC	13:10	13:55	None	6/8	20	F3	SW	17
26/08/2024	2	NC	14:45	17:00	None	8/8	13	F3	S	17
27/08/2024	2	NC	09:55	11:55	None	7/8	20	F4	SW	15
27/08/2024	2	NC	12:10	13:10	None	6/8	20	F3	SW	17
27/08/2024	1	NC	14:10	17:00	None	4/8	20	F3	SW	19
28/08/2024	1	NC	10:00	12:00	Drizzle	8/8	11	F3	SSW	14
28/08/2024	1	NC	12:15	13:25	None	8/8	15	F3	SSW	15
28/08/2024	3	NC	13:40	15:40	None	6/8	20	F4	SW	15
28/08/2024	3	NC	15:45	16:45	None	5/8	20	F4	SW	17
29/08/2024	3	NC	09:35	11:35	None	3/8	13	F3	WSW	13
29/08/2024	3	NC	11:50	14:50	None	5/8	20	F3	W	16

Table 5.21: Breeding season 2024 VP Survey Sightings.

Date	VP No	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
08/04/2024	1	15:30	18:30	10800	Buzzard	1		35						35
10/04/2024	3	10:00	12:00	7200	Lesser Black-backed Gull	1	5	15	5					25
10/04/2024	3	10:00	12:00	7200	Cormorant	1			5					5
10/04/2024	3	10:00	12:00	7200	Cormorant	1				25				25
10/04/2024	3	10:00	12:00	7200	Mallard	1	7	3						10
10/04/2024	3	10:00	12:00	7200	Sparrowhawk	1	17							17
11/04/2024	2	10:26	13:27	10800	Cormorant	1					70	50		120
11/04/2024	2	10:26	13:27	10800	Golden Plover	9			60	40	100			200
11/04/2024	2	10:26	13:27	10800	Buzzard	1					500			500
11/04/2024	2	14:00	17:00	10800	Cormorant	1			60	60				120
11/04/2024	2	14:00	17:00	10800	Great Black-backed Gull	2				50	50			100
11/04/2024	2	14:00	17:00	10800	Golden Plover	3			200	100				300
11/04/2024	2	14:00	17:00	10800	Golden Plover	15			200	300				500
24/04/2024	1	09:00	12:00	10800	Lesser Black-backed Gull	2			20	30				50
24/04/2024	1	09:00	12:00	10800	Cormorant	1				20				20
24/04/2024	1	09:00	12:00	10800	Mallard	1		10	5					15
24/04/2024	1	09:00	12:00	10800	Kestrel	1		6						6
24/04/2024	1	09:00	12:00	10800	Kestrel	1			60	80	40	60		240
24/04/2024	1	09:00	12:00	10800	Kestrel	1			10	40	40	60		150
25/04/2024	3	10:25	13:25	10800	Peregrine	1				15				15
25/04/2024	3	10:25	13:25	10800	Buzzard	1						25	30	55
25/04/2024	3	10:25	13:25	10800	Kestrel	1		10	45					55
25/04/2024	3	10:25	13:25	10800	Kestrel	1	10	5						15
25/04/2024	3	10:25	13:25	10800	Kestrel	1		25	45	45	40			155
25/04/2024	3	10:25	13:25	10800	Lesser Black-backed Gull	1		30	10					40

Date	VP No	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
25/04/2024	3	10:25	13:25	10800	Cormorant	1					40			40
25/04/2024	3	10:25	13:25	10800	Kestrel	1	15	20	10					45
25/04/2024	3	10:25	13:25	10800	Kestrel	1		10	20	20	10			60
25/04/2024	3	10:25	13:25	10800	Lesser Black-backed Gull	1				47				47
08/05/2024	1	13:40	16:40	10800	Cormorant	5		100	5	5				110
08/05/2024	1	13:40	16:40	10800	Raven	1	38							38
08/05/2024	1	13:40	16:40	10800	Buzzard	1	7							7
09/05/2024	3	08:45	09:45	3600	Raven	1	10	7						17
09/05/2024	3	08:45	09:45	3600	Mallard	2	5	25						30
28/05/2024	2	11:15	14:15	10800	Lesser Black-backed Gull	2				35	70	20		125
28/05/2024	2	11:15	14:15	10800	Lesser Black-backed Gull	1		5	20					25
28/05/2024	2	11:15	14:15	10800	Cormorant	1		25	60					85
28/05/2024	2	11:15	14:15	10800	Lesser Black-backed Gull	1	8	20	20					48
28/05/2024	2	11:15	14:15	10800	Black-headed Gull	1	30	7						37
28/05/2024	2	11:15	14:15	10800	Black-headed Gull	1	3	20						23
28/05/2024	2	11:15	14:15	10800	Cormorant	1	5	5						10
28/05/2024	2	11:15	14:15	10800	Cormorant	1	15	40						55
28/05/2024	2	11:15	14:15	10800	Lesser Black-backed Gull	1		7						7
28/05/2024	2	11:15	14:15	10800	Lesser Black-backed Gull	1	5	15						20
28/05/2024	2	11:15	14:15	10800	Lesser Black-backed Gull	1		90						90
28/05/2024	2	11:15	14:15	10800	Lesser Black-backed Gull	1	10	33						43
28/05/2024	2	11:15	14:15	10800	Cormorant	1			26					26
28/05/2024	2	11:15	14:15	10800	Lesser Black-backed Gull	1		10						10
28/05/2024	2	11:15	14:15	10800	Lesser Black-backed Gull	1		20	9					29
28/05/2024	2	11:15	14:15	10800	Buzzard	1	20	59						79

Date	VP No	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
28/05/2024	2	11:15	14:15	10800	Buzzard	1	3	7						10
28/05/2024	2	11:15	14:15	10800	Buzzard	1		10	20	50	50			130
28/05/2024	2	11:15	14:15	10800	Buzzard	1				40				40
28/05/2024	2	11:15	14:15	10800	Buzzard	1	2	8						10
28/05/2024	2	11:15	14:15	10800	Cormorant	1		9						9
28/05/2024	2	11:15	14:15	10800	Peregrine	1		9	40	30				79
28/05/2024	2	11:15	14:15	10800	Buzzard	1	30							30
28/05/2024	2	11:15	14:15	10800	Lesser Black-backed Gull	1	7	13						20
28/05/2024	2	11:15	14:15	10800	Cormorant	1				75				75
28/05/2024	2	11:15	14:15	10800	Lesser Black-backed Gull	1			25	18				43
28/05/2024	2	11:15	14:15	10800	Lesser Black-backed Gull	1		15	20					35
28/05/2024	2	11:15	14:15	10800	Buzzard	1	5	15	60	35				115
28/05/2024	2	11:15	14:15	10800	Buzzard	1			85					85
28/05/2024	2	11:15	14:15	10800	Cormorant	1			40	15				55
28/05/2024	2	11:15	14:15	10800	Buzzard	1	10	10	20	180				220
28/05/2024	2	14:50	17:50	10800	Cormorant	1	10	25	35					70
28/05/2024	2	14:50	17:50	10800	Lesser Black-backed Gull	1		10						10
28/05/2024	2	14:50	17:50	10800	Cormorant	1		20						20
28/05/2024	2	14:50	17:50	10800	Cormorant	1					30			30
28/05/2024	2	14:50	17:50	10800	Cormorant	2			40					40
28/05/2024	2	14:50	17:50	10800	Cormorant	1				75				75
28/05/2024	2	14:50	17:50	10800	Sparrowhawk	1	13	4						17
28/05/2024	2	14:50	17:50	10800	Sparrowhawk	1	10	20	10					40
28/05/2024	2	14:50	17:50	10800	Mallard	1	10	10						20
28/05/2024	2	14:50	17:50	10800	Cormorant	1			28					28

Date	VP No	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
28/05/2024	2	14:50	17:50	10800	Cormorant	1			60					60
28/05/2024	2	14:50	17:50	10800	Cormorant	1			30	10				40
28/05/2024	2	14:50	17:50	10800	Sparrowhawk	1	10	35						45
29/05/2024	1	09:30	12:30	10800	Sparrowhawk	1			20	43				63
29/05/2024	1	09:30	12:30	10800	Cormorant	1			46					46
29/05/2024	1	09:30	12:30	10800	Cormorant	1			48					48
29/05/2024	1	09:30	12:30	10800	Peregrine	1	18							18
29/05/2024	1	09:30	12:30	10800	Buzzard	1			40	40	40	20		140
29/05/2024	1	09:30	12:30	10800	Peregrine	1		10	40	30				80
29/05/2024	1	09:30	12:30	10800	Lesser Black-backed Gull	1			35					35
29/05/2024	1	09:30	12:30	10800	Lesser Black-backed Gull	1		7						7
29/05/2024	1	09:30	12:30	10800	Cormorant	1			20	20	20	85		145
29/05/2024	1	09:30	12:30	10800	Cormorant	1				50	50	45		145
30/05/2024	3	09:40	12:40	10800	Cormorant	1				13				13
30/05/2024	3	09:40	12:40	10800	Cormorant	1			25					25
30/05/2024	3	09:40	12:40	10800	Cormorant	1			30					30
30/05/2024	3	09:40	12:40	10800	Cormorant	1					20	85		105
30/05/2024	3	09:40	12:40	10800	Cormorant	2			18	10				28
30/05/2024	3	09:40	12:40	10800	Black-headed Gull	1		10	20					30
30/05/2024	3	09:40	12:40	10800	Buzzard	1	13							13
30/05/2024	3	09:40	12:40	10800	Sparrowhawk	1			6					6
30/05/2024	3	09:40	12:40	10800	Buzzard	1		23	40					63
30/05/2024	3	09:40	12:40	10800	Cormorant	1				55				55
30/05/2024	3	09:40	12:40	10800	Cormorant	1			30	12				42
30/05/2024	3	09:40	12:40	10800	Cormorant	1			30					30

Date	VP No	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
30/05/2024	3	09:40	12:40	10800	Lesser Black-backed Gull	3				40				40
30/05/2024	3	09:40	12:40	10800	Sparrowhawk	1	2	8	6					16
30/05/2024	3	09:40	12:40	10800	Sparrowhawk	1		5	15	10				30
30/05/2024	3	09:40	12:40	10800	Lesser Black-backed Gull	1				20	30	70		120
30/05/2024	3	09:40	12:40	10800	Buzzard	1			30	40	80			150
30/05/2024	3	09:40	12:40	10800	Buzzard	1		5	15					20
30/05/2024	3	09:40	12:40	10800	Buzzard	1			1	1	1	37		40
30/05/2024	3	09:40	12:40	10800	Lesser Black-backed Gull	1			15	35				50
30/05/2024	3	09:40	12:40	10800	Cormorant	1			10	35				45
30/05/2024	3	09:40	12:40	10800	Lesser Black-backed Gull	1				30	20			50
30/05/2024	3	09:40	12:40	10800	Buzzard	1				50				50
30/05/2024	3	09:40	12:40	10800	Black-headed Gull	1			5					5
30/05/2024	3	09:40	12:40	10800	Cormorant	1				40				40
30/05/2024	3	09:40	12:40	10800	Peregrine	1			9	20				29
30/05/2024	3	09:40	12:40	10800	Cormorant	1				25				25
30/05/2024	3	09:40	12:40	10800	Lesser Black-backed Gull	3				20	30	45		95
11/06/2024	2	17:00	20:00	10800	Lesser Black-backed Gull	1	14							14
11/06/2024	2	17:00	20:00	10800	Buzzard	1	9	50						59
11/06/2024	2	17:00	20:00	10800	Buzzard	1	4	60						64
11/06/2024	2	17:00	20:00	10800	Buzzard	1	30							30
11/06/2024	2	20:30	21:30	3600	Lesser Black-backed Gull	1		123						123
11/06/2024	2	20:30	21:30	3600	Buzzard	1	19							19
12/06/2024	3	11:40	14:40	10800	Buzzard	1		184						184
12/06/2024	3	11:40	14:40	10800	Cormorant	1			25					25
12/06/2024	3	11:40	14:40	10800	Buzzard	1	4	70						74
12/06/2024	3	11:40	14:40	10800	Buzzard	1	12							12
12/06/2024	3	11:40	14:40	10800	Buzzard	1	1	50	50					101

Date	VP No	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
13/06/2024	3	11:20	12:20	3600	Mallard	2	28							28
13/06/2024	3	11:20	12:20	3600	Mallard	2	20	6						26
14/06/2024	3	08:00	11:00	10800	Buzzard	1	8	70						78
14/06/2024	3	08:00	11:00	10800	Cormorant	1		53						53
14/06/2024	3	08:00	11:00	10800	Buzzard	1	37							37
14/06/2024	3	08:00	11:00	10800	Mallard	2	25							25
14/06/2024	3	08:00	11:00	10800	Buzzard	1	1	90						91
24/06/2024	1	21:00	21:30	10800	Raven	1	3	20						23
25/06/2024	1	19:00	21:30	10800	Buzzard	1	8	20						28
01/07/2024	2	12:00	14:00	7200	Cormorant	1			37					37
01/07/2024	2	12:00	14:00	7200	Lesser Black-backed Gull	1	2	20						22
01/07/2024	2	12:00	14:00	7200	Cormorant	1	4	30						34
01/07/2024	2	12:00	14:00	7200	Raven	2	60	3						63
01/07/2024	2	12:00	14:00	7200	Lesser Black-backed Gull	1	27							27
01/07/2024	2	12:00	14:00	7200	Lesser Black-backed Gull	1	85							85
01/07/2024	2	12:00	14:00	7200	Buzzard	1	13	100						113
02/07/2024	3	19:00	21:00	7200	Raven	1	58							58
02/07/2024	3	19:00	21:00	7200	Buzzard	1	2	40						42
02/07/2024	3	19:00	21:00	7200	Cormorant	1		39						39
03/07/2024	1	15:40	17:40	7200	Buzzard	1	24							24
03/07/2024	1	15:40	17:40	7200	Raven	1	29							29
04/07/2024	1	08:00	10:00	7200	Black-headed Gull	5	87							87
04/07/2024	1	08:00	10:00	7200	Black-headed Gull	4	41							41
04/07/2024	1	08:00	10:00	7200	Cormorant	1		68						68
04/07/2024	1	10:15	12:15	7200	Sparrowhawk	1	12							12
04/07/2024	1	10:15	12:15	7200	Sparrowhawk	1	5							5
04/07/2024	1	10:15	12:15	7200	Black-headed Gull	2	24							24
04/07/2024	1	10:15	12:15	7200	Cormorant	1				41				41

Date	VP No	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
04/07/2024	1	10:15	12:15	7200	Black-headed Gull	2	19							19
15/07/2024	2	13:00	16:00	10800	Cormorant	1			74					74
15/07/2024	2	13:00	16:00	10800	Cormorant	1			36					36
15/07/2024	2	13:00	16:00	10800	Cormorant	1			56					56
15/07/2024	2	13:00	16:00	10800	Lesser Black-backed Gull	1				30	7			37
15/07/2024	2	13:00	16:00	10800	Cormorant	1			60	5				65
15/07/2024	2	13:00	16:00	10800	Buzzard	2				200	100	63		363
23/07/2024	3	11:30	13:30	7200	Buzzard	1		4	70					74
23/07/2024	3	11:30	13:30	7200	Cormorant	1			36					36
23/07/2024	3	11:30	13:30	7200	Peregrine	1			52					52
23/07/2024	3	11:30	13:30	7200	Cormorant	1		16						16
23/07/2024	3	13:45	15:45	7200	Mallard	2		42						42
23/07/2024	3	13:45	15:45	7200	Cormorant	1		33						33
23/07/2024	3	13:45	15:45	7200	Buzzard	1	2	10	80					92
23/07/2024	3	13:45	15:45	7200	Cormorant	1		52						52
23/07/2024	3	13:45	15:45	7200	Buzzard	2		87	300					387
23/07/2024	3	13:45	15:45	7200	Buzzard	1	5	50						55
29/07/2024	2	13:30	16:30	10800	Lesser Black-backed Gull	1		60						60
29/07/2024	2	13:30	16:30	10800	Cormorant	1		71						71
30/07/2024	1	15:00	17:00	7200	Raven	2			64					64
30/07/2024	1	15:00	17:00	7200	Buzzard	1	8	30						38
30/07/2024	1	17:15	19:15	7200	Buzzard	1	3	60						63
30/07/2024	1	17:15	19:15	7200	Sparrowhawk	1	7							7
30/07/2024	1	17:15	19:15	7200	Cormorant	1		60						60
30/07/2024	1	17:15	19:15	7200	Grey Heron	1			52					52
13/08/2024	2	09:20	11:20	7200	Cormorant	1			58					58
13/08/2024	2	09:20	11:20	7200	Kestrel	1	7	50						57
13/08/2024	2	09:20	11:20	7200	Raven	2		64						64

Date	VP No	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
13/08/2024	2	09:20	11:20	7200	Buzzard	1		7						7
13/08/2024	2	11:35	13:35	7200	Kestrel	1		52						52
14/08/2024	1	12:40	13:40	10800	Kestrel	1				100				100
20/08/2024	3	12:00	15:00	10800	Buzzard	1	26							26
20/08/2024	3	12:00	15:00	10800	Raven	2					91			91
20/08/2024	3	12:00	15:00	10800	Lesser Black-backed Gull	2				60				60
20/08/2024	3	15:30	18:30	10800	Buzzard	2				8	50			58
20/08/2024	3	15:30	18:30	10800	Raven	3				96				96
20/08/2024	3	15:30	18:30	10800	Buzzard	1		7	90					97
20/08/2024	3	15:30	18:30	10800	Cormorant	1			48					48
23/08/2024	1	10:00	12:00	9000	Raven	1	20							20
23/08/2024	1	10:00	12:00	9000	Grey Heron	1	7	10						17
23/08/2024	1	10:00	12:00	9000	Raven	4	41							41
23/08/2024	2	12:15	14:15	7200	Buzzard	1	19	100						119
23/08/2024	2	12:15	14:15	7200	Cormorant	1		51						51
23/08/2024	2	12:15	14:15	7200	Buzzard	1	1	9						10
23/08/2024	2	12:15	14:15	7200	Buzzard	2		5	50					55
23/08/2024	2	12:15	14:15	7200	Raven	1		27						27
26/08/2024	2	12:10	13:10	3600	Kestrel	1				6	200			206
26/08/2024	2	13:10	13:55	2700	Buzzard	1		29	100					129
26/08/2024	2	14:45	17:00	8100	Nil Sightings									
27/08/2024	2	09:55	11:55	7200	Buzzard	1	9	40						49
27/08/2024	2	09:55	11:55	7200	Buzzard	1		62						62
27/08/2024	2	09:55	11:55	7200	Buzzard	1	6	180						186
27/08/2024	2	09:55	11:55	7200	Raven	1		50	7					57
27/08/2024	2	12:10	13:10	3600	Raven	5			4	100				104
27/08/2024	1	14:10	17:00	10200	Grey Heron	1	7	50						57
27/08/2024	1	14:10	17:00	10200	Hen Harrier	1		43						43

Date	VP No	Start	End	Duration of Survey (s)	Species	Number	<10m	10-20m	20-30m	30-40m	40-50m	50-200m	>200m	Total Duration (s)
27/08/2024	1	14:10	17:00	10200	Buzzard	2			42					42
27/08/2024	1	14:10	17:00	10200	Cormorant	1		6	70					76
27/08/2024	1	14:10	17:00	10200	Raven	2		63						63
28/08/2024	1	10:00	12:00	7200	Buzzard	1	2	40						42
28/08/2024	1	12:15	13:25	4200	Raven	3		32						32
28/08/2024	3	13:40	15:40	7200	Mallard	22		28						28
28/08/2024	3	15:45	16:45	3600	Buzzard	1	5	50						55
29/08/2024	3	09:35	11:35	7200	Nil Sightings									
29/08/2024	3	11:50	14:50	10800	Buzzard	1	7	20						27
29/08/2024	3	11:50	14:50	10800	Cormorant	1			87					87

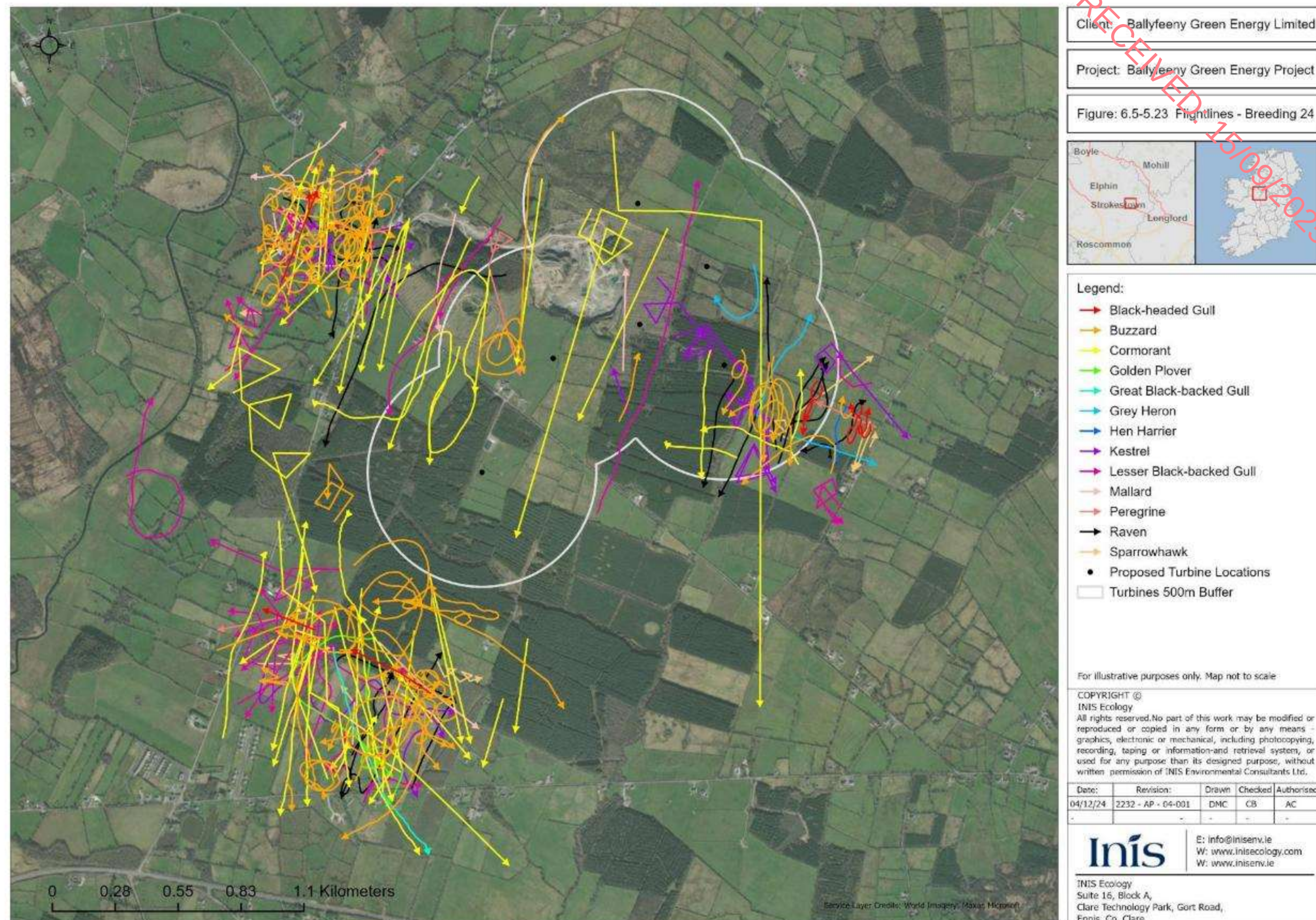


Figure 5.23: Breeding season 2024 VP flightlines.

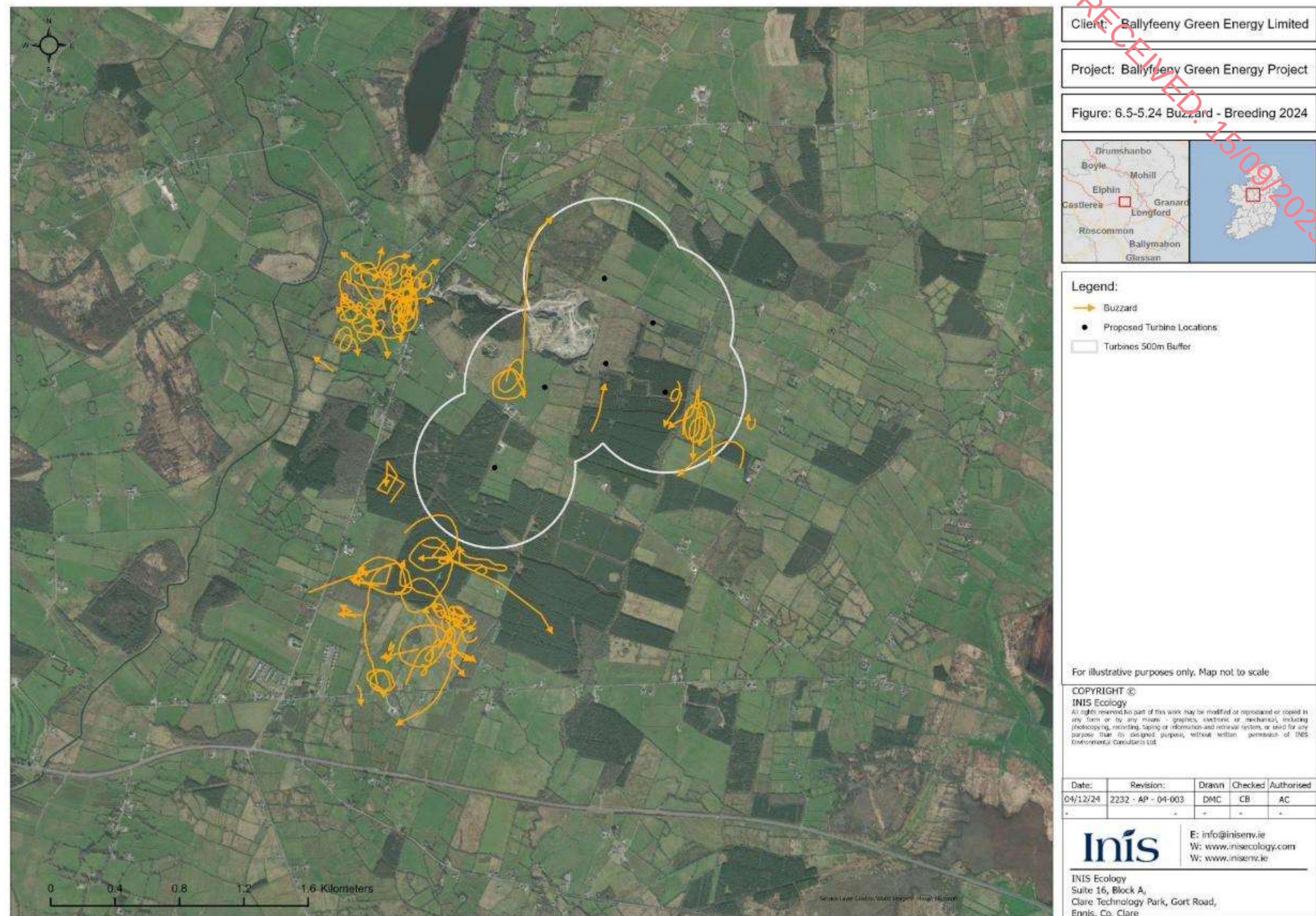


Figure 5.24: Breeding season 2024 Buzzard flightlines.

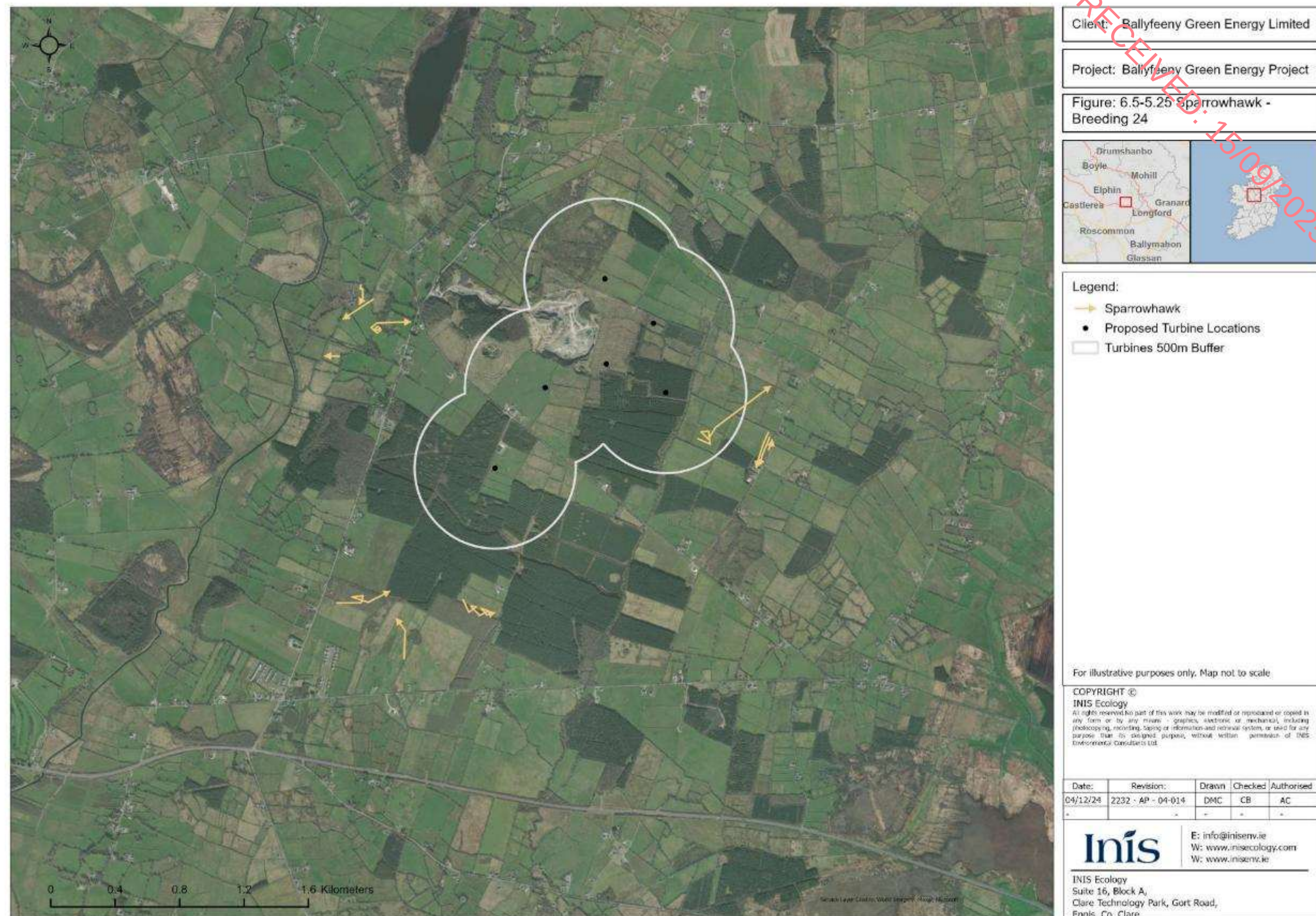


Figure 5.25: Breeding season 2024 Sparrowhawk flightlines.

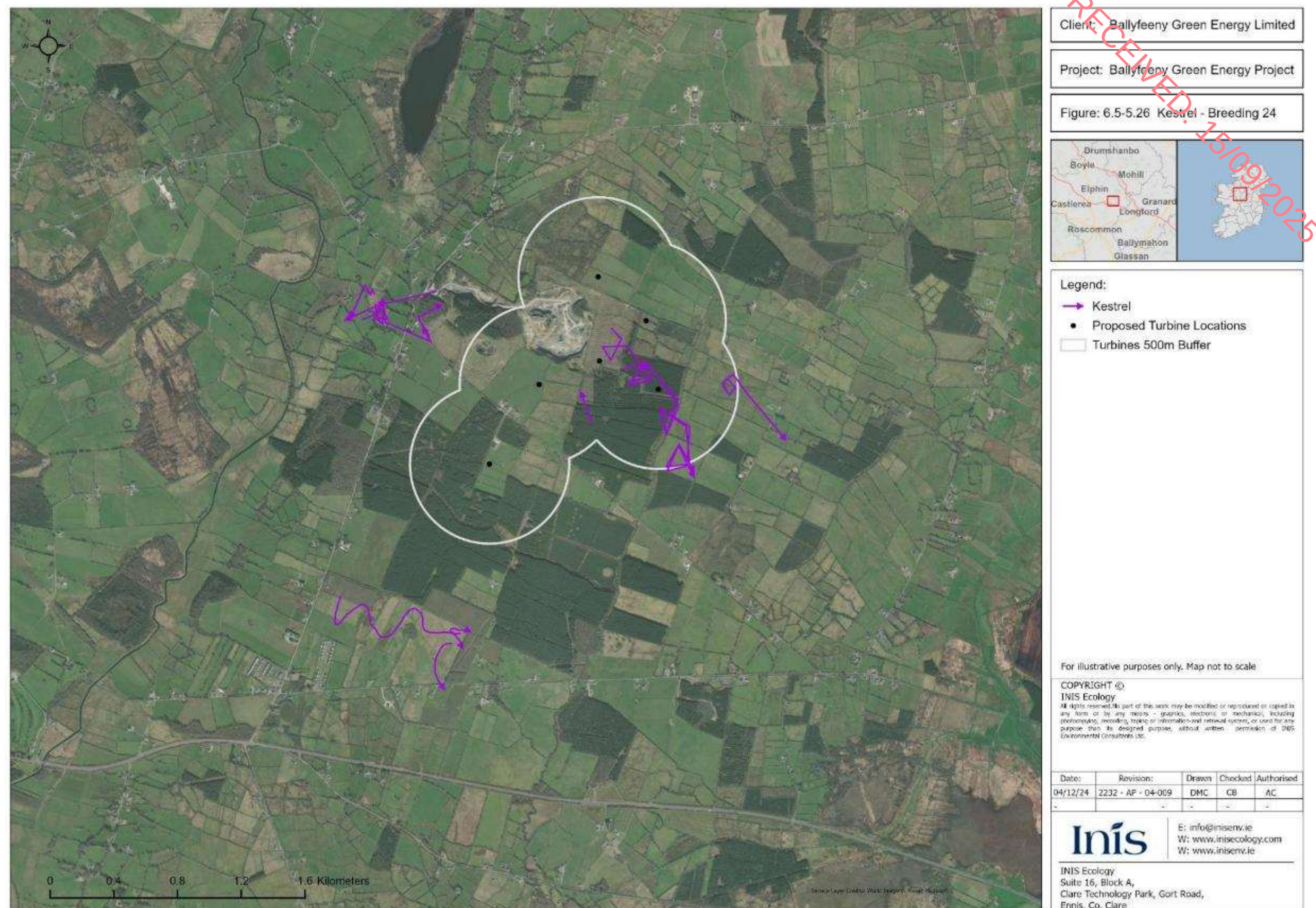


Figure 5.26: Breeding season 2024 Kestrel flightlines.

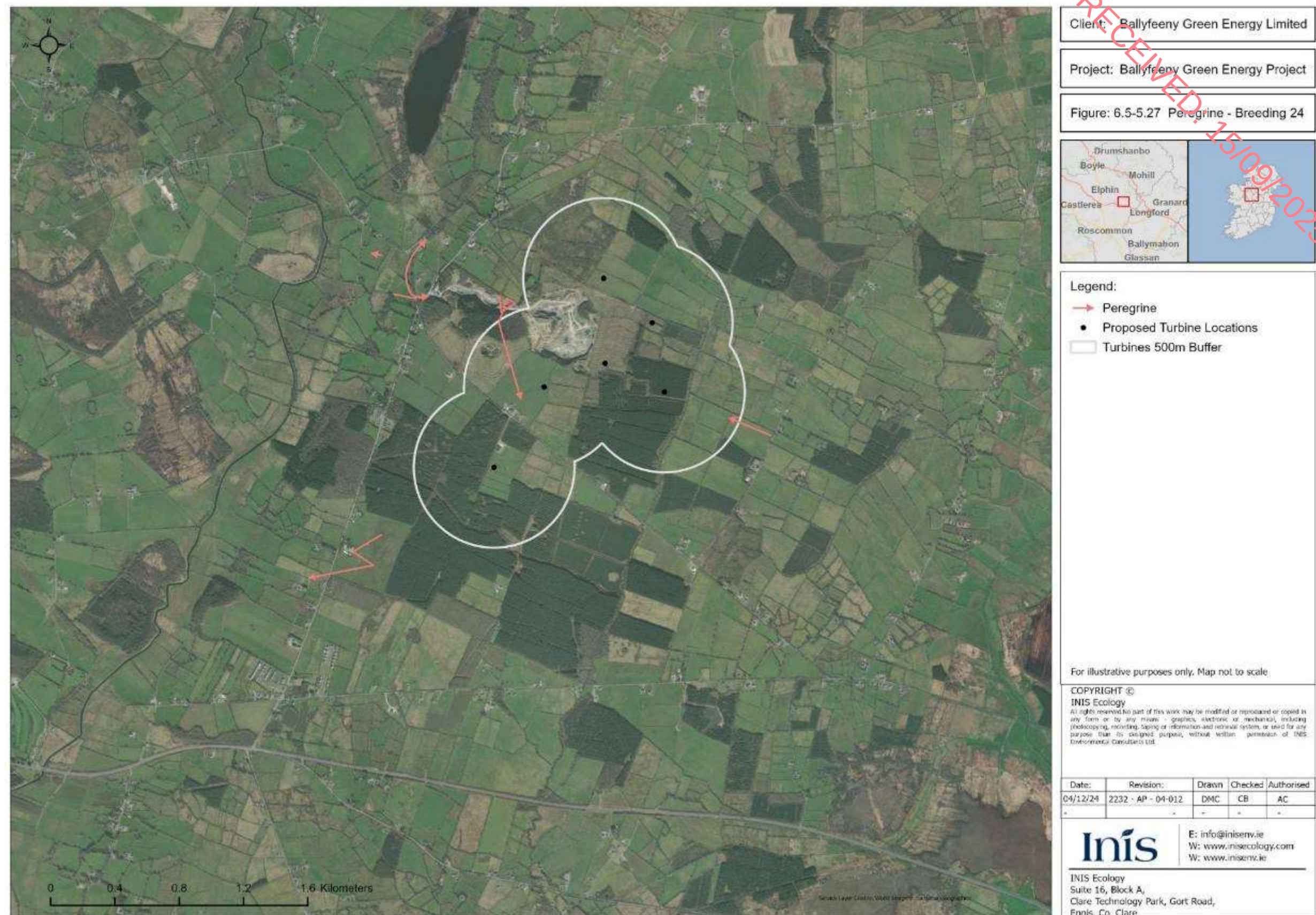


Figure 5.27: Breeding season 2024 Peregrine flightlines.

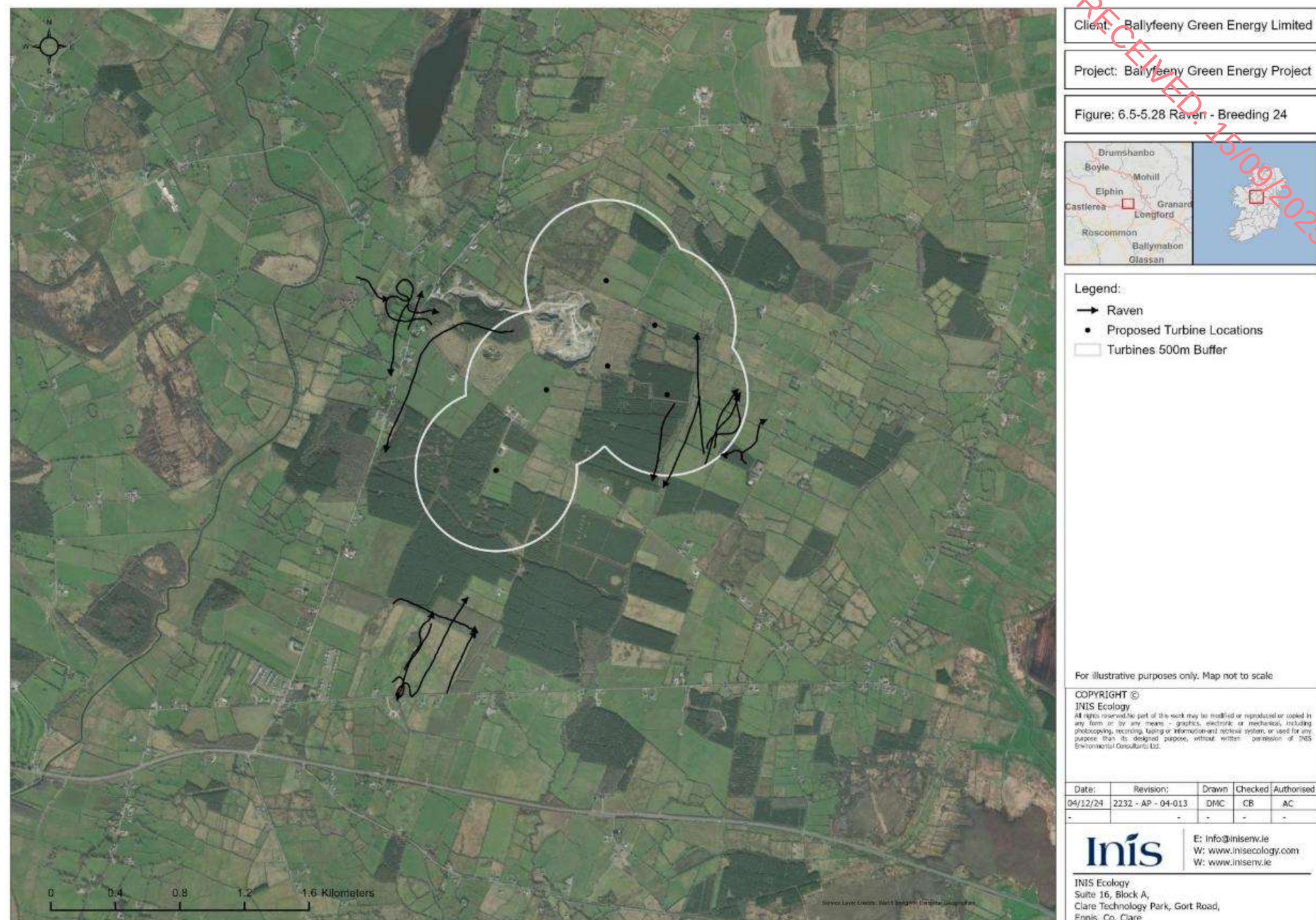


Figure 5.28: Breeding season 2024 Raven flightlines.

