



Appendix 2C: Wintering Bird Report

Gortnalug 110Kv Substation and Grid Connection

25/03/2026



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1. INTRODUCTION

BACKGROUND

- 1.1. Neo Environmental Ltd has been appointed by Renewable Energy Systems on behalf of Ballydonagh Solar Limited (the “Applicant”) to undertake a Wintering Bird Report for a new 110kV Air insulated substation (AIS) and grid connection with associated infrastructure (the “Development”) on lands at Ballydonagh, Kiltormer, Co. Galway, Ireland (the “Application Site”).
- 1.2. The method of connection to the national grid will be a new 110 kV AIS Loop-in station (Gortnalug) with a ‘Loop-in/Loop out’ connection into the existing Ennis-Agannygal-Shannonbridge 110kV circuit. Ballydonagh Solar Limited accepted the Eirgrid Connection Offer (P602-CA-OL) in December 2025.
- 1.3. The Proposed Development comprises a 110kV AIS and associated grid connection infrastructure to facilitate the connection of the permitted Ballydonagh Solar Farm under Ref 2361049, as amended under Ref 25/61903 and Ballydonagh Solar Farm Extension under Ref 2461749, as amended under 26/60009, to the national grid. The applicant is seeking a ten-year permission from the date of consent of the 110kV Substation.
- 1.4. Please see Figure 300101338-DR-100 Overall Site Layout, Volume 2 for the layout of the proposed Development.

Development Description

- 1.5. The Proposed Development comprises a 110kV Air Insulated Substation and associated grid connection infrastructure to facilitate the connection of the permitted Ballydonagh Solar Farm under Ref 2361049, as amended under Ref 25/61903 and Ballydonagh Extension Solar Farm under Ref 2461749 , as amended under 26/60009, to the national grid, which revised the approved solar layout to accommodate the Gortnalug substation and grid connection infrastructure. The Proposed Development comprises a 110kV Air Insulated loop in/ loop out electricity substation (11,300m²) consisting of EirGrid control building (25m x 18m), customer control building (23.1m x 10.8m), 110kV bay arrangement, busbar infrastructure foundations, transformer, lightening masts, telecoms pole, CCTV, lighting columns, capacitor bank, reactor bank, harmonic filter, rural supply kiosk, house transformer, neutral earth resistor, resistor, stand by generator, compound roads, drainage, parking and hardstanding, palisade fence and gates.
- 1.6. The grid connection will consist of the removal of c.248m of the existing overhead line and poles from Ennis-Agannygal-Shannonbridge 110kV circuit and the erection of two new towers (16m height) and c.975m of double 110kV underground circuit and tracks into the proposed substation.

- 1.7. Remaining associated infrastructure consists of entrance; perimeter fencing, access tracks (1907m) (upgraded and localised widening) with water crossings, deposition areas (4,300m²), temporary construction compound; and all associated and ancillary site development, excavation, construction, landscaping and reinstatement works and the provision of site drainage.

Site Description

- 1.8. The area of the proposed Development (the “Application Site”) lies at an elevation of approximately 76.51 – 96.56m AOD and covers a total area of c. 34.8 hectares. It is centred at approximate Irish National Grid Reference (NGR) E 183907 N 220547 and is located in lands north of the L4301.
- 1.9. Comprising of a 13 field parcels of agricultural land, the site is currently being used for pastoral farming. The Application Site is bound by a mixture of trees, hedgerows and post-and-wire fencing. Access will be gained from the south gate entrance from a private lane to an unnamed local road off the L4301 to the southeast of the site.
- 1.10. The surrounding context is predominately agriculture with pockets of forestry and peatland and punctuated by individual properties, farmsteads and ribbon development associated with the minor and regional road network. Fields are typically small to medium in scale and similar in character to the Application Site lands.