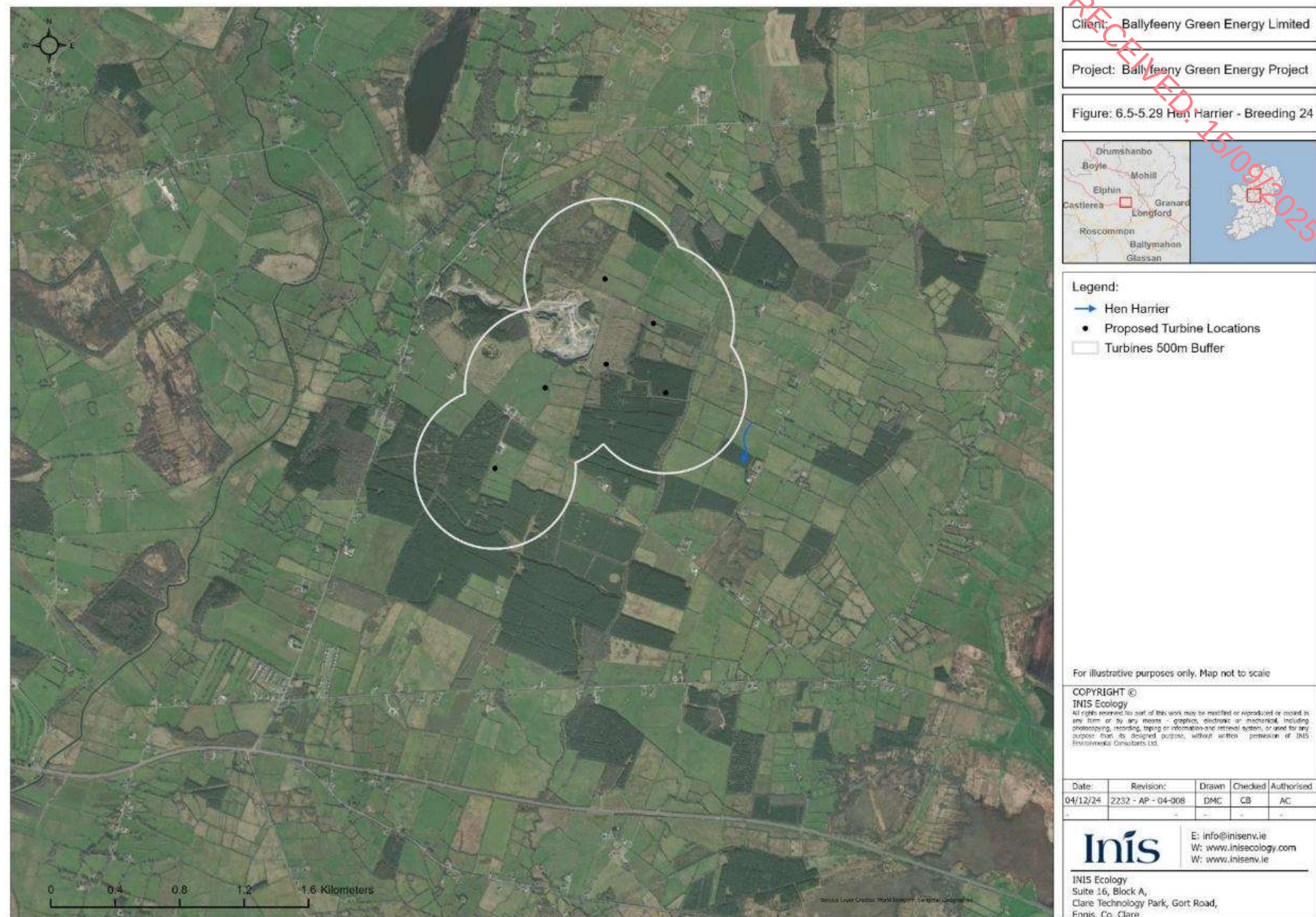


Figure 5.29: Breeding season 2024 Hen Harrier flightlines.

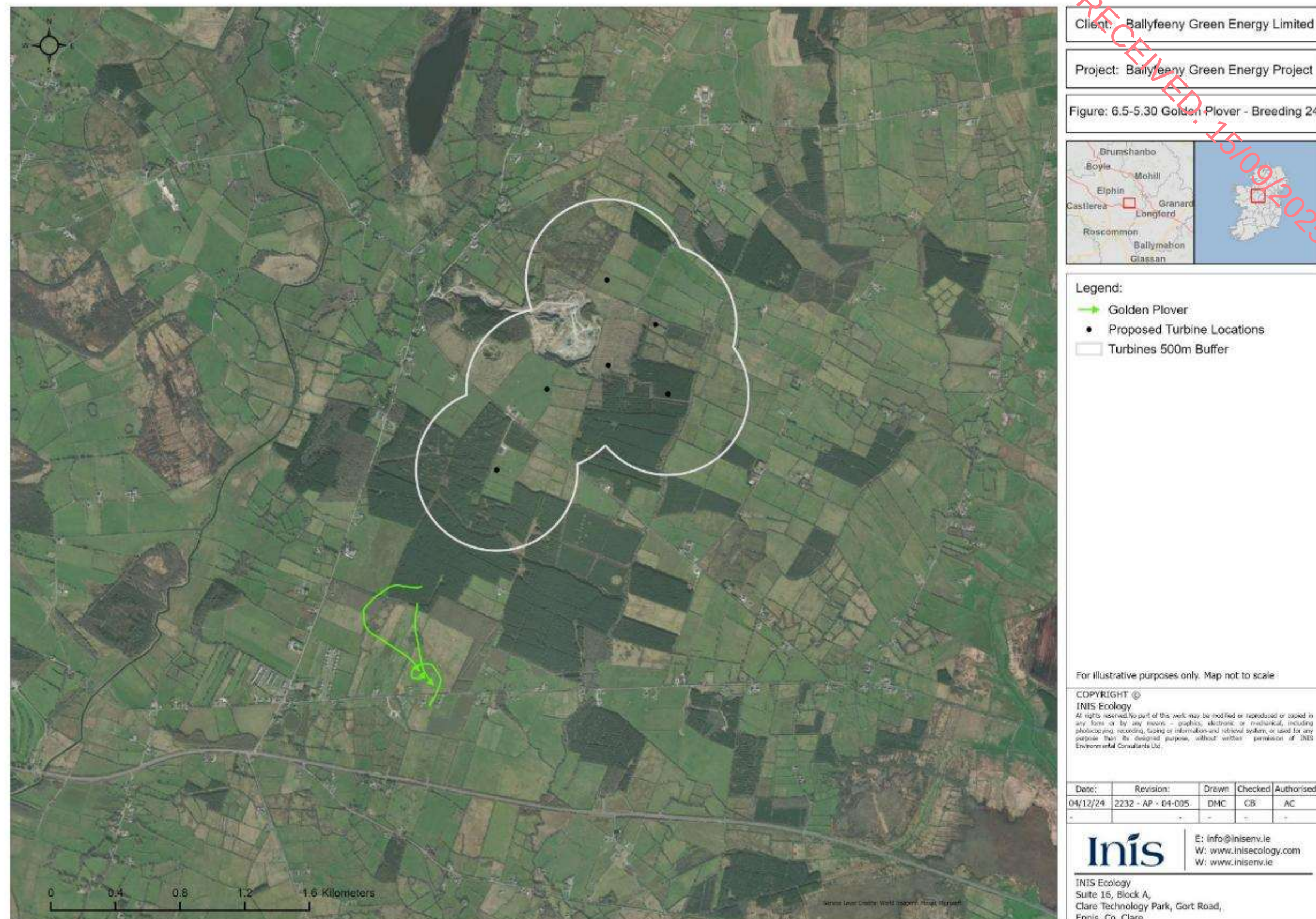


Figure 5.30: Breeding 2024 Golden Plover flightline.

5.4.2 Countryside Bird Surveys

The locations of the two bird transect survey routes is shown in **Figure 5.31**. These two transect routes were used for all breeding and wintering bird transect surveys.

5.4.2.1 Winter Season 2022/2023

A total of 130 individuals from 21 species were recorded from bird transect surveys in Winter 2022/23 (see **Table 5.22**). Blackbird was the commonest species observed (28 records) followed by Starling (24 records), Robin (19 records), and Mistle Thrush and Rook (14 observations each).

One BoCCI Red-listed species, Meadow Pipit, was observed: a single bird on Transect 2 in January. Three BoCCI Amber-listed species (Goldcrest, House Sparrow and Starling) were also recorded.

Details of survey timings and conditions for all bird transects survey visits is shown in **Table 5.23**.

Table 5.22: Winter season 2022/2023 CBS Transect Survey Sightings.

Transect	November		December		January		February		Total Birds
	T1	T2	T1	T2	T1	T2	T1	T2	
Blackbird	7	3	-	7	1	5	3	2	28
Blue Tit	-	-	1	-	-	-	-	-	1
Chaffinch	-	-	-	1	-	-	2	-	3
Coal Tit	-	-	-	2	-	-	-	-	2
Dunnock	-	-	-	-	-	1	-	-	1
Fieldfare	-	-	-	-	1	1	-	-	2
Goldcrest	-	-	-	2	-	2	-	-	4
Great Tit	-	-	-	-	-	-	1	-	1
Hooded Crow	-	-	-	-	-	2	-	-	2
House Sparrow	-	-	-	1	-	-	-	-	1
Long-tailed Tit	-	-	1	-	-	-	-	-	1
Magpie	1	-	-	-	-	-	-	-	1
Meadow Pipit	-	-	-	-	-	1	-	-	1
Mistle Thrush	-	-	-	-	-	14	-	-	14
Pied Wagtail	-	-	-	-	-	1	-	-	1
Robin	2	1	2	2	2	5	2	3	19
Rook	11	1	-	-	2	-	-	-	14
Song Thrush	-	-	-	-	-	-	3	-	3
Starling	-	-	-	-	-	24	-	-	24
Woodpigeon	1	-	1	-	1	-	-	-	3
Wren	-	-	2	-	1	1	-	-	4
Total Birds	22	5	7	15	8	57	11	5	130

Table 5.23: *Winter season 2022/2023 Bird Transect Survey Visit Data.*

Date	Observer	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction
08/11/2022	ML	12:30	13:34	None	1/8	1	F1	S
08/11/2022	ML	13:40	14:12	None	1/8	1	F1	S
10/01/2023	NC	9:00	9:30	None	3/8	1	F2	N/A
10/01/2023	NC	9:40	10:10	None	3/8	1	F2	N/A
17/01/2023	NL	16:14	16:45	None	2/8	1	F1	N/A
19/01/2023	NL	14:30	15:02	None	2/8	1	F1	N/A
20/01/2023	NL	14:30	15:02	None	2/8	1	F1	N/A
21/01/2023	NL	14:30	15:02	None	2/8	1	F1	N/A
22/01/2023	NL	14:30	15:02	None	2/8	1	F1	N/A
23/01/2023	NL	14:30	15:02	None	2/8	1	F1	N/A
24/01/2023	NL	14:30	15:02	None	2/8	1	F1	N/A
25/01/2023	NL	14:30	15:02	None	2/8	1	F1	N/A
26/01/2023	NL	14:30	15:02	None	2/8	1	F1	N/A
27/01/2023	NL	14:30	15:02	None	2/8	1	F1	N/A
28/02/2023	NL	13:30	14:00	None	2/8	2	F1	NE
28/02/2023	NL	14:30	15:00	None	4/8	2	F1	NE

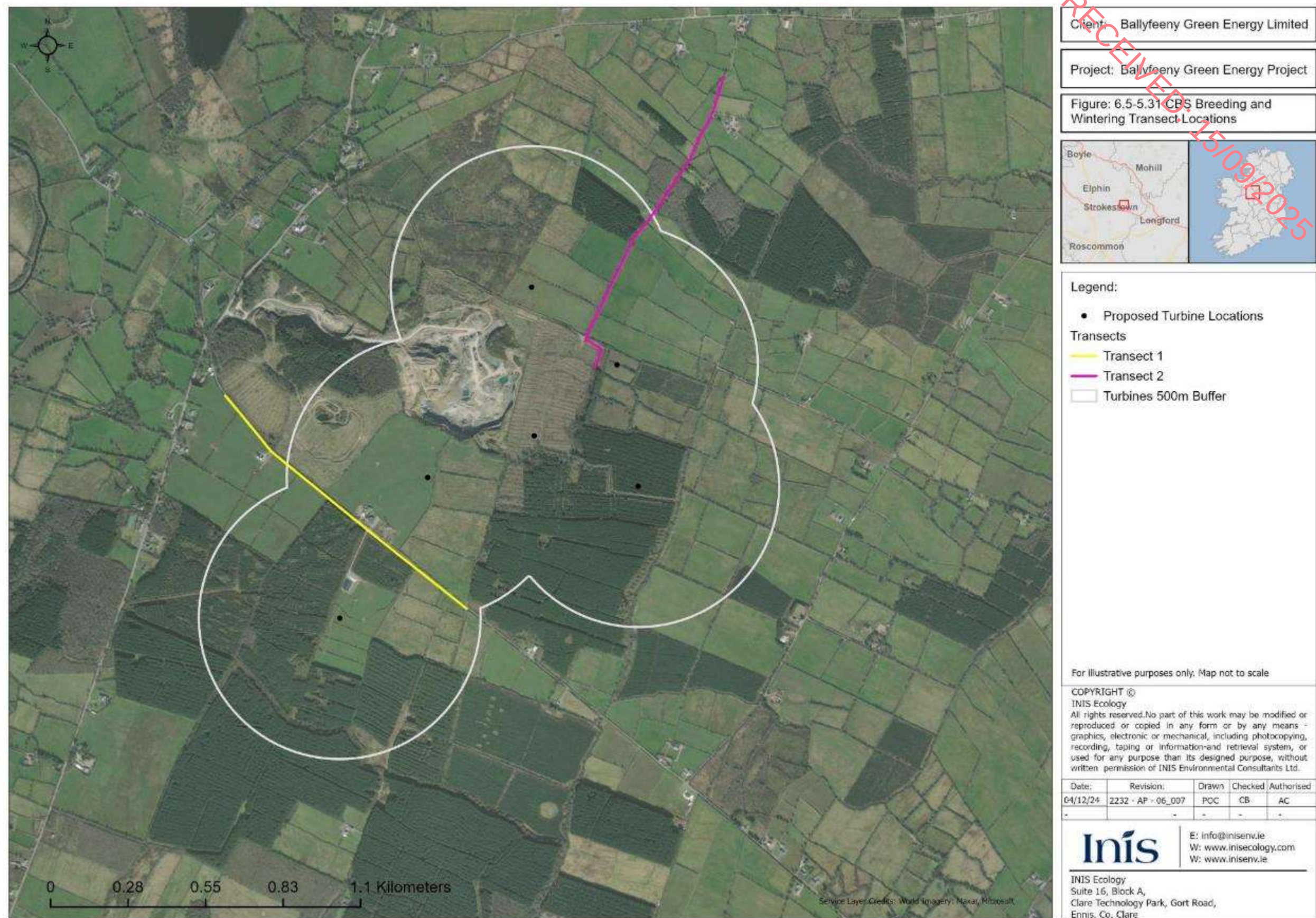


Figure 5.31: CBS breeding and wintering transect locations.

5.4.2.2 Breeding Season 2023

A total of 266 individuals from 30 species were recorded from bird transect surveys in the breeding season in 2024 (see **Table 5.24**). Blackbird was the commonest species observed (28 records) followed by Wren (39 records), Willow Warbler (31 records), Chaffinch (21 records) and Robin (20 records).

One BoCCI Red-listed species, Stock Dove, was observed: a single bird on the early visit on Transect 1. Four BoCCI Amber-listed species (Goldcrest, House Martin, Starling and Willow Warbler) were also recorded.

Details of survey timings and conditions for all bird transects survey visits is shown in **Table 5.25**.

Table 5.24: Breeding season 2023 Bird Transect Survey Sightings.

Transect	Date	Early		Late		Total Birds
		T1	T2	T1	T2	
Blackbird		19	12	19	9	59
Blackcap		-	5	3	-	8
Bullfinch		1	-	-	-	1
Buzzard		-	1	-	-	1
Chaffinch		5	5	4	7	21
Chiffchaff		2	2	-	-	4
Coal Tit		-	-	-	1	1
Dunnock		1	1	1	-	3
Goldcrest		1	-	1	-	2
Goldfinch		-	-	-	1	1
Great Tit		2	-	-	-	2
Hooded Crow		-	-	1	9	10
House Martin		4	-	-	-	4
Jackdaw		-	3	-	-	3
Long-tailed Tit		2	-	-	-	2
Magpie		-	2	7	1	10
Mistle Thrush		2	1	-	-	3
Pheasant		-	-	-	-	0
Robin		6	12	-	2	20
Rook		2	7	-	1	10
Sedge Warbler		-	-	1	-	1
Siskin		-	-	5	-	5
Song Thrush		6	1	-	-	7
Sparrowhawk		-	-	-	1	1
Starling		-	3	2	-	5
Stock Dove		-	1	-	-	1
Whitethroat		1	-	-	-	1
Willow Warbler		8	8	10	5	31
Woodpigeon		5	2	1	2	10
Wren		8	9	13	9	39
Total birds		75	75	68	48	266

Table 5.5: *Breeding season 2023 Bird Transect Survey Visit Data.*

Date	Observer	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction
09/05/2023	SID	7:45	8:24	None	8/8	16	F1	S
09/05/2023	SID	8:35	9:15	None	8/8	16	F1	S
23/06/2023	CD	5:15	5:45	None	8/8	15	F4	NW
23/06/2023	CD	6:05	6:30	Drizzle	8/8	15	F4	W

5.4.2.3 Winter Season 2023/2024

A total of 426 individuals from 26 species were recorded from bird transect surveys in Winter 2023/24 (see **Table 5.26**). Redwing was the commonest species observed (78 records) followed by Robin (41 records) and Blackbird and Chaffinch (30 observations each).

Three BoCCI Red-listed species, Kestrel, Meadow Pipit and Redwing, were observed: the single Kestrel on Transect 1 in December, Meadow Pipit on both transects in November and Redwing on both transects in November and December. Two BoCCI Amber-listed species (Goldcrest and Starling) were also recorded.

Details of survey timings and conditions for all bird transects survey visits is shown in **Table 5.27**.

Table 5.26: *Winter season 2023/2024 Bird Transect Survey Sightings.*

Transect	Date	November		December		January		February		Total Birds
		T1	T2	T1	T2	T1	T2	T1	T2	
Blackbird		7	6	2	5	4	1	3	2	30
Blue Tit		1	-	1	-	2	-	3	1	8
Bullfinch		-	3	1	-	3	-	-	4	11
Buzzard		-	1	-	-	-	-	-	-	1
Chaffinch		4	4	18	1	2	-	-	1	30
Coal Tit		1	4	-	-	-	-	-	-	5
Dunnock		1	-	-	2	-	-	-	-	3
Goldcrest		2	1	-	-	-	1	-	-	4
Goldfinch		2	-	-	-	-	-	-	-	2
Great Tit		1	-	-	-	-	-	1	-	2
Greenfinch		-	2	-	-	-	-	-	-	2
Hooded Crow		4	3	1	2	-	-	-	-	10
Jackdaw		-	1	6	1	-	-	-	-	8
Jay		-	1	-	1	-	-	-	2	4
Kestrel		-	-	1	-	-	-	-	-	1
Magpie		1	2	2	1	-	-	-	-	6
Meadow Pipit		6	1	-	-	-	-	-	-	7
Mistle Thrush		1	-	-	1	-	1	-	-	3
Pied Wagtail		1	2	2	-	-	-	-	-	5
Redwing		4	35	10	29	-	-	-	-	78
Redpoll		-	5	-	-	-	-	-	-	5

Transect	Date	November		December		January		February		Total Birds
		T1	T2	T1	T2	T1	T2	T1	T2	
Robin		6	10	2	1	6	-	8	8	41
Rook		3	2	5	-	-	-	-	-	10
Song Thrush		1	1	1	1	-	-	1	-	5
Starling		31	-	35	60	-	-	-	-	126
Wren		9	3	2	1	1	-	2	1	19
Total Birds		86	87	89	106	18	3	18	19	426

Table 5.27: Winter season 2023/2024 Bird Transect Survey Visit Data.

Date	Observer	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction
07/11/2023	CG	8:50	9:35	None	1/8	20	F3	W
21/11/2023	JOH	13:15	13:45	None	6/8	15	F2	WSW
07/12/2023	JOH	10:30	11:00	Constant	8/8	5	F4	SE
06/12/2023	JOH	13:35	14:05	Occasional showers	8/8	7	F4	NE
24/01/2024	HM	15:30	16:00	Occasional showers	8/8	2	F2	SW
24/01/2024	HM	11:15	11:40	Occasional showers	8/8	2	F2	SW
07/02/2024	HM	13:50	14:20	None	8/8	2	F1	NW
07/02/2024	HM	15:41	16:10	None	8/8	2	F1	NW

5.4.2.4 Breeding 2024

A total of 215 individuals from 33 species were recorded from bird transect surveys in the breeding season in 2024 (see **Table 5.28**). Wren was the commonest species observed (44 records) followed by Blackbird (26 records).

One BoCCI Red-listed species, Meadow Pipit, was observed: single birds during the late visits to both transects. Seven BoCCI Amber-listed species (Goldcrest, Lesser Black-backed Gull, Linnet, Mallard, Spotted Flycatcher, Starling and Willow Warbler) were also recorded.

Details of survey timings and conditions for all bird transects survey visits is shown in **Table 5.29**.

Table 5.68: Breeding season 2024 Bird Transect Survey Sightings.

Transect	Date	Early		Late		Total Birds
		T1	T2	T1	T2	
Blackbird		3	9	3	11	26
Blackcap		4	4	2	4	14
Blue Tit		-	3	-	-	3
Buzzard		-	-	2	-	2
Chaffinch		3	3	-	4	10
Chiffchaff		-	1	-	-	1
Dunnock		-	5	1	1	7
Goldcrest		-	-	6	-	6

Transect	Date	Early		Late		Total Birds
		T1	T2	T1	T2	
Grasshopper Warbler		-	-	-	1	1
Great Tit		2	4	-	2	8
Hooded Crow		-	4	-	-	4
Jackdaw		-	-	2	-	2
Lesser-Black backed Gull		-	-	1	-	1
Linnet		-	-	1	-	1
Long-tailed Tit		1	-	-	-	1
Magpie		1	1	3	-	5
Mallard		-	1	-	-	1
Meadow Pipit		-	-	1	1	2
Mistle Thrush		-	-	-	1	1
Pheasant		-	1	1	2	4
Pied Wagtail		-	-	1	-	1
Robin		2	5	1	3	11
Rook		2	7	-	4	13
Sedge Warbler		-	-	-	-	0
Siskin		-	-	-	-	0
Song Thrush		4	2	3	2	11
Spotted Flycatcher		-	-	-	1	1
Starling		4	1	1	2	8
Whitethroat		-	-	2	-	2
Willow Warbler		-	3	6	4	13
Woodpigeon		7	-	2	2	11
Wren		5	14	14	11	44
Total Birds		38	68	53	56	215

Table 5.29: Breeding season 2024 Bird Transect Survey Visit Data.

Date	Observer	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction
11/04/2024	LS	07:30	08:30	Light drizzle	8/8	3	F2	N
11/04/2024	NA	07:41	08:24	Light drizzle	8/8	2	F2	SW
30/05/2024	NA	07:42	08:17	None	8/8	10	F3	NNW
30/05/2024	NA	06:32	07:12	Light Showers	8/8	2	F2	NW

5.4.3 Breeding Wader Surveys

The location of the breeding wader survey area is shown in **Figure 5.32**.

5.4.3.1 Breeding Season 2023

There were no sightings of breeding waders during the 2023 breeding wader surveys (see **Table 5.30**). Survey timings and weather are shown in **Table 5.31**.

Table 5.30: Breeding season 2023 Breeding Wader Survey Results.

Date	Start Time	End Time	Species	Notes
13/04/2023	07:00	09:30	Nil Sightings	
25/04/2023	08:35	10:04	Nil Sightings	
18/05/2023	05:49	08:21	Nil Sightings	
31/05/2023	05:35	07:45	Nil Sightings	

Table 5.7: Breeding season 2023 Breeding Wader Visit Data.

Date	Observer	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction	Temp.
13/04/2023	NL	07:00	09:30	None	4/8	2	F1	NW	6
25/04/2023	NA	08:35	10:04	None	1/8	15	F1	NW	5
18/05/2023	NA	05:49	08:21	None	6/8	16	F2	S	11
31/05/2023	CG	05:00	07:15	None	0/8	8	F2	NE	10
31/05/2023	CD	05:35	07:45	Occasional showers	8/8	15	F4	NW	14

5.4.3.2 Breeding Season 2024

There were single records of Snipe on 26th April and 13th June during the 2024 breeding wader surveys (see **Table 5.32**; **Figure 5.33**). There was no breeding behaviours recorded for Snipe during any survey visits (See **Table 5.33**).

Survey timings and weather are shown in **Table 5.31**.

Table 5.8: Breeding season 2024 Breeding Wader Species Counts.

Species	April	May	June	Total
Snipe	1	-	1	2

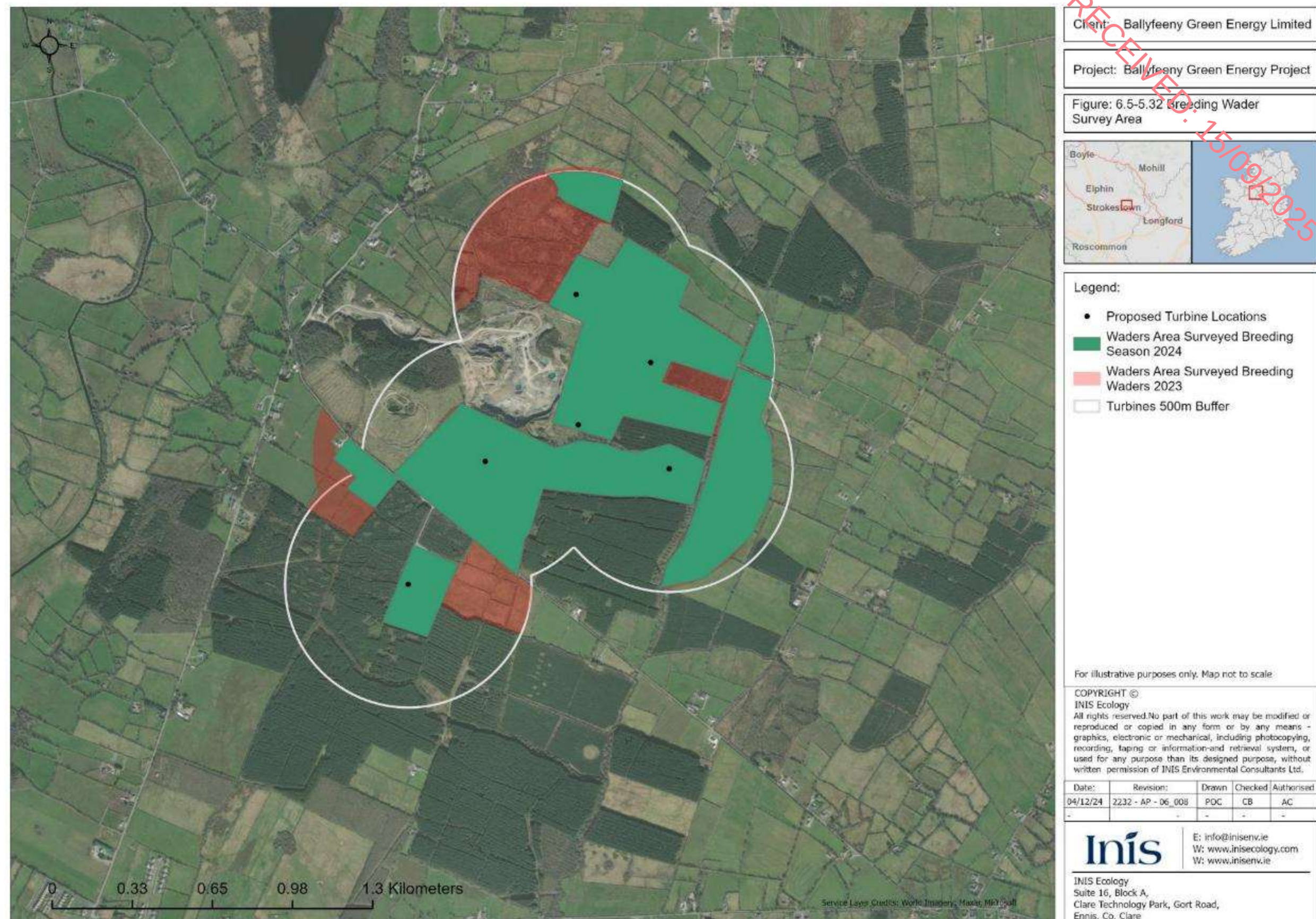


Figure 5.32: Breeding wader survey area.

Table 5.9: Breeding season 2024 Breeding Wader Survey Results.

Date	Start Time	End Time	Species	Number	Sex	Time of sighting	Notes
24/04/2024	06:11	08:30	Nil Sightings				
26/04/2024	06:13	08:23	Snipe	1		06:18	
09/05/2024	05:40	08:40	Nil Sightings				
09/05/2024	05:40	08:40	Nil Sightings				
29/05/2024	05:20	07:50	Nil Sightings				
13/06/2024	05:00	08:00	Snipe	1			Flushed
14/06/2024	05:00	07:00	Nil Sightings				

Table 5.10: Breeding season 2024 Breeding Wader Visit Data.

Date	Observer	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction	Temp.
24/04/2024	NA	06:11	08:30	None	3/8	16	F2	NNW	5
26/04/2024	NA	06:13	08:23	None	3/8	5	F1	NNE	2
09/05/2024	NC	05:40	08:40	None	7/8	12	F1	S	8
29/05/2024	NA	05:20	07:50	None	8/8	10	F1	WSW	11
13/06/2024	NC	05:00	08:00	Drizzle	8/8	11	F2	SE	10
14/06/2024	NC	05:00	07:00	None	5/8	15	F2	SW	10



Figure 5.33: Breeding season 2024 breeding wader survey results.

5.4.4 Wintering Wetland Bird (I-WeBS) Surveys

The location of the I-WeBS survey area is shown in **Figure 5.34**.

5.4.4.1 Winter Season 2022/2023

A total of 679 individuals from 19 species were recorded during I-WeBS surveys in Winter 2022/23 (see **Table 5.32**). Mute Swan and Tufted Duck were the only species observed during field survey visits in all six months. Tufted Duck numbers peaked at 70 individuals seen in February 2023, with Mute Swan numbers peaking in January 2023 (63 individuals recorded). Details of survey conditions for all I-WeBS survey visits is shown in **Table 5.33**.

A full breakdown of all sightings is presented in **Table 5.34**, with locations shown for all species observed in **Figure 5.35**.

Table 5.11: Winter season 2022/2023 I-WeBS Species Counts.

Species	October	November	December	January	February	March	Total
Black-headed Gull	-	-	-	-	15	-	15
Common Gull	-	1	-	-	-	-	1
Common Scoter	-	-	-	-	-	2	2
Coot	2	-	-	-	8	2	12
Cormorant	44	2	7	-	1	3	57
Curlew	3	-	-	-	-	-	3
Great Crested Grebe	-	-	2	-	-	-	2
Grey Heron	2	-	1	2	1	-	6
Kingfisher	1	-	-	-	-	-	1
Lesser Black-backed Gull	8	1	-	-	1	-	10
Little Egret	-	1	-	-	-	-	1
Little Grebe	1	-	-	6	-	1	8
Mallard	38	1	32	18	-	1	90
Moorhen	1	-	2	3	-	-	6
Mute Swan	35	12	58	63	44	39	251
Redshank	-	1	-	-	-	-	1
Teal	-	-	-	19	-	-	19
Tufted Duck	18	5	64	4	70	1	162
Whooper Swan	5	24	3	-	-	-	32
Total	158	48	169	115	140	49	679

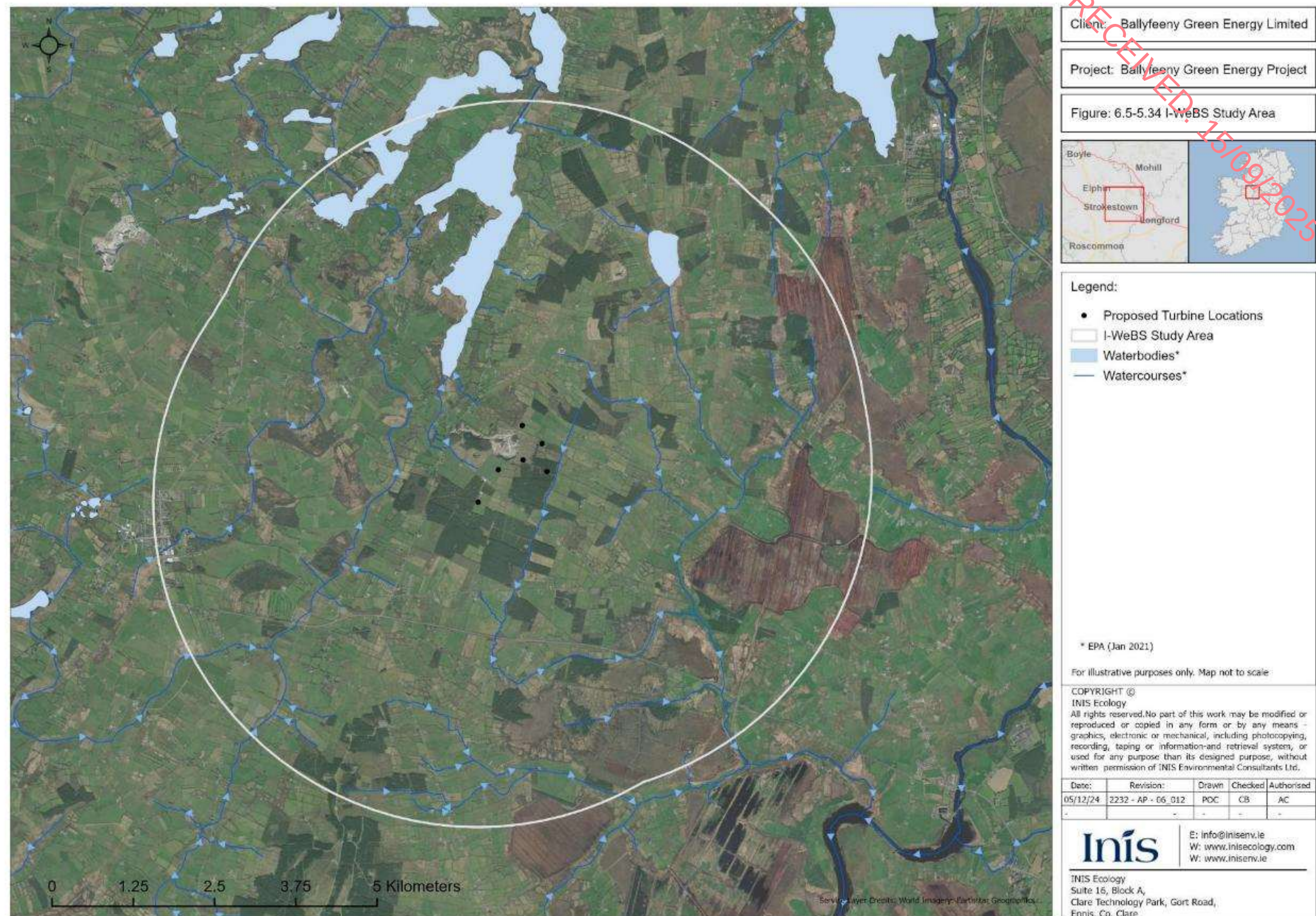


Figure 5.34: I-WeBS survey area.

Table 5.12: Winter season 2022/2023 I-WeBS Visit Data.

Date	Observer	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction	Temp.
17/10/2022	NC	13:00	16:00	None	0/8	15	F2	E	9
18/10/2022	NC	10:20	12:20	None	0/8	15	F2	E	9
19/10/2022	NC	9:00	12:00	Heavy Showers	8/8	5	F4	E	11
08/11/2022	ML	14:14	16:20	Occasional showers	1/8	1	F1	SSW	9
09/11/2022	ML	12:15	15:33	Dry	6/8	15	F2	SSW	11
30/11/2022	NC	11:00	14:00	None	8/8	20	F3	SE	9
12/01/2023	NC	13:00	16:00	Showers	6/8	10	F4	WSW	7
19/01/2023	NL	10:45	14:07	None	3/8	6	F1	SW	2
27/02/2023	HM	1:30	16:30	Dry	8/8	2	F2	E	7
02/03/2023	NL	N/A	N/A	None	5/8	2	F1	NE	6
20/03/2023	ML	N/A	N/A	Dry	8/8	15	F1	S	13
22/03/2023	ML	14:05	17:11	Drizzle	8/8	15	F2	SSW	9
13/04/2023	NL	10:00	12:00	None	0/8	4	F2	NW	7

Table 5.13: Winter season 2022/2023 I-WeBS Sightings.

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location (ITM)	Habitat Type	Waterbody name (if applicable)
17/10/2022	13:00	16:00	Grey Heron	13:00	1		603418, 777394	River	Fedrish River
17/10/2022	13:00	16:00	Mallard	13:00	7		603418, 777394	River	Fedrish River
17/10/2022	13:00	16:00	Whooper Swan	13:15	5		603245, 776602	River & Bog	River Shannon
17/10/2022	13:00	16:00	Mute Swan	13:15	17		603245, 776602	River & Bog	River Shannon
17/10/2022	13:00	16:00	Nil Sightings				601491, 775049	Cutaway Bog	
17/10/2022	13:00	16:00	Nil Sightings				599914, 776203	Cutaway Bog	
17/10/2022	13:00	16:00	Little Grebe	13:55	1		599268, 774805	Cutaway Bog	
17/10/2022	13:00	16:00	Mallard	13:55	5		599268, 774805	Cutaway Bog	

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location (ITM)	Habitat Type	Waterbody name (if applicable)
17/10/2022	13:00	16:00	Nil Sightings				605305, 786995	River	
17/10/2022	13:00	16:00	Nil Sightings				606082, 784133	River	River Shannon
17/10/2022	13:00	16:00	Cormorant	14:50	1		603103, 788958	Lake	
17/10/2022	13:00	16:00	Mute Swan	15:00	2		603278, 788172	Lake	Lough Bofin
17/10/2022	13:00	16:00	Moorhen	15:20	1		602125, 789561	Lake	Lough Boderg
17/10/2022	13:00	16:00	Cormorant	15:20	3		602125, 789561	Lake	Lough Boderg
17/10/2022	13:00	16:00	Nil Sightings				600268, 790295	River	Larnadoe Pier
17/10/2022	13:00	16:00	Cormorant	15:50	9		599329, 787788	Lake	Grange Lough
17/10/2022	13:00	16:00	Lesser Black-backed Gull	15:50	5		599329, 787788	Lake	Grange Lough
17/10/2022	13:00	16:00	Mute Swan	15:50	1		599329, 787788	Lake	Grange Lough
18/10/2022	10:20	12:20	Mute Swan	10:20	4		597936, 784134	Lake	Kilglass Harbour
18/10/2022	10:20	12:20	Coot	10:20	1		597936, 784134	Lake	Kilglass Harbour
18/10/2022	10:20	12:20	Cormorant	10:20	1		597936, 784134	Lake	Kilglass Harbour
18/10/2022	10:20	12:20	Kingfisher	10:20	1		597936, 784134	Lake	Kilglass Harbour
18/10/2022	10:20	12:20	Nil Sightings				596681, 783362	River	Scramogue River
18/10/2022	10:20	12:20	Mute Swan	11:00	4		598955, 785349	Lake	Kilglass Lough
18/10/2022	10:20	12:20	Nil Sightings				597694, 789557	Cutaway Bog	
18/10/2022	10:20	12:20	Cormorant	11:45	2		597167, 788009	Lake	Grange Lough
18/10/2022	10:20	12:20	Mute Swan	11:45	1		597167, 788009	Lake	Grange Lough
18/10/2022	10:20	12:20	Mallard	12:00	8		598110, 790012	Lake	
19/10/2022	9:00	12:00	Mute Swan	9:00	16		596993, 789398	Lake	Lough Elia
19/10/2022	9:00	12:00	Cormorant	9:00	24		596993, 789398	Lake	Lough Elia
19/10/2022	9:00	12:00	Mallard	9:00	28		596993, 789398	Lake	Lough Elia
19/10/2022	9:00	12:00	Tufted Duck	9:00	18		596993, 789398	Lake	Lough Elia
19/10/2022	9:00	12:00	Cormorant	9:15	4		595854, 786914	Lake	Grange Lough
19/10/2022	9:00	12:00	Mute Swan	9:25	1		593459, 787057	Lake	Drumman Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location (ITM)	Habitat Type	Waterbody name (if applicable)
19/10/2022	9:00	12:00	Curlew	9:40	3		594980, 788863	Lake	Lough Nablahy
19/10/2022	9:00	12:00	Mute Swan	9:40	1		594980, 788863	Lake	Lough Nablahy
19/10/2022	9:00	12:00	Coot	9:40	1		594980, 788863	Lake	Lough Nablahy
19/10/2022	9:00	12:00	Cormorant	9:50	4		594980, 788963	Lake	Lough Incha
19/10/2022	9:00	12:00	Mute Swan	9:50	3		594980, 788963	Lake	Lough Incha
19/10/2022	9:00	12:00	Mute Swan	10:15	2		590186, 782705	Lake	Lough Nabrasbarnagh
19/10/2022	9:00	12:00	Lesser Black-backed Gull	10:15	3		590186, 782705	Lake	Lough Nabrasbarnagh
19/10/2022	9:00	12:00	Grey Heron	10:30	1		589549, 783864	Lake	Annaghmore Lough
19/10/2022	9:00	12:00	Mute Swan	10:55	2		591089, 779672	Lake	Cloonfree Lough
19/10/2022	9:00	12:00	Mallard	10:55	2		591089, 779672	Lake	Cloonfree Lough
08/11/2022	14:14	16:20	Redshank	14:25	1		597863, 784230	Lake	Kilglass Lough
08/11/2022	14:14	16:20	Mallard	15:02	1		600786, 785111	Lake	Lough Acrick
08/11/2022	14:14	16:20	Little Egret	15:02	1		600786, 785111	Lake	Lough Acrick
08/11/2022	14:14	16:20	Cormorant	15:50	2		595489, 785993	Lake	Grange Lough
09/11/2022	12:15	15:33	Tufted Duck	12:54	2		595483, 785990	Lake	Grange Lough
09/11/2022	12:15	15:33	Whooper Swan	13:48	6		597863, 784216	Lake	Kilglass Lough
09/11/2022	12:15	15:33	Tufted Duck	13:48	3		597863, 784216	Lake	Kilglass Lough
09/11/2022	12:15	15:33	Common Gull	13:48	1		597863, 784216	Lake	Kilglass Lough
09/11/2022	12:15	15:33	Lesser Black-backed Gull	13:48	1		597863, 784216	Lake	Kilglass Lough
09/11/2022	12:15	15:33	Mute Swan	14:42	5		600733, 674032	Lake	Lough Acrick
09/11/2022	12:15	15:33	Whooper Swan	15:13	18		596599, 783329	River	Scramoge River
09/11/2022	12:15	15:33	Mute Swan	15:13	7		596599, 783329	River	Scramoge River
30/11/2022	11:00	14:00	Mute Swan	11:00	26		598320, 785441	Lake	
30/11/2022	11:00	14:00	Moorhen	11:00	2		598320, 785441	Lake	

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location (ITM)	Habitat Type	Waterbody name (if applicable)
30/11/2022	11:00	14:00	Great Crested Grebe	11:00	2		598320, 785441	Lake	
30/11/2022	11:00	14:00	Cormorant	11:00	6		598320, 785441	Lake	
30/11/2022	11:00	14:00	Mallard	11:00	8		598320, 785441	Lake	
30/11/2022	11:00	14:00	Mute Swan	11:25	2		600965, 785042	Lake	
30/11/2022	11:00	14:00	Mallard	11:25	16		600965, 785042	Lake	
30/11/2022	11:00	14:00	Nil Sightings	11:40			603249, 784051	Cutaway Bog	
30/11/2022	11:00	14:00	Nil Sightings	11:55			603077, 782275	Cutaway Bog	
30/11/2022	11:00	14:00	Nil Sightings	12:15			601706, 778165	River	
30/11/2022	11:00	14:00	Nil Sightings	12:30			601668, 777879	Cutaway Bog	
30/11/2022	11:00	14:00	Nil Sightings	12:50			599570, 777291	Flooded Fields	
30/11/2022	11:00	14:00	Nil Sightings	13:00			599109, 776847	Cutaway Bog	
30/11/2022	11:00	14:00	Mallard	13:30	2		602363, 777315	Flooded Fields	
30/11/2022	11:00	14:00	Mute Swan	13:30	2		602363, 777315	Flooded Fields	
30/11/2022	11:00	14:00	Mallard	13:45	6		603480, 777413	River	
30/11/2022	11:00	14:00	Mute Swan	13:55	5		603488, 776600	River	
30/11/2022	11:00	14:00	Whooper Swan	13:55	3		603488, 776600	River	
12/01/2023	13:00	16:00	Coot	13:00	1		597950, 784202	Lake	Kilglass Lough
12/01/2023	13:00	16:00	Mute Swan	13:05	6		600497, 785034	Lake	Lough Acrick
12/01/2023	13:00	16:00	Mallard	13:05	10		600497, 785034	Lake	Lough Acrick
12/01/2023	13:00	16:00	Tufted Duck	13:05	2		600497, 785034	Lake	Lough Acrick
12/01/2023	13:00	16:00	Nil Sightings	13:15	0		603494, 782881	Bog	
12/01/2023	13:00	16:00	Nil Sightings	13:20	0		603126, 782289	Bog	
12/01/2023	13:00	16:00	Mute Swan	13:35	2		601351, 779772	River	Feorish River
12/01/2023	13:00	16:00	Nil Sightings	13:45	0		601583, 778116	Bog	
12/01/2023	13:00	16:00	Grey Heron	13:50	1		600413, 776860	Flooded Fields	
12/01/2023	13:00	16:00	Nil Sightings	14:00	0		599592, 776828	Bog	

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location (ITM)	Habitat Type	Waterbody name (if applicable)
12/01/2023	13:00	16:00	Mute Swan	14:10	3		602812, 777991	Flooded Fields	
12/01/2023	13:00	16:00	Mute Swan	14:20	1		603429, 777434	River	Feorish River
12/01/2023	13:00	16:00	Mallard	14:30	2		603241, 776617	River	River Shannon
12/01/2023	13:00	16:00	Cormorant	15:00	8		595716, 785623	Lake	Grange Lough
12/01/2023	13:00	16:00	Mute Swan	15:00	4		595716, 785623	Lake	Grange Lough
12/01/2023	13:00	16:00	Grey Heron	15:00	1		595716, 785623	Lake	Grange Lough
12/01/2023	13:00	16:00	Mute Swan	15:30	7		596554, 783339	River	Scramogue River
19/01/2023	10:45	14:07	Nil Sightings	10:45			591756, 780628	River	
19/01/2023	10:45	14:07	Mute Swan	11:27	15		597952, 784191	Lake	Kilglass Marina
19/01/2023	10:45	14:07	Tufted Duck	11:27	16		597952, 784191	Lake	Kilglass Marina
19/01/2023	10:45	14:07	Tufted Duck	11:50	34		598796, 785928	Lake	
19/01/2023	10:45	14:07	Mute Swan	12:37	4		597971, 786855	Lake	
19/01/2023	10:45	14:07	Grey Heron	12:37	1		597971, 786855	Lake	
19/01/2023	10:45	14:07	Tufted Duck	12:37	4		597971, 786855	Lake	
19/01/2023	10:45	14:07	Mute Swan	12:50	4		598241, 787507	Lake	
19/01/2023	10:45	14:07	Cormorant	12:50	1		598241, 787507	Lake	
19/01/2023	10:45	14:07	Tufted Duck	12:50	10		598241, 787507	Lake	
19/01/2023	10:45	14:07	Nil Sightings	13:27			547985, 785059	Lake	
19/01/2023	10:45	14:07	Nil Sightings	13:44			602828, 783675	River	
19/01/2023	10:45	14:07	Nil Sightings	13:57			605047, 785036	River	
27/02/2023	13:30	16:30	Mallard	13.30	3		600413, 776859	Stream	
27/02/2023	13:30	16:30	Mute Swan	13.56	2		595715, 785622	Lake	
27/02/2023	13:30	16:30	Coot	13.56	2		595715, 785622	Lake	
27/02/2023	13:30	16:30	Cormorant	13.56	1		595715, 785622	Lake	
27/02/2023	13:30	16:30	Little Grebe	13.56	1		595715, 785622	Lake	
27/02/2023	13:30	16:30	Moorhen	13.56	1		595715, 785622	Lake	

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location (ITM)	Habitat Type	Waterbody name (if applicable)
27/02/2023	13:30	16:30	Cormorant	14.11	1		597984, 786868	Lake	
27/02/2023	13:30	16:30	Mute Swan	14.11	4		597984, 786868	Lake	
27/02/2023	13:30	16:30	Coot	14.11	10		597984, 786868	Lake	
27/02/2023	13:30	16:30	Moorhen	14.11	2		597984, 786868	Lake	
27/02/2023	13:30	16:30	Little Grebe	14.11	1		597984, 786868	Lake	
27/02/2023	13:30	16:30	Nil Sightings	14.41			596593, 783339	River	
27/02/2023	13:30	16:30	Coot	14.47	4		597945, 784159	Lake	
27/02/2023	13:30	16:30	Mute Swan	14.47	7		597945, 784159	Lake	
27/02/2023	13:30	16:30	Little Grebe	14.47	2		597945, 784159	Lake	
27/02/2023	13:30	16:30	Mallard	14.47	1		597945, 784159	Lake	
27/02/2023	13:30	16:30	Mute Swan	15.00	13		598808, 786061	Lake	
27/02/2023	13:30	16:30	Coot	15.00	7		598808, 786061	Lake	
27/02/2023	13:30	16:30	Mallard	15.00	2		598808, 786061	Lake	
27/02/2023	13:30	16:30	Teal	15.00	19		598808, 786061	Lake	
27/02/2023	13:30	16:30	Cormorant	15.00	1		598808, 786061	Lake	
27/02/2023	13:30	16:30	Little Grebe	15.00	1		598808, 786061	Lake	
27/02/2023	13:30	16:30	Tufted Duck	14.44	2		600497, 785033	Lake	
27/02/2023	13:30	16:30	Coot	14.44	2		600497, 785033	Lake	
27/02/2023	13:30	16:30	Little Grebe	14.44	1		600497, 785033	Lake	
27/02/2023	13:30	16:30	Nil Sightings	16.00			601351, 779771	River	
27/02/2023	13:30	16:30	Nil Sightings	16.10			603429, 777434	River	
27/02/2023	13:30	16:30	Mute Swan	16.17	14		603240, 776617	Lake	
02/03/2023	N/A	N/A	Nil Sightings	10:30			591756, 780628	Lake	
02/03/2023	N/A	N/A	Mute Swan	10:50	7		597958, 784200	Lake	Kilglass Marina
02/03/2023	N/A	N/A	Coot	10:50	1		597958, 784200	Lake	
02/03/2023	N/A	N/A	Mute Swan	11:02	12		598812, 786045	Lake	
02/03/2023	N/A	N/A	Grey Heron	11:02	1		598812, 786045	Lake	
02/03/2023	N/A	N/A	Coot	11:02	1		598812, 786045	Lake	

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location (ITM)	Habitat Type	Waterbody name (if applicable)
02/03/2023	N/A	N/A	Tufted Duck	11:02	26		598812, 786045	Lake	
02/03/2023	N/A	N/A	Black-headed Gull	11:02	15		598812, 786045	Lake	
02/03/2023	N/A	N/A	Mute Swan	11:36	6		598219, 787494	Lake	
02/03/2023	N/A	N/A	Tufted Duck	11:36	7		598219, 787494	Lake	
02/03/2023	N/A	N/A	Cormorant	11:36	1		598219, 787494	Lake	
02/03/2023	N/A	N/A	Lesser Black-backed Gull	11:36	1		598219, 787494	Lake	
02/03/2023	N/A	N/A	Tufted Duck	11:36	4		598219, 787494	Lake	
02/03/2023	N/A	N/A	Mute Swan	12:00	3		595564, 785648	Lake	
02/03/2023	N/A	N/A	Coot	12:00	1		595564, 785648	Lake	
02/03/2023	N/A	N/A	Mute Swan	12:20	2		600595, 784871	Lake	
02/03/2023	N/A	N/A	Tufted Duck	12:20	32		600595, 784871	Lake	
02/03/2023	N/A	N/A	Nil Sightings	12:33			605578, 784949	River	
20/03/2023	N/A	N/A	Coot	15:18	5		597810, 784174	Lake	Kilglass Lake
20/03/2023	N/A	N/A	Mute Swan	15:18	1		597810, 784174	Lake	Kilglass Lake
20/03/2023	N/A	N/A	Tufted Duck	15:18	1		597810, 784174	Lake	Kilglass Lake
20/03/2023	N/A	N/A	Mute Swan	15:52	11		596596, 783355	River	Scramogue River
20/03/2023	N/A	N/A	Mute Swan	16:20	2		595536, 785928	Lake	Grange Lough
20/03/2023	N/A	N/A	Nil Sightings	17:02			600695, 785057	Lake	Lough Accrick
22/03/2023	14:05	17:11	Mute Swan	14:05	17		596596, 783355	River	Scramogue River
22/03/2023	14:05	17:11	Tufted Duck	14:05	1		596596, 783355	River	Scramogue River
22/03/2023	14:05	17:11	Mute Swan	14:37	1		595536, 785928	Lake	Grange Lough
22/03/2023	14:05	17:11	Common Scoter	15:15	2		597810, 784174	Lake	Kilglass Lake
22/03/2023	14:05	17:11	Mallard	16:15	1		600695, 785057	Lake	Lough Accrick
22/03/2023	14:05	17:11	Nil Sightings	16:45			595803, 786720	Lake	Unknown
13/04/2023	10:00	12:00	Coot	10:00	1		597951, 784188	Lake	Kilglass Marina
13/04/2023	10:00	12:00	Cormorant	10:00	2		597951, 784188	Lake	Kilglass Marina
13/04/2023	10:00	12:00	Mute Swan	10:00	4		597951, 784188	Lake	Kilglass Marina
13/04/2023	10:00	12:00	Little Grebe	10:00	1		597951, 784188	Lake	Kilglass Marina

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location (ITM)	Habitat Type	Waterbody name (if applicable)
13/04/2023	10:00	12:00	Cormorant	10:11	1		598817, 786028	Lake	
13/04/2023	10:00	12:00	Mute Swan	10:11	16		598817, 786028	Lake	
13/04/2023	10:00	12:00	Coot	10:11	1		598817, 786028	Lake	
13/04/2023	10:00	12:00	Mute Swan	10:55	1		600523, 785005	Lake	
13/04/2023	10:00	12:00	Nil Sightings	11:10			602884, 783722	River	
13/04/2023	10:00	12:00	Nil Sightings	11:25			605034, 785047	River	
13/04/2023	10:00	12:00	Nil Sightings	11:50			591756, 780628	River	

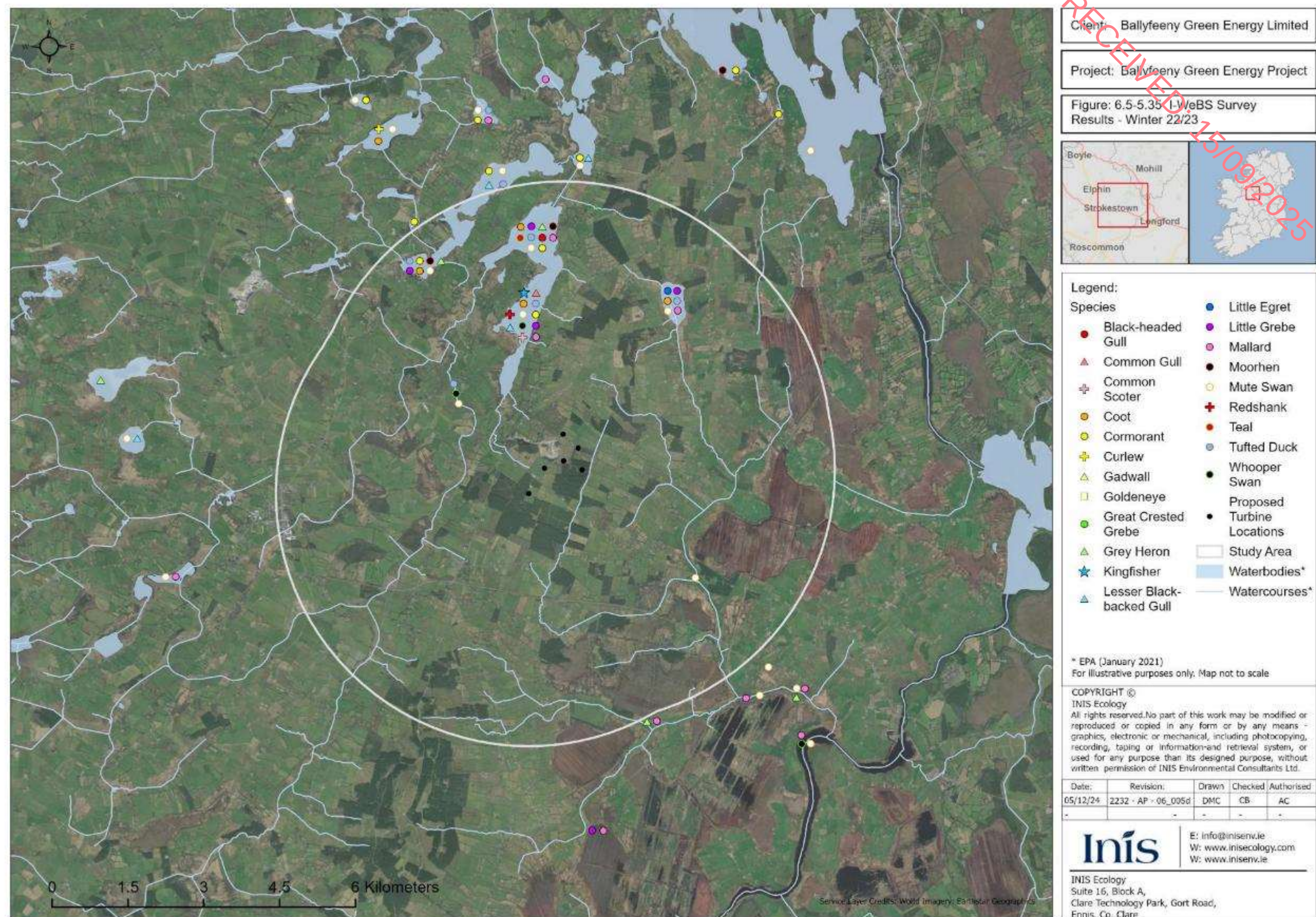


Figure 5.35: I-WeBS results for the winter season 2022/2023.

5.4.4.2 Breeding Season 2023

A total of 756 individuals from 14 species were recorded during I-WeBS surveys in April, May and September 2023 (see **Table 5.35**). Mute Swan were the most numerous species encountered, with 142 individuals recorded in April, followed by Coot, which had 114 individuals recorded in September. Details of survey conditions for all I-WeBS survey visits is shown in **Table 5.36**.

A full breakdown of all sightings is presented in **Table 5.37**, with locations shown for all species observed in **Figure 5.36**.

Table 5.14: Breeding season 2023 I-WeBS Species Counts.

Species	April	May	September	Total
Coot	23	6	114	143
Cormorant	23	3	19	45
Great Crested Grebe	41	6	24	71
Grey Heron	4	-	5	9
Grey Wagtail	-	-	1	1
Herring Gull	-	4	-	4
Lapwing	-	-	8	8
Little Grebe	11	7	-	18
Mallard	29	2	58	89
Moorhen	2	3	1	6
Mute Swan	142	28	81	251
Teal	-	-	8	8
Tufted Duck	-	-	93	93
Whooper Swan	10	-	-	10
Total	285	59	412	756

Table 5.15: Breeding season 2023 I-WeBS Visit Data.

Date	Observer	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction	Temp.
25/04/2023	NA	13.06	15.30	None	6/8	15	F2	SE	11
09/05/2023	SID	9:45	10:15	None	7/8	16	F1	S	12
09/05/2023	SID	10:21	10:30	None	7/8	16	F1	S	12
09/05/2023	SID	10:40	10:50	None	7/8	16	F1	S	12
09/05/2023	SID	11:01	11:15	None	7/8	16	F1	S	12
09/05/2023	SID	11:25	11:30	None	7/8	16	F1	S	12
09/05/2023	SID	11:35	11:45	None	7/8	16	F1	S	12
09/05/2023	SID	12:15	12:30	None	7/8	16	F1	S	12
18/05/2023	NA	13.12	16.04	Light drizzle	8/8	16	F2	SSW	15
19/05/2023	NA	10.00	12.18	None	7/8	16	F2	WSW	11
06/09/2023	DP	13:15	16:30	None	6/8	20	F4	SW	20
27/09/2023	NA & VH	11:00	15:30	Constant Rain	8/8	5	F4	ESE	14

Table 5.38: Breeding season 2023 I-WeBS Sightings.

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
09/05/2023	9:45	10:15	Mallard	N/A	2		600652, 785280	Lake	Lough Acrick
09/05/2023	9:45	10:15	Great Crested Grebe	N/A	4		600652, 785280	Lake	Lough Acrick
09/05/2023	9:45	10:15	Mute Swan	N/A	2		600652, 785280	Lake	Lough Acrick
09/05/2023	10:21	10:30	Mute Swan	N/A	16		597925, 784230	Lake	Kilglass Lough
09/05/2023	10:21	10:30	Coot	N/A	2		597925, 784230	Lake	Kilglass Lough
09/05/2023	10:21	10:30	Cormorant	N/A	1		597925, 784230	Lake	Kilglass Lough
09/05/2023	10:21	10:30	Little Grebe	N/A	4		597925, 784230	Lake	Kilglass Lough
09/05/2023	10:21	10:30	Herring Gull	N/A	1		597925, 784230	Lake	Kilglass Lough
09/05/2023	10:40	10:50	Mute Swan	N/A	8		598800, 786071	Lake	Kilglass Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
09/05/2023	10:40	10:50	Coot	N/A	4		598800, 786071	Lake	Kilglass Lough
09/05/2023	10:40	10:50	Little Grebe	N/A	2		598800, 786071	Lake	Kilglass Lough
09/05/2023	10:40	10:50	Cormorant	N/A	1		598800, 786071	Lake	Kilglass Lough
09/05/2023	10:40	10:50	Herring Gull	N/A	1		598800, 786071	Lake	Kilglass Lough
09/05/2023	11:01	11:15	Nil Sightings	N/A			595610, 785721	Lake	Grange Lough
09/05/2023	11:25	11:30	Nil Sightings	N/A			595842, 786829	Lake	Black Lough
09/05/2023	11:35	11:45	Nil Sightings	N/A			595704, 787248	Lake	Lough O'Donra
09/05/2023	12:15	12:30	Mute Swan	N/A	2		599432, 787952	Lake	Grange Lough
09/05/2023	12:15	12:30	Cormorant	N/A	1		599432, 787952	Lake	Grange Lough
09/05/2023	12:15	12:30	Little Grebe	N/A	1		599432, 787952	Lake	Grange Lough
09/05/2023	12:15	12:30	Moorhen	N/A	3		599432, 787952	Lake	Grange Lough
09/05/2023	12:15	12:30	Herring Gull	N/A	2		599432, 787952	Lake	Grange Lough
09/05/2023	12:15	12:30	Great Crested Grebe	N/A	2		599432, 787952	Lake	Grange Lough
25/04/2023	13:06	15:30	Great Crested Grebe	13:08	5		600495, 785042	Lake	Lough Acrick
25/04/2023	13:06	15:30	Mallard	13:08	5		600495, 785042	Lake	Lough Acrick
25/04/2023	13:06	15:30	Grey Heron	13:08	1		600495, 785042	Lake	Lough Acrick
25/04/2023	13:06	15:30	Mute Swan	13:08	1		600495, 785042	Lake	Lough Acrick
25/04/2023	13:06	15:30	Little Grebe	13:40	1		597960, 784202	Lake	Kilglass Lough
25/04/2023	13:06	15:30	Mute Swan	13:40	10		597960, 784202	Lake	Kilglass Lough
25/04/2023	13:06	15:30	Great Crested Grebe	13:40	2		597960, 784202	Lake	Kilglass Lough
25/04/2023	13:06	15:30	Coot	13:40	1		597960, 784202	Lake	Kilglass Lough
25/04/2023	13:06	15:30	Coot	13:56	3		595618, 785662	Lake	Grange Lough
25/04/2023	13:06	15:30	Grey Heron	13:56	2		595618, 785662	Lake	Grange Lough
25/04/2023	13:06	15:30	Mute Swan	13:56	4		595618, 785662	Lake	Grange Lough
25/04/2023	13:06	15:30	Cormorant	13:56	1		595618, 785662	Lake	Grange Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
25/04/2023	13:06	15:30	Mute Swan	14:12	19		597654, 786637	Lake	Kilglass Lough
25/04/2023	13:06	15:30	Little Grebe	14:12	2		597654, 786637	Lake	Kilglass Lough
25/04/2023	13:06	15:30	Great Crested Grebe	14:12	2		597654, 786637	Lake	Kilglass Lough
25/04/2023	13:06	15:30	Grey Heron	14:12	1		597654, 786637	Lake	Kilglass Lough
25/04/2023	13:06	15:30	Nil sightings	14:39			591756, 780634	River	Scramogue River
25/04/2023	13:06	15:30	Mute Swan	15:25	30		598806, 786077	Lake	Kilglass Lough
25/04/2023	13:06	15:30	Coot	15:25	4		598806, 786077	Lake	Kilglass Lough
25/04/2023	13:06	15:30	Moorhen	15:25	1		598806, 786077	Lake	Kilglass Lough
18/05/2023	13:12	16:04	Moorhen	13:14	1		597938, 784215	Lake	Kilglass Lough
18/05/2023	13:12	16:04	Little Grebe	13:14	2		597938, 784215	Lake	Kilglass Lough
18/05/2023	13:12	16:04	Mute Swan	13:14	11		597938, 784215	Lake	Kilglass Lough
18/05/2023	13:12	16:04	Great Crested Grebe	13:14	3		597938, 784215	Lake	Kilglass Lough
18/05/2023	13:12	16:04	Cormorant	13:14	2		597938, 784215	Lake	Kilglass Lough
18/05/2023	13:12	16:04	Coot	13:14	1		597938, 784215	Lake	Kilglass Lough
18/05/2023	13:12	16:04	Mallard	13:14	7	6 of the 7 were ducklings	597938, 784215	Lake	Kilglass Lough
18/05/2023	13:12	16:04	Cormorant	13:36	9		598804, 786072	Lake	Kilglass Lough
18/05/2023	13:12	16:04	Mute Swan	13:36	14		598804, 786072	Lake	Kilglass Lough
18/05/2023	13:12	16:04	Coot	13:36	1		598804, 786072	Lake	Kilglass Lough
18/05/2023	13:12	16:04	Mallard	13:36	2		598804, 786072	Lake	Kilglass Lough
18/05/2023	13:12	16:04	Great Black-backed Gull	13:36	1		598804, 786072	Lake	Kilglass Lough
18/05/2023	13:12	16:04	Great Crested Grebe	13:52	8		600512, 785025	Lake	Lough Acrick
18/05/2023	13:12	16:04	Mallard	13:52	2		600512, 785025	Lake	Lough Acrick
18/05/2023	13:12	16:04	Mute Swan	13:52	1		600512, 785025	Lake	Lough Acrick
18/05/2023	13:12	16:04	Nil Sightings	14:16			596590, 783338	River	Scramogue River

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
18/05/2023	13:12	16:04	Great Crested Grebe	14:33	4		595618, 785662	Lake	Grange Lough
18/05/2023	13:12	16:04	Mute Swan	14:33	1		595618, 785662	Lake	Grange Lough
18/05/2023	13:12	16:04	Coot	14:33	2		595618, 785662	Lake	Grange Lough
18/05/2023	13:12	16:04	Mute Swan	14:48	3		597654, 786637	Lake	Kilglass Lough
18/05/2023	13:12	16:04	Little Grebe	14:48	1		597654, 786637	Lake	Kilglass Lough
18/05/2023	13:12	16:04	Nil Sightings	15:19			591451, 780851	River	Scramogue River
18/05/2023	13:12	16:04	Nil Sightings	15:44			603413, 777432	River	Feorish River
18/05/2023	13:12	16:04	Mute Swan	15:56	4		603286, 776621	River	River Shannon
18/05/2023	13:12	16:04	Whooper Swan	15:56	2		603286, 776621	River	River Shannon
19/05/2023	10:00	12:18	Nil Sightings	10:01			603413, 777432	River	Feorish River
19/05/2023	10:00	12:18	Cormorant	10:15	2		603286, 776621	River	River Shannon
19/05/2023	10:00	12:18	Mute Swan	10:15	8		603286, 776621	River	River Shannon
19/05/2023	10:00	12:18	Whooper Swan	10:15	8		603286, 776621	River	River Shannon
19/05/2023	10:00	12:18	Great Crested Grebe	10:15	2		603286, 776621	River	River Shannon
19/05/2023	10:00	12:18	Mallard	10:40	11		600512, 785025	Lake	Lough Acrick
19/05/2023	10:00	12:18	Great Crested Grebe	10:40	6		600512, 785025	Lake	Lough Acrick
19/05/2023	10:00	12:18	Little Grebe	10:56	2		598804, 786072	Lake	Kilglass Lough
19/05/2023	10:00	12:18	Mallard	10:56	2		598804, 786072	Lake	Kilglass Lough
19/05/2023	10:00	12:18	Coot	10:56	4		598804, 786072	Lake	Kilglass Lough
19/05/2023	10:00	12:18	Cormorant	10:56	6		598804, 786072	Lake	Kilglass Lough
19/05/2023	10:00	12:18	Mute Swan	10:56	24		598804, 786072	Lake	Kilglass Lough
19/05/2023	10:00	12:18	Great Crested Grebe	10:56	2		598804, 786072	Lake	Kilglass Lough
19/05/2023	10:00	12:18	Little Grebe	11:13	2		597938, 784215	Lake	Kilglass Lough
19/05/2023	10:00	12:18	Great Crested Grebe	11:13	4		597938, 784215	Lake	Kilglass Lough
19/05/2023	10:00	12:18	Mute Swan	11:13	10		597938, 784215	Lake	Kilglass Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
19/05/2023	10:00	12:18	Coot	11:13	5		597938, 784215	Lake	Kilglass Lough
19/05/2023	10:00	12:18	Cormorant	11:13	2		597938, 784215	Lake	Kilglass Lough
19/05/2023	10:00	12:18	Nil Sightings	11:33			596590, 783338	River	Scramogue River
19/05/2023	10:00	12:18	Mute Swan	11:48	2		595618, 785662	Lake	Grange Lough
19/05/2023	10:00	12:18	Great Crested Grebe	11:48	3		595618, 785662	Lake	Grange Lough
19/05/2023	10:00	12:18	Cormorant	11:48	1		595618, 785662	Lake	Grange Lough
19/05/2023	10:00	12:18	Coot	11:48	2		595618, 785662	Lake	Grange Lough
19/05/2023	10:00	12:18	Little Grebe	11:48	1		595618, 785662	Lake	Grange Lough
19/05/2023	10:00	12:18	Nil Sightings	12:10			591451, 780851	River	Scramogue River
06/09/2023	13:15	16:30	Mute Swan	13:26	2		597882, 784175	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Grey Heron	13:43	1	Flying	597890, 784223	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Moorhen	13:40	1	Calling	597869, 784202	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Great Crested Grebe	13:52	1	Feeding	597892, 784525	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Mute Swan	13:53	5	1 adult 4 cygnets	598158, 784946	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Mallard	13:50	1	Female flying	597824, 784298	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Coot	14:02	2	Feeding	598088, 784721	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Mute Swan	14:12	2	Feeding	597722, 786271	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Mallard	14:13	2	Flying	597633, 783899	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Mute Swan	14:28	1	Feeding	598739, 785886	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Mute Swan	14:30	1	Resting	598707, 785980	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Coot	14:32	28	Large group feeding close to shore	598707, 785969	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Great Crested Grebe	14:35	1	Feeding	598349, 785352	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Coot	14:37	14	Group travelling across lake	598633, 785933	Lake	Kilglass Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
06/09/2023	13:15	16:30	Lapwing	14:39	2	Sitting on lake shore	598694, 785992	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Teal	14:42	8	Feeding	598661, 786063	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Mallard	14:44	10	Feeding	598663, 786053	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Grey Heron	14:44	1	Feeding	598654, 786067	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Mute Swan	14:47	2	Feeding	598655, 786525	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Coot	14:47	11	Swimming	598505, 786133	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Great Crested Grebe	14:48	2	Swimming	598428, 786163	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Cormorant	14:51	5	Perched	598205, 786512	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Mute Swan	15:36	3	Swimming	595567, 785932	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Mute Swan	15:44	1	Swimming	596080, 785794	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Mute Swan	15:45	6	1 adult 5 cygnets	596111, 785963	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Mallard	15:46	6	Feeding	596103, 785822	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Coot	15:56	5	Feeding	596130, 785874	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Great Crested Grebe	16:20	1	Feeding	600782, 785302	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Great Crested Grebe	16:21	1	Resting	600729, 785124	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Mallard	16:23	5	Resting	601101, 785175	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Tufted Duck	16:24	5	Feeding	600800, 784944	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Tufted Duck	16:26	9	Feeding in general area	601002, 784843	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Grey Heron	16:27	1	Flying	600821, 784786	Lake	Kilglass Lough
06/09/2023	13:15	16:30	Great Crested Grebe	16:28	1	Feeding	601036, 784898	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Nil Sightings	11:00		VP location	591452, 780847	River	Scramogue River
27/09/2023	11:00	15:30	Nil Sightings	11:30		VP location	596594, 783337	River	Scramogue River
27/09/2023	11:00	15:30	Cormorant	11:37	1		596557, 783526	River	Scramogue River
27/09/2023	11:00	15:30	Mallard	11:38	2		596621, 783202	River	Scramogue River
27/09/2023	11:00	15:30	Grey Wagtail	11:38	1		596600, 783316	River	Scramogue River
27/09/2023	11:00	15:30	Nil Sightings	11:57		VP location	595602, 785660	Lake	Grange Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
27/09/2023	11:00	15:30	Mute Swan	11:59	1		595513, 785790	Lake	Grange Lough
27/09/2023	11:00	15:30	Cormorant	11:59	1		595824, 786005	Lake	Grange Lough
27/09/2023	11:00	15:30	Cormorant	12:00	1		595917, 785735	Lake	Grange Lough
27/09/2023	11:00	15:30	Great Crested Grebe	12:01	3		595961, 785711	Lake	Grange Lough
27/09/2023	11:00	15:30	Nil Sightings	12:15		VP Location / nil sightings	595866.9786850	Lake	Black Lough
27/09/2023	11:00	15:30	Nil Sightings	12:20		VP Location	595874, 787202	Lake	Lough O'Donra
27/09/2023	11:00	15:30	Lapwing	12:20	1		595777, 787081	Lake	Lough O'Donra
27/09/2023	11:00	15:30	Grey Heron	12:22	1	Flying over the lake	595585, 787258	Lake	Lough O'Donra
27/09/2023	11:00	15:30	Nil Sightings	12:45		VP location	599374, 787979	Lake	Grange Lough north
27/09/2023	11:00	15:30	Great Crested Grebe	12:59	2		599083, 787816	Lake	Grange Lough north
27/09/2023	11:00	15:30	Mallard	12:59	8	Flying	598890, 788669	Lake	Grange Lough north
27/09/2023	11:00	15:30	Great Crested Grebe	13:00	1		599186, 788026	Lake	Grange Lough north
27/09/2023	11:00	15:30	Cormorant	13:02	3	Perched, then flying south	598989, 788480	Lake	Grange Lough north
27/09/2023	11:00	15:30	Nil Sightings	13:17		VP Location	598813, 786001	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Mute Swan	13:22	2		597587, 784806	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Mute Swan	13:23	1		597999, 785394	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Mute Swan	13:23	1		598283, 785175	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Coot	13:22	24		598624, 785884	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Great Crested Grebe	13:22	2		598577, 785800	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Cormorant	13:23	5		597961, 784907	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Coot	13:27	7		598583, 786059	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Coot	13:28	5		598455, 785954	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Mute Swan	13:30	2		598656, 785953	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Great Crested Grebe	13:30	1		598504, 786143	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Coot	13:31	9		598365, 786340	Lake	Kilglass Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
27/09/2023	11:00	15:30	Mute Swan	13:31	3		598358, 786385	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Cormorant	13:32	2		598331, 786336	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Nil Sightings	13:45		VP Location	597931, 784207	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Coot	13:51	5		597625, 783658	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Mute Swan	13:52	1	Juvenile	597865, 784408	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Great Crested Grebe	13:54	3		597950, 784306	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Coot	13:54	1		597917, 784286	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Coot	14:10	1		597841, 784190	Lake	Kilglass Lough
27/09/2023	11:00	15:30	Tufted Duck	14:35	79		600861, 785213	Lake	Lough Acrick
27/09/2023	11:00	15:30	Great Crested Grebe	14:36	2		600807, 785365	Lake	Lough Acrick
27/09/2023	11:00	15:30	Great Crested Grebe	14:37	3		600930, 784988	Lake	Lough Acrick
27/09/2023	11:00	15:30	Mute Swan	14:36	2		601109, 784875	Lake	Lough Acrick
27/09/2023	11:00	15:30	Mallard	14:36	13		600669, 785104	Lake7	Lough Acrick
27/09/2023	11:00	15:30	Cormorant	14:38	1		601110, 785106	Lake	Lough Acrick
27/09/2023	11:00	15:30	Coot	14:38	2		600745, 785027	Lake	Lough Acrick
27/09/2023	11:00	15:30	Grey Heron	14:42	1		600793, 784987	Lake	Lough Acrick
27/09/2023	11:00	15:30	Nil Sightings	15:10		VP Location	603429, 777427	River	Feorish River
27/09/2023	11:00	15:30	Mallard	15:09	4		603597, 777397	River	Feorish River
27/09/2023	11:00	15:30	Mallard	15:11	4		603272, 777552	River	Feorish River
27/09/2023	11:00	15:30	Mallard	15:13	1		603556, 777352	River	Feorish River
27/09/2023	11:00	15:30	Nil Sightings	15:19		VP location	603270, 776609	River	Shannon River
27/09/2023	11:00	15:30	Mute Swan	15:20	12		603445, 776570	River	Shannon River
27/09/2023	11:00	15:30	Mute Swan	15:22	19		603415, 776520	River	Shannon River
27/09/2023	11:00	15:30	Mute Swan	15:22	8		603548, 776328	River	Shannon River
27/09/2023	11:00	15:30	Lapwing	15:21	5		603379, 776510	River	Shannon River
27/09/2023	11:00	15:30	Mallard	15:22	2		603522, 776406	River	Shannon River
27/09/2023	11:00	15:30	Mute Swan	15:28	6		603362, 776197	River	Shannon River

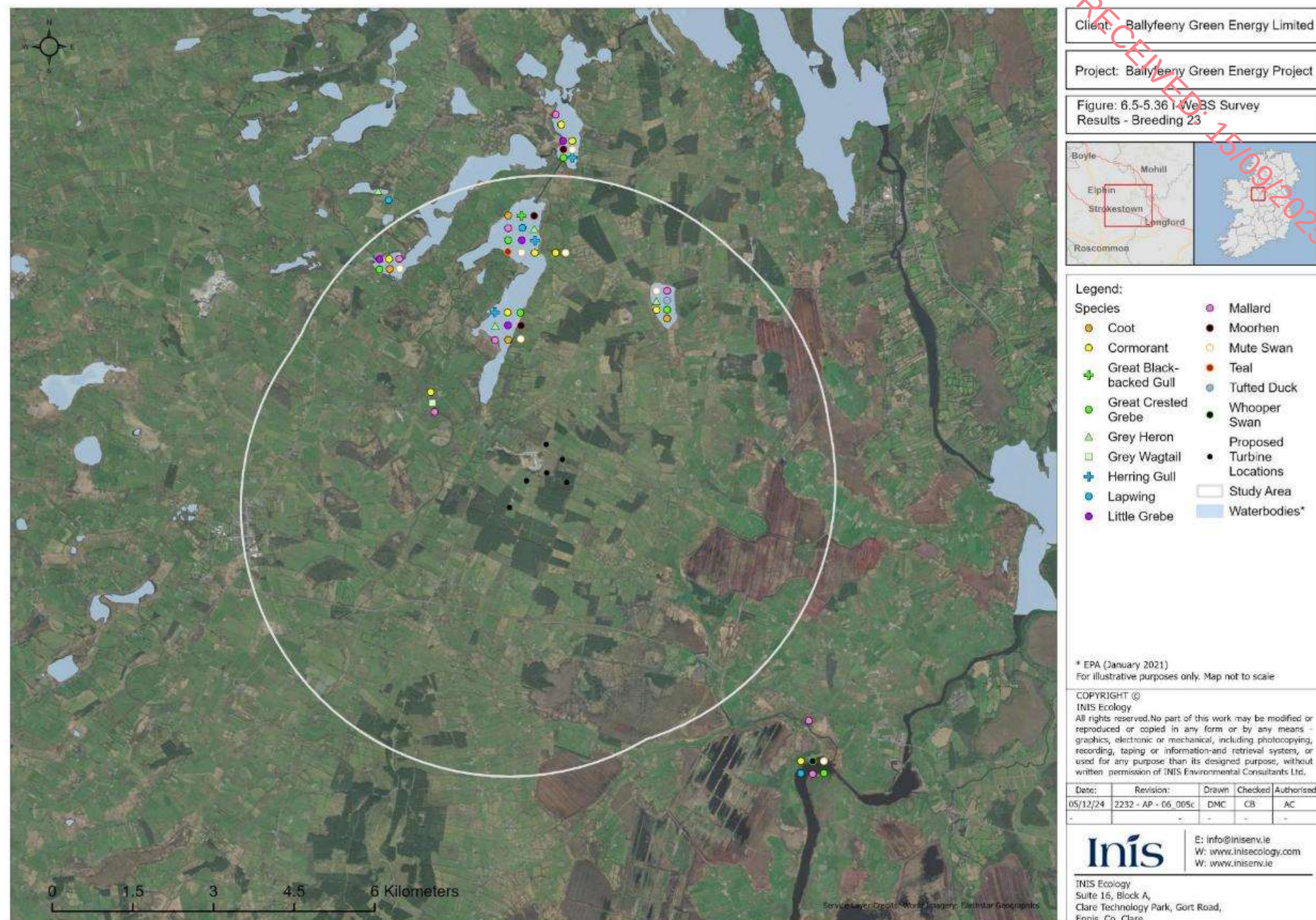


Figure 5.36: I-WeBS results for the breeding season 2023.