Statement of Authority

- 1.11. The wintering bird surveys were carried out by Neo Environmental Ecologists Rhona Coghlan, Niall Murray and Sean O’Ceallaigh. The assessment of surveys was carried out by Ornithologist Rhona Coghlan and reviewed by Principal Ecologist Samuel O’Hara.
- 1.12. Niall Murray, who carried out surveys, holds circa 2.5 years’ experience in the ecology consultancy services sector. Niall is an ornithological specialist with substantial experience supporting renewable energy development, particularly onshore wind farms throughout pre-construction and operational monitoring phases. Niall’s expertise spans the full suite of ornithological survey methodologies—VP activity surveys, breeding and wintering walkovers, waterbird distribution assessments, species specific surveys (Hen Harrier, Barn Owl, Woodcock)—and the interpretation of these datasets to inform collision-risk assessments and ecological constraints analyses. Niall has experience in contributing to large datasets, producing GIS mapping outputs, and helping prepare technically robust interim reports.
- 1.13. Sean O’Ceallaigh, who carried out surveys, is a Graduate Ecologist at Neo Environmental with a BSc (Hons) in Zoology from the University of Galway. He has six months of experience as an ecologist in both field and office-based work. Sean has worked on Wintering and breeding bird surveys, Fossitt habitat surveys, bat surveys, invertebrate and invasive species surveys. He has worked on wind and solar projects and smaller scale commercial projects. Sean is currently a qualifying CIEEM member working his way up to full membership.

- 1.14. Rhona Coghlan, who carried out surveys and authored this report, is an Assistant Ecologist with over 1 year experience in the ecology and conservation industry. Rhona has been awarded a 1:1 BSc in Environmental Science from the National University of Galway and is a Qualifying Member of the Chartered Institute for Ecology and Environmental Management. Rhona has conducted Fossitt Habitat surveys, Breeding and Wintering Bird surveys, Bat surveys, Otter surveys, and aquatic invertebrate surveys. Rhona has authored Natura Impact Statements, Ecological Impact Assessment, Biodiversity Management Plans, Q-value reports, Wintering Bird reports and more. Rhona is appointed ECoW for two wind farm development and has experience with client-facing consultations and survey reports. Rhona has taken part in several training events organised by CIEEM, The British Trust for Ornithology and Birdwatch Ireland.
- 1.15. Samuel O’Hara, who reviewed this report, is a Principal Ecologist at Neo Environmental, holds a BSc (Hons) in Ecology and has over eleven years’ experience in ecology consultancy and conservation. He is a protected species licence holder (bats, smooth newt, common lizard) who has extensive experience of habitat and protected species survey work throughout Britain and Ireland with a particular focus on habitat and botanical surveys. Samuel has produced a wide range of documents in support of planning submissions including ecological impact assessment (EcIA), Habitats Directive appraisals, protected species surveys reports, condition compliance reports, invasive species management plans and habitat management plans, among others. This includes planning applications across an array of sectors. Samuel is a full member of the CIEEM.

2. METHODOLOGY

STUDY AREAS

- 2.1. The various areas of study considered during the ornithological assessment of the Proposed Development at the Application Site are outlined within **Table 2-1** below. Due to the scale and nature of the Proposed Development, it is considered that the chosen distances from the Application Site are appropriate for gathering relevant ornithological information for assessment. These distances are collectively known as the Proposed Development's Zones of Influence (Zoi).
- 2.2. In the absence of Irish-specific guidance, current best practice - that is utilised across the United Kingdom and the Republic of Ireland - for determining Zones of Influence is to refer to the NatureScot guidance documents "Assessing Connectivity with Special Protection Areas (SPAs)" and the Chartered Institute of Ecology and Environmental Management (CIEEM) guidance "Guidelines for Ecological Impact Assessment in the UK and Ireland - Terrestrial, Freshwater, Coastal and Marine" .
- 2.3. The purpose for reference to these best practice guidance documents is to provide a robust and universal process by which Zones of Influence, study areas and 'connectivity' between development proposals and Special Protection Areas (SPAs) or other important ornithological interests can be determined.
- 2.4. When defining the extent of the Zones of Influence, the SPA connectivity guidance states: *"the core range should be used when determining whether there is connectivity between the proposal and the qualifying interests."* The 'core range' is a measure of typical bird travel distance for foraging purposes, from its nest site during breeding season, to its chosen foraging locations. The guidance also states: *"Maximum ranges are also provided to indicate that birds will, at times, travel further. In exceptional cases distances up to the maximum foraging range may be considered"* and that birds flying beyond their core foraging range *"may still be connected if there is a lack of other closer foraging sites."* Foraging ranges for bird species during the wintering season are also given in the same guidance.
- 2.5. These distances, given in the guidance, were the result of extensive literature reviewing that examined ranging behaviour and produced a list of the 'core foraging range' and 'maximum foraging range' for the dispersal and foraging behaviours of a range of bird species.
- 2.6. All bird species listed as breeding qualifying interests of SPAs will have their nests inside the boundaries of the designated areas but may rely upon grounds outside of the designated areas for sustenance. Similarly, all bird species listed as wintering qualifying interests of SPAs will have their night roosts inside the boundaries of the designated areas but may rely upon grounds outside of the designated areas for sustenance. Safeguarding these dependent

sustenance aspects of qualifying bird's species lifecycles is regarded as maintaining the designated site's 'integrity'.

- 2.1. Therefore, Zones of Influence and potential connectivity to Designated Sites are determined, primarily by an analysis of their qualifying interest's core foraging ranges, with a secondary analysis of maximum foraging ranges and a tertiary analysis of the value of the habitats within and surrounding the Application Site and those between the Application Site and any potentially connected Designated Site.
- 2.2. The majority of named species core foraging ranges are up to 5km from their nest/roost site.
- 2.3. **Table 2-1**, below, lists the various study areas for the differing elements comprising this assessment process.

Table 2-1: Study Areas.

| Study Type | Distance |
|---|------------------------------------|
| Existing ornithological records obtained from desktop study of data records on NBDC | 10km |
| Statutory Designated Sites for ornithological interest | 15km |
| Breeding and non-breeding bird surveys | Application Site + 50m ("the ESA") |

- 2.4. The above study areas have been defined in compliance with the aforementioned guidance documents during the scoping stage (noted in the following sections, where relevant) and in conducting the field surveys, and are considered appropriate for assessing any potential effects on ornithological interests arising from the Proposed Development.

LEGISLATION, POLICY & GUIDANCE

- 2.5. The Proposed Development has been assessed against existing European, national, regional and local policies and guidance. The assessment has been collated and considered based upon the following legislation, planning policy and guidance.

European Legislation

- 2.6. European legislation relevant to the Proposed Development is outlined within **Table 2-2** below.

Table 2-2: Relevant European Legislation

| Directive | Main Provisions |
|--|--|
| EU Birds Directive EC/79/409 (amended by 2009/147/EC) | <p>European Union members meet their obligations for bird species under the Bern Convention and Bonn Convention, and more specifically by the means of the EU Birds Directive.</p> <p>The Birds Directive sets out the criteria for Special Protection Areas including; a list of species requiring protection in Annex 1 of the Directive and mechanisms for protecting wild birds naturally occurring in Europe. This Directive is transposed into national legislation principally by the 'EC (Birds and Natural Habitats) Regulations 2011'¹.</p> <p>The Directive provides a framework for the conservation and management of, and human interactions with, wild birds in Europe. It sets broad objectives for a wide range of activities, although the precise legal mechanisms for their achievement are at the discretion of each Member State.</p> |
| EU Habitats Directive 92/43/EEC | <p>The EU Habitats Directive sets out the framework for the designation and protection of sites for nature conservation for species and habitats listed in Annex II, IV and V. The directive was adopted in 1992 as a response to the Bern Convention.</p> <p>"The main aim of the Habitats Directive is to promote the maintenance of biodiversity by requiring Member States to take measures to maintain or restore natural habitats and wild species listed on the Annexes to the Directive at a favourable conservation status, introducing robust protection for those habitats and species of European importance."</p> <p>The protection of species outlined in the Habitats Directive is transposed in Ireland by national legislation into the European Communities (Birds and Natural Habitats) Regulations 2011, as amended².</p> |
| Environmental Liability Directive 2004/35/EC | <p>The Environmental Liability Directive aims to make those causing damage to the environment (water, land and nature) legally and financially responsible for remedying such damage. The Directive applies to all development sizes and values.</p> <p>Species and natural habitats are protected under the 1992 Habitats Directive, the 1979 Wild Birds Directive and its 2009 update.</p> |