5.4.4.3 Winter Season 2023/2024

A total of 3,868 individuals from 21 species were recorded during I-WeBS surveys in Winter 2023/24 (see **Table 5.39**). Coot, Cormorant, Great Crested Grebe, Little Grebe, Mallard, Moorhen, Mute Swan and Tufted Duck were observed during field survey visits in all six months. Tufted Duck were the most numerous species recorded, with numbers peaking at 550 individuals seen in January 2024, with Coot numbers also peaking in January 2024 (312 individuals recorded). Details of survey conditions for all I-WeBS survey visits is shown in **Table 5.40**.

A full breakdown of all sightings is presented in **Table 5.41**, with locations shown for all species observed in **Figure 5.36**.

Table 5.39: Winter season 2023/2024 I-WeBS Species Counts.

Species	October	November	December	January	February	March	Total
Black-headed Gull	-	-	-	1	4	3	8
Coot	17	204	137	312	63	107	840
Cormorant	14	45	33	31	17	11	151
Gadwall	-	7	-	18	-	-	25
Goldeneye	1	-	1	2	1	-	5
Great Crested Grebe	29	29	11	42	7	22	140
Grey Heron	-	1	2	-	-	2	5
Grey Wagtail	-	-	-	-	-	1	1
Lapwing	-	-	20	34	-	-	54
Lesser Black-backed Gull	-	1	-	-	2	3	6
Little Egret	-	-	-	-	1	-	1
Little Grebe	7	21	27	67	15	18	155
Mallard	76	55	34	116	15	13	309
Moorhen	1	7	4	7	4	4	27
Mute Swan	29	90	115	107	103	189	633
Shoveler	-	-	-	10	-	-	10
Snipe	-	-	-	1	-	-	1
Teal	-	14	28	133	2	5	182
Tufted Duck	70	225	175	550	65	174	1,259
Whooper Swan	-	17	-	-	-	-	17
Wigeon	1	-	21	17	-	-	39
TOTAL	245	716	608	1,448	299	552	3,868

Table 5.16: *Winter season 2023/2024 I-WeBS Visit Data.*

Date	Observer	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction	Temp.
05/10/2023	JOC	10:20	10:20	Occasional showers	8/8	5	F3	S	14
05/10/2023	JOC	10:20	13:35	Occasional showers	8/8	5	F3	S	14
18/10/2023	CG	12:55	17:10	Heavy Showers	8/8	3	F4	E	13
09/11/2023	CG	10:30	15:15	Occasional showers	7/8	10	F4	SW	7
23/11/2023	JOH	09:30	14:00	None	7/8	15	F2	WSW	11
04/12/2023	JOH	12:30	17:00	None	0/8	15	F2	N	2
19/12/2023	HM	10:30	14:30	Occasional showers	7/8	2	F2	W	8
17/01/2024	CG	09:00	16:00	None	0/8	15	F1	NW	-1
22/01/2024	HM	12:40	15:50	Heavy Showers	8/8	2	F4	W	7
07/02/2024	HM	13:00	16:00	None	7/8	2	F1	NW	7
20/02/2024	NC	15:00	15:30	None	3/8	20	F3	WSW	12
19/03/2024	NC	15:00	17:00	Occasional showers	8/8	20	F1	S	12
20/03/2024	NC	08:40	10:40	None	2/8	20	F2	N	7
26/03/2024	NC	08:20	11:20	Constant Rain	8/8	5	F3	NE	5

Table 5.17: *Winter season 2023/2024 I-WeBS Sightings.*

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
05/10/2023	10:20	10:20	Nil Sightings	10:20			598218, 784121	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Great Crested Grebe	10:29	4	On water	597920, 784206	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Coot	10:30	10	On water	597863, 784160	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Mallard	10:31	5	On water	597702, 783990	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Cormorant	10:35	5	Perched	598450, 785597	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Mute Swan	10:36	6		598219, 785012	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Coot	10:58	22	On water	598600, 785847	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Great Crested Grebe	11:02	2	On water	598532, 785839	Lake	Kilglass Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
05/10/2023	10:20	10:20	Cormorant	11:03	1	Perched	598371, 786157	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Little Grebe	11:31	5	On water	597317, 785902	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Cormorant	11:31	1	On water	597387, 786020	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Mute Swan	11:31	4	On water	597690, 786204	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Mute Swan	11:42	8	On water	595572, 785941	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Great Crested Grebe	11:45	1	On water	595894, 785911	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Mallard	11:42	1	In reedbed	595506, 785872	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Coot	11:59	9	On water	596650, 786341	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Mute Swan	12:00	5	On water	596758, 786562	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Great Crested Grebe	12:02	4	On water	596621, 786554	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Mallard	12:29	50	On water	600744, 784971	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Tufted Duck	12:29	62	On water	600795, 785088	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Mute Swan	12:32	2	On water	601120, 784902	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Cormorant	12:32	2	Perched	601099, 785203	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Great Crested Grebe	12:34	4	On water	600793, 785318	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Wigeon	12:40	1	On water	600758, 785081	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Nil Sightings	12:59			603537, 783186	Lake	Kilglass Lough
05/10/2023	10:20	10:20	Nil Sightings	13:15			603860, 780747	Lake	Kilglass Lough
05/10/2023	10:20	13:35	Nil Sightings	13:35			601673, 777600	Flooded Cutover Bog	N/A
18/10/2023	12:55	17:10	Nil Sightings	12:55			599787, 776141	Flooded Cutover Bog	N/A
18/10/2023	12:55	17:10	Nil Sightings	13:20			601875, 778101	River	Florist River
18/10/2023	12:55	17:10	Cormorant	13:40	1		597881, 784208	Lake	Kilglass Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
18/10/2023	12:55	17:10	Mallard	13:45	3		597847.25, 784504	Lake	Kilglass Lough
18/10/2023	12:55	17:10	Tufted Duck	14:45	8		598070, 784583	Lake	Kilglass Lough
18/10/2023	12:55	17:10	Mute Swan	14:50	1		598089, 785174	Lake	Kilglass Lough
18/10/2023	12:55	17:10	Coot	14:50	5		597871, 784879	Lake	Kilglass Lough
18/10/2023	12:55	17:10	Great Crested Grebe	14:55	3		597766, 784745	Lake	Kilglass Lough
18/10/2023	12:55	17:10	Mallard	14:05	4		597603, 783966	Lake	Kilglass Lough
18/10/2023	12:55	17:10	Coot	14:10	9		597718, 783900	Lake	Kilglass Lough
18/10/2023	12:55	17:10	Great Crested Grebe	14:15	3		597635, 783874	Lake	Kilglass Lough
18/10/2023	12:55	17:10	Mute Swan	14:20	1		597586, 783837	Lake	Kilglass Lough
18/10/2023	12:55	17:10	Mallard	14:50	4		598681, 785985	Lake	Kilglass Lough
18/10/2023	12:55	17:10	Coot	14:55	37		598409, 785646	Lake	Kilglass Lough
18/10/2023	12:55	17:10	Little Grebe	15:00	2		598619, 785802	Lake	Kilglass Lough
18/10/2023	12:55	17:10	Moorhen	15:00	1		598689, 785936	Lake	Kilglass Lough
18/10/2023	12:55	17:10	Great Crested Grebe	15:05	3		598090, 786398	Lake	Kilglass Lough
18/10/2023	12:55	17:10	Cormorant	15:05	4		598311, 786524	Lake	Kilglass Lough
18/10/2023	12:55	17:10	Mute Swan	15:10	1		598064, 786633	Lake	Kilglass Lough
18/10/2023	12:55	17:10	Mallard	15:35	9		601094, 785291	Lake	Lough Acrick
18/10/2023	12:55	17:10	Goldeneye	15:40	1		601090, 785193	Lake	Lough Acrick
18/10/2023	12:55	17:10	Coot	15:45	1		600968, 785180	Lake	Lough Acrick
18/10/2023	12:55	17:10	Nil Sightings	16:05			596597, 783337	River	Scramogue River
18/10/2023	12:55	17:10	Coot	16:15	8		595780, 785872	Lake	Grange Lough
18/10/2023	12:55	17:10	Coot	16:45	12		597235, 787441	Lake	Grange Lough
18/10/2023	12:55	17:10	Mute Swan	16:40	1		597191, 787253	Lake	Grange Lough
18/10/2023	12:55	17:10	Great Crested Grebe	16:45	2		597409, 787586	Lake	Grange Lough
18/10/2023	12:55	17:10	Great Crested Grebe	17:00	3		596873, 787008	Lake	Grange Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
18/10/2023	12:55	17:10	Coot	17:00	4		596886, 786888	Lake	Grange Lough
18/10/2023	12:55	17:10	Nil Sightings	17:10			595767, 786739	Lake	Black Lough
09/11/2023	10:30	15:15	Mute Swan	10:30	2		600954, 784763	Lake	Lough Acrick
09/11/2023	10:30	15:15	Great Crested Grebe	10:30	2		600946, 784912	Lake	Lough Acrick
09/11/2023	10:30	15:15	Tufted Duck	10:35	34		600868, 784866	Lake	Lough Acrick
09/11/2023	10:30	15:15	Cormorant	10:40	1		601016, 784742	Lake	Lough Acrick
09/11/2023	10:30	15:15	Mallard	10:45	3		601068, 784800	Lake	Lough Acrick
09/11/2023	10:30	15:15	Teal	10:50	12		601109, 784852	Lake	Lough Acrick
09/11/2023	10:30	15:15	Cormorant	11:00	2		601082, 785167	Lake	Lough Acrick
09/11/2023	10:30	15:15	Great Crested Grebe	11:05	1		600742, 785411	Lake	Lough Acrick
09/11/2023	10:30	15:15	Gadwall	11:20	2	Male/female pair dabbling in inlet	598644, 786020	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Mute Swan	11:20	2		598588, 786032	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Coot	11:30	32	Scattered around area	598527, 785888	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Great Crested Grebe	11:35	2		598420, 785890	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Mute Swan	11:40	1		597981, 786498	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Tufted Duck	11:45	10		598469, 786279	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Coot	11:45	2		598472, 786453	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Cormorant	11:50	3	Roosting in tree on island	598263, 786297	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Little Grebe	12:00	6		598665, 785774	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Cormorant	12:05	9	Roosting in trees on island	598322, 785455	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Mute Swan	12:05	1		598365, 785469	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Coot	12:10	15	Scattered around area	598158, 785366	Lake	Lough Kilglass

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
09/11/2023	10:30	15:15	Tufted Duck	12:15	2		598090, 785523	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Great Crested Grebe	12:15	2		598215, 785485	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Coot	12:30	4		597856, 784197	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Tufted Duck	12:30	24		597873, 784475	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Mute Swan	12:35	6		597970, 784624	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Cormorant	12:35	6		598051, 784774	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Great Crested Grebe	12:40	3		597822, 784761	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Coot	12:40	18		597800, 784685	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Little Grebe	12:45	1		597810, 784106	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Tufted Duck	12:55	29		597602, 783917	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Coot	13:00	5		597584, 783995	Lake	Lough Kilglass
09/11/2023	10:30	15:15	Mallard	13:15	6	On bank	596636, 783145	River	Scramogue River
09/11/2023	10:30	15:15	Mute Swan	13:20	2		596551, 783390	River	Scramogue River
09/11/2023	10:30	15:15	Mute Swan	13:35	3		595703, 785798	Lake	Grange Lough
09/11/2023	10:30	15:15	Moorhen	13:35	1		595510, 785824	Lake	Lough Grange
09/11/2023	10:30	15:15	Coot	13:40	4		595571, 785830	Lake	Lough Grange
09/11/2023	10:30	15:15	Great Crested Grebe	13:40	1		595598, 785899	Lake	Lough Grange
09/11/2023	10:30	15:15	Tufted Duck	13:45	18		596145, 786047	Lake	Lough Grange
09/11/2023	10:30	15:15	Coot	13:45	7		596034, 785859	Lake	Lough Grange
09/11/2023	10:30	15:15	Great Crested Grebe	13:45	2		596177, 785978	Lake	Lough Grange
09/11/2023	10:30	15:15	Cormorant	13:45	1		596152, 785936	Lake	Lough Grange
09/11/2023	10:30	15:15	Mallard	13:50	14	Flushed	596282, 786082	Lake	Lough Grange
09/11/2023	10:30	15:15	Mallard	14:15	5		598130, 787755	Lake	Lough Grange
09/11/2023	10:30	15:15	Mute Swan	14:15	6		598280, 787799	Lake	Lough Grange
09/11/2023	10:30	15:15	Tufted Duck	14:20	16		598169, 787919	Lake	Lough Grange
09/11/2023	10:30	15:15	Coot	14:25	33		598540, 787861	Lake	Lough Grange

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
09/11/2023	10:30	15:15	Great Crested Grebe	14:25	6		598306, 787975	Lake	Lough Grange
09/11/2023	10:30	15:15	Tufted Duck	14:30	26		598111, 788161	Lake	Lough Grange
09/11/2023	10:30	15:15	Mallard	14:30	10		598073, 788080	Lake	Lough Grange
09/11/2023	10:30	15:15	Gadwall	14:30	5		598166, 788100	Lake	Lough Grange
09/11/2023	10:30	15:15	Mute Swan	14:30	4		598168, 788188	Lake	Lough Grange
09/11/2023	10:30	15:15	Coot	14:35	18		597738, 787754	Lake	Lough Grange
09/11/2023	10:30	15:15	Cormorant	14:35	1		597602, 787656	Lake	Lough Grange
09/11/2023	10:30	15:15	Coot	14:55	7		596594, 786856	Lake	Lough Grange
09/11/2023	10:30	15:15	Tufted Duck	14:55	11		596729, 787014	Lake	Lough Grange
09/11/2023	10:30	15:15	Mallard	14:55	5		596708, 786639	Lake	Lough Grange
09/11/2023	10:30	15:15	Nil Sightings	15:10			595753, 786754	Lake	Lough Grange
23/11/2023	09:30	14:00	Great Crested Grebe	09:30	4		597906, 784246	Lake	Kilglass Lough
23/11/2023	09:30	14:00	Coot	09:35	8		597784, 784054	Lake	Kilglass Lough
23/11/2023	09:30	14:00	Little Grebe	09:35	3		597801, 784142	Lake	Kilglass Lough
23/11/2023	09:30	14:00	Tufted Duck	09:45	5		597707, 783953	Lake	Kilglass Lough
23/11/2023	09:30	14:00	Mute Swan	09:50	2		597735, 784096	Lake	Kilglass Lough
23/11/2023	09:30	14:00	Mallard	09:55	10	Flying overhead	597830, 784541	Lake	Kilglass Lough
23/11/2023	09:30	14:00	Coot	10:15	42		598539, 785916	Lake	Kilglass Lough
23/11/2023	09:30	14:00	Little Grebe	10:15	5		598616, 785850	Lake	Kilglass Lough
23/11/2023	09:30	14:00	Moorhen	10:15	2		598548, 785818	Lake	Kilglass Lough
23/11/2023	09:30	14:00	Cormorant	10:25	5		599227, 787959	Lake	Grange Lough
23/11/2023	09:30	14:00	Mute Swan	10:25	2		599183, 787857	Lake	Grange Lough
23/11/2023	09:30	14:00	Moorhen	10:25	4		599255, 787845	Lake	Grange Lough
23/11/2023	09:30	14:00	Little Grebe	10:30	6		599257, 787891	Lake	Grange Lough
23/11/2023	09:30	14:00	Nil Sightings	10:40			600181, 790226	River	Owenur River
23/11/2023	09:30	14:00	Mute Swan	10:45	2		600530, 790364	River	Owenur River
23/11/2023	09:30	14:00	Mute Swan	11:00	2		601734, 789795	Lake	Lough Boderg
23/11/2023	09:30	14:00	Cormorant	11:00	4		601785, 789768	Lake	Lough Boderg

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
23/11/2023	09:30	14:00	Lesser Black-backed Gull	11:00	1		601767, 789782	Lake	Lough Boderg
23/11/2023	09:30	14:00	Whooper Swan	11:05	6		601683, 790161	Lake	Lough Boderg
23/11/2023	09:30	14:00	Mute Swan	11:25	2		603017, 788865	Lake	Lough Boderg
23/11/2023	09:30	14:00	Nil Sightings	11:30			603554, 787985	Lake	Lough Bofin
23/11/2023	09:30	14:00	Mute Swan	11:40	5		604405, 787191	Lake	Lough Bofin
23/11/2023	09:30	14:00	Cormorant	11:45	2		604388, 787878	Lake	Lough Bofin
23/11/2023	09:30	14:00	Mallard	11:45	2		604337, 787846	Lake	Lough bofin
23/11/2023	09:30	14:00	Teal	11:45	2		604374, 787838	Lake	Lough bofin
23/11/2023	09:30	14:00	Great Crested Grebe	11:55	4		605313, 787597	River	River Shannon
23/11/2023	09:30	14:00	Nil Sightings	12:10			605938, 783406	Lake	Lough bofin
23/11/2023	09:30	14:00	Mute Swan	12:15	2		607296, 782444	Lake	Lough bofin
23/11/2023	09:30	14:00	Whooper Swan	12:35	4		608053, 783120	Flooded field	River Shannon
23/11/2023	09:30	14:00	Mute Swan	12:35	2		608035, 783139	Flooded field	River Shannon
23/11/2023	09:30	14:00	Grey Heron	12:40	1		608043, 783096	Flooded field	River Shannon
23/11/2023	09:30	14:00	Mute Swan	13:10	2		600775, 785385	Lake	Lough Acrick
23/11/2023	09:30	14:00	Cormorant	13:10	3		600959, 785304	Lake	Lough Acrick
23/11/2023	09:30	14:00	Tufted Duck	13:10	5		600896, 785094	Lake	Lough Acrick
23/11/2023	09:30	14:00	Great Crested Grebe	13:15	2		601014, 785046	Lake	Lough Acrick
23/11/2023	09:30	14:00	Cormorant	13:35	8		597190, 788834	Lake	Lough Elia
23/11/2023	09:30	14:00	Nil Sightings	13:30			597490, 789598	Flooded cutaway bog	Lough Elia
23/11/2023	09:30	14:00	Mute Swan	13:35	23		597178, 788925	Lake	Lough Elia
23/11/2023	09:30	14:00	Tufted Duck	13:35	10		597106., 788822	Lake	Lough Elia

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
23/11/2023	09:30	14:00	Tufted Duck	13:45	40		597412, 787520	Lake	Lough Grange
23/11/2023	09:30	14:00	Whooper Swan	13:45	7		597806, 787624	Lake	Lough Grange
23/11/2023	09:30	14:00	Mute Swan	13:45	1		597135, 787622	Lake	Lough Grange
23/11/2023	09:30	14:00	Coot	13:45	6		597609, 787588	Lake	Lough Grange
23/11/2023	09:30	14:00	Mute Swan	13:50	14		596580, 786678	Lake	Lough Grange
23/11/2023	09:30	14:00	Nil Sightings	13:53			595766, 786730	Lake	Black Lough
23/11/2023	09:30	14:00	Mute Swan	14:00	2		595723, 785760	Lake	Lough Grange
23/11/2023	09:30	14:00	Coot	14:10	3		597551, 786186	Lake	Kilglass Lough
23/11/2023	09:30	14:00	Mute Swan	14:05	2		597182, 785989	Lake	Kilglass lough
04/12/2023	12:30	17:00	Mute Swan	12:30	12		597895, 784351	Lake	Lough Kilglass
04/12/2023	12:30	17:00	Great Crested Grebe	12:35	1		597897, 784169	Lake	Lough kilglass
04/12/2023	12:30	17:00	Cormorant	12:45	2		597962, 784454	Lake	Lough kilglass
04/12/2023	12:30	17:00	Tufted Duck	13:00	8		600825, 785050	Lake	Lough Acrick
04/12/2023	12:30	17:00	Mute Swan	13:05	2		600814, 785361	Lake	Lough Acrick
04/12/2023	12:30	17:00	Cormorant	13:10	5		600919, 785193	Lake	Lough Acrick
04/12/2023	12:30	17:00	Mallard	13:15	28		601110, 785017	Lake	Lough Acrick
04/12/2023	12:30	17:00	Lapwing	13:15	5		601106, 785139	Lake	Lough Acrick
04/12/2023	12:30	17:00	Mute Swan	13:35	5		598536, 786172	Lake	Lough Kilglass
04/12/2023	12:30	17:00	Lapwing	13:40	2		598556, 786206	Lake	Lough Kilglass
04/12/2023	12:30	17:00	Tufted Duck	13:40	6		598595, 785993	Lake	Lough Kilglass
04/12/2023	12:30	17:00	Coot	13:45	9		598517, 786019	Lake	Lough Kilglass
04/12/2023	12:30	17:00	Moorhen	13:45	4		598519, 786151	Lake	Lough Kilglass
04/12/2023	12:30	17:00	Teal	13:45	28		598520, 786086	Lake	Lough Kilglass
04/12/2023	12:30	17:00	Little Grebe	13:50	11		598554, 786173	Lake	Lough Kilglass
04/12/2023	12:30	17:00	Mute Swan	14:00	4		599217, 787795	Lake	Grange Lough
04/12/2023	12:30	17:00	Great Crested Grebe	14:10	1		599101, 787968	Lake	Lough Grange
04/12/2023	12:30	17:00	Cormorant	14:10	1		599020, 787940	Lake	Lough Grange
04/12/2023	12:30	17:00	Little Grebe	14:15	3		599214, 787901	Lake	Lough Grange

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
04/12/2023	12:30	17:00	Coot	14:20	1		599105, 787818	Lake	Lough Grange
04/12/2023	12:30	17:00	Goldeneye	14:25	1	Male	600405, 790338	River	River Owenur
04/12/2023	12:30	17:00	Mute Swan	14:25	2		600328, 790294	River	River owenur
04/12/2023	12:30	17:00	Cormorant	14:35	1	Flying overhead	600372, 790324	River	River Owenur
04/12/2023	12:30	17:00	Nil Sightings	14:40			600170, 790221	River	River Owenur
04/12/2023	12:30	17:00	Coot	14:55	2		598405, 789640	Lake	Garrymona Lough
04/12/2023	12:30	17:00	Nil Sightings	15:05			597527, 789465	Flooded bog	N/A
04/12/2023	12:30	17:00	Cormorant	15:15	18		597140, 788883	Lake	Lough Elia
04/12/2023	12:30	17:00	Mute Swan	15:15	56		597071, 788944	Lake	Lough Elia
04/12/2023	12:30	17:00	Tufted Duck	15:20	45		597197, 788993	Lake	Lough Elia
04/12/2023	12:30	17:00	Coot	15:20	17		597067, 788837	Lake	Lough Elia
04/12/2023	12:30	17:00	Mallard	15:25	5		597108, 789064	Lake	Lough Elia
04/12/2023	12:30	17:00	Wigeon	15:25	9		597048, 789022	Lake	Lough Elia
04/12/2023	12:30	17:00	Tufted Duck	15:35	50		597376, 787681	Lake	Grange Lough
04/12/2023	12:30	17:00	Mute Swan	15:40	6		597547, 787735	Lake	Grange Lough
04/12/2023	12:30	17:00	Wigeon	15:40	12		597387, 787780	Lake	Grange Lough
04/12/2023	12:30	17:00	Coot	15:40	13		597286, 787617	Lake	Grange Lough
04/12/2023	12:30	17:00	Cormorant	15:40	2		597475, 787584	Lake	Grange Lough
04/12/2023	12:30	17:00	Great Crested Grebe	15:45	5		597340, 787473	Lake	Grange Lough
04/12/2023	12:30	17:00	Coot	15:50	6		596822, 786939	Lake	Grange Lough
04/12/2023	12:30	17:00	Mute Swan	15:50	4		596697, 787013	Lake	Grange Lough
04/12/2023	12:30	17:00	Nil Sightings	15:55			595764, 786734	Pond	N/A
04/12/2023	12:30	17:00	Nil Sightings	16:00			595694, 787229	Lake	Lough O' Donra
04/12/2023	12:30	17:00	Coot	16:10	2		595563, 785883	Lake	Grange Lough
04/12/2023	12:30	17:00	Little Grebe	16:10	1		595661, 785972	Lake	Grange Lough
04/12/2023	12:30	17:00	Great Crested Grebe	16:10	1		595642, 785887	Lake	Grange Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
04/12/2023	12:30	17:00	Tufted Duck	16:20	7		596044, 785973	Lake	Grange Lough
04/12/2023	12:30	17:00	Coot	16:20	3		596007, 786018	Lake	Grange Lough
04/12/2023	12:30	17:00	Mute Swan	16:20	2		596126, 786030	Lake	Grange Lough
04/12/2023	12:30	17:00	Mute Swan	16:30	6		597281, 786081	Lake	Lough Kilglass
19/12/2023	10:30	14:30	Nil Sightings	10:53			601342, 779759	River	Feorish River
19/12/2023	10:30	14:30	Cormorant	11:15	2		600772, 785102	Lough	Lough Acrick
19/12/2023	10:30	14:30	Mute Swan	11:15	2		600782, 785001	Lough	Lough Acrick
19/12/2023	10:30	14:30	Great Crested Grebe	11:15	1		600811, 785068	Lough	Lough Acrick
19/12/2023	10:30	14:30	Coot	11:29	13		598659, 785995	Lough	Lough Acrick
19/12/2023	10:30	14:30	Little Grebe	11:31	6		598682, 785936	Lough	Lough Acrick
19/12/2023	10:30	14:30	Great Crested Grebe	11:31	2		598697, 785899	Lough	Lough Acrick
19/12/2023	10:30	14:30	Coot	11:31	1		598671, 785903	Lough	Lough Acrick
19/12/2023	10:30	14:30	Coot	11:32	8		598431, 785824	Lough	Lough Acrick
19/12/2023	10:30	14:30	Mute Swan	11:32	5		598248, 785970	Lough	Lough Acrick
19/12/2023	10:30	14:30	Coot	11:55	34		597842, 784075	Lough	Lough Acrick
19/12/2023	10:30	14:30	Little Grebe	11:55	2		597839, 784122	Lough	Lough Acrick
19/12/2023	10:30	14:30	Mute Swan	11:55	1		597838, 784147	Lough	Lough Acrick
19/12/2023	10:30	14:30	Mute Swan	12:10	1		596591, 783377	River	Mountain River
19/12/2023	10:30	14:30	Grey Heron	12:11	1		596581, 783387	River	Scramoge River
19/12/2023	10:30	14:30	Lapwing	12:12	13		596576, 783361	River	Mountain River
19/12/2023	10:30	14:30	Coot	12:28	13		595637, 785898	Lough	Grange Lough
19/12/2023	10:30	14:30	Tufted Duck	12:28	11		595743, 786020	Lough	Grange Lough
19/12/2023	10:30	14:30	Mute Swan	12:29	1		596161, 785996	Lough	Lough Acrick
19/12/2023	10:30	14:30	Cormorant	12:29	1		596050, 785878	Lough	Grange Lough
19/12/2023	10:30	14:30	Little Grebe	12:29	2		595536, 785879	Lough	Grange Lough
19/12/2023	10:30	14:30	Cormorant	12:30	1		595845, 785963	Lough	Grange Lough
19/12/2023	10:30	14:30	Tufted Duck	12:59	48		598041, 786806	Lough	Kilglass Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
19/12/2023	10:30	14:30	Coot	13:00	5		597941, 786726	Lough	Kilglass Lough
19/12/2023	10:30	14:30	Mallard	13:05	1		597718, 786600	Lough	Kilglass Lough
19/12/2023	10:30	14:30	Coot	13:05	8		597741, 786211	Lough	Grange Lough
19/12/2023	10:30	14:30	Grey Heron	13:05	1	In flight	597918, 786618	Lough	Grange Lough
19/12/2023	10:30	14:30	Mute Swan	13:05	1		597633, 786351	Lough	Grange Lough
19/12/2023	10:30	14:30	Little Grebe	13:33	2		598199, 785651	Lough	Grange Lough
19/12/2023	10:30	14:30	Coot	13:33	2		598173, 785604	Lough	Grange Lough
19/12/2023	10:30	14:30	Mute Swan	13:34	5		597159, 784654	Flooded wetland	N/A
19/12/2023	10:30	14:30	Nil Sightings	14:28			595228, 779503	Lough	Lough Acrick
17/01/2024	09:00	16:00	Mallard	09:00	31	Foraging	601090, 785156	Lake	Lough Acrick
17/01/2024	09:00	16:00	Teal	09:00	36	Foraging	601092, 785105	Lake	Lough Acrick
17/01/2024	09:00	16:00	Goldeneye	09:00	2	Foraging	601085, 785066	Lake	Lough Acrick
17/01/2024	09:00	16:00	Mute Swan	09:20	2	Roosting	601025, 784749	Lake	Lough Acrick
17/01/2024	09:00	16:00	Great Crested Grebe	09:40	2	Foraging	600889, 784959	Lake	Lough Acrick
17/01/2024	09:00	16:00	Tufted Duck	09:40	1	Foraging	600855, 785237	Lake	Lough Acrick
17/01/2024	09:00	16:00	Wigeon	10:05	14	Foraging	598702, 785874	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Tufted Duck	10:05	10	Foraging	598504, 785819	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Little Grebe	10:05	26	Foraging	598268, 785152	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Tufted Duck	10:20	33	Foraging	598082, 784899	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Teal	10:20	17		598169, 784877	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Coot	10:20	8		598114, 784947	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Cormorant	10:25	9		597977, 785015	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Mute Swan	10:25	4		598196, 784958	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Great Crested Grebe	10:25	9		598084, 785223	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Mute Swan	10:25	7		598168, 785577	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Coot	10:30	54	Foraging	597914, 785268	Lake	Kilglass Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
17/01/2024	09:00	16:00	Moorhen	10:30	3		598305, 785927	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Mute Swan	10:35	15		598119, 786266	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Little Grebe	10:35	3		598639, 785979	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Coot	10:40	17	Foraging	597944, 786456	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Great Crested Grebe	10:40	9	Foraging	598270, 786401	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Cormorant	10:40	13	Foraging and roosting	598117, 786650	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Mute Swan	10:45	2		597291, 786001	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Coot	10:45	4		597412, 786080	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Tufted Duck	10:50	46		597760, 786640	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Teal	11:15	14	Roosting	598076, 784559	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Little Grebe	11:15	2	Foraging	598059, 784505	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Mallard	11:15	14	Foraging	597884, 784635	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Coot	11:25	40	Foraging	597766, 784724	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Great Crested Grebe	11:25	5	Foraging and roosting	597717, 784774	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Mute Swan	11:25	2	Roosting	597894, 784782	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Coot	11:35	12	Roosting and foraging	597627, 783796	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Moorhen	11:35	2	Foraging	597553, 783985	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Black-headed Gull	11:35	1	Roosting	597776, 783953	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Mallard	11:40	14	Roosting	597493, 783674	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Teal	11:40	2	Foraging	597487, 783597	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Tufted Duck	11:40	15	Foraging	597555, 783713	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Little Grebe	11:45	5	Foraging	597641, 784060	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Great Crested Grebe	11:45	5		597599, 783613	Lake	Kilglass Lough
17/01/2024	09:00	16:00	Mute Swan	11:45	1		597662, 783740.	Lake	Kilglass Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
17/01/2024	09:00	16:00	Lapwing	12:10	3	Roosting	596561, 783266	GA1	Scramogue River
17/01/2024	09:00	16:00	Mute Swan	12:10	4	Roosting	596539, 783538	River	Scramogue River
17/01/2024	09:00	16:00	Snipe	12:15	1	Roosting	596480, 783524	GS4	Scramogue River
17/01/2024	09:00	16:00	Moorhen	12:15	1	Foraging	596502, 783549	GS4	Scramogue River
17/01/2024	09:00	16:00	Lapwing	12:25	6	Roosting	596504, 783516	GS4	Scramogue River
17/01/2024	09:00	16:00	Great Crested Grebe	12:45	1		599149, 788128	Lake	Grange Lough
17/01/2024	09:00	16:00	Cormorant	12:45	2	Foraging	599256, 788045	Lake	Grange Lough
17/01/2024	09:00	16:00	Coot	12:45	3	Foraging	599272, 787938	Lake	Grange Lough
17/01/2024	09:00	16:00	Tufted Duck	12:45	6	Foraging	599215, 787979	Lake	Grange Lough
17/01/2024	09:00	16:00	Coot	12:55	42	Foraging and roosting	598297, 787915	Lake	Grange Lough
17/01/2024	09:00	16:00	Cormorant	12:55	1	Roosting	597985, 787840	Lake	Grange Lough
17/01/2024	09:00	16:00	Tufted Duck	13:10	51	Foraging	598531, 787857	Lake	Grange Lough
17/01/2024	09:00	16:00	Mallard	13:10	9	Foraging	598237, 788117	Lake	Grange Lough
17/01/2024	09:00	16:00	Teal	13:10	3	Roosting	598484, 787927	Lake	Grange Lough
17/01/2024	09:00	16:00	Gadwall	13:25	12	Foraging	598383, 788040	Lake	Grange Lough
17/01/2024	09:00	16:00	Little Grebe	13:20	14		598250, 787783	Lake	Grange Lough
17/01/2024	09:00	16:00	Great Crested Grebe	13:20	1		598361, 787893	Lake	Grange Lough
17/01/2024	09:00	16:00	Mute Swan	13:20	8		598096, 787980	Lake	Grange Lough
17/01/2024	09:00	16:00	Wigeon	13:20	3	Roosting	598191, 787976	Lake	Grange Lough
17/01/2024	09:00	16:00	Coot	13:30	33		597575, 787656	Lake	Grange Lough
17/01/2024	09:00	16:00	Cormorant	13:30	2		597662, 787697	Lake	Grange Lough
17/01/2024	09:00	16:00	Tufted Duck	13:40	63	Foraging	597482, 787797	Lake	Grange Lough
17/01/2024	09:00	16:00	Great Crested Grebe	13:40	5	Foraging and roosting	597420, 787650	Lake	Grange Lough
17/01/2024	09:00	16:00	Mallard	13:45	2	Roosting	597083, 787675	Lake	Grange Lough
17/01/2024	09:00	16:00	Mute Swan	13:45	3	Roosting	597581, 787851	Lake	Grange Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
17/01/2024	09:00	16:00	Tufted Duck	14:15	36	Foraging	595713, 785999	Lake	Grange Lough
17/01/2024	09:00	16:00	Mallard	14:15	2	Foraging	595593, 785964	Lake	Grange Lough
17/01/2024	09:00	16:00	Moorhen	14:15	1	Foraging	595530, 786014	Lake	Grange Lough
17/01/2024	09:00	16:00	Little Grebe	14:25	12	Foraging	595554, 785796	Lake	Grange Lough
17/01/2024	09:00	16:00	Gadwall	14:25	2		595777, 785916	Lake	Grange Lough
17/01/2024	09:00	16:00	Coot	14:25	15		595943, 785870	Lake	Grange Lough
17/01/2024	09:00	16:00	Teal	14:35	37		596178, 786075	Lake	Grange Lough
17/01/2024	09:00	16:00	Mallard	14:35	36		596270, 786055	Lake	Grange Lough
17/01/2024	09:00	16:00	Tufted Duck	14:35	65		596411, 786181	Lake	Grange Lough
17/01/2024	09:00	16:00	Coot	14:35	38		596370, 786141	Lake	Grange Lough
17/01/2024	09:00	16:00	Mute Swan	14:45	5		596275, 785919	Lake	Grange Lough
17/01/2024	09:00	16:00	Cormorant	14:45	1		595971, 785764	Lake	Grange Lough
17/01/2024	09:00	16:00	Mallard	15:15	8		596759, 786448	Lake	Grange Lough
17/01/2024	09:00	16:00	Tufted Duck	15:15	31		596853, 786601	Lake	Grange Lough
17/01/2024	09:00	16:00	Coot	15:20	16		596728, 786612	Lake	Grange Lough
17/01/2024	09:00	16:00	Great Crested Grebe	15:20	2		596685, 786400	Lake	Grange Lough
17/01/2024	09:00	16:00	Mute Swan	15:20	4		596826, 786692	Lake	Grange Lough
17/01/2024	09:00	16:00	Cormorant	15:20	2		596926, 786667	Lake	Grange Lough
17/01/2024	09:00	16:00	Tufted Duck	15:30	8		596434, 786962	Lake	Grange Lough
17/01/2024	09:00	16:00	Coot	15:30	9		596602, 786920	Lake	Grange Lough
17/01/2024	09:00	16:00	Great Crested Grebe	15:30	1		596512, 786856	Lake	Grange Lough
17/01/2024	09:00	16:00	Shoveler	15:40	2		597385, 787395	Lake	Grange Lough
17/01/2024	09:00	16:00	Tufted Duck	15:45	39		597042, 787356	Lake	Grange Lough
17/01/2024	09:00	16:00	Shoveler	15:45	8		597168, 787126.	Lake	Grange Lough
17/01/2024	09:00	16:00	Great Crested Grebe	15:45	2		596990, 787182	Lake	Grange Lough
17/01/2024	09:00	16:00	Mute Swan	15:45	11		597203, 787320	Lake	Grange Lough
17/01/2024	09:00	16:00	Coot	15:45	10		597127, 787252	Lake	Grange Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
17/01/2024	09:00	16:00	Little Grebe	15:45	2		596972, 787417	Lake	Grange Lough
17/01/2024	09:00	16:00	Gadwall	15:50	4		597350, 787350	Lake	Grange Lough
22/01/2024	12:40	15:50	Coot	12:45	1		595551, 785930	Lough	Grange Lough
22/01/2024	12:40	15:50	Coot	12:55	1		595607, 785776	Lough	Grange Lough
22/01/2024	12:40	15:50	Mute Swan	12:55	1		595671, 785792	Lough	Grange Lough
22/01/2024	12:40	15:50	Cormorant	12:56	1		595712, 785732	Lough	Grange Lough
22/01/2024	12:40	15:50	Mute Swan	13:08	8		597573, 786213	Lough	Grange Lough
22/01/2024	12:40	15:50	Mute Swan	13:14	2		597748, 786549	Lough	Grange Lough
22/01/2024	12:40	15:50	Tufted Duck	13:14	45		597890, 786555	Lough	Grange Lough
22/01/2024	12:40	15:50	Coot	13:14	2		597905, 786726	Lough	Grange Lough
22/01/2024	12:40	15:50	Mute Swan	13:15	2		598573, 786556	Lough	Grange Lough
22/01/2024	12:40	15:50	Little Grebe	13:15	1		597940, 786709	Lough	Grange Lough
22/01/2024	12:40	15:50	Tufted Duck	13:16	23		598073, 786751	Lough	Grange Lough
22/01/2024	12:40	15:50	Tufted Duck	13:19	70		598205, 786903	Lough	Grange Lough
22/01/2024	12:40	15:50	Mute Swan	13:21	2		598125, 786965	Lough	Grange Lough
22/01/2024	12:40	15:50	Coot	13:21	1		598085, 786937	Lough	Grange Lough
22/01/2024	12:40	15:50	Lapwing	13:42	25		596551, 783415	Lough	Grange Lough
22/01/2024	12:40	15:50	Little Grebe	13:55	1		598076, 785551	Lough	Grange Lough
22/01/2024	12:40	15:50	Coot	13:55	2		598063, 785535	Lough	Grange Lough
22/01/2024	12:40	15:50	Mute Swan	14:07	4		597804, 784214	Lough	Grange Lough
22/01/2024	12:40	15:50	Coot	14:07	4		597875, 784285	Lough	Grange Lough
22/01/2024	12:40	15:50	Little Grebe	14:07	1		597871, 784103	Lough	Grange Lough
22/01/2024	12:40	15:50	Mute Swan	14:18	18		598330, 785946	Lough	Grange Lough
22/01/2024	12:40	15:50	Tufted Duck	14:18	4		598601, 785887	Lough	Grange Lough
22/01/2024	12:40	15:50	Teal	14:18	24		598584, 785763	Lough	Grange Lough
22/01/2024	12:40	15:50	Mute Swan	14:57	2		601061, 785038	Lough	Grange Lough
22/01/2024	12:40	15:50	Tufted Duck	14:57	4		601008, 785132	Lough	Grange Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
07/02/2024	13:00	16:00	Nil Sightings	13:00			600456, 778983	Stream	N/A
07/02/2024	13:00	16:00	Tufted Duck	13:26	9		600934, 785196	Loch	Lough Acrick
07/02/2024	13:00	16:00	Mute Swan	13:47	34		598443, 786221	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Coot	13:47	9		598558, 785988	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Little Grebe	13:47	2		598670, 785972	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Tufted Duck	13:48	4		598617, 785910	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Moorhen	13:48	3		598696, 785877	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Cormorant	13:49	2		598643, 785772	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Coot	14:04	5		597907, 784125	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Little Grebe	14:04	1		597845, 784104	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Mute Swan	14:04	2		597821, 784221	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Great Crested Grebe	14:04	1		597940, 784353	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Cormorant	14:05	3		598035, 784865	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Little Egret	14:05	1		597987, 784849	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Mallard	14:21	1		596548, 783534	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Mute Swan	14:03	3		597717, 784675	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Little Grebe	14:31	2		598158, 785642	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Great Crested Grebe	14:31	1		598268, 785623	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Mute Swan	14:32	5		598257, 785681	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Coot	14:32	3		598318, 785704	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Little Grebe	14:49	4		595618, 785774	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Coot	14:49	10		595712, 785741	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Mute Swan	14:49	10		596034, 785988	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Tufted Duck	14:50	10		596109, 786001	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Great Crested Grebe	15:04	2		598074, 786645	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Coot	15:04	2		597976, 786726	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Tufted Duck	15:05	2		598099, 786839	Loch	Kilglass Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
07/02/2024	13:00	16:00	Coot	15:07	11		598312, 787033	Loch	Kilglass Lough
07/02/2024	13:00	16:00	Tufted Duck	15:07	8		598461, 787000	Loch	Kilglass Lough
20/02/2024	09:30	12:30	Coot	10:12	1	Swimming	597808, 784207	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Mute Swan	10:12	3	Roosting	597694, 785012	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Cormorant	10:13	4	Perched	597865, 784944	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Tufted Duck	10:13	7	Feeding	597492, 783545	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Little Grebe	10:13	1	Calling	597888, 784044	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Mute Swan	10:14	2	Feeding	597477, 783595	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Moorhen	10:14	1	Swimming	597746, 784103	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Mallard	10:22	2	Male & Female	595610, 783060	River	Scramogue River
20/02/2024	09:30	12:30	Mallard	10:23	2	Flying	595584, 783089	River	Scramogue River
20/02/2024	09:30	12:30	Little Grebe	10:32	1	Calling	595543, 785836	Lake	Grange Lough
20/02/2024	09:30	12:30	Coot	10:33	2	Swimming	595628, 785967	Lake	Grange Lough
20/02/2024	09:30	12:30	Mute Swan	10:33	1	Swimming	595651, 785966	Lake	Grange Lough
20/02/2024	09:30	12:30	Cormorant	10:33	1	Perched	595809, 785752	Lake	Grange Lough
20/02/2024	09:30	12:30	Mute Swan	10:42	6	Feeding	597524, 786261	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Coot	10:43	4	Swimming	597544, 786264	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Teal	10:43	2	Male & Female	597537, 786258	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Little Grebe	10:43	1	Calling	597557, 786265	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Black-headed Gull	10:44	4	Flying	597323, 785997	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Mute Swan	10:44	2	Swimming	597364, 785949	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Mute Swan	10:45	3	Preening	598515, 786188	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Cormorant	10:45	4	Perched	597761, 786604	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Mute Swan	10:48	4	Feeding	597684, 786479	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Coot	10:50	3	Swimming	597894, 786709	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Little Grebe	10:50	2	Swimming	597924, 786757	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Mute Swan	10:50	2	Swimming	598053, 786777	Lake	Kilglass Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
20/02/2024	09:30	12:30	Coot	11:19	3	Swimming	598683, 785969	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Lesser Black-backed Gull	11:19	2	Perched	598653, 785995	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Mute Swan	11:20	3	Preening	598513, 785754	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Mute Swan	11:20	5	Feeding	598375, 785748	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Little Grebe	11:20	1	Calling	598707, 785929	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Cormorant	11:21	2	Perched	598526, 785728	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Cormorant	11:21	1	Perched	598390, 785593	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Mute Swan	11:21	2	Swimming	598523, 786524	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Mallard	11:21	3	Flying	598352., 786404	Lake	Kilglass Lough
20/02/2024	09:30	12:30	Goldeneye	11:31	1	Flying	600686, 785323	Lake	Lough Acrick
20/02/2024	09:30	12:30	Mallard	11:31	2	Flying	600976, 785319	Lake	Lough Acrick
20/02/2024	09:30	12:30	Mute Swan	11:34	2	Feeding	601096, 784946	Lake	Lough Acrick
20/02/2024	09:30	12:30	Mallard	11:58	5	Flying	601879, 778087	River	Feorish River
20/02/2024	09:30	12:30	Mute Swan	12:02	2	Swimming	601819, 778064	River	Feorish River
20/02/2024	09:30	12:30	Mute Swan	12:24	1	Feeding	596034, 785735	Lake	Grange Lough
20/02/2024	09:30	12:30	Tufted Duck	12:24	8	Swimming	596018, 786029	Lake	Grange Lough
20/02/2024	09:30	12:30	Tufted Duck	12:30	11	Swimming	597004, 786974	Lake	Grange Lough
20/02/2024	09:30	12:30	Great Crested Grebe	12:30	2	Swimming	597006, 787123	Lake	Grange Lough
20/02/2024	09:30	12:30	Coot	12:30	7	Swimming	597079, 787060	Lake	Grange Lough
20/02/2024	09:30	12:30	Coot	12:30	3	Swimming	596790, 787105	Lake	Grange Lough
20/02/2024	09:30	12:30	Mute Swan	12:30	2	Swimming	596610, 786923	Lake	Grange Lough
20/02/2024	15:00	15:30	Mute Swan	15:23	7	Swimming	597572, 787479	Lake	Grange Lough
20/02/2024	15:00	15:30	Tufted Duck	15:24	6	Swimming	597436, 787752	Lake	Grange Lough
20/02/2024	15:00	15:30	Mute Swan	15:24	2	Flying	597353, 787547	Lake	Grange Lough
20/02/2024	15:00	15:30	Great Crested Grebe	15:25	1	Diving	597270, 787608	Lake	Grange Lough
19/03/2024	15:00	17:00	Grey Wagtail	15:05	1	Flying	596596, 783325	River	Scramogue River

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
19/03/2024	15:00	17:00	Great Crested Grebe	15:22	1	Diving	595622, 785837	Lake	Grange Lough
19/03/2024	15:00	17:00	Lesser Black-backed Gull	15:22	1	Preening	595639, 785758	Lake	Grange Lough
19/03/2024	15:00	17:00	Mallard	15:23	1	Swimming	595783, 785722	Lake	Grange Lough
19/03/2024	15:00	17:00	Coot	15:23	2	Swimming	595804, 785914	Lake	Grange Lough
19/03/2024	15:00	17:00	Mute Swan	15:54	2	Swimming	596600, 786852	Lake	Grange Lough
19/03/2024	15:00	17:00	Coot	15:54	3	Swimming	596410, 786828	Lake	Grange Lough
19/03/2024	15:00	17:00	Great Crested Grebe	15:55	1	Diving	596591, 786892	Lake	Grange Lough
19/03/2024	15:00	17:00	Grey Heron	15:55	1	Flying	596512, 786935	Lake	Grange Lough
19/03/2024	15:00	17:00	Tufted Duck	16:08	27	Swimming	597438, 787462	Lake	Grange Lough
19/03/2024	15:00	17:00	Mute Swan	16:09	6	Roosting	597602, 787442	Lake	Grange Lough
19/03/2024	15:00	17:00	Coot	16:09	2	Swimming	597269, 787853	Lake	Grange Lough
19/03/2024	15:00	17:00	Cormorant	16:09	2	Perched	597430, 787660	Lake	Grange Lough
19/03/2024	15:00	17:00	Great Crested Grebe	16:09	1	Swimming	597424, 787433	Lake	Grange Lough
19/03/2024	15:00	17:00	Mute Swan	16:13	6	Swimming	597197, 787168	Lake	Grange Lough
19/03/2024	15:00	17:00	Mallard	16:14	2	Flying	597063, 787073	Lake	Grange Lough
19/03/2024	15:00	17:00	Coot	16:14	2	Swimming	596987, 787395	Lake	Grange Lough
19/03/2024	15:00	17:00	Coot	16:33	7	Swimming	597941, 784220	Lake	Kilglass Lough
19/03/2024	15:00	17:00	Little Grebe	16:34	3	Swimming	597824, 784477	Lake	Kilglass Lough
19/03/2024	15:00	17:00	Mute Swan	16:34	25	Roosting	597812, 785115	Lake	Kilglass Lough
19/03/2024	15:00	17:00	Mute Swan	16:34	9	Feeding	597505, 783748	Lake	Kilglass Lough
19/03/2024	15:00	17:00	Mute Swan	16:34	2	Swimming	597968, 784286	Lake	Kilglass Lough
19/03/2024	15:00	17:00	Tufted Duck	16:35	14	Swimming	597555, 783815	Lake	Kilglass Lough
19/03/2024	15:00	17:00	Coot	16:35	3	Swimming	597506, 783781	Lake	Kilglass Lough
19/03/2024	15:00	17:00	Great Crested Grebe	16:35	1	Diving	597706, 784447	Lake	Kilglass Lough
19/03/2024	15:00	17:00	Great Crested Grebe	16:35	1	Swimming	598053, 785385	Lake	Kilglass Lough
19/03/2024	15:00	17:00	Little Grebe	16:47	2	Swimming	598625, 785990	Lake	Kilglass Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
19/03/2024	15:00	17:00	Mute Swan	16:48	10	Swimming	598099, 786863	Lake	Kilglass Lough
19/03/2024	15:00	17:00	Mute Swan	16:48	3	Feeding	598366, 785867	Lake	Kilglass Lough
19/03/2024	15:00	17:00	Mute Swan	16:48	5	Swimming	598503, 785519	Lake	Kilglass Lough
19/03/2024	15:00	17:00	Mute Swan	16:49	4	Feeding	597738, 786543	Lake	Kilglass Lough
19/03/2024	15:00	17:00	Coot	16:49	12	Swimming	597930, 786657	Lake	Kilglass Lough
19/03/2024	15:00	17:00	Coot	16:49	2	Diving	598620, 785866	Lake	Kilglass Lough
19/03/2024	15:00	17:00	Tufted Duck	16:49	12	Swimming	598141, 785482	Lake	Kilglass Lough
19/03/2024	15:00	17:00	Mute Swan	16:50	3	Preening	598543, 786481	Lake	Kilglass Lough
19/03/2024	15:00	17:00	Coot	16:50	1	Diving	598478, 786468	Lake	Kilglass Lough
19/03/2024	15:00	17:00	Cormorant	16:54	1	Diving	598420, 786101	Lake	Kilglass Lough
20/03/2024	08:40	10:40	Tufted Duck	09:06	19	Swimming	600683, 785527	Lake	Lough Acrick
20/03/2024	08:40	10:40	Mallard	09:07	1	Male	600665, 785342	Lake	Lough Acrick
20/03/2024	08:40	10:40	Great Crested Grebe	09:07	3	Swimming	600696, 785421	Lake	Lough Acrick
20/03/2024	08:40	10:40	Mute Swan	09:08	2	Swimming	601084, 785106	Lake	Lough Acrick
20/03/2024	08:40	10:40	Great Crested Grebe	09:08	1	Diving	601054, 785053	Lake	Lough Acrick
20/03/2024	08:40	10:40	Mute Swan	09:31	1	Preening	595557, 785936	Lake	Grange Lough
20/03/2024	08:40	10:40	Mute Swan	09:31	4	Swimming	596298, 785950	Lake	Grange Lough
20/03/2024	08:40	10:40	Tufted Duck	09:31	12	Swimming	596119, 785980	Lake	Grange Lough
20/03/2024	08:40	10:40	Tufted Duck	09:31	8	Swimming	596334, 786079	Lake	Grange Lough
20/03/2024	08:40	10:40	Black-headed Gull	09:32	2	Flying	596121, 785913	Lake	Grange Lough
20/03/2024	08:40	10:40	Great Crested Grebe	09:32	2	Swimming	595805, 786027	Lake	Grange Lough
20/03/2024	08:40	10:40	Great Crested Grebe	09:32	1	Diving	596169, 785887	Lake	Grange Lough
20/03/2024	08:40	10:40	Little Grebe	09:33	5	Swimming	595767, 786012	Lake	Grange Lough
20/03/2024	08:40	10:40	Coot	09:33	10	Swimming	596245, 785982	Lake	Grange Lough
20/03/2024	08:40	10:40	Cormorant	09:33	1	Perched	596274, 786108	Lake	Grange Lough
20/03/2024	08:40	10:40	Teal	09:53	5	Roosting	601851, 778162	River	Feorish River
20/03/2024	08:40	10:40	Mute Swan	09:54	2	Feeding	601879, 778054	Lake	Feorish River

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
20/03/2024	08:40	10:40	Mute Swan	10:18	3	Feeding	597524, 786239	Lake	Kilglass Lough
20/03/2024	08:40	10:40	Mute Swan	10:18	2	Swimming	597602, 786068	Lake	Kilglass Lough
20/03/2024	08:40	10:40	Mute Swan	10:18	2	Swimming	597344, 785925	Lake	Kilglass Lough
20/03/2024	08:40	10:40	Coot	10:19	1	Swimming	597564, 786233	Lake	Kilglass Lough
20/03/2024	08:40	10:40	Coot	10:19	3	Swimming	597418, 785982	Lake	Kilglass Lough
20/03/2024	08:40	10:40	Great Crested Grebe	10:19	1	Diving	597306, 786016	Lake	Kilglass Lough
20/03/2024	08:40	10:40	Little Grebe	10:19	1	Calling	597496, 786214	Lake	Kilglass Lough
20/03/2024	08:40	10:40	Moorhen	10:20	3	Swimming	597444, 786167	Lake	Kilglass Lough
20/03/2024	08:40	10:40	Mute Swan	10:32	7	Swimming	596523, 786239	Lake	Kilglass Lough
20/03/2024	08:40	10:40	Cormorant	10:32	1	Flying	596569, 786299	Lake	Kilglass Lough
20/03/2024	08:40	10:40	Mute Swan	10:33	5	Swimming	596866, 786573	Lake	Kilglass Lough
20/03/2024	08:40	10:40	Tufted Duck	10:33	16	Swimming	596926, 786652	Lake	Kilglass Lough
26/03/2024	08:20	11:20	Mute Swan	08:37	4	Feeding	597859, 784346	Lake	Kilglass Lough
26/03/2024	08:20	11:20	Great Crested Grebe	08:39	1	Swimming	597682, 784007	Lake	Kilglass Lough
26/03/2024	08:20	11:20	Coot	08:39	5	Swimming	597727, 784080	Lake	Kilglass Lough
26/03/2024	08:20	11:20	Cormorant	08:39	1	Flying	597862, 784174	Lake	Kilglass Lough
26/03/2024	08:20	11:20	Mute Swan	09:01	18	Feeding	598323, 785694	Lake	Kilglass Lough
26/03/2024	08:20	11:20	Mute Swan	09:01	10	Swimming	598044, 786664	Lake	Kilglass Lough
26/03/2024	08:20	11:20	Coot	09:01	11	Swimming	598602, 785742	Lake	Kilglass Lough
26/03/2024	08:20	11:20	Cormorant	09:02	2	Perched	598436, 785960	Lake	Kilglass Lough
26/03/2024	08:20	11:20	Lesser Black-backed Gull	09:02	2	Flying	598261, 786353	Lake	Kilglass Lough
26/03/2024	08:20	11:20	Black-headed Gull	09:02	1	Flying	598403, 786199	Lake	Kilglass Lough
26/03/2024	08:20	11:20	Tufted Duck	09:02	15	Swimming	598321, 785433	Lake	Kilglass Lough
26/03/2024	08:20	11:20	Tufted Duck	09:03	12	Swimming	597837, 786460	Lake	Kilglass Lough
26/03/2024	08:20	11:20	Mute Swan	09:03	3	Swimming	597961, 785189	Lake	Kilglass Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
26/03/2024	08:20	11:20	Mute Swan	09:30	17	Swimming & feeding	597433, 786144	Lake	Kilglass Lough
26/03/2024	08:20	11:20	Little Grebe	09:30	4	Diving & calling	597562, 786255	Lake	Kilglass Lough
26/03/2024	08:20	11:20	Mallard	09:30	3	Swimming	597594, 786101	Lake	Kilglass Lough
26/03/2024	08:20	11:20	Coot	09:31	2	Swimming	597562, 786193	Lake	Kilglass Lough
26/03/2024	08:20	11:20	Moorhen	09:40	1	Walking	595531, 785883	Lake	Grange Lough
26/03/2024	08:20	11:20	Coot	09:41	7	Swimming	595662, 785963	Lake	Grange Lough
26/03/2024	08:20	11:20	Coot	09:41	5	Swimming	596336, 786046	Lake	Grange Lough
26/03/2024	08:20	11:20	Great Crested Grebe	09:41	1	Diving	596270, 786048	Lake	Grange Lough
26/03/2024	08:20	11:20	Tufted Duck	09:42	11	Swimming	596365, 786168	Lake	Grange Lough
26/03/2024	08:20	11:20	Tufted Duck	09:42	13	Swimming	596709, 786459	Lake	Grange Lough
26/03/2024	08:20	11:20	Mute Swan	09:42	2	Swimming	596743, 786383	Lake	Grange Lough
26/03/2024	08:20	11:20	Mute Swan	09:42	1	Swimming	596538, 786335	Lake	Grange Lough
26/03/2024	08:20	11:20	Mute Swan	09:43	7	Swimming	596291, 785940	Lake	Grange Lough
26/03/2024	08:20	11:20	Grey Heron	09:43	1	Flying	596078, 785867	Lake	Grange Lough
26/03/2024	08:20	11:20	Cormorant	09:56	1	Perched	595600, 785800	Lake	Grange Lough
26/03/2024	08:20	11:20	Coot	09:57	2	Swimming	595471, 785981	Lake	Grange Lough
26/03/2024	08:20	11:20	Tufted Duck	10:03	6	Swimming	596556, 786816	Lake	Grange Lough
26/03/2024	08:20	11:20	Great Crested Grebe	10:03	1	Swimming	596483, 786851	Lake	Grange Lough
26/03/2024	08:20	11:20	Coot	10:03	7	Swimming	596564, 786927	Lake	Grange Lough
26/03/2024	08:20	11:20	Cormorant	10:04	1	Perched	596907, 786901	Lake	Grange Lough
26/03/2024	08:20	11:20	Little Grebe	10:11	3	Swimming	597273, 787863	Lake	Grange Lough
26/03/2024	08:20	11:20	Mute Swan	10:11	8	Swimming	597328, 787297	Lake	Grange Lough
26/03/2024	08:20	11:20	Coot	10:11	7	Swimming	597638, 787537	Lake	Grange Lough
26/03/2024	08:20	11:20	Mallard	10:12	1	Flying	597189, 787501	Lake	Grange Lough
26/03/2024	08:20	11:20	Mallard	10:12	2	Swimming	597265, 787289	Lake	Grange Lough
26/03/2024	08:20	11:20	Coot	10:14	6	Swimming	596820, 787139	Lake	Grange Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody name (if applicable)
26/03/2024	08:20	11:20	Great Crested Grebe	10:14	2	Diving	596994, 787072	Lake	Grange Lough
26/03/2024	08:20	11:20	Great Crested Grebe	10:33	4	Swimming	601049, 785279	Lake	Grange Lough
26/03/2024	08:20	11:20	Tufted Duck	10:34	9	Swimming	600985, 785201	Lake	Grange Lough
26/03/2024	08:20	11:20	Mallard	10:34	1	Male	601023, 785385	Lake	Grange Lough
26/03/2024	08:20	11:20	Mute Swan	10:34	2	Swimming	600834, 784966	Lake	Grange Lough
26/03/2024	08:20	11:20	Coot	10:35	7	Swimming	601072, 785108	Lake	Grange Lough
26/03/2024	08:20	11:20	Cormorant	10:35	1	Perched	600866, 785226	Lake	Grange Lough
26/03/2024	08:20	11:20	Mallard	10:49	1	Male	596600, 783313	River	Scramogue River
26/03/2024	08:20	11:20	Mallard	11:05	1	Male	601860, 778146	River	Feorish River
26/03/2024	08:20	11:20	Mute Swan	11:05	4	Feeding	601855, 778062	River	Feorish River

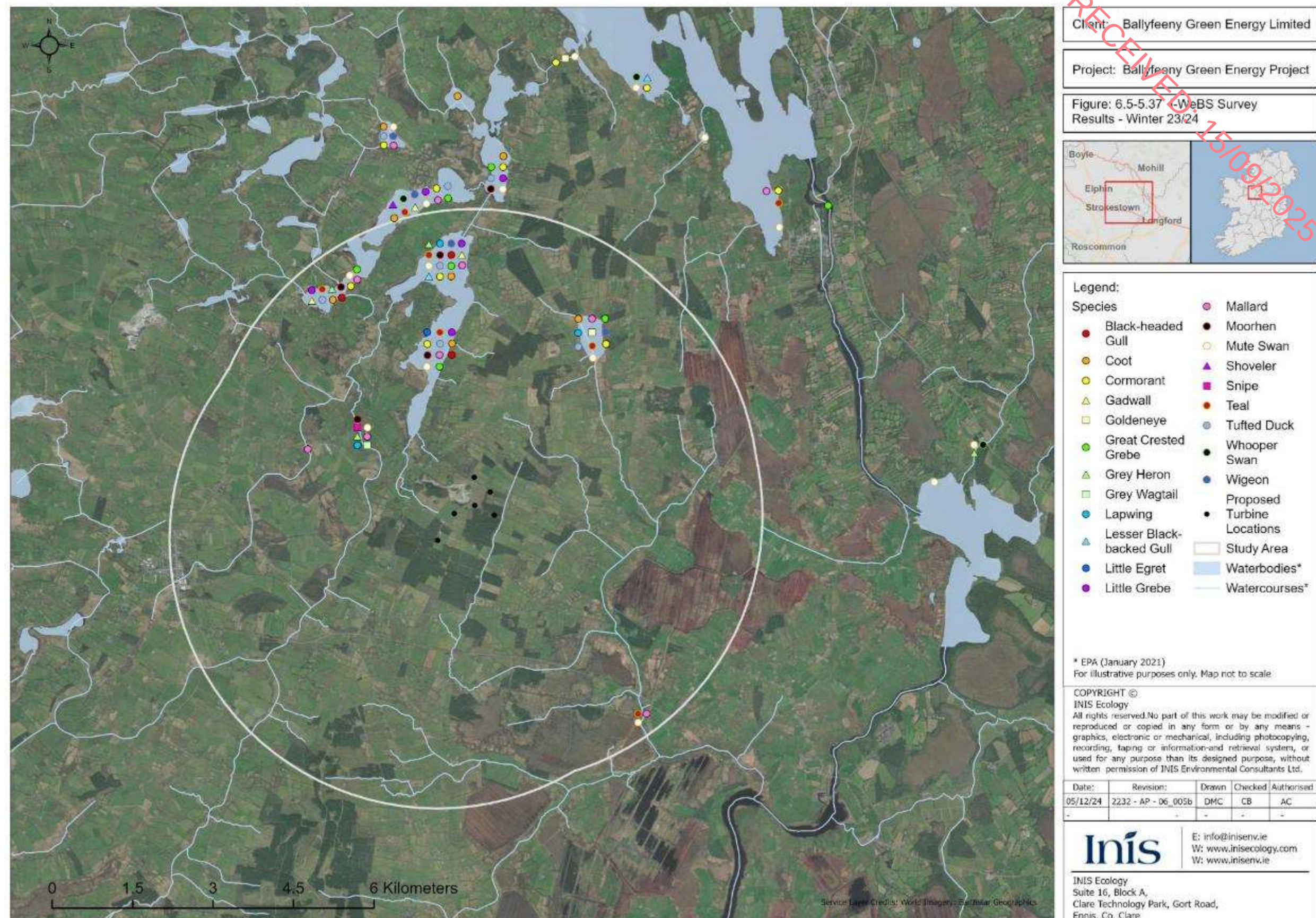


Figure 5.37: I-WeBS results for the winter season 2023/2024

5.4.4.4 Breeding Season 2024

A total of 375 individuals from 13 species were recorded during I-WeBS surveys in April and May 2024 (see **Table 5.42**). Mute Swan were the most numerous species encountered, with 114 individuals recorded in April, followed by Great Crested Grebe, which had 27 individuals recorded in April. Details of survey conditions for all I-WeBS survey visits is shown in **Table 5.43**.

A full breakdown of all sightings is presented in **Table 5.44**, with locations shown for all species observed in **Figure 5.38**.

Table 5.42: Breeding season 2024 I-WeBS Species Counts.

Species	April	May	Total
Black-headed Gull	1	-	1
Coot	22	11	33
Cormorant	12	4	16
Great Crested Grebe	27	21	48
Grey Heron	6	1	7
Lesser Black-backed Gull	3	-	3
Little Egret	1	-	1
Little Grebe	14	2	16
Mallard	8	7	15
Moorhen	4	1	5
Mute Swan	114	94	208
Tufted Duck	15	-	15
Whooper Swan	7	-	7
TOTAL	234	141	375

Table 5.18: Breeding season 2024 I-WeBS Visit Data.

Date	Observer	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction	Temp.
10/04/2024	NC	14:50	18:50	Drizzle/rain	8/8	10	F4	SW	13
23/04/2024	NA	15:50	15:50	None	1/8	16	F3	NNW	13
08/05/2024	NC	10:35	13:35	None	8/8	20	F1	SSW	13
29/05/2024	NC	11:00	14:00	Occasional showers	8/8	20	F3	NW	14

Table 5.19: Breeding season 2024 I-WeBS Results.

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody
10/04/2024	14:50	18:50	Mute Swan	15:13	20	Feeding/swimming	597591, 784853	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Mute Swan	15:14	1	Feeding	597864, 784262	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Mute Swan	15:14	2	Feeding	597542, 783881	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Mute Swan	15:14	2	Feeding	598089, 784534	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Cormorant	15:15	5	Perched	598105, 785144	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Cormorant	15:15	1	Flying	597653, 783531	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Little Grebe	15:16	1	Calling	597881, 784047	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Tufted Duck	15:16	7	Swimming	597503, 783456	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Great Crested Grebe	15:16	2	Swimming	597798, 785044	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Great Crested Grebe	15:17	4	Swimming	597509, 783616	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Coot	15:17	1	Swimming	597783, 784162	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Coot	15:17	3	Swimming	597649, 784840	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Coot	15:17	2	Swimming	597487, 783577	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Moorhen	15:29	1	Preening	598395, 785793	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Mute Swan	15:30	7	Swimming/feeding	597563, 786292	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Mute Swan	15:30	1	Preening	597353, 786138	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Great Crested Grebe	15:31	2	Diving	598315, 786002	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Whooper Swan	15:31	7	Roosting/preening	597920, 785397	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Mute Swan	15:32	5	Feeding	597961, 785340	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Coot	15:32	2	Swimming	598313, 785711	Lake	Kilglass Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody
10/04/2024	14:50	18:50	Mallard	15:32	1	Flying	597994, 785466	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Mute Swan	15:33	8	Roosting	598567, 786073	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Mute Swan	15:33	2	Feeding	598584, 785659	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Little Grebe	15:33	1	Calling	598689, 785810	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Mute Swan	15:36	1	Roosting	598492, 785759	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Tufted Duck	15:44	3	Diving/swimming	600710, 785266	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Coot	15:44	1	Swimming	601086, 785212	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Great Crested Grebe	15:45	2	Swimming	601035, 784946	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Cormorant	15:57	1	Flying	596600, 783323	River	Scramogue River
10/04/2024	14:50	18:50	Mute Swan	15:57	2	Swimming	596587, 783444	River	Scramogue River
10/04/2024	14:50	18:50	Little Grebe	16:05	1	Calling	595510, 785888	Lake	Grange Lough
10/04/2024	14:50	18:50	Coot	16:06	2	Swimming	595522, 785902	Lake	Grange Lough
10/04/2024	14:50	18:50	Mute Swan	16:06	1	Preening	595525, 785876	Lake	Grange Lough
10/04/2024	14:50	18:50	Cormorant	16:07	1	Perched	596286, 786035	Lake	Grange Lough
10/04/2024	14:50	18:50	Cormorant	16:07	1	Perched	596270, 786143	Lake	Grange Lough
10/04/2024	14:50	18:50	Moorhen	16:07	1	Swimming	596107, 785814	Lake	Grange Lough
10/04/2024	14:50	18:50	Mute Swan	16:07	2	Swimming	596434, 786094	Lake	Grange Lough
10/04/2024	14:50	18:50	Mute Swan	16:08	1	Feeding	596494, 786407	Lake	Grange Lough
10/04/2024	14:50	18:50	Mute Swan	16:08	2	Feeding	596276, 786219	Lake	Grange Lough
10/04/2024	14:50	18:50	Mute Swan	16:08	4	Swimming	596033, 786014	Lake	Grange Lough
10/04/2024	14:50	18:50	Great Crested Grebe	16:09	1	Swimming	595923, 785916	Lake	Grange Lough
10/04/2024	14:50	18:50	Coot	16:22	1	Calling	598104, 786942	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Mute Swan	16:22	2	Swimming	598349, 786936	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Cormorant	16:22	1	Perched	598183, 786729	Lake	Kilglass Lough
10/04/2024	14:50	18:50	Lesser Black-backed Gull	16:35	3	Swimming	595479, 785980	Lake	Grange Lough
10/04/2024	14:50	18:50	Moorhen	16:40	1	Swimming	595787, 786756	Lake	Black Lough
10/04/2024	14:50	18:50	Coot	16:45	1	Swimming	596875, 786552	Lake	Grange Lough
10/04/2024	14:50	18:50	Mute Swan	16:46	5	Swimming	596867, 786521	Lake	Grange Lough
10/04/2024	14:50	18:50	Coot	16:50	1	Swimming	596965, 786971	Lake	Grange Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody
10/04/2024	14:50	18:50	Great Crested Grebe	16:50	1	Diving	596969, 787152	Lake	Grange Lough
10/04/2024	14:50	18:50	Mute Swan	16:52	2	Feeding	597166, 787681	Lake	Grange Lough
10/04/2024	14:50	18:50	Mute Swan	16:54	2	Swimming	597697, 787534	Lake	Grange Lough
10/04/2024	14:50	18:50	Cormorant	16:54	1	Flying	597313, 787517	Lake	Grange Lough
10/04/2024	14:50	18:50	Mute Swan	17:36	4	Swimming	598942, 788002	Lake	Grange Lough
10/04/2024	14:50	18:50	Coot	17:36	1	Calling	599287, 787950	Lake	Grange Lough
10/04/2024	14:50	18:50	Mute Swan	17:36	2	Feeding	599041, 788194	Lake	Grange Lough
10/04/2024	14:50	18:50	Grey Heron	17:37	1	Flying	599246, 787771	Lake	Grange Lough
10/04/2024	14:50	18:50	Coot	17:37	2	Swimming	598917, 787954	Lake	Grange Lough
10/04/2024	14:50	18:50	Mallard	17:56	1	Male	601810, 778041	River	Feorish River
10/04/2024	14:50	18:50	Mute Swan	17:57	2	Feeding	601838, 777995	River	Feorish River
10/04/2024	14:50	18:50	Mute Swan	17:57	1	Feeding	601822, 778552	River	Feorish River
10/04/2024	14:50	18:50	Mute Swan	18:00	1	Swimming	601832, 778219	River	Feorish River
23/04/2024	15:50	15:50	Mute Swan	15:51	1	Amongst reeds	595839, 786039	Lake	Grange Lough
23/04/2024	15:50	15:50	Mute Swan	15:53	1	Sitting on a nest	595545, 785867	Lake	Grange Lough
23/04/2024	15:50	15:50	Great Crested Grebe	15:55	1	Foraging amongst reeds	595715, 785968	Lake	Grange Lough
23/04/2024	15:50	15:50	Great Crested Grebe	15:56	2	Displaying courtship behaviour	596029, 785839	Lake	Grange Lough
23/04/2024	15:50	15:50	Coot	15:58	1	Foraging amongst reeds	595617, 785787	Lake	Grange Lough
23/04/2024	15:50	15:50	Little Grebe	15:58	1	Heard, not seen.	595570, 785821	Lake	Grange Lough
23/04/2024	15:50	15:50	Mute Swan	15:59	2	Resting on bank	596546, 786388	Lake	Grange Lough
23/04/2024	15:50	15:50	Mute Swan	15:59	2	Resting on bank	596743, 786273	Lake	Grange Lough
23/04/2024	15:50	15:50	Great Crested Grebe	16:00	2		596269, 786172	Lake	Grange Lough
23/04/2024	15:50	15:50	Grey Heron	16:01	1	Perched in reeds	596030, 786008	Lake	Grange Lough
23/04/2024	15:50	15:50	Grey Heron	16:01	1	Sitting amongst reeds	595578, 785942	Lake	Grange Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody
23/04/2024	15:50	15:50	Mallard	16:01	1	Flew over lough and into reeds to the west	595853, 785841	Lake	Grange Lough
23/04/2024	15:50	15:50	Mute Swan	16:02	1	Foraging	596013, 785760	Lake	Grange Lough
23/04/2024	15:50	15:50	Nil Sightings	16:12			595872, 786786	Lake	Black Lough
23/04/2024	15:50	15:50	Nil Sightings	16:17			595863, 787112	Lake	Lough O'Donra
23/04/2024	15:50	15:50	Mallard	16:28	1	Flushed. Flew upstream	596592, 783439	River	River Scramogue
23/04/2024	15:50	15:50	Grey Heron	16:29	1	Flushed, flew away over fields	596610, 783223	River	River Scramogue
23/04/2024	15:50	15:50	Mallard	16:30	1	Resting on bank	596604, 783251	River	River Scramogue
23/04/2024	15:50	15:50	Great Crested Grebe	16:41	1	On water	597948, 784249	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Moorhen	16:41	1	Amongst reeds	597825, 784227	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Mallard	16:41	1	Spooked by surveyor	597834, 784139	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Grey Heron	16:43	1	Caught a fish	597858, 784250	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Little Grebe	16:44	1	Heard not seen	597811, 784206	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Little Grebe	16:44	1	Foraging	597814, 784165	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Coot	16:45	2	Foraging	597779, 784069	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Great Crested Grebe	16:45	2	On water	597574, 783788	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Mute Swan	16:46	3		597480, 783656	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Mute Swan	16:48	5	Resting on bank	597834, 784443	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Coot	16:48	1	Preening	597855, 784331	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Mute Swan	16:49	2	On bank	598033, 784401	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Mallard	16:51	1		597770, 784112	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Mute Swan	17:15	8	Resting on island	598412, 785949	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Mute Swan	17:15	1	Foraging	598506, 785940	Lake	Kilglass Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody
23/04/2024	15:50	15:50	Cormorant	17:16	1	Perched on partially submerged post	598508, 785604	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Mute Swan	17:17	1	Foraging	598438, 785528	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Black-headed Gull	17:18	1	Perched on post	598604, 786054	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Mute Swan	17:18	1	Foraging	598098, 785997	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Coot	17:20	1	Foraging	598503, 786037	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Grey Heron	17:21	1	Moving amongst reeds	598294, 785770	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Little Grebe	17:22	8	4 pairs near bank. A lot of calling	598656, 785956	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Mute Swan	17:23	4		597738, 784673	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Little Egret	17:24	1	Flew off eastward from bank of Lake	598015, 785473	Lake	Kilglass Lough
23/04/2024	15:50	15:50	Great Crested Grebe	17:40	1		601006, 784813	Lake	Lough Acrick
23/04/2024	15:50	15:50	Great Crested Grebe	17:40	2	Foraging near reeds	600759, 784987	Lake	Lough Acrick
23/04/2024	15:50	15:50	Great Crested Grebe	17:40	2	Out on water	600957, 785174	Lake	Lough Acrick
23/04/2024	15:50	15:50	Tufted Duck	17:41	2	Out on open water	600976, 785140	Lake	Lough Acrick
23/04/2024	15:50	15:50	Mallard	17:41	1	Resting on bank	601105, 785153	Lake	Lough Acrick
23/04/2024	15:50	15:50	Tufted Duck	17:43	3	Foraging	600797, 785388	Lake	Lough Acrick
23/04/2024	15:50	17:50	Great Crested Grebe	17:43	2	Amongst reeds	600818, 785520	Lake	Lough Acrick
08/05/2024	10:35	13:35	Mute Swan	11:00	4	Feeding	597972, 784257	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Mute Swan	11:00	10	Roosting & preening	597699, 785021	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Mute Swan	11:00	1	On a nest	597903, 784793	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Coot	11:01	1	Swimming	597983, 784315	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Coot	11:01	1	Swimming	597884, 784565	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Coot	11:01	1	Calling	597805, 784193	Lake	Kilglass Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody
08/05/2024	10:35	13:35	Little Grebe	11:01	1	Calling	597806, 784219	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Great Crested Grebe	11:02	3	Diving	597591, 783661	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Mallard	11:02	1	Male flying	597722, 783738	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Mute Swan	11:14	10	On island	598522, 785856	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Mute Swan	11:14	5	Swimming	598271, 785684	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Mute Swan	11:14	5	Swimming	597836, 786574	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Mute Swan	11:15	10	Swimming	598533, 786313	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Cormorant	11:15	1	Diving	598408, 785534	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Great Crested Grebe	11:15	1	Diving	598210, 785442	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Great Crested Grebe	11:23	10	Swimming	600762, 785399	Lake	Lough Acrick
08/05/2024	10:35	13:35	Grey Heron	11:23	1	Hunting	601094, 785223	Lake	Lough Acrick
08/05/2024	10:35	13:35	Mute Swan	11:35	2	Swimming	596589, 783412	River	Scramogue River
08/05/2024	10:35	13:35	Mallard	11:35	2	Male & Female flying	596594, 783310	River	Scramogue River
08/05/2024	10:35	13:35	Coot	11:54	2	Swimming	595553, 785826	Lake	Grange Lough
08/05/2024	10:35	13:35	Mute Swan	11:54	1	Roosting	595547, 785915	Lake	Grange Lough
08/05/2024	10:35	13:35	Coot	11:54	1	Swimming	596284, 785950	Lake	Grange Lough
08/05/2024	10:35	13:35	Great Crested Grebe	11:54	1	Diving	596410, 786264	Lake	Grange Lough
08/05/2024	10:35	13:35	Mute Swan	12:03	1	Swimming	597728, 786209	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Coot	12:04	1	Swimming	597592, 786093	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Coot	12:04	1	Swimming	597272, 786062	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Great Crested Grebe	12:04	1	Swimming	597304, 786038	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Cormorant	12:04	1	Flying	598074, 786497	Lake	Kilglass Lough
08/05/2024	10:35	13:35	Mute Swan	12:26	3	Swimming	596926, 786896	Lake	Grange Lough
08/05/2024	10:35	13:35	Coot	12:27	1	Swimming	596452, 786938	Lake	Grange Lough
08/05/2024	10:35	13:35	Mute Swan	12:27	1	Swimming	596790, 786542	Lake	Grange Lough
08/05/2024	10:35	13:35	Cormorant	12:30	1	Diving	596988, 787130	Lake	Grange Lough
08/05/2024	10:35	13:35	Mute Swan	12:30	2	Swimming	597128, 787137	Lake	Grange Lough
08/05/2024	10:35	13:35	Mute Swan	12:31	1	Feeding	597355, 787319	Lake	Grange Lough