¹ Office of the Attorney General (2011), European Communities (Birds and Natural Habitats) Regulations 2011, available at www.irishstatutebook.ie

² [Online](https://www.irishstatutebook.ie/eli/2011/si/477/made/en/print), available at: <https://www.irishstatutebook.ie/eli/2011/si/477/made/en/print>

| Directive | Main Provisions |
|-------------------|--|
| | Damage to protected species and natural habitats is “any damage that has significant adverse effects on reaching or maintaining the favourable conservation status of such habitats or species”. |
| Ramsar Convention | The Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention) came into force in 1975. It is an international treaty for the conservation and wise use of wetlands. |
| Bern Convention | The Bern Convention came into force in 1982, with the principal aims to ensure conservation and protection of wild plant and animal species and their natural habitats (listed in Appendices I and II of the Convention), to increase cooperation between contracting parties, and to regulate the exploitation of those species (including migratory species) listed in Appendix III. |
| Bonn Convention | The Bonn convention came into force in 1985. Contracting Parties work together to conserve migratory species and their habitats by providing strict protection for endangered migratory species (listed in Appendix I of the Convention), concluding multilateral Agreements for the conservation and management of migratory species which require or would benefit from international cooperation (listed in Appendix II), and by undertaking cooperative research activities. |

National Legislation

2.7. The principal legislative acts and regulations underpinning biodiversity and nature conservation in Ireland are:

- The Wildlife Act 1976
- The Wildlife (Amendment) Act 2000
- The European Communities (Birds and Natural Habitats) Regulations 2011

2.8. The national legislation governing the protection of wildlife and natural resources in Ireland further includes:

- The Irish Wildlife Act 1976 to 2012, as amended- this is the main legislation for the protection of wildlife in Ireland and outlines strict protection for species that have significant conservation value.

- It is an offence to intentionally kill, injure, or take any wild bird or their eggs or nests, with special penalties for Annex 1 species.
- Wildlife (Amendment) Act 2023
- S.I. No. 293/1998 - European Communities (Quality of Salmonid Waters) Regulations, 1988;
- S.I. No. 477/2011 - European Communities (Birds and Natural Habitats) Regulations 2011 as amended. These regulations form an Irish law that implements two key European directives:
 - The Birds Directive (2009/147/EC)
 - The Habitats Directive (92/43/EEC);
- Flora Protection Order, 2015;
- Water Framework Directive (2000/60/EC) & the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (S.I. 272 of 2009), as amended;
- Heritage Act 2018 (no. 15 of 2018), Part 3;
- Planning, Heritage and Broadcasting (Amendment) Act 2021 (no.11 of 2021), Chapter 3.

2.9. Policies and Objectives in the following Plans were also considered:

- The National Biodiversity Action Plan 2023-2030 (NBAP);
- Galway County Development Plan 2022-2028.

DESKTOP STUDY

- 2.10. A pre-survey data search was conducted in order to collate existing information of ornithological interest from the footprint of the Proposed Development and its surrounding area. The data search utilised the following information sources:
- Collation of bird atlas data and other known bird records from the National Biodiversity Data Centre (www.biodiversityireland.ie).
 - Birdwatch Ireland (BWI) - <https://birdwatchireland.ie/> provides open access data for the Irish Wetland Bird Survey (I-WeBS). I-WeBS is an annual survey of wintering birds undertaken at a national level, focussing on wetland sites utilised by wintering birds. Bird