Date	Start Time	End Time	Species	Time of Sighting	Number	Observations	Location	Habitat Type	Waterbody
08/05/2024	10:35	13:35	Mallard	12:31	2	Flying	596829, 787083	Lake	Grange Lough
08/05/2024	10:35	13:35	Coot	12:31	2	Swimming	597031, 787033	Lake	Grange Lough
08/05/2024	10:35	13:35	Great Crested Grebe	12:31	2	Preening	596689, 786988	Lake	Grange Lough
08/05/2024	10:35	13:35	Mute Swan	12:52	1	Swimming	601856, 778168	River	Feorish River
29/05/2024	11:00	14:00	Mallard	11:17	2	Flying	596589, 783339	River	Scramogue River
29/05/2024	11:00	14:00	Mute Swan	11:33	2	Swimming	597714, 786201	Lake	Kilglass Lough
29/05/2024	11:00	14:00	Mute Swan	11:38	2	Swimming	598186, 786572	Lake	Kilglass Lough
29/05/2024	11:00	14:00	Moorhen	11:38	1	Swimming	597965, 786795	Lake	Kilglass Lough
29/05/2024	11:00	14:00	Cormorant	11:45	1	Perched	595731, 785769	Lake	Grange Lough
29/05/2024	11:00	14:00	Mute Swan	11:51	2	Swimming	595771, 786808	Lake	Black Lough
29/05/2024	11:00	14:00	Mute Swan	11:54	1	Swimming	596607, 786918	Lake	Grange Lough
29/05/2024	11:00	14:00	Mute Swan	11:57	1	Swimming	597122, 787466	Lake	Grange Lough
29/05/2024	11:00	14:00	Mute Swan	11:58	3	Swimming	597255, 787769	Lake	Grange Lough
29/05/2024	11:00	14:00	Little Grebe	12:18	1	Calling	597855, 784247	Lake	Kilglass Lough
29/05/2024	11:00	14:00	Mute Swan	12:19	2	Swimming	598016, 784378	Lake	Kilglass Lough
29/05/2024	11:00	14:00	Mute Swan	12:19	1	Swimming	597528, 783840	Lake	Kilglass Lough
29/05/2024	11:00	14:00	Great Crested Grebe	12:19	1	Diving	597666, 783754	Lake	Kilglass Lough
29/05/2024	11:00	14:00	Mute Swan	12:35	16	Roosting on island	598564, 785900	Lake	Kilglass Lough
29/05/2024	11:00	14:00	Mute Swan	12:36	2	Roosting on island	598445, 786072	Lake	Kilglass Lough
29/05/2024	11:00	14:00	Mute Swan	12:36	1	Swimming	598322, 785895	Lake	Kilglass Lough
29/05/2024	11:00	14:00	Mute Swan	12:36	1	Swimming	598247, 785623	Lake	Kilglass Lough
29/05/2024	11:00	14:00	Great Crested Grebe	12:36	1	Swimming	598383, 785389	Lake	Kilglass Lough
29/05/2024	11:00	14:00	Mute Swan	12:37	2	Swimming	597975, 785281	Lake	Kilglass Lough
29/05/2024	11:00	14:00	Great Crested Grebe	13:03	1	Swimming	600850, 785113	Lake	Lough Acrick
29/05/2024	11:00	14:00	Mute Swan	13:19	1	Swimming	601858, 778184	River	Feorish River

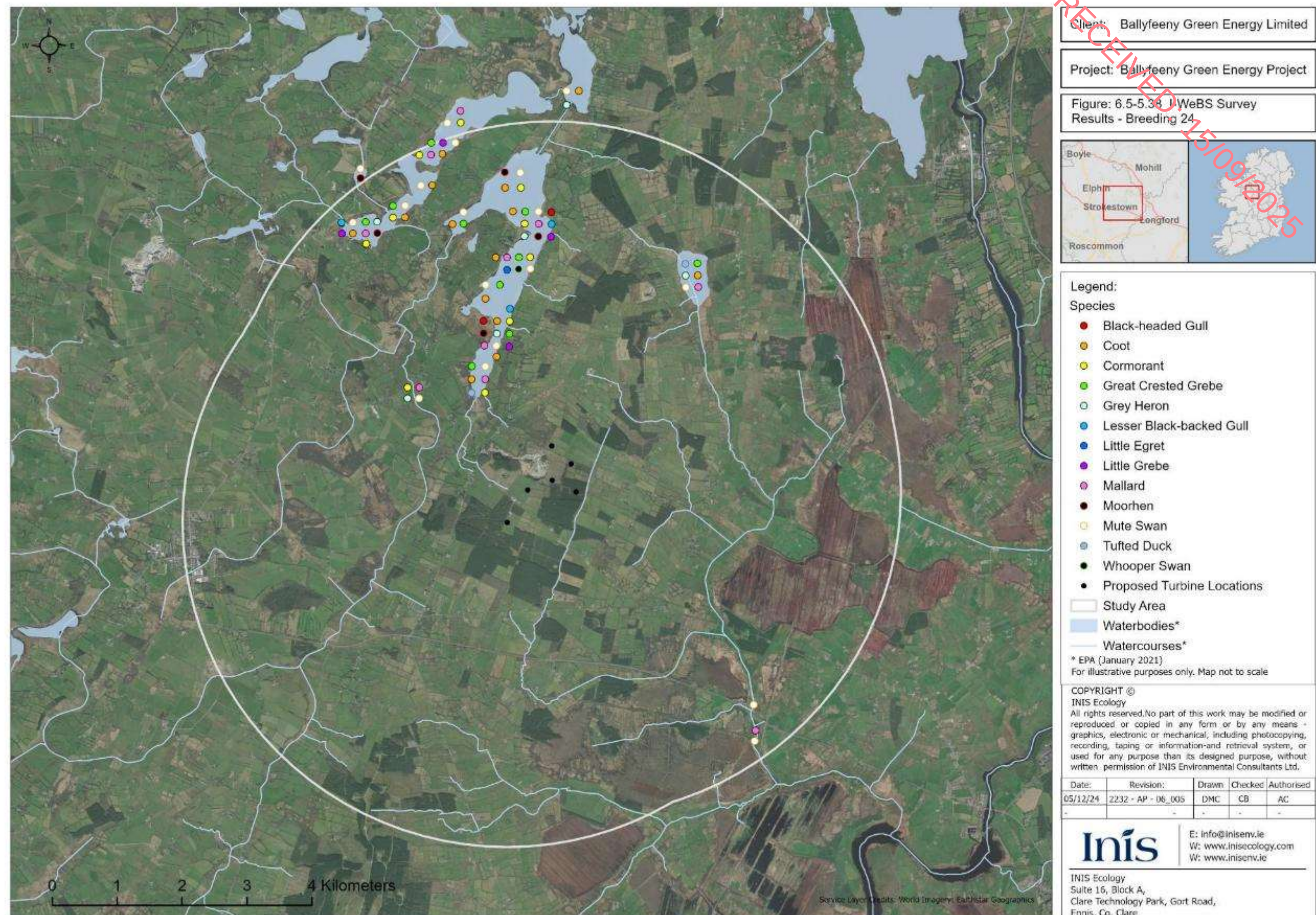


Figure 5.38: I-WeBS results for the breeding season 2024.

5.4.5 Breeding Kestrel & Peregrine Surveys

The location of the breeding raptor survey area is shown in **Figure 5.39**. The breeding raptor surveys had two elements: the suitability surveys to look for potential nesting sites; and the activity surveys to check for signs of occupation at the potential nesting sites identified as part of the suitability survey.

5.4.5.1 Breeding Raptor Suitability Survey

The results of the breeding raptor suitability survey are shown in **Table 5.45**. A total of ten potential Kestrel or Peregrine nesting sites were identified, of which two were considered to be of high suitability, two of intermediate suitability, two of low suitability and four of negligible suitability (see **Figure 5.40** for the location of these sites).

5.4.5.2 Breeding Raptor Activity Survey 2023

Breeding raptor surveys were undertaken on six occasions during the 2023 breeding season (see **Table 5.46**) for details on the visits undertaken. During these activity surveys, an active Peregrine nest was located; please see **Appendix 6.5A: Technical Appendix Ornithology Redacted** for further information. In addition, Kestrel was observed on two occasions at one location although no active nest was identified (see **Table 5.47** and **Figure 5.41** for details of sightings).

5.4.5.3 Breeding Raptor Activity Survey 2024

Breeding raptor surveys were undertaken on seven occasions during the 2024 breeding season (see **Table 5.48**) for details on the visits undertaken. During these activity surveys, an active Peregrine nest was located; please see **Appendix 6.5A: Technical Appendix Ornithology Redacted** for further information. In addition, a pair of Kestrels were briefly observed flying to the west of the site although no active nest was identified. See **Table 5.49** and **Figure 5.42** for details of Kestrel sightings and **Table 5.49** and **Figure 5.43** for details of Peregrine sightings.

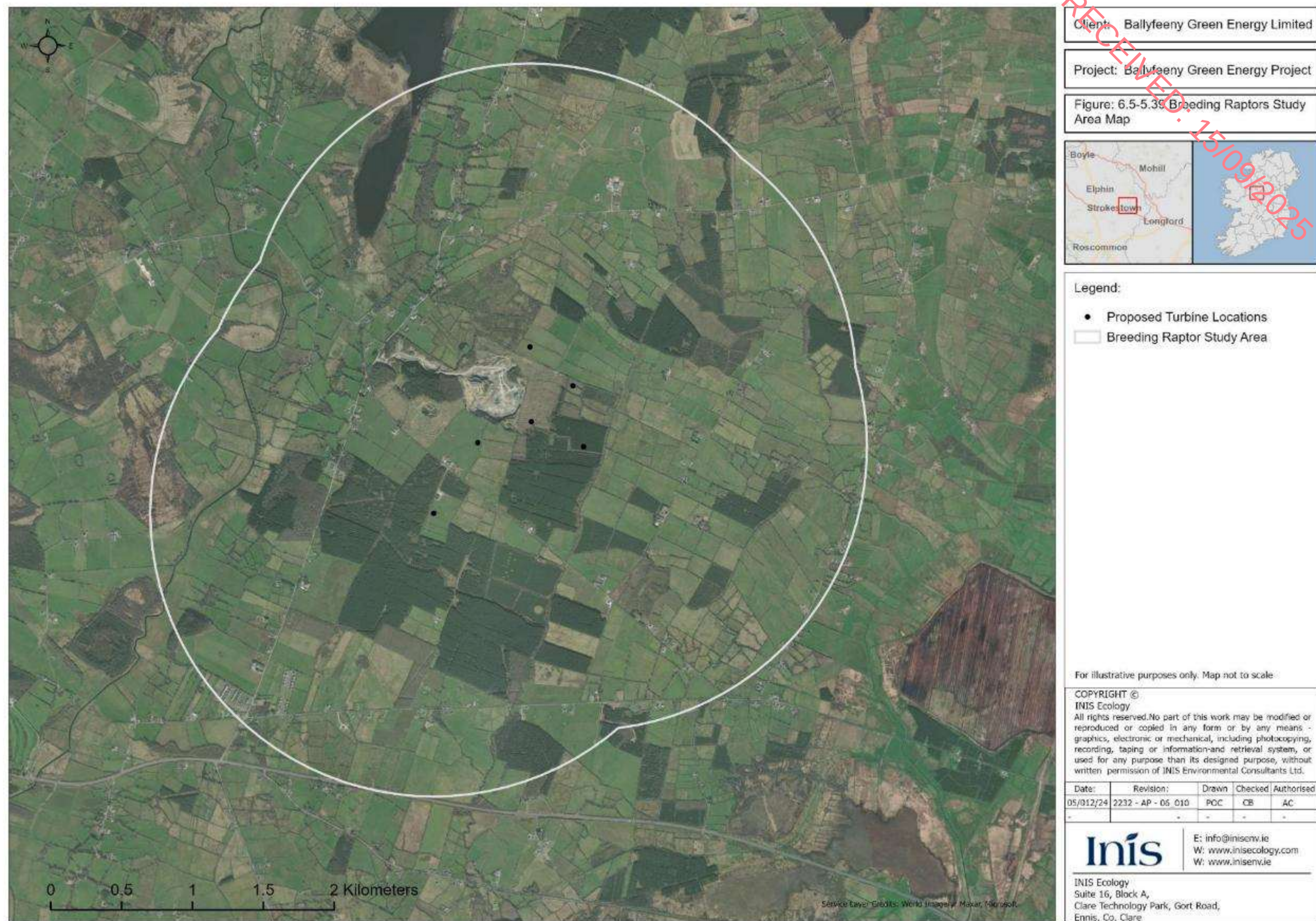


Figure 5.39: Breeding raptor survey area.

Table 5.20: Breeding Raptor Suitability Survey Results 2022/2023.

Date	Time of sighting	Location of sighting	Species	Evidence	Site Type	Site Suitability	Notes
02/03/2023	-	596955, 784088	Nil Sightings	No high ledges	Modern Agricultural building	Negligible	
02/03/2023	-	597322, 782810	Nil Sightings	No high ledges / too enclosed	Traditional Agricultural building	Negligible	
02/03/2023	-	596305, 782424	Nil Sightings	No high ledges / too enclosed	Traditional Agricultural building	Negligible	
02/03/2023	-	596662, 779953	Nil Sightings	only one high ledge	Other (specify in notes)	Low	Church
02/03/2023	-	601381, 783042	Nil Sightings	No high ledges	Other (specify in notes)	Negligible	Church
02/03/2023	-	600563, 784923	Nil Sightings	Cliff edges present	Other (specify in notes)	High	Quarry
02/03/2023	-	598943, 785332	Nil Sightings	church bell ledge	Other (specify in notes)	Low	Church
02/03/2023	-	598632, 782478	Nil Sightings	Cliff edges present	Other (specify in notes)	High	Quarry
02/03/2023	-	604648, 786636	Nil Sightings	High ledge	Other (specify in notes)	Intermediate	water tower
02/03/2023	-	604761, 786952	Nil Sightings	High tower	Other (specify in notes)	Intermediate	Church



Figure 5.40: Winter season 2022/2023 breeding raptor suitability survey results.

Table 5.46: Breeding season 2023 Breeding Raptor Survey Visit Data.

Date	Observer	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction	Temp.
12/05/2023	HM	11:00	14:00	Dry	4/8	2	F1	W	15
23/05/2023	NL	11:00	14:00	None	5/8	2	F2	NE	13
24/05/2023	HM	11:15	14:30	Dry	8/8	2	F2	W	15
20/06/2023	CD	13:40	17:00	Occasional showers	8/8	14	F4	NNW	19
21/06/2023	CD	14:00	18:00	Occasional showers	6/8	15	F4	NW	22
26/07/2023	NL	15:30	18:30	Constant	8/8	2	F2	S	16

Table 5.21: Breeding season 2023 Breeding Raptor Survey Sightings.

Date	Time of sighting	Location of sighting	Species sighting	Evidence	Site Type	Site Suitability	Notes
12/05/2023	11:40	598678, 783613	Nil Sightings	Low disturbance	Mix of traditional & modern agricultural buildings	Intermediate	Kestrel/ Barn Owl
23/05/2023	-	598587, 782015	Nil Sightings	Nil sightings	Other (specify in notes)	High	Quarry
24/05/2023	-	598632, 782478	Nil Sightings	Nil sightings	Other (specify in notes)	High	
20/06/2023	REDACTED. See Appendix 6.5A for data and results.						
20/06/2023	REDACTED. See Appendix 6.5A for data and results.						
20/06/2023	14:25	596777, 780533	Nil Sightings	Nil sightings		Intermediate	
20/06/2023	15:02	598122, 781823	Kestrel	Other (specify in notes)	Other (specify in notes)	Intermediate	Male Hunting. Habitat: Open field
20/06/2023	15:14	599756, 781749	Kestrel	Other (specify in notes)	Other (specify in notes)	Intermediate	Habitat: Open field
20/06/2023	15:22	600220, 782275	Nil Sightings	Nil sightings	Modern Agricultural building	Low	
20/06/2023	15:30	599639, 781306	Nil Sightings	Nil sightings	Modern Agricultural building	High	
20/06/2023	16:30	599800, 780254	Nil Sightings	Nil sightings	Traditional Agricultural building	High	

Date	Time of sighting	Location of sighting	Species sighting	Evidence	Site Type	Site Suitability	Notes
20/06/2023	16:40	597945, 784156	Nil Sightings	Nil sightings	Other (specify in notes)	Intermediate	Lakeside, upward view of hill/forest
21/06/2023	REDACTED. See Appendix 6.5A for data and results.						
21/06/2023	16:26	599524, 783725	Nil Sightings	Nil sightings	Tree hole/hollow	Intermediate	Tree habitat
21/06/2023	17:30	598091, 780000	Nil Sightings	Nil sightings	Traditional Agricultural building	High	Collection of old buildings
26/07/2023	15:30	599524, 783725	Nil Sightings	Nil sightings	Tree hole/hollow	Intermediate	
26/07/2023	16:40	598889, 782345	Nil Sightings	Nil sightings	Other (specify in notes)	High	Quarry

RECEIVED: 15/09/2025

Figure redacted – See Appendix 6.5A

Figure 5.41: *Breeding season 2023 breeding raptor survey results.*

Table 5.48: Breeding season 2024 Breeding Raptor Survey Visit Data.

Date	Observer	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction	Temp.
11/04/2024	NC	10:30	14:30	Light drizzle	8/8	5	F2	SSW	13
09/04/2024	NC	08:50	11:50	Occasional showers	4/8	20	F4	NW	7
28/05/2024	NA	16:30	21:00	Drizzle	8/8	20	F3	SSW	12
12/06/2024	NC	15:15	18:15	None	7/8	20	F2	SW	16
13/06/2024	NC	08:10	11:10	Drizzle/rain	8/8	10	F3	SE	12
02/07/2024	NC	21:15	21:45	None	8/8	11	F3	SSW	13
03/07/2024	NC	11:00	15:30	None	7/8	20	F4	WNW	15

Table 5.49: Breeding season 2024 Breeding Peregrine and Kestrel Survey Results.

Date	Time of sighting	Location of sighting	Species sighting	Evidence	Site Type	Suitability	Notes
11/04/2024	10:39	REDACTED: See Appendix 6.5A for data and results.					
11/04/2024	10:50	REDACTED: See Appendix 6.5A for data and results.					
11/04/2024	11:02	598016, 782397	Kestrel	Other (specify in notes)	Other (specify in notes)	Intermediate	A pair of Kestrels flew over quarry in direction of conifer plantation (for 20secs, at <10 to 10-20m).
11/04/2024	13:02	600788, 782857	Nil Sightings	Nil sightings	Traditional Agricultural building	Intermediate	Derelict stone building with tin roof. Surveyed from 12:00-13:00, nil sightings. Pied wagtail nesting in structure

11/04/2024	14:23	597704, 782067	Nil Sightings	Nil sightings	Other (specify in notes)	Intermediate	Viewpoint looking over conifer plantation where the Kestrel pair were last seen heading.
09/04/2024	08:50	598351, 782273	Nil Sightings	Nil Sightings	Other (specify in notes)	High	Quarry
09/04/2024	08:50	597011, 780590	Nil Sightings	Nil Sightings	Traditional Agricultural building	Low	
09/04/2024	08:50	598013, 782903	Nil Sightings	Nil Sightings	Traditional Agricultural building	Low	
09/04/2024	08:50	598214, 783759	Nil Sightings	Nil Sightings	Traditional Agricultural building	Intermediate	
09/04/2024	08:50	597525, 782399	Nil Sightings	Nil Sightings	Ruin	Low	
09/04/2024	08:50	597307, 782801	Nil Sightings	Nil Sightings	Traditional Agricultural building	Intermediate	
09/04/2024	08:50	596520, 782887	Nil Sightings	Nil Sightings	Ruin	Intermediate	
09/04/2024	08:50	596320, 782555	Nil Sightings	Nil Sightings	Ruin	High	
09/04/2024	08:50	596304, 782442	Nil Sightings	Nil Sightings	Ruin	Intermediate	
09/04/2024	08:50	597695, 782860	Nil Sightings	Nil Sightings	Ruin	Low	
09/04/2024	08:50	597740, 782926	Nil Sightings	Nil Sightings	Ruin	Intermediate	
09/04/2024	08:50	598706, 783615	Nil Sightings	Nil Sightings	Traditional Agricultural building	Intermediate	
09/04/2024	08:50	599315, 783678	Nil Sightings	Nil Sightings	Modern Agricultural building	Intermediate	
09/04/2024	08:50	599464, 783472	Nil Sightings	Nil Sightings	Mix of traditional & modern agricultural buildings	Intermediate	
09/04/2024	08:50	599649, 783500	Nil Sightings	Nil Sightings	Mix of traditional & modern agricultural buildings	Intermediate	
09/04/2024	08:50	600222, 782270	Nil Sightings	Nil Sightings	Ruin	Intermediate	
09/04/2024	08:50	599611, 781291	Nil Sightings	Nil Sightings	Modern Agricultural building	Low	

09/04/2024	08:50	599591, 781097	Nil Sightings	Nil Sightings	Traditional Agricultural building	Low	
09/04/2024	08:50	598120, 781735	Nil Sightings	Nil Sightings	Mix of traditional & modern agricultural buildings	Intermediate	
09/04/2024	08:50	599203, 780836	Nil Sightings	Nil Sightings	Ruin	Intermediate	
09/04/2024	08:50	599557, 780565	Nil Sightings	Nil Sightings	Ruin	Low	
09/04/2024	08:50	598081, 780003	Nil Sightings	Nil Sightings	Ruin	Low	
09/04/2024	08:50	598068, 780434	Nil Sightings	Nil Sightings	Traditional Agricultural building	Low	
09/04/2024	08:50	598093, 783348	Nil Sightings	Nil Sightings	Ruin	Low	
09/04/2024	12:17	599815, 781594	Nil Sightings	Nil Sightings	Ruin	Low	
28/05/2024	17:56	REDACTED: See Appendix 6.5A for data and results.					
28/05/2024	19:29	596707, 779903	Nil Sightings	Nil sightings	Other (specify in notes)	Negligible	Church
28/05/2024	20:58	600201, 782268	Nil Sightings	Nil sightings	Ruin	Intermediate	
12/06/2024	16:48	600786, 782854	Nil Sightings	Nil sightings	Ruin	High	
12/06/2024	18:15	596305, 782441	Nil Sightings	Nil sightings	Ruin	Intermediate	
13/06/2024	09:22	597742, 782924	Nil Sightings	Nil sightings	Ruin	Intermediate	
13/06/2024	11:10	598112, 781743	Nil Sightings	Nil sightings	Mix of traditional & modern agricultural buildings	Intermediate	
02/07/2024	21:45	596529, 782889	Nil Sightings	Nil sightings	Ruin	Intermediate	
03/07/2024	12:13	596520, 782886	Nil Sightings	Nil sightings	Ruin	Intermediate	
03/07/2024	14:13	597307, 782802	Nil Sightings	Nil sightings	Other (specify in notes)	Intermediate	Sheds with swallows nesting within
03/07/2024	15:30	599203, 780834	Nil Sightings	Nil sightings	Ruin	Intermediate	

RECEIVED: 15/09/2025

Figure redacted – See Appendix 6.5A

Figure 5.42: *Breeding season 2024 breeding raptor survey results.*

RECEIVED: 15/09/2025

Figure redacted – See Appendix 6.5A

Figure 5.43: *Peregrine Nest Location Breeding Season 2023 and Breeding Season 2024.*

5.4.6 Wintering Hen Harrier (Roost) Survey

5.4.6.1 Winter Season 2022/2023

Wintering Hen Harrier roost surveys were undertaken monthly from October 2022 to March 2023 (see **Table 5.50** for details of visit times and weather conditions and **Figure 5.44** for the roost watch survey locations).

There were no Hen Harrier sightings during any of the survey visits (see **Table 5.51**).

5.4.6.2 Winter Season 2023/2024

Wintering Hen Harrier roost surveys were undertaken monthly from October 2023 to March 2024 (see **Table 5.52** for details of visit times and weather conditions and **Figure 5.45** for the roost watch survey locations).

There were two Hen Harrier sightings during the survey efforts (see **Table 5.53**). On 18/10/2023, one ringtail was seen quartering over the edge of the lake. It was not seen to land but continued to fly north along the lake shore. On 07/02/2024 a ringtail was seen flying from south-east to north-west; again, this individual was not seen to land but continued to fly until lost from view. See **Figure 5.46** for the location of these two sightings.

Table 5.50: Winter season 2022/2023 Hen Harrier Roost Survey Visit Data.

Date	Observer	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction	Temp
13/10/2022	NC	18:10	19:40	None	2/8	10	F3	SW	12
09/11/2022	ML	16:14	17:44	Showers	8/8	5	F2	SE	10
30/11/2022	NC	15:45	17:05	Drizzle	8/8	3	F3	SSE	10
11/01/2023	NC	16:00	17:20	None	8/8	5	F3	SW	7
27/02/2023	NL	17:30	19:00	Dry	7/8	2	F1	E	7
02/03/2023	HM	17:42	19:12	None	6/8	3	F1	E	6

Table 5.51: Winter season 2022/2023 Hen Harrier Roost Survey Results

Date	Exposure	Start Time	End Time	Sunrise/ sunset	Bird No	Sex	Arrival/ departure	Settling/ rising	Direction of arrival/departure	Notes	Location
13/10/2022	Partial	18:10	19:40	N/A	Nil sightings						597921, 784229
09/11/2022	Full	16:14	17:44	16:44	Nil sightings						600013, 783493
30/11/2022	Partial	15:45	17:05	16:15	Nil sightings						598884 782341
11/01/2023	Full	16:00	17:20	16:34	Nil sightings						597967 783104
27/02/2023	Partial	17:30	19:00	01:12	Nil sightings						598433, 781454
02/03/2023	Partial	17:42	19:12	18:12	Nil sightings						596339, 782089

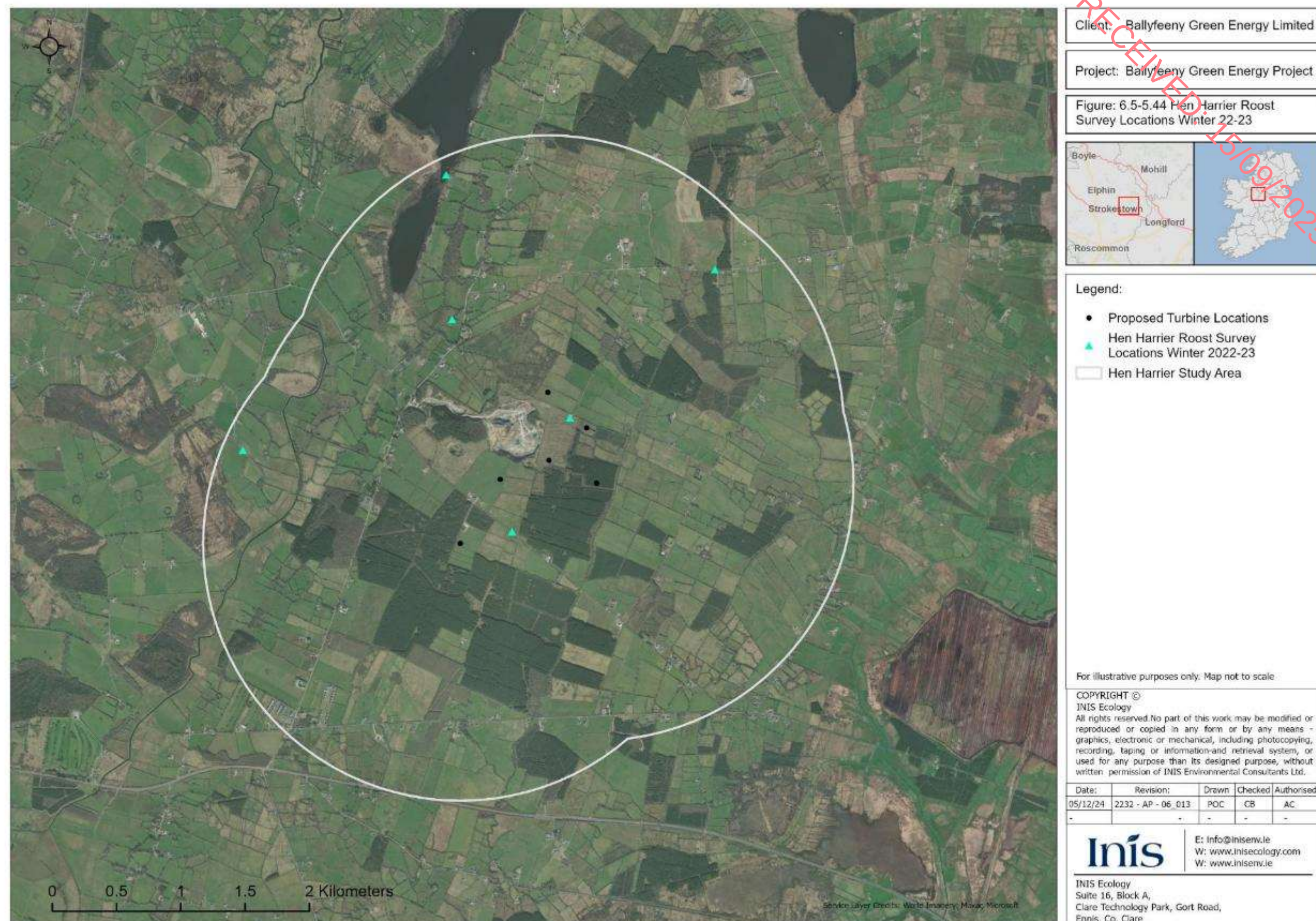


Figure 5.44: Winter season 2022/2023 Hen Harrier roost survey locations.

Table 5.52: Winter season 2023/2024 Hen Harrier Roost Survey Visit Data.

Date	Observer	Start Time	End Time	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction	Temp
18/10/2023	CG	17:29	19:14	Constant Rain	8/8	2	F4	E	13
09/11/2023	CG	15:30	17:30	Light Showers	8/8	5	F4	SW	8
19/12/2023	HM	15:30	17:00	None	6/8	2	F2	W	7
22/01/2024	HM	16:20	17:50	Heavy Showers	8/8	2	F3	W	7
07/02/2024	HM	17:00	18:30	None	7/8	2	F1	NW	7
19/03/2024	NC	17:45	19:15	Constant Rain	8/8	11	F1	NE	11

Table 5.53: Winter season 2023/2024 Hen Harrier Roost Survey Results.

Date	Exposure	Start Time	End Time	Sunrise/sunset	Bird No	Sex	Arrival/departure	Settling/rising	Direction of arrival/departure	Notes	Location
18/10/2023	Partial	17:29	19:14	18:29	1		17:42		N	Ringtail quartering over habitat next to lake. Lost sight of it as it was following the lake's edge, headed N. Not seen settling	597606, 784474
09/11/2023	Partial	15:30	17:30	16:44						Surveyor location; nil sightings	597965, 784183
19/12/2023	Partial	15:30	17:00	16:12	Nil sightings					No sightings	598132, 784086
22/01/2024	Full	16:20	17:50	16:54	Nil sightings						598884, 782329
07/02/2024	Partial	17:00	18:30	17:32	1	Ringtail	17:42		SE	Didn't land, just continued to fly out of line of sight	598419, 786661
19/03/2024	Partial	17:45	19:15	18:44	Nil sightings						595313, 781818

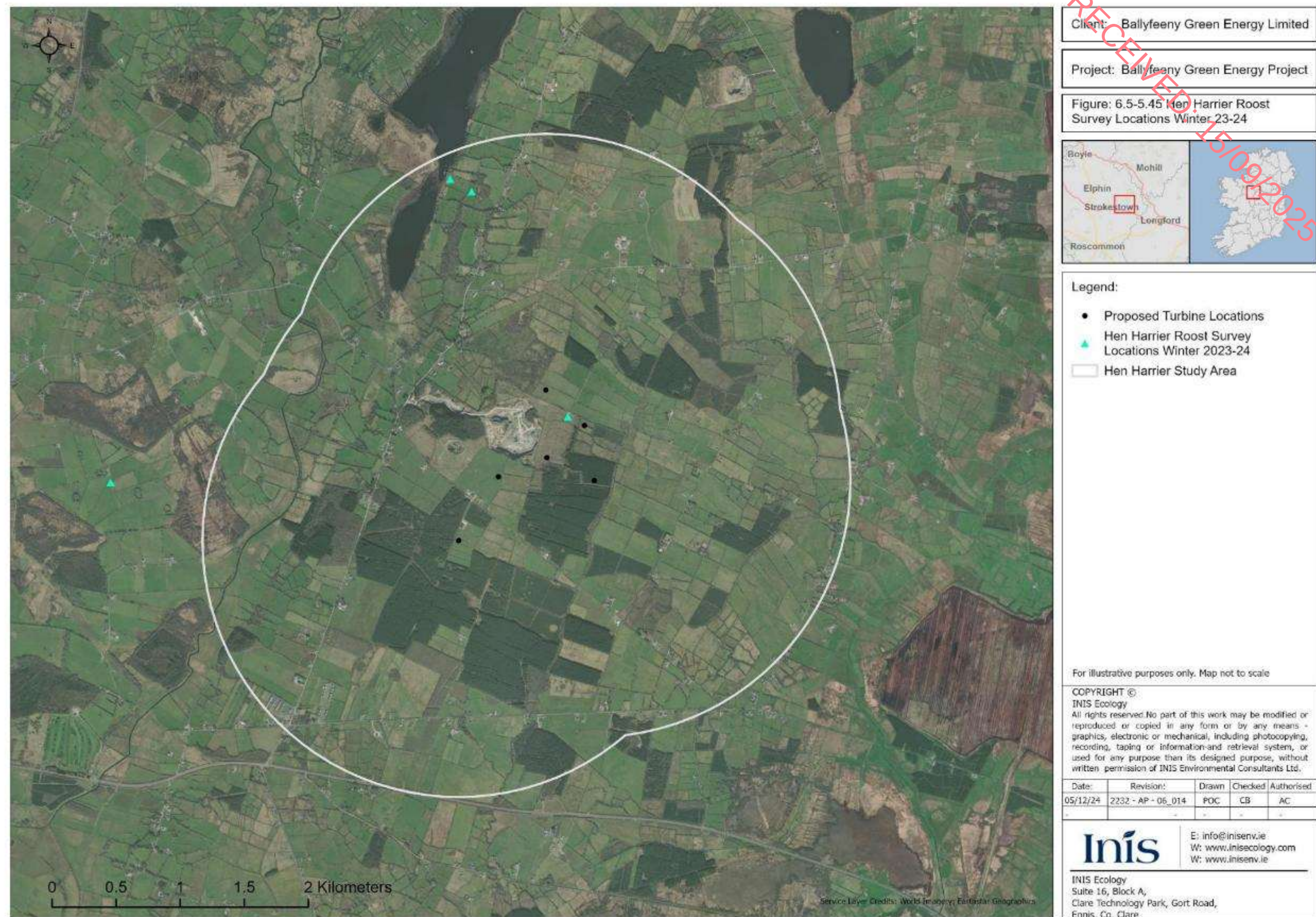


Figure 5.45: Winter season 2023/2024 Hen Harrier roost survey locations.

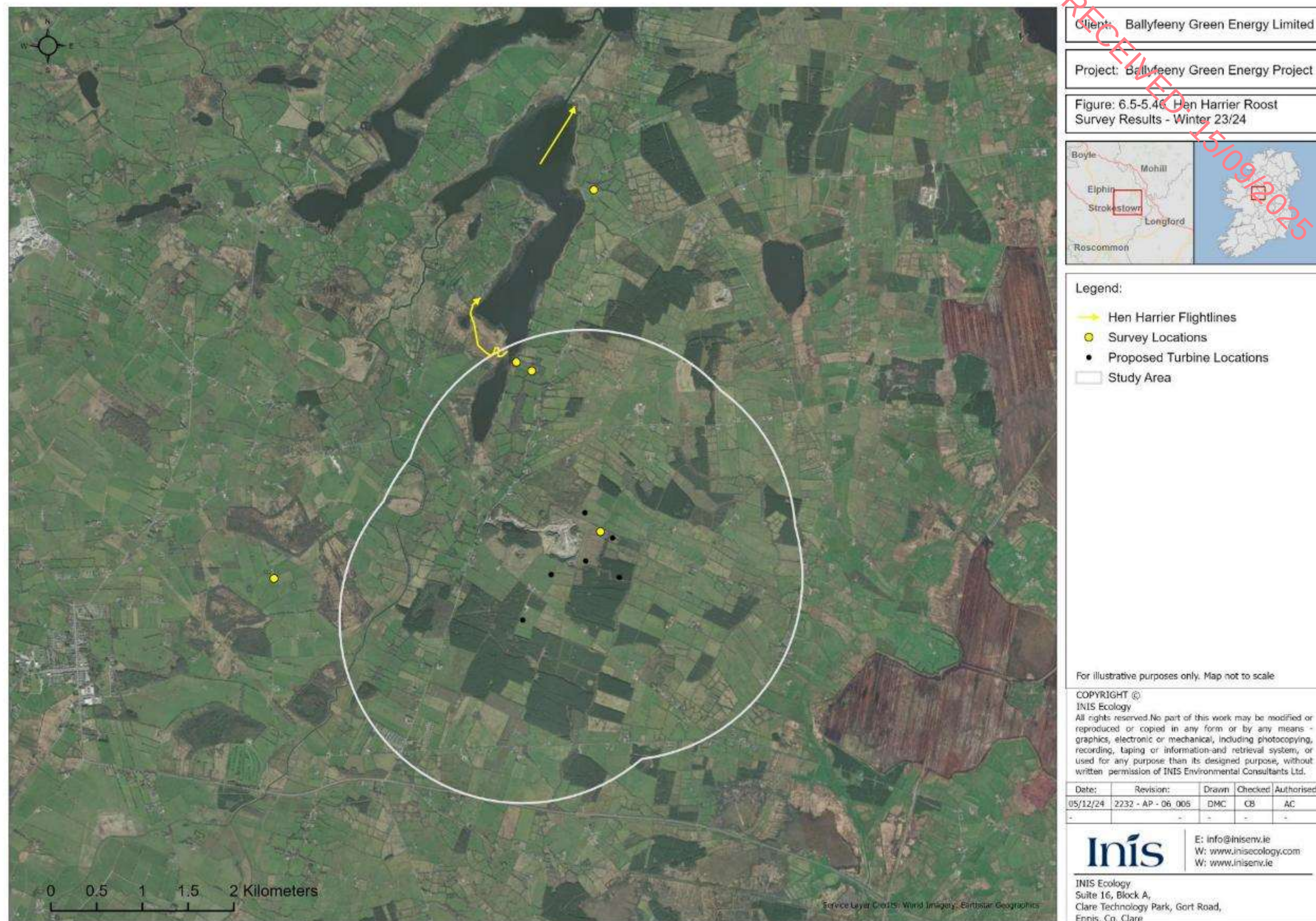


Figure 5.46: Winter season 2023/2024 Hen Harrier roost survey results.

5.4.7 Breeding Woodcock Survey

The location of the breeding Woodcock survey area is shown in **Figure 5.47**.

5.4.7.1 Breeding Season 2023

There was a total of 18 records of Woodcock during the 2023 breeding Woodcock surveys (see **Table 5.54**). Survey timings and weather are shown in **Table 5.55**. One pair were seen flying together on 08/06/2023, indicating probably breeding (pair seen together), with a number of birds exhibiting territorial behaviour. See **Table 5.56** and **Figure 5.48** for full details of all sightings.

Table 5.54: *Breeding Season 2023 Woodcock Survey Counts.*

	May	June	TOTAL
Woodcock seen	-	4	4
Woodcock heard	-	3	3
Woodcock seen and heard	2	9	11
Total	2	16	18

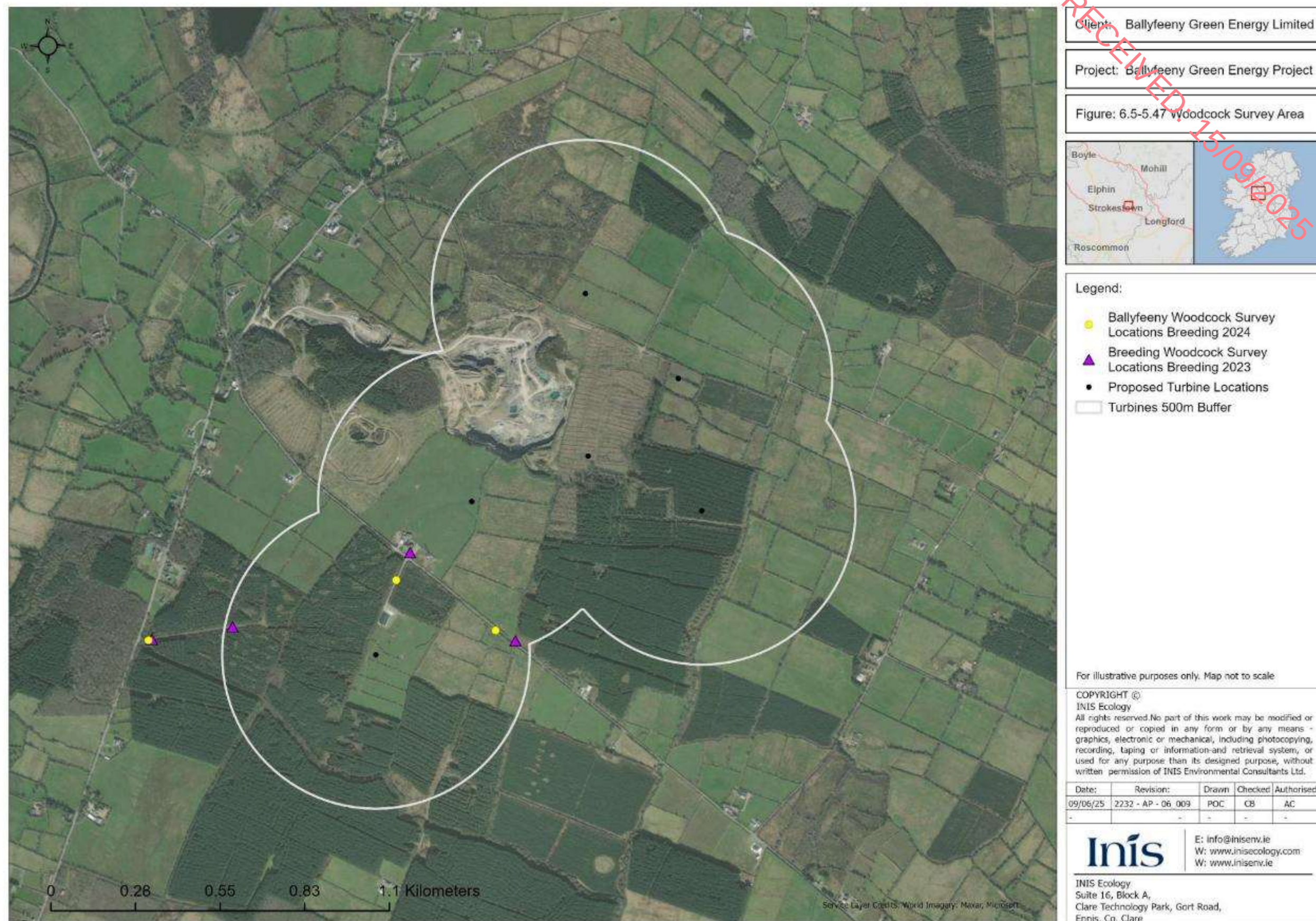


Figure 5.47: Woodcock survey area.

Table 5.55: Breeding Season 2023 Woodcock Surveys Visit Data.

Date	Observer	Start Time	End Time	Rain	Wind Speed	Wind Direction	Cloud	Visibility	Temperature
22/05/2023	HM	21:38	22:40	Dry	F1	N	2/8	5	11
22/05/2023	NL	21:38	22:42	None	F2	SE	3/8	2	10
08/06/2023	ML	21:44	22:59	Dry	F1	NE	5/8	15	11
21/06/2023	NA	21:50	23:20	None	F2	NW	0/8	16	16
21/06/2023	CD	21:30	23:12	None	F2	NW	2/8	15	12

Table 5.56: Breeding Season 2023 Woodcock Survey Results.

Date	Start Time	End Time	Species	Number seen	Number heard	Number seen & heard	Location	Bout Number	Habitat	Time of sighting	Notes
22/05/2023	21:38	22:40	Woodcock			1	598440, 781463	1	Plantation forest	22:20	Roding
22/05/2023	21:38	22:42	Woodcock			1	598142, 781694	1	Forestry	22:40	
08/06/2023	21:44	22:59	Nil Sightings								
08/06/2023	21:36	23:06	Woodcock			2	598462, 781451	1	Forestry	22:57	Pair flying close and together, calling, no song
08/06/2023	21:36	23:06	Woodcock			1	598462 781451	2	Forestry	22:58	Call and song
21/06/2023	21:50	23:20	Woodcock			1	597302, 781412	1	Scrub, Conifer Plantation	22.18	
21/06/2023	21:50	23:20	Woodcock	1			597302, 781412	2	Scrub, Conifer Plantation	22.23	
21/06/2023	21:50	23:20	Woodcock	1			597302, 781412	3	Scrub, Conifer Plantation	22.28	
21/06/2023	21:50	23:20	Woodcock			1	597302, 781412	4	Scrub, Conifer Plantation	22.41	

Date	Start Time	End Time	Species	Number seen	Number heard	Number seen & heard	Location	Bout Number	Habitat	Time of sighting	Notes
21/06/2023	21.50	23.20	Woodcock		1		597302, 781412		Scrub, Conifer Plantation	22.42	
21/06/2023	21.50	23.20	Woodcock		1		597302, 781412		Scrub, Conifer Plantation	22.49	
21/06/2023	21.50	23.20	Woodcock		1		597302, 781412		Scrub, Conifer Plantation	22.55	
21/06/2023	21.50	23.20	Woodcock			1	597302, 781412	3	Scrub, Conifer Plantation	22.57	
21/06/2023	21.50	23.20	Woodcock			1	597302, 781412	1	Scrub, Conifer Plantation	22.59	
21/06/2023	21.50	23.20	Woodcock			1	597302, 781412	5	Scrub, Conifer Plantation	23.05	
21/06/2023	21.50	23.20	Woodcock	1			597302, 781412		Scrub, Conifer Plantation	22.12	
21/06/2023	21:30	23:12	Woodcock	1			598303, 781678	1		22:45	Flying over. Incidental sighting of Male Kestrel hunting 21:40->22:05
21/06/2023	21:30	23:12	Woodcock			1	598441, 781555	2		23:00	Calling and flying over

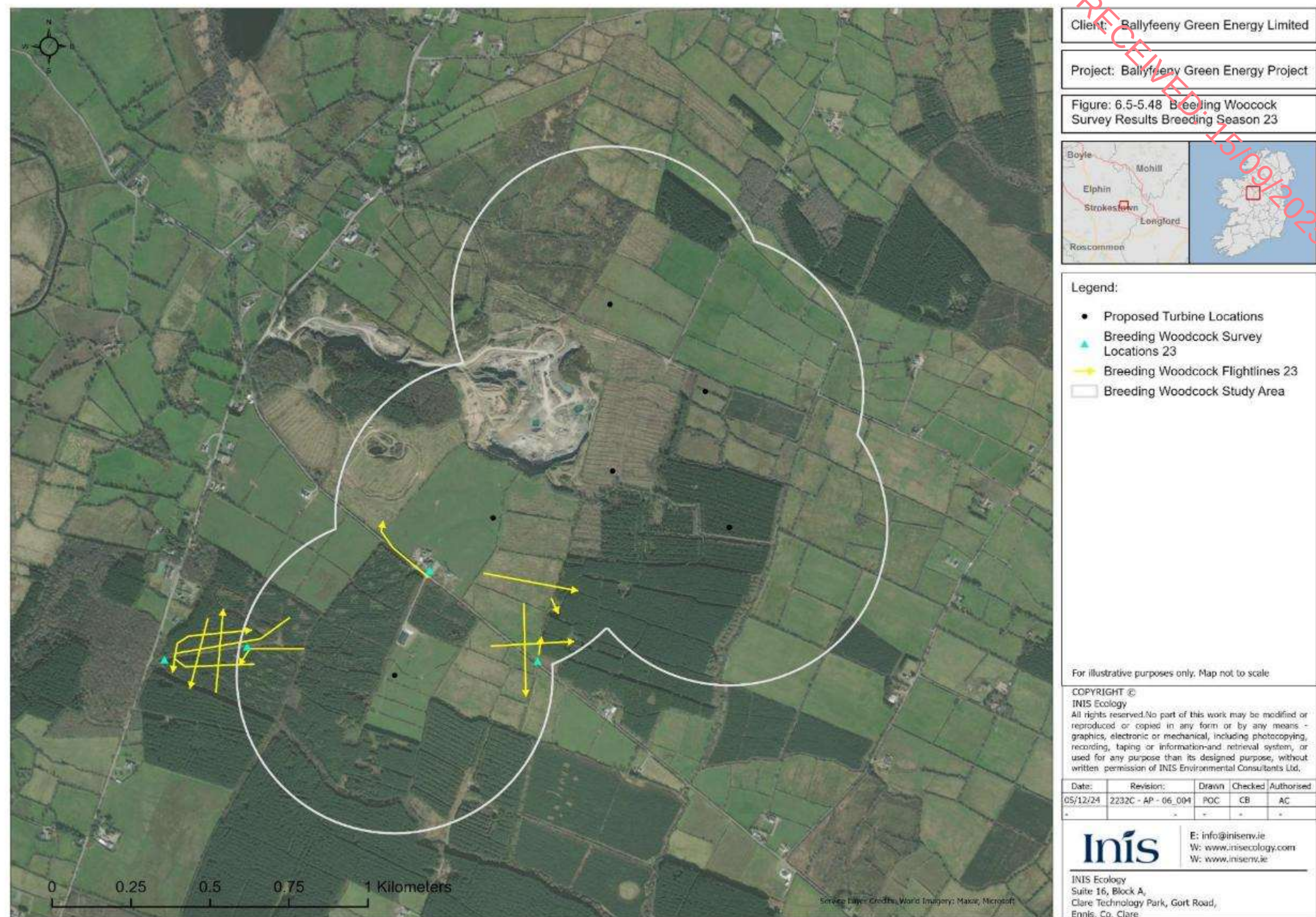


Figure 5.48: Breeding season 2023 Woodcock survey results.

5.4.7.2 Breeding Season 2024

There was a total of 12 records of Woodcock during the 2024 breeding Woodcock surveys (see **Table 5.57**). Survey timings and weather are shown in **Table 5.58**. Several of the observations indicated birds exhibiting territorial behaviour. See **Table 5.59** and **Figure 5.49** for full details of all sightings.

Table 5.57: *Breeding Season 2024 Woodcock Survey Counts.*

	May	June	TOTAL
Woodcock seen	1	-	1
Woodcock heard	3	-	3
Woodcock seen and Heard	7	1	8
Total	11	1	12

Table 5.58: Breeding Season 2024 Woodcock Surveys Visit Data.

Date	Observer	Start Time	End Time	Rain	Wind Speed	Wind Direction	Cloud	Visibility	Temperature
07/05/2024	NC	21:00	22:15	None	F1	SSW	8/8	20	12
27/05/2024	NC	21:30	22:45	None	F2	SSW	7/8	20	12
27/05/2024	NA	21:32	22:44	None	F1	SSW	6/8	12	12
28/05/2024	NC	21:30	22:45	None	F3	WSW	8/8	20	12
24/06/2024	NC	21:55	23:10	None	F2	WSW	7/8	20	16
11/06/2024	NC	21:45	23:00	None	F2	NW	3/8	20	8

Table 5.59: Breeding Season 2024 Woodcock survey results.

Date	Start Time	End Time	Species	Number seen	Number heard	Number seen & heard	Location	Bout Number	Habitat	Time of sighting	Notes
07/05/2024	21:00	22:15	Woodcock		1		598146, 781608	1	Conifer plantation	21:10	
27/05/2024	21:30	22:45	Woodcock			1	598272, 781558	1	Conifer & Grazing	21:57	
27/05/2024	21:30	22:45	Woodcock			1	598140, 781661	2	Conifer & Grazing	22:08	
28/05/2024	21:30	22:45	Woodcock			1	597591, 781456	1	Conifer plantation	21:51	
28/05/2024	21:30	22:45	Woodcock		1		597547, 781472	2	Conifer plantation	21:53	
28/05/2024	21:30	22:45	Woodcock			1	597607, 781469	3	Conifer plantation	21:56	
28/05/2024	21:30	22:45	Woodcock			1	597593, 781473	4	Conifer plantation	21:57	
28/05/2024	21:30	22:45	Woodcock			1	597514, 781464	5	Conifer plantation	22:04	

28/05/2024	21:30	22:45	Woodcock			1	597571, 781460	6	Conifer plantation	22:06	
28/05/2024	21:30	22:45	Woodcock		1		597551, 781388	7	Conifer plantation	22:09	
27/05/2024	21:32	22:44	Woodcock	1	0	0	598413, 781750	1	Young mixed forestry	21:57	
24/06/2024	21:55	23:10	Nil Sightings				598099, 781605			23:10	
11/06/2024	21:45	23:00	Woodcock			1	597562, 781433	1		22:17	

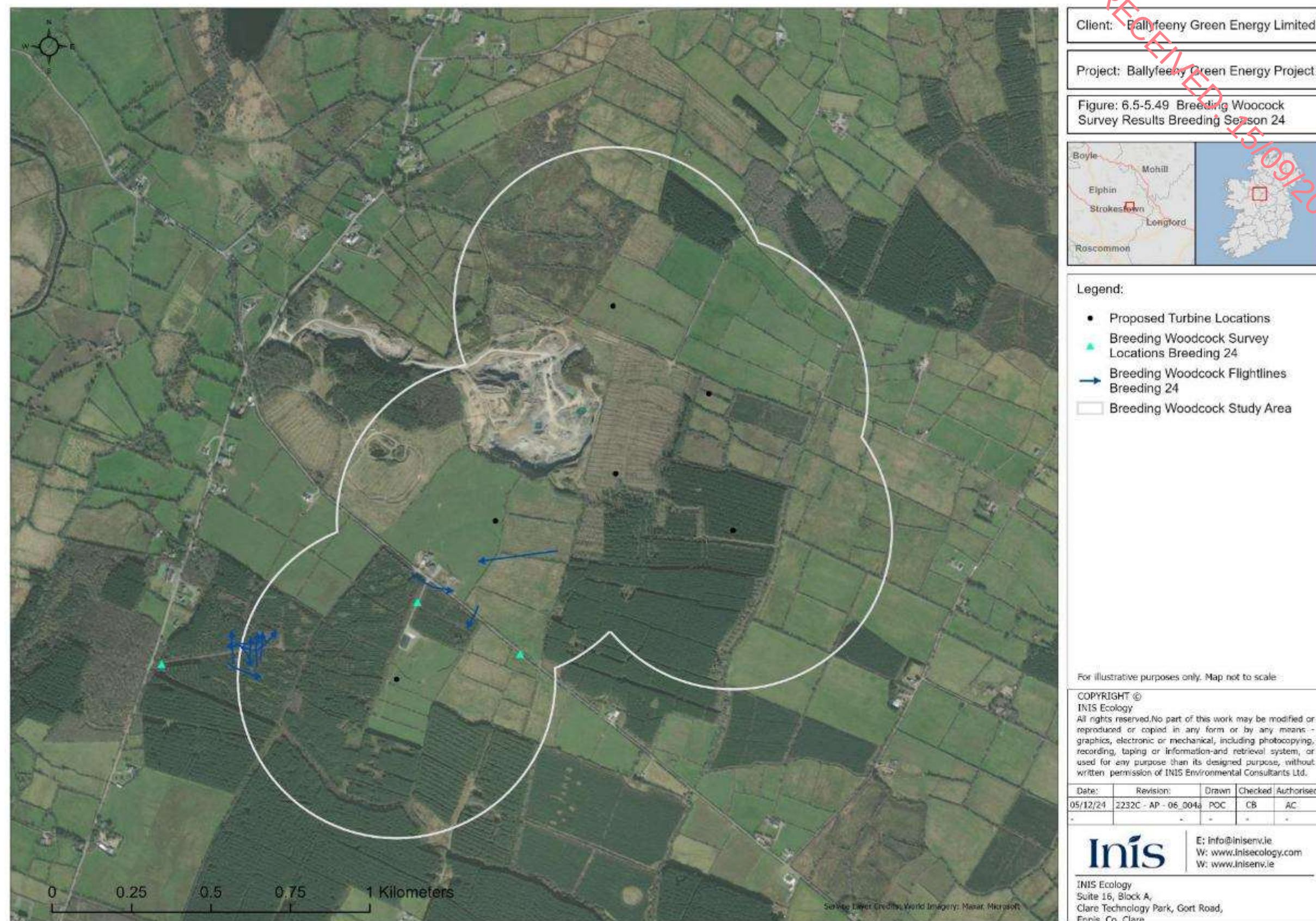


Figure 5.49: Breeding season 2024 Woodcock survey results.

5.4.8 Breeding Barn Owl Survey

5.4.8.1 Breeding Season 2023

Four visits were undertaken for breeding Barn Owls in 2023. The first visit (on 12/05/2023) was to assess the suitability of buildings in the vicinity of the Project (see **Figure 5.50** for the locations of potential nesting sites) . Three activity surveys, undertaking at dusk, were also conducted to determine if any birds were present at the potential nesting locations. **Table 5.60** details the timing and weather for the four survey visits.

A total of seven buildings were assessed for their suitability for nesting Barn Owl. One building was considered to be of high suitability, four of intermediate suitability and two of low suitability. Activity surveys focused on the building considered to be of high suitability, but no evidence of nesting Barn Owls was confirmed. Full details of all survey efforts are presented in **Table 5.61**

Table 5.60: Breeding season 2023 Barn Owl Survey Visit Data.

Date	Observer	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction	Temp.
12/05/2023	HM	Dry	4/8	2	F1	W	15
17/07/2023	NA	Dry	6/8	5	F1	NW	13
24/07/2023	LK	None	6/8	16	F1	W	15
21/08/2023	SID	None	6/8	>20	F2	SSW	17

Table 5.61: Breeding season 2023 Barn Owl Survey Results.

Date	Survey type	Start Time	End Time	Time of sighting	Location	Species sighting	Evidence	Site Type	Site Suitability	Notes
12/05/2023	Day-time Check	11:00	14:00	11:40	598678, 783613	Nil	Low disturbance	Mix of traditional & modern agricultural buildings	Intermediate	Kestrel/ Barn Owl
12/05/2023	Day-time Check	11:00	14:00	11:57	599653, 783498	Nil	Nil	Traditional Agricultural building	Intermediate	Barn Owl
12/05/2023	Day-time Check	11:00	14:00	12:11	600745, 782808	Nil	Low disturbance	Traditional Agricultural building	High	Barn Owl
12/05/2023	Day-time Check	11:00	14:00	12:30	601063, 781705	Nil	Jackdaws nesting in chimney	Traditional Agricultural building	Low	Barn Owl
12/05/2023	Day-time Check	11:00	14:00	13:12	599535, 780545	Nil	Swallows nesting inside	Traditional Agricultural building	Intermediate	Barn Owl
12/05/2023	Day-time Check	11:00	14:00	13:30	596183, 783282	Nil	Could not get a good look due to grass cutting taking place	Traditional Agricultural building	Intermediate	Barn Owl

Date	Survey type	Start Time	End Time	Time of sighting	Location	Species sighting	Evidence	Site Type	Site Suitability	Notes
							outside the building			
12/05/2023	Day-time Check	11:00	14:00	14:00	599175, 780840	Nil	Chimneys blocked by ivy	Traditional Agricultural building	Low	Barn Owl
17/07/2023	Dusk roost watch/activity survey	21:23	23:03	23:03	600794, 782861	Nil	Nil sightings	Traditional Agricultural building	High	
24/07/2023	Dusk roost watch/activity survey	21:15	22:45			Nil		Ruin	High	
21/08/2023	Dusk roost watch/activity survey	20:20	22:00		600749, 782811	Nil	Nil sightings	Traditional Agricultural building	High	

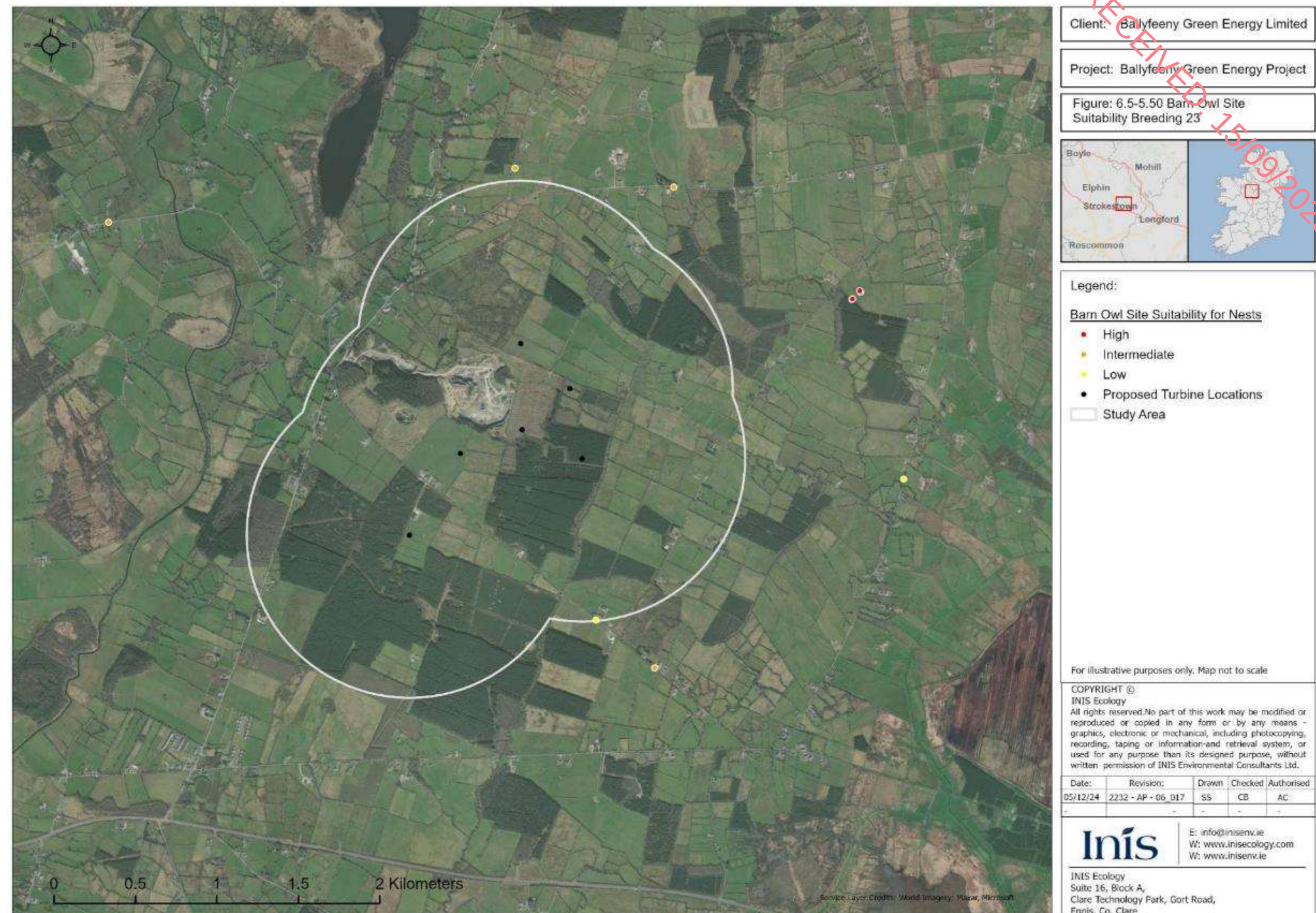


Figure 5.50: Breeding season 2023 Barn Owl survey area, suitability locations and results.

5.4.8.2 Breeding Season 2024

Four visits were undertaken for breeding Barn Owls in 2023. The first visit (on 09/04/2024) was to assess the suitability of buildings in the vicinity of the Project (see **Figure 5.51** for the locations of potential nesting sites). Three activity surveys, undertaken at dusk, were also conducted to determine if any birds were present at the potential nesting locations. **Table 5.62** details the timing and weather for the four survey visits.

A total of nine buildings were assessed for their suitability for nesting Barn Owl. One building was considered to be of high suitability, seven of intermediate suitability and one of low suitability. Activity surveys focused on the building considered to be of higher suitability. One Barn Owl was observed flying to/from a roost in an agricultural building on 25/06/2023. However, no evidence of nesting Barn Owls was confirmed. Full details of all survey efforts are presented in **Table 5.63** and the location of the Barn Owl sighting is shown in **Figure 5.52**.

Table 5.62: Breeding season 2024 Barn Owl Survey Visit Data.

Date	Observer	Rain	Cloud	Visibility (km)	Wind Speed	Wind Direction	Temp.
09/04/2024	NC	Occasional showers	4/8	20	F4	NW	7
25/06/2024	NC	None	2/8	20	F2	NNW	14
02/07/2024	NC	None	8/8	11	F3	SSW	13
12/08/2024	NC	None	1/8	20	F3	SSE	18

Table 5.63: Breeding season 2024 Barn Owl Survey Results.

Date	Survey Type	Start Time	End Time	Time of sighting	Location	Sighting	Evidence	Site Type	Suitability	Notes
09/04/2024	Day-time Check	08:50	13:50		598689, 783613	Nil	Nil	Traditional agricultural building	Intermediate	
09/04/2024	Day-time Check	08:50	13:50		599461, 783469	Nil	Nil	Mix of traditional & modern agricultural buildings	Intermediate	
09/04/2024	Day-time Check	08:50	13:50		598122, 781734	Nil	Nil	Traditional agricultural building	Intermediate	
09/04/2024	Day-time Check	08:50	13:50		599609, 781286	Nil	Nil	Mix of traditional & modern agricultural buildings	Intermediate	
09/04/2024	Day-time Check	08:50	13:50		599593, 781090	Nil	Nil	Traditional agricultural building	Intermediate	
09/04/2024	Day-time Check	08:50	13:50		598008, 782901	Nil	Nil	Traditional agricultural building	Intermediate	
09/04/2024	Day-time Check	08:50	13:50		597531, 782397	Nil	Nil	Ruin	Low	
09/04/2024	Day-time Check	08:50	13:50		597743, 782926	Nil	Nil	Ruin	Intermediate	
09/04/2024	Day-time Check	08:50	13:50		596319, 782553	Nil	Nil	Ruin	High	

Date	Survey Type	Start Time	End Time	Time of sighting	Location	Sighting	Evidence	Site Type	Suitability	Notes
25/06/2024	Dusk roost check/activity survey	22:07	23:37	23:12	598100, 781707	Barn Owl	Other (specify in notes)	Traditional agricultural building	Intermediate	Adult seen flying to/from roost site. Flying from farmyard and down road. No chicks or female heard
02/07/2024	Dusk roost check/activity survey	22:05	23:35	23:35	597739, 782922	Nil	Nil	Ruin	Intermediate	
12/08/2024	Dusk roost check/activity survey	21:00	22:30	22:30	599592, 781091	Nil	Nil	Traditional agricultural building	Intermediate	

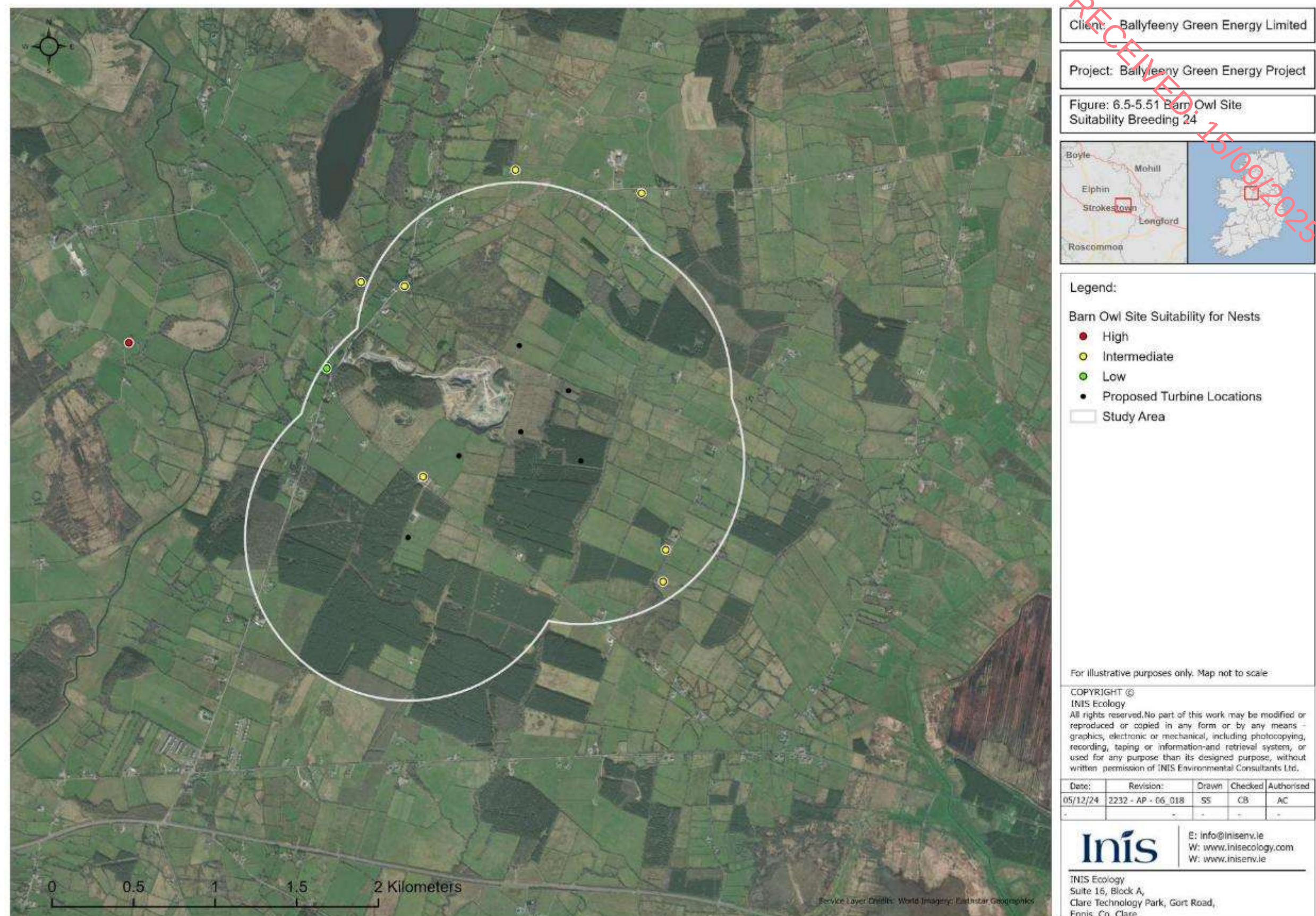


Figure 5.51: Breeding season 2024 Barn Owl survey area, suitability locations and results.

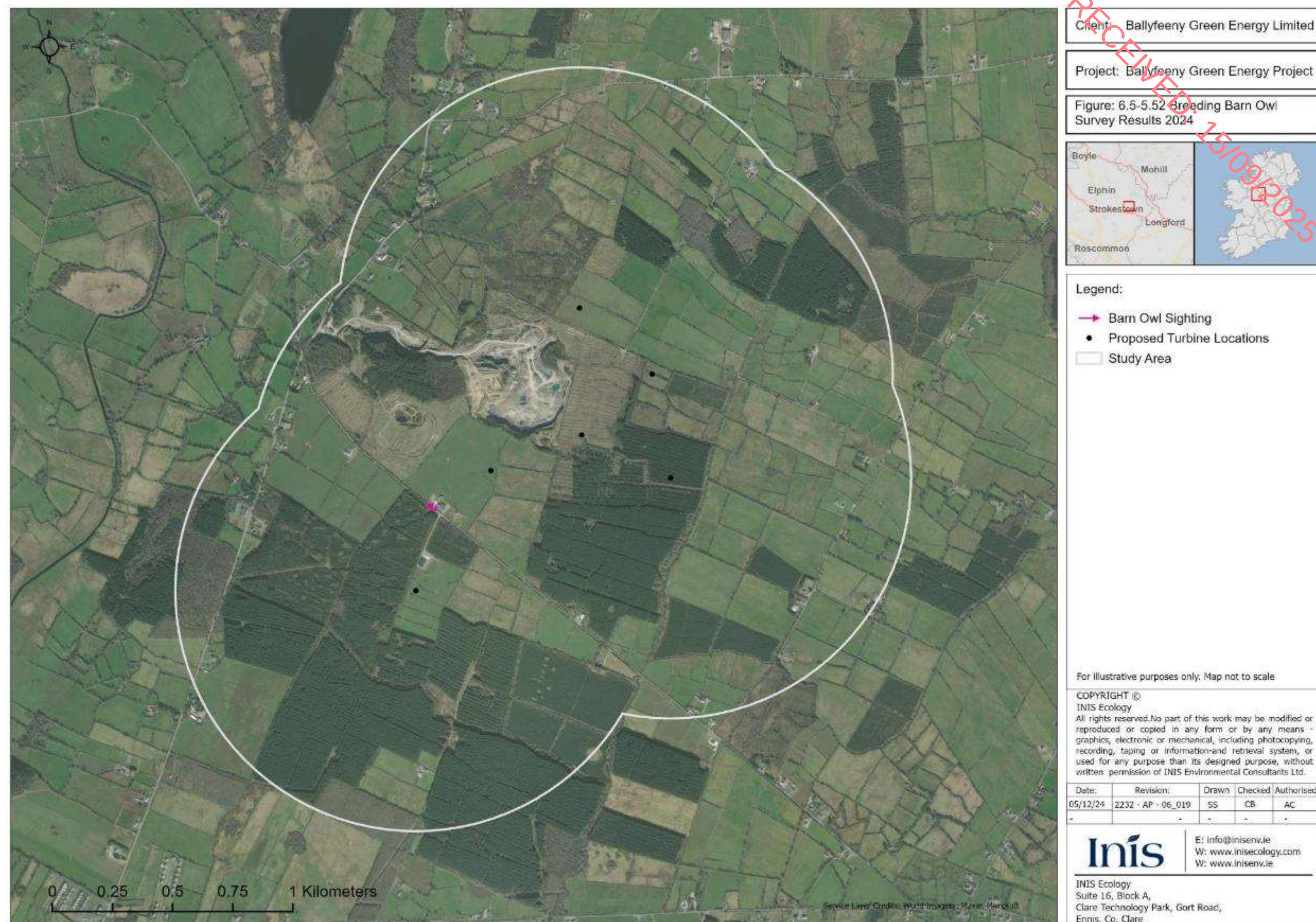


Figure 5.52: Breeding 2024 breeding Barn Owl survey results.

5.5 Species Assessments

Detailed results for target species based on the results of the ornithological surveys are discussed below. The conservation status described for each species is based Gilbert *et al.*, 2021. The sensitivity of each bird to the Project is evaluated following the guidance from Percival (2007) and NRA (2009) combined.

5.5.1 Buzzard

Buzzard is a common resident species in Ireland with a widespread distribution and increasing population size both in long-term and short-term (Hardey *et al.*, 2013; Gilbert *et al.*, 2021). They nest in trees and sometimes on cliffs, usually with access to open land including farmland, moorland, and wetland. The desk study identified 10 observations of Buzzard within the 10km grid squares within which the Project is located, most recently on 03/05/2023 (NBDC, 2024).

Sightings during field surveys comprised:

- Winter season 2022/2023 VP surveys, Buzzard was observed on 20 occasions;
- Winter season 2023/2024 VP surveys, Buzzard was observed on 34 occasions;
- Breeding season 2023 VP surveys, Buzzard was observed on 35 occasions; and
- Breeding season 2024 VP surveys, Buzzard was observed on 51 occasions.

With high Buzzard activity was recorded within and surrounding the Project during the winter and breeding seasons, local populations of Buzzard are therefore evaluated as being of **Local Importance (Higher Value)** and is included for further consideration as a KER.

5.5.2 Sparrowhawk

Sparrowhawk is a common and widespread resident species in Ireland. It is widespread in woodland, farmland, larger parks and gardens, where it nests in trees. The short-term population trend and long-term breeding range for this species appear stable. The desk study identified 19 observations of Sparrowhawk within the 10km grid squares within which the Project is located, most recently on 26/08/2019 (NBDC, 2025).

Sightings during field surveys comprised:

- Winter season 2022/2023 VP surveys, Sparrowhawk was observed once;
- Winter season 2022/2023 VP surveys, Sparrowhawk was observed on 14 occasions;
- Breeding season 2023 VP surveys, Sparrowhawk was observed on 10 occasions; and
- Breeding season 2024 VP surveys, Sparrowhawk was observed on 11 occasions

Low Sparrowhawk activity was recorded and no flightline activity was recorded within Project areas. Local populations of Sparrowhawk are evaluated as being of **Local Importance (Lower Value)** based on its sensitivity to wind farm developments but **is not included** for further consideration as a KER due to its negligible presence limited to the edges of the 500m VP study area and its green-list status.

5.5.3 Kestrel

Whilst a common and widespread raptor species in Ireland, Kestrel is included on the BoCCI Red List due to its widespread decline. Although the species' short-term population trend is stable and its short-term breeding distribution trend is increasing, its range is decreasing in the long-term.

Kestrels typically forage over farmland, wetlands, moorland and roadside verges, and nest in trees, buildings and in cliff faces. During winter they are largely resident within the breeding territory, although some move down to lowland areas. The desk study identified 23 observations of Kestrel within the M78 and M98 10km grid squares, within which the Project is located, most recently on 31/12/2011 (NBDC, 2024).

Sightings during field surveys comprised:

- Winter season 2022/2023 VP surveys, Kestrel was observed on 13 occasions;
- Winter season 2022/2023 VP surveys, Kestrel was observed on 20 occasions;
- Breeding season 2023 VP surveys, Kestrel was observed on 24 occasions;
- Breeding season 2024 VP surveys, Kestrel was observed on 13 occasions;
- One Kestrel was recorded during winter transect surveys in December 2023;
- During the breeding season 2023, one male Kestrel was recorded during breeding raptor surveys, hunting over suitable foraging habitat (but no nest found); and
- During the breeding season 2024 breeding raptor surveys, a Kestrel pair were recorded flying over the quarry in the direction of conifer plantation, 539.7m northwest of the Project boundary.

Kestrel activity was recorded within the proposed Project boundary during both winter and breeding seasons, high quality nesting sites and habitat were identified within the vicinity of the Project. Local populations of Kestrel are therefore evaluated as being of **County Importance** and **is included** for further consideration as a KER.

5.5.4 Peregrine

Peregrine is listed under Annex I of the EC Birds Directive and the BoCCI Green List, with an increasing population in the short- and long-term in Ireland. Peregrines breed on coastal and inland cliffs and can also be found in cities, and hunt over a range of habitats including farmland and wetland. Wintering habitat shows some movement away from its breeding

areas. The desk study identified one observation of Peregrine within the 10km grid square (M97) within which the Project is located. The NPWS consultation yielded that nesting pairs are present within the M97, M98 grid squares.

Sightings during field surveys comprised:

- Winter season 2022/2023 VP surveys, Peregrine was observed once;
- Breeding season 2023 VP surveys, Peregrine was observed on 9 occasions;
- Breeding season 2024 VP surveys, Peregrine was observed on 6 occasions;
- One Kestrel was recorded during winter transect surveys in December 2023;
- During the breeding season 2023 breeding raptor survey, a Peregrine nest was recorded;
- During the breeding season 2024 breeding raptor surveys, three Peregrines were recorded. The nest recorded in 2023 was still active with a Peregrine recorded in the nest in April 2024 with a second Peregrine was recorded circling near the nest. In May 2024, one Peregrine chick was recorded in the nest.

As evidenced by the confirmed nest site during the breeding seasons 2023 and 2024, there is suitable breeding and hunting habitat for Peregrine within and surrounding the Site boundary, the nest is also located within the disturbance distance for Peregrine (750m) from Project (Goodship & Furness, 2022). Local populations of Peregrine are therefore evaluated as being of **National Importance** and **is included** for further consideration as a KER.

5.5.5 Hen Harrier

Hen Harrier list under Annex I of the EC Birds Directive and the BoCCI Amber List, with a decreasing short-term population trend in Ireland. Breeding birds are confined largely to heather moorland and young forestry plantations where they typically nest on the ground, whilst in winter they are found in more coastal and lowland areas throughout Ireland.

The desk study identified six observations of Hen Harrier within the 10km grid square (M97), within which the Project is located (NBDC, 2025).

Sightings during field surveys comprised:

- Winter season 2022/2023 VP surveys, a female Hen Harrier was observed once;
- Breeding season 2024 VP surveys, Hen Harrier was observed on two occasions;
- Two observations of Hen Harrier were recorded during the Hen Harrier roost surveys in October 2023 and February 2024 ;

Given the low activity within the vicinity of the Project, and absence of Hen Harrier within the Project boundary, local populations of Hen Harrier are evaluated as being of **County Importance** and **is included** for further consideration as a KER despite the unlikelihood for

this species to be a receptor of the proposed Project impacts under the precautionary principle.

5.5.6 Barn Owl

Barn Owl is included on the BoCCI Red List. Barn Owls breed in ruined buildings, such as castles and to a lesser extent in outbuildings (barns/sheds). Breeding success heavily depends on the availability of suitable prey. In winter, they are largely resident, though young birds will wander in search of new territories. The desk study identified one record of Barn Owl within the relevant 10km grid square (M97), most recently on 04/09/2020 (NBDC, 2025). High suitability Barn Owl nesting sites were recorded in the form of ruins and traditional agricultural buildings, the closest site was located 1.7km northeast of the proposed Project.

Sightings during field surveys comprised:

- During the breeding season 2024, a Barn Owl sighting was recorded 29.6m southeast of the proposed Onsite Substation, although no active nest was located.

Several potential Barn Owl nesting sites were recorded within and surrounding the Project boundary. Given that Barn Owl activity has been confirmed in close proximity to the proposed Project boundary, local populations of Barn Owl are therefore evaluated as being of **Local Importance (Higher Value)** and **is included** for further consideration as an KER under the precautionary principle.

5.5.7 Curlew

Curlew is included on the BoCCI Red List. They nest on the ground in rough pastures, meadows and heather, they can be found in most parts of the country. They winter in a wide range of wetland habitats (coastal and inland) and other good feeding areas including damp fields. The Irish breeding population is supplemented by Scottish and Scandinavian breeders in winter. The desk study identified seven records of Curlew within the 10km grid squares, most recently on 09/11/2020 (NBDC, 2024). A total count of three Curlews was recorded during the winter season 2022/2023 I-WeBS. All sightings were recorded on Lough Nabhahy, located 6.9km northwest of the Site boundary. There were no sightings during the breeding season.

Due to the absence of sightings within the Site boundary and low level of baseline activity recorded, Curlew **is not included** for further consideration as a KER.

5.5.8 Lapwing

Lapwing is included on the BoCCI Red List. They breed on open farmland and appear to prefer nesting in fields that are relatively bare (particularly when cultivated in the spring) and adjacent to grass. Wintering distribution in Ireland is widespread. Large flocks regularly recorded in a variety of habitats, including most of the major wetlands, pasture and rough land adjacent to bogs. The desk study identified 23 records of Lapwing within the relevant 10km grid squares, most recently on 31/12/2011 (NBDC, 2024). A total of eight Lapwings were

recorded during I-WeBS during the breeding season 2023 (Appendix 6.5). Two were observed sitting on the lake shore at Kilglass Lough, located 1.2km from the proposed Project Site boundary, the remaining Lapwing were recorded at Lough Acrick, Lough O'Donra and the River Shannon. Lapwing is an SCI of Lough Ree SPA, located 11.9km from the Site boundary. There were no breeding season records.

Given the wide commuting ranges and the presence of suitable habitat (Kilglass Lough) close to the Project, there is potential for ex-situ effects on Lapwing via disturbance, displacement and contamination of suitable habitat. Lapwing is evaluated as being of **Local Importance (Higher Value)** and the wintering population **is included for** further consideration as a KER.

5.5.9 Redshank

Redshank is included on the BoCCI Red List. In the breeding season, they nest on the ground in grassy tussock, in wet, marshy areas and occasionally heather. They winter all around the coasts of Ireland, favouring mudflats, large estuaries and inlets. The desk study identified five records of Redshank within the 10km grid square (M98), most recently on 31/12/2011 (NBDC, 2024). One count of Redshank was recorded during the winter season 2022/2023 I-WeBS. The sighting was recorded on Kilglass, Lough, 1.8km northwest of the Project.

Due to the absence of sightings within the Site boundary and low level of baseline activity recorded, Redshank is **not included** for further consideration as a KER.

5.5.10 Snipe

Snipe is included on the BoCCI Red List due to its long and short-term population decline. Snipe nest on the ground, usually concealed in a grassy tussock, in or near wet or boggy terrain. They forage across a variety of wetland and damp habitats, with particularly high concentrations found on the fringes of lowland lakes. The desk study identified 21 observations of Snipe within the 10km grid squares, within which the Project is located, most recently on 31/12/2011 (NBDC, 2024).

Sightings during field surveys comprised:

- Winter season 2022/2023 VP surveys, Snipe was observed once;
- Winter season 2022/2024 VP surveys, Snipe was observed twice;
- One Snipe was recorded roosting within wet grassland habitat at the Scramogue River, located 2.2km northwest of Project during winter season 2023/2024 I-WeBS.
- During the breeding season 2024, two Snipe were recorded during breeding wader surveys. One Snipe was flushed within agricultural grassland, over the footprint of the T05 hardstand. The other Snipe was flushed 139.4m north of the T04 hardstand.

Due to the low levels of activity and limited habitat availability within the proposed wind farm Site boundary, Snipe **is not included** for further consideration as a KER.

5.5.11 Woodcock

Woodcock is included on the BoCCI Red List. In the breeding season, Woodcock nest on the ground in forests and woodland, usually well camouflaged amongst dead leaves and low vegetation, the young leave the nest soon after hatching. They have a wider distribution in winter, occurring in woodland, also scrub and some open areas (bracken and heather-covered hills). The desk study identified seven records of Woodcock within the 10km grid square (M97), most recently on 31/12/2011 (NBDC, 2024).

Sightings during field surveys comprised:

- Breeding season 2023 Woodcock surveys recorded a total of 18 Woodcock observations. Observations included a pair calling and flying together over conifer plantation habitat, a roding male over conifer plantation and an individual flying overhead.
- Breeding 2024 Woodcock surveys recorded a total of 12 Woodcock observations, with all sightings recorded within a single territory, a conifer plantation adjacent to the footprint of the GCR, no breeding behavior was observed. season 2024 VP surveys, Kestrel was observed on 13 occasions;

As evidenced by breeding behavior displayed by Woodcock during the breeding season 2023 and continued observations during the breeding season 2024, and extensive areas of conifer plantation and woodland within and surrounding the Site boundary, there is suitable breeding and foraging habitat for Woodcock within and surrounding the Project. Local populations of Woodcock are therefore evaluated as being of **County Importance** and **is included** for further consideration as a KER.

5.5.12 Common Scoter

Common Scoter is included on the BoCCI Red List. In the breeding season, they nest on islands with dense covering of scrub and tree cover. The breeding population has declined since due to the increase in Mink, which predate the nests and young. Common Scoter are almost entirely marine during the winter and tend to congregate in large flocks on shallow seas with sandy bottoms supporting their preferred prey. The desk study identified no records of Common Scoter within the 10km grid squares (NBDC, 2024). Two counts of Common Scoter was recorded during the winter season 2022/2023 I-WeBS. The sightings were recorded on Kilglass Lough, located 1.7km northwest of the Site boundary. Common Scoter is an SCI of Lough Ree SPA, located 11.9km from the Site boundary. Given the wide commuting ranges and the presence of suitable habitat (Kilglass Lough) close to the Project, there is potential for ex-situ effects on Common Scoter via disturbance, displacement and contamination of suitable habitat. Common Scoter is evaluated as being of **Local Importance (Higher Value)** and **is included** for further consideration as a KER.

5.5.13 Coot

Coot is included on the BoCCI Amber List. This species is not as widespread as the Moorhen as it requires larger bodies of water on which to nest. They nest in large shallow water bodies that are rich in nutrients and have abundant bottom vegetation for food and some emergent vegetation for nest anchorage. They are widespread but absent from parts of Kerry, Cork, south-west Clare, west Galway, Mayo, Sligo and Donegal. The winter distribution is more widespread than breeding distribution, birds are found on lakes, coastal estuaries and river systems, but show a clear preference for large inland lakes. The desk study identified 20 records of Coot within the 10km grid squares, most recently on 31/12/2011 (NBDC, 2024).

Sightings during field surveys comprised:

- Winter season 2022/2023 I-WeBS surveys, a peak count of 8 individuals in October 2022 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.7km northwest of the Site boundary;
- Breeding season 2023 I-WeBS surveys, a peak count of 114 individuals in September 2023 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.7km northwest of the Site boundary;
- Winter season 2023/2024 I-WeBS surveys, a peak count of 312 individuals in January 2024 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.7km northwest of the Site boundary;
- Breeding season 2024 I-WeBS surveys, a peak count of 22 individuals in April 2024 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.7km northwest of the Site boundary;

Coot is an SCI of Lough Ree SPA, located 11.9km from the Site boundary. Given the wide commuting ranges and the presence of suitable habitat (Kilglass Lough) close to the Project, there is potential for ex-situ effects on Coot via disturbance, displacement and contamination of suitable habitat. Coot is evaluated as being of **Local Importance (Higher Value)** and is **included** for further consideration as a KER

5.5.14 Cormorant

Cormorant is included on the BoCCI Amber List. They breed in colonies mainly around the coast of Ireland, with some birds breeding inland. The desk study identified 14 records of Cormorant within the 10km grid squares, most recently on 31/12/2011 (NBDC, 2024).

Sightings during field surveys comprised:

- Winter season 2023/2024 VP surveys, Cormorant was observed on 12 occasions;
- Breeding season 2023 VP surveys, Cormorant was observed on 10 occasions;
- Breeding season 2024 VP surveys, Cormorant was observed on 67 occasions;

- Winter season 2022/2023 I-WeBS surveys, a peak count of 44 individuals in October 2022 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.7km northwest of the Site boundary;
- Breeding season 2023 I-WeBS surveys, a peak count of 23 individuals in April 2023 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.7km northwest of the Site boundary;
- Winter season 2023/2024 I-WeBS surveys, a peak count of 45 individuals in November 2023 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.7km northwest of the Site boundary;
- Breeding season 2024 I-WeBS surveys, a peak count of 12 individuals in April 2024 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.7km northwest of the Site boundary;

Due to the lack of suitable breeding habitat within the Site boundary, Cormorant is **not included** for further consideration as a KER.

5.5.15 Gadwall

Gadwall is included on the BoCCI Amber List. They nest on a variety of freshwater and brackish wetlands, especially shallow lakes with abundant emergent vegetation, slow moving rivers and marshes, and winter at a variety of inland and coastal sites. The desk study identified one record of Gadwall within the 10km grid square (M98), most recently on 31/12/2011 (NBDC, 2024). A total of 25 Gadwalls were recorded during I-WeBS in the winter season 2023/2024. Behaviors included a sighting of a male and female pair dabbling at an inlet at Kilglass Lough, located 3.2km north from Project. Other behaviors observed include foraging at Grange Lough. Due to the absence of sightings and suitable habitat within the Site boundary, Gadwall **is not included** for further consideration as a KER.

5.5.16 Goldeneye

Goldeneye is included on the BoCCI Red List. Nests in holes in trees and nestboxes, and occasionally in rabbit burrows, usually near water. They winter on coastal estuaries and inland lakes. Relatively widespread distribution in Ireland. The desk study identified four records of Goldeneye within the relevant 10km grid square (M98), most recently on 31/12/2011 (NBDC, 2024). A total of five Goldeneyes were recorded during I-WeBS in the winter season 2023/2024. Behaviors observed included foraging and flying, the closest sighting in relation to the Project was 3.4km northeast on Lough Acrick.

Goldeneye is an SCI of Lough Ree SPA, located 11.9km from the Site boundary. Given the wide commuting ranges and the presence of suitable habitat (Kilglass Lough) located 1.2km northwest of the Project Site boundary, there is potential for ex-situ effects on Goldeneye via disturbance, displacement and contamination of suitable habitat. Goldeneye is evaluated as being of **Local Importance (Higher Value)** and **is included** for further consideration as a KER.

5.5.17 Golden Plover

Golden Plover is included on Annex I of the EC Birds Directive and the BoCCI Red List. They breed in heather moors, blanket bogs & acidic grasslands. Distribution limited to the uplands of northwest counties in Ireland. Throughout the winter, Golden Plovers are regularly found in large, densely packed flocks, and in a variety of habitats, both coastal and inland. Their distribution is widespread in Ireland. The desk study identified six records of Golden Plover within the relevant 10km grid squares, most recently on 31/12/2011 (NBDC, 2024). During the breeding season 2024 VP surveys, one flock of Golden Plover was observed on one occasion. No sightings were recorded within the Site boundary.

Golden Plover is an SCI of Lough Ree SPA, located 11.9km from the Site boundary. Given the wide commuting ranges and the presence of suitable habitat (Kilglass Lough) close to the Project, there is potential for ex-situ effects on Golden Plover via disturbance, displacement, mortality and contamination of suitable habitat. Golden Plover is evaluated as being of **Local Importance (Higher Value)** and **is included** for further consideration as a KER.

5.5.18 Great Crested Grebe

Great Crested Grebe is included on the BoCCI Amber List. Great Crested Grebes breed on large, shallow eutrophic loughs, and along canals and slow flowing rivers – wetlands with emergent vegetation bordered by open water are generally selected. Nests are a large mound of aquatic vegetation and are usually well concealed within reeds. The winter distribution is widespread with greatest concentration in the north midlands and northeast and birds from the continent join the resident population. Outside the breeding season Great Crested Grebes are often solitary with some birds moving to the coast through the winter. The desk study identified 28 records of Great Crested Grebe within the 10km grid squares, most recently on 05/05/2019 (NBDC, 2024).

- Winter season 2022/2023 I-WeBS surveys, two individuals in December 2022 with the closest sighting in relation to the Project recorded on Kilglass Lough, 2.8km northwest of the Site boundary;
- Breeding season 2023 I-WeBS surveys, a peak count of 41 individuals in April 2023 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.7km northwest of the Site boundary;
- Winter season 2023/2024 I-WeBS surveys, a peak count of 42 individuals in January 2024 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.5km northwest of the Site boundary;
- Breeding season 2024 I-WeBS surveys, a peak count of 27 individuals in April 2024 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.6km northwest of the Site boundary;

Due to the absence of sightings and lack of suitable habitat within the Site boundary, Great Crested Grebe is **not included** for further consideration as a KER.

5.5.19 Grey Heron

Grey Herons breed in large trees and can form large heronries, some of which have been in use for over 100 years. They are found in the same wetland habitats during the winter as in the breeding season. The desk study identified no records of Grey Heron within the 10km grid squares.

Sightings during field surveys comprised:

- Winter season 2022/2023 VP surveys, Grey Heron was observed once;
- Breeding season 2024 VP surveys, Grey Heron was observed on four occasions;
- Winter season 2022/2023 I-WeBS surveys, a peak count of two individuals in October 2022 and January 2023, with the closest sighting in relation to the Project recorded Kilglass Lough, 3.4km north of the Site boundary;
- Breeding season 2023 I-WeBS surveys, a peak count of five individuals in September 2023 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.6km northwest of the Site boundary;
- Winter season 2023/2024 I-WeBS surveys, a peak count of two individuals in December 2023 and March 2024, with the closest sighting in relation to the Project recorded on the Scramogue River, 2km northwest of the Site boundary;
- Breeding season 2024 I-WeBS surveys, a peak count of 6 individuals in April 2024 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.6km northwest of the Site boundary;

Due to the lack of suitable habitat and recorded absence of Grey Heron within the Site boundary, Grey Heron is **not included** for further consideration as a KER.

5.5.20 Kingfisher

Kingfisher is included on the BoCCI Amber List. They are a very sedentary species in winter. Kingfishers rarely move from their territories. However, some may move to lakes and coasts during extended spells of poor weather. The desk study identified 12 records of Kingfisher within the 10km grid squares, most recently on 24/06/2022 (NBDC, 2024). One count of Kingfisher was recorded during the winter season 2022/2023 I-WeBS. The sighting was recorded on Kilglass Lough, located 1.7km northwest of the Site boundary. Due to the absence of sightings and suitable habitat within the Site boundary and low level of baseline activity, Kingfisher is **not included** for further consideration as a KER.

5.5.21 Little Egret

Little Egret is an Annex I species protected under the EC Birds Directive. Little Egret is a resident along coasts and rivers throughout Ireland, but still scarce in the midlands and northwest of the country. They breed near lakes, marshes, flooded fields and estuaries, and overwinter in a variety of wetland habitats including shallow lakes, riverbanks, lagoons, coastal estuaries and rocky shoreline. The desk study identified one record of Little Egret within the 10km grid square (M98), most recently on 31/12/2011 (NBDC, 2024).

Sightings during field surveys comprised:

- Winter season 2022/2023 I-WeBS surveys, one individual was recorded in November 2022 at Lough Acrick, 3.1km northeast of the Site boundary;
- Winter season 2023/2024 I-WeBS surveys, one individual was recorded in November 2022 at Kilglass Lough, 2.3km north of the Site boundary;
- Breeding season 2024 I-WeBS surveys, one individual was recorded in November 2022 at Kilglass Lough, 2.9km northwest of the Site boundary;

Due to the lack of suitable habitat and recorded absence of the Little Egret within the Site boundary, Little Egret is **not included** for further consideration as a KER.

5.5.22 Mallard

Mallard is included on the BoCCI Amber List. Nest sites typically comprise dense vegetation near water, whilst overwintering occurs at a variety of coastal and inland wetland habitats. The desk study identified 29 records of Mallard within the 10km grid squares, most recently on 31/12/2011 (NBDC, 2024).

Sightings during field surveys comprised:

- Winter season 2022/2023 VP surveys, Mallard was observed on five occasions;
- Winter season 2023/2024 VP surveys, Mallard was observed on 18 occasions;
- Breeding season 2024 VP surveys, Mallard was observed on 35 occasions;
- Winter season 2022/2023 I-WeBS surveys, a peak count of 38 individuals in October 2022 with the closest sighting in relation to the Project recorded on Scramogue River, located 1.9km northwest of the Site boundary;
- Breeding season 2023 I-WeBS surveys, a peak count of 58 individuals in September 2023 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.7km northwest of the Site boundary;
- Winter season 2023/2024 I-WeBS surveys, a peak count of 116 individuals in January 2024, with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.6km northwest of the Site boundary;

- Breeding season 2024 I-WeBS surveys, a peak count of eight individuals in April 2024 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.7km northwest of the Site boundary;

Mallard is an SCI of Lough Ree SPA, located 11.9km from the Site boundary. Given the wide commuting ranges and the presence of suitable habitat (Kilglass Lough) close to the Project, there is potential for ex-situ effects on Mallard via disturbance, displacement, mortality and contamination of suitable habitat. Mallard is evaluated as being of **Local Importance (Higher Value)** and is **included** for further consideration as a KER.

5.5.23 Mute Swan

Mute Swan is included on the BoCCI Amber List. Breeds on lakes, ponds and rivers, and nests are a large mound constructed from reed stem and other aquatic vegetation, with seaweed being used in coastal locations. They winter on lakes, ponds and rivers. The desk study identified 36 records of Mute Swan within the relevant 10km grid squares, most recently on 05/05/2019 (NBDC, 2024).

Sightings during field surveys comprised:

- Winter season 2022/2023 I-WeBS surveys, a peak count of 63 individuals in January 2023 with the closest sighting in relation to the Project recorded on Scramogue River, located 1.9km northwest of the Site boundary;
- Breeding season 2023 I-WeBS surveys, a peak count of 142 individuals in April 2023 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.6km northwest of the Site boundary;
- Winter season 2023/2024 I-WeBS surveys, a peak count of 189 individuals in March 2024, with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.6km northwest of the Site boundary;
- Breeding season 2024 I-WeBS surveys, a peak count of 114 individuals in April 2024 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.7km northwest of the Site boundary;

Due to the lack of suitable habitats and activity within the Site boundary, Mute Swan is **not included** for further consideration as a KER.

5.5.24 Moorhen

Moorhens nest near water, usually in emergent vegetation or on a floating raft. It is a widespread species throughout the country, and is the most common river bird in Ireland, only in parts of the west is it absent or rare. They can be found on any freshwater habitat with abundant emergent vegetation, including town canals, muddy ditches, and large lakes. The desk study identified no records of Moorhen within the 10km grid squares (NBDC, 2024).

Sightings during field surveys comprised:

- Winter season 2022/2023 I-WeBS surveys, a peak count of three individuals in January 2023 with the closest sighting in relation to the Project recorded on Kilglass Lough, located 2.8km northwest of the Site boundary;
- Breeding season 2023 I-WeBS surveys, a peak count of three individuals in May 2023 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.7km northwest of the Site boundary;
- Winter season 2023/2024 I-WeBS surveys, a peak count of seven individuals in November 2023 and January 2024, with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.6km northwest of the Site boundary;
- Breeding season 2024 I-WeBS surveys, a peak count of 4 individuals in April 2024 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.7km northwest of the Site boundary;

Due to the absence of sightings and lack of suitable habitat within the Site boundary, Moorhen is **not included** for further consideration as a KER.

5.5.25 Shoveler

Shoveler is included on the BoCCI Red List. They nest on the ground among waterside vegetation, often many nests in close proximity. Breeding in Ireland is centered around Lough Neagh and the mid- Shannon basin. In winter, Shovelers prefer shallow eutrophic waters rich in plankton and occur on a variety of habitats while wintering in Ireland, including coastal estuaries, lagoons and inland lakes and callows. The desk study identified three records of Shoveler within the relevant 10km grid squares, most recently on 31/12/2011 (NBDC, 2024).

A total of ten Shovelers were recorded during I-WeBS in the winter season 2023/2024. All ten Shovelers were recorded at Grange Lough, the closest sighting was recorded 4.8km north of the Project. Shoveler is an SCI of Lough Ree SPA, located 11.9km from the Site boundary. Given the wide commuting ranges and the presence of suitable habitat (Kilglass Lough and Grange Lough) close to the Project, there is potential for ex-situ effects on Shoveler via disturbance, displacement and contamination of suitable habitat. Shoveler is evaluated as being of **Local Importance (Higher Value)** and **is included** for further consideration as a KER.

5.5.26 Teal

Teal is included on the BoCCI Amber List. In the breeding season, they usually nest near small freshwater lakes or pools and small upland streams away from the coast, and also in thick cover. In the winter season, they are widespread on wetlands with good cover, such as reedbeds. Wide variety of habitats, both coastal and inland, and usually below an altitude of 200m, including coastal lagoons and estuaries and inland marshes, lakes, ponds and

turloughs. The desk study identified 10 records of Teal within the 10km grid squares, most recently on 31/12/2011 (NBDC, 2024).

Sightings during field surveys comprised:

- Winter season 2022/2023 I-WeBS surveys, a peak count of 19 individuals in January 2023 with the closest sighting in relation to the Project recorded on Kilglass Lough, located 3.4km northwest of the Site boundary;
- Breeding season 2023 I-WeBS surveys, a peak count of eight individuals in September 2023 with the closest sighting in relation to the Project recorded on Kilglass Lough, 3.4km northwest of the Site boundary;
- Winter season 2023/2024 I-WeBS surveys, a peak count of 133 individuals in January 2024, with the closest sighting in relation to the Project recorded on Kilglass Lough, 3.8km northwest of the Site boundary;

Teal is an SCI of Lough Ree SPA, located 11.9km from the Site boundary. Given the wide commuting ranges and the presence of suitable habitat (Kilglass Lough) close to the Project, there is potential for ex-situ effects on Teal via disturbance, displacement and contamination of suitable habitat. Teal is evaluated as being of **Local Importance (Higher Value)** and is **included** for further consideration as a KER.

5.5.27 Tufted Duck

Tufted Duck is included on the BoCCI Amber List. In the breeding season, Tufted Duck have a preference for large open lakes in lowland areas, where nests are built in waterside vegetation. They winter in lowland freshwater lakes and are often seen on town lakes, canals and slow-moving rivers. The desk study identified 17 records of Tufted Duck within the relevant 10km grid squares, most recently on 31/12/2011 (NBDC, 2024).

Sightings during field surveys comprised:

- Winter season 2022/2023 I-WeBS surveys, a peak count of 24 individuals in November 2022 with the closest sighting in relation to the Project recorded on Scramogue River, located 1.9km northwest of the Site boundary;
- Breeding season 2023 I-WeBS surveys, a peak count of 93 individuals in September 2023 with the closest sighting in relation to the Project recorded on the River Shannon, located 6.6km southeast of the Site boundary;
- Winter season 2023/2024 I-WeBS surveys, a peak count of 550 individuals in February 2024, with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.5km northwest of the Site boundary;
- Breeding season 2024 I-WeBS surveys, a peak count of ten individuals in April 2024 with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.5km northwest of the Site boundary;

A total count of 90 Tufted Ducks was recorded during the winter season 2022/2023 I-WeBS. The closest sighting in relation to the Project was recorded on the Scramogue River, located 11.9km from the Site boundary. Given the wide commuting ranges and the presence of suitable habitat (Kilglass Lough) close to the Project, there is potential for ex-situ effects on Tufted Duck via disturbance, displacement and contamination of suitable habitat. Tufted Duck is evaluated as being of **Local Importance (Higher Value)** and **is included** for further consideration as a KER.

5.5.28 Wigeon

Wigeon is included on the BoCCI Amber List. In the breeding season, they usually breed in shallow freshwater marshes, under tussocks adjacent to lakes and lagoons or on lake islands. In the winter season, they occur on coastal marshes, freshwater and brackish lagoons, estuaries and bays. Many on inland wetlands, lakes, rivers and turloughs. The desk study identified nine records of Wigeon within the 10km grid squares, most recently on 31/12/2011 (NBDC, 2024). A total of 39 Wigeon were recorded during I-WeBS in the winter season 2023/2024, the closest sighting in relation to the Project was 3.2km at Lough Acrick.

Wigeon is an SCI of Lough Ree SPA, located 11.9km from the Site boundary. Given the wide commuting ranges and the presence of suitable habitat (Kilglass Lough and Lough Acrick) close to the Project, there is potential for ex-situ effects on Wigeon via disturbance, displacement and contamination of suitable habitat. Wigeon is evaluated as being of **Local Importance (Higher Value)** and **is included** for further consideration as a KER.

5.5.29 Whooper Swan

Whooper Swan is included on Annex I of the EC Birds Directive and the BoCCI Amber List. Very low numbers remain during summer, with the vast majority of birds overwintering lowland open farmland around inland wetlands, feeding in grassland and stubble. The desk study identified 15 records of Whooper Swan within the relevant 10km grid squares, most recently on 18/11/2022 (NBDC, 2024).

Sightings during field surveys comprised:

- Winter season 2022/2023 I-WeBS surveys, a peak count of 70 individuals in February 2023 with the closest sighting in relation to the Project recorded on Kilglass Lough, located 1.7km northwest of the Site boundary;
- Breeding season 2023 I-WeBS surveys, a peak count of 93 individuals in September 2023 with the closest sighting in relation to the Project recorded on Lough Acrick, 3.1km northeast of the Site boundary;

- Winter season 2023/2024 I-WeBS surveys, a peak count of 17 individuals in November 2023 on Lough Bofin and Grange Lough, with the closest sighting located 5.1km north of the Site boundary;
- Breeding season 2024 I-WeBS surveys, a peak count of 7 individuals in April 2024 with the closest sighting in relation to the Project recorded on Kilglass Lough, 2.3km northwest of the Site boundary;

Whooper Swan is an SCI of Lough Ree SPA, located 11.9km from the Site boundary. Given the wide commuting ranges and the presence of suitable habitat (Kilglass Lough) close to the Project, there is potential for ex-situ effects on Whooper Swan via disturbance, displacement and contamination of suitable habitat. Whooper Swan is evaluated as being of **Local Importance (Higher Value)** and is **included** for further consideration as a KER.

5.5.30 Black-headed Gull

Black-headed Gull is included on the BoCCI Red List. Black-headed gull populations are increasing in the short-term and long-term, and its short-term breeding range is increasing, although its long-term breeding range is decreasing. They breed both on the coast and inland where they will often nest in colonies, using wetland areas such as bogs, marshes and artificial lakes. In winter, they are widespread at the coast and inland. The desk study identified 23 records of Black-headed Gull within the 10km grid squares, most recently on 31/12/2011 (NBDC, 2024).

Sightings during field surveys comprised:

- Breeding season 2023 VP surveys, Black-headed Gull was observed on 3 occasions;
- Breeding season 2023 VP surveys, Black-headed Gull was observed on 37 occasions;
- Winter season 2022/2023 I-WeBS surveys, a peak count of 15 individuals in October 2022 with the closest sighting in relation to the Project recorded near Kilglass Lough, 3.5km north of the Site boundary;
- Winter season 2023/2024 I-WeBS surveys, a peak count of four individuals in February 2024, with the closest sighting in relation to the Project recorded on Kilglass Lough, 1.6km northwest of the Site boundary;
- Breeding season 2024 I-WeBS surveys, a single individual was recorded in April 2024 at Kilglass Lough, the sighting was recorded 3.4km north of the Site boundary.

Due to the lack of suitable habitat and absence of recorded sightings within the Site boundary, this species is **not included** for further consideration as a KER.

5.5.31 Common Gull

Common Gull is included on the BoCCI Amber List. They nest on the ground in a wide variety of situations, including islands, cliffs and shingle banks. They breed on the coast and inland in the west of Ireland, from Dingle to Malin Head, with most colonies in Co. Galway, Co. Mayo and Co. Donegal. In winter, numbers of resident birds are joined by wintering birds from Europe. The desk study identified no records of Common Gull within the 10km grid squares (NBDC, 2024).

Sightings during field surveys comprised:

- Breeding season 2023 VP surveys, Common Gull was observed twice;
- Winter season 2022/2023 I-WeBS surveys, a single individual was recorded in April 2024 at Kilglass Lough, 1.7km northwest of the Site boundary.

Due to the lack of suitable habitat and recorded absence of the Common Gull within the Site boundary and low levels of baseline activity, Common Gull is **not included** for further consideration as a KER.

5.5.32 Great Black-backed Gull

Great Black-backed Gulls breed on the ground in colonies all around the coast of Ireland. Most colonies are on well-vegetated offshore islands, or in other areas difficult to access, making the species difficult to census. They are resident birds and are joined by immigrants in the winter, found around the coast with some birds inland. The desk study identified one observation of Great Black-backed Gull within the 10km grid square (M97), within which the Project is located, most recently on 31/12/2011 (NBDC, 2024).

During the breeding season 2024 VP surveys, Great Black-backed Gull was observed once. Due to the low frequency of recorded observations and lack of suitable habitat for the species, Great Black-backed Gull is **not included** for further consideration as a KER.

5.5.33 Herring Gull

Herring Gull is included on the BoCCI Amber List. The species breeds in colonies around the coast of Ireland and is widespread in winter on the coast and inland. The desk study identified one record of Herring Gull within the 10km grid square (M97) (NBDC, 2024).

Eight Herring Gulls were recorded during I-WeBS during the breeding season 2023, all sightings were recorded at Kilglass Lough and Grange Lough. Due to no activity recorded within the Site boundary, low levels of activity within the surrounding environment and lack of suitable habitat, Herring Gull is **not included** for further consideration as a KER.

5.5.34 Lesser Black-backed Gull

Lesser Black-backed Gull is included on the BoCCI Amber List. Lesser Black-backed Gull has experienced an increase in distribution and population over both the short-term and long-term. They breed colonially, often with other gull species such as Herring Gull, favouring offshore islands, islands in inland lakes, sand dunes and coastal cliffs. In winter the species is found in a wide variety of habitats both inland and along the south and east coasts. The desk study identified 12 observations of Lesser Black-backed Gull within the 10km grid squares, within which the Project is located, most recently on 31/12/2011 (NBDC, 2024).

Sightings during field surveys comprised:

- Breeding season 2023 VP surveys, Lesser Black-backed Gull was observed on 43 occasions;
- Breeding season 2024 VP surveys, Lesser Black-backed Gull was observed on 26 occasions;
- Breeding season 2024 Transect survey, one Lesser Black-backed Gull was observed on transect 1;
- Winter season 2022/2023 I-WeBS surveys, a peak count of eight individuals in October 2022 with the closest sighting in relation to the Project recorded on Kilglass Lough, located 1.7km northwest of the Site boundary;
- Winter season 2023/2024 I-WeBS surveys, a peak count of three individuals in March 2024, recorded on Grange Lough and Kilglass Lough. The closest sighting was recorded 3.4km north of the Site boundary.
- Breeding season 2024 I-WeBS surveys, a peak count of three individuals in April 2024 on Grange Lough and Kilglass Lough, the closest sighting was recorded 3.3km north of the Site boundary;

The Project Site does not support suitable breeding habitat for Lesser Black-backed Gulls. Due to the low frequency of recorded observations and lack of suitable habitat for the species, Lesser Black-backed Gull is **not included** for further consideration as a KER.

5.5.35 Passerines and Other Bird Species

Many of the species recorded within and adjacent to the Site boundary were passerines (i.e., songbirds). The majority of these were common and widespread species included on the BoCCI Green List. BoCCI Red Listed species recorded included Stock Dove, Meadow Pipit, and Redwing. BoCCI Amber Listed species recorded included Goldcrest, House Martin, Starling, and Willow Warbler, Linnet and Spotted Flycatcher.

Goldcrests breed in a wide variety of habitats, including broadleaf forests, hedgerows and suburban gardens. It is also one of the few species that will breed in dense coniferous woodlands. They are a resident species in winter. In very cold weather they may visit garden

bird tables but prefers searching for insects in vegetation. In the winter season 2022/2023, Goldcrests were observed on four occasions during transect surveys. In the breeding season 2023, two Goldcrest were observed during transect surveys. In the winter season 2023/2024, Goldcrests were observed on four occasions during transect surveys. In the breeding season 2024, Goldcrests were observed on six occasions. Considering the low levels of activity recorded within the Site boundary during both winter and breeding seasons, Goldcrest is **not included** for further consideration as a KER.

House Martin breeds similarly to Swallow; they construct a nest out of mud. It is usually sited underneath the eaves of a house and on cliffs. They usually raise between two or three broods every year, with some fledging as late as October. The desk study identified 16 observations of House Martin within the 10km grid squares, most recently on 22/09/2019 (NBDC, 2024). House Martin was observed on four occasions during the breeding season 2023 transect surveys. Due to the low numbers of this species within the Site boundary during the breeding season, House Martin is **not included** for further consideration as a KER.

House Sparrows breed throughout Ireland, mainly around farm buildings and built-up areas. They nest in cavities in building, especially under eaves or holes formed by missing brickwork and will use nestboxes. Populations have declined in recent years. In some areas this may be due to lack of nest sites. During winter, they undertake only minor movements. The desk study identified 33 observations of House Sparrow within the 10km grid squares, most recently on 23/11/2019 (NBDC, 2024). One observation of House Sparrow was recorded during the winter seasons 2022/2023 transect surveys. Due to the low numbers of this species recorded within the Site boundary during the winter season, House Sparrow is **not included** for further consideration as a KER.

Linnets breed in a variety of habitats, including rough grassland, uplands and in coastal areas with gorse. Rather social and small flocks can be seen even during the breeding season. They mainly winter in Ireland but will gather in large flocks outside of the breeding season. The desk study identified 21 observations of Linnet within the 10km grid squares, most recently on 31/12/2011 (NBDC, 2024). In the breeding season 2024, one Linnet was observed at transect 2. Linnet was not recorded during any other survey period. Considering the low levels of activity recorded within the Site boundary, Linnet is **not included** for further consideration as a KER.

Meadow Pipits typically breed in bogs, uplands and areas of scrub and pasture, and are either sedentary or move to lowland areas in winter. The desk study identified 40 observations of Meadow Pipit within the 10km grid squares, most recently on 31/12/2011 (NBDC, 2024). A total of one observation and seven observations were recorded during the winter seasons 2022/2023 and 2023/2024 transect surveys respectively. No Meadow Pipits were recorded during the breeding season 2023. In the breeding season 2024, one Meadow Pipit was observed at Transect 1. Due to the low numbers of this species recorded within the Site boundary during the winter and breeding season, Meadow Pipit is **not included** for further consideration as a KER.

Raven is a widespread resident species (especially in upland areas) with an increasing breeding distribution in Ireland. The desk study identified 15 observations of Raven within the 10km grid squares within which the red line boundary is located, most recently on 31/12/2011 (NBDC, 2024). Sightings during field surveys comprised:

- Winter season 2022/2023 VP surveys, Raven was observed on eight occasions;
- Winter season 2022/2023 VP surveys, Raven was observed once;
- Breeding season 2023 VP surveys, Raven was observed on 12 occasions;
- Breeding season 2024 VP surveys, Raven was observed on 47 occasions;

Considering the low level of activity recorded within the Site boundary, local populations of Ravens are therefore evaluated as being of Local Importance (Lower Value). Raven is **not included** for further consideration as a KER.

Redwing does not breed in Ireland. They are however a common winter visitor to Ireland, favouring open fields in lowland areas, avoiding urban areas. Redwing is a species with an unknown population trend in Ireland due to its wintering status (NPWS, 2012). The desk study identified 16 observations of Redwing within the 10km grid squares, most recently on 02/11/2019 (NBDC, 2024). A total of 78 observations of Redwing were recorded during the winter season 2023/2024 transect surveys. Local populations of Redwing are therefore evaluated as being of **Local Importance (Higher Value)**. Due to the high levels of activity of this species within the Site boundary during the winter season, Redwing **is included** for further consideration as a KER.

Spotted Flycatchers are a widespread breeding bird in broadleaf woodlands, well-vegetated hedgerows, parks and gardens, they winter in central and southern Africa. The desk study identified 14 observations of Spotted Flycatcher within the 10km grid squares, most recently on 31/12/2011 (NBDC, 2024). In the breeding season 2024, one Spotted Flycatcher was observed at Transect 2. Spotted Flycatcher was not recorded during any other survey period. Local populations Considering the low levels of activity recorded within the Site boundary, Spotted Flycatcher is **not included** for further consideration as a KER.

Starlings are residents of woodland, farmland, towns and cities, nesting in trees and manmade structures. The desk study identified 42 observations of Starling within the 10km grid squares, most recently on 31/12/2011 (NBDC, 2024). A total of 24 observations were recorded during the winter season 2022/2023 transect surveys, five observations were recorded during breeding season 2023 and 126 observations in the winter season 2023/2024 transect surveys respectively. Starling was observed on eight occasions during the breeding seasons 2024 during transect surveys. Local populations Starlings are therefore evaluated as being of **Local Importance (Higher Value)**. Considering the level of activity recorded within the Site boundary, particularly in the winter season 2023/2024, Starling **is included** for further consideration as a KER.

Stock Doves breed in lowlands of eastern and southern Ireland, almost invariably near agricultural areas, especially cereal. They nest in holes in trees and have declined as a breeding species in Ireland. They are resident in winter, with only local movements. The desk study identified no observations of Stock Dove within the 10km grid squares, within which the Project is located (NBDC, 2024). One Stock Dove was recorded during the breeding season 2023 transect surveys. Due to the low numbers of this species within the Site boundary, Stock Dove is **not included** for further consideration as a KER.

Willow Warbler is one of the common breeding birds in Ireland (about 1 million pairs), with the highest densities in stands of willows along the edges of bogs and marshes. Less frequently in hedgerows, forests, and well-vegetated gardens. Willow Warblers winter in central and southern Africa and there are no winter records of Willow Warblers in Ireland. The desk study identified 32 observations of Willow Warbler within the 10km grid squares, most recently on 31/12/2011 (NBDC, 2024). Willow Warbler was observed on 31 and 13 occasions respectively during the breeding seasons 2023 and 2024 transect surveys respectively. Local populations of Willow Warbler are therefore evaluated as being of **Local Importance (Higher Value)**. Considering the level of activity recorded within the Site boundary during the breeding season, Willow Warbler **is included** for further consideration as a KER.

5.6 Summary of Key Ecological Receptors (KERs)

Based on the assessments provided above, A summary of avian Key Ecological Receptors (KERs) for the Project are presented in Table 5.64. These species will be taken forward for further assessment within the main EIAR, **Chapter 6: Biodiversity**.

Table 5.64: Summary of species importance and identification of Key Ecological Receptors.

Species	Importance
Buzzard	Local Importance (Higher Value)
Kestrel	County Importance
Peregrine	National Importance
Hen Harrier	County Importance
Barn Owl	County Importance
Lapwing	Local Importance (Higher Value)
Woodcock	County Importance
Common Scoter	Local Importance (Higher Value)
Coot	Local Importance (Higher Value)
Goldeneye	Local Importance (Higher Value)
Golden Plover	Local Importance (Higher Value)
Mallard	Local Importance (Higher Value)
Shoveler	Local Importance (Higher Value)
Teal	Local Importance (Higher Value)
Tufted Duck	Local Importance (Higher Value)
Wigeon	Local Importance (Higher Value)
Whooper Swan	Local Importance (Higher Value)
Redwing	Local Importance (Higher Value)
Starling	Local Importance (Higher Value)
Willow Warbler	Local Importance (Higher Value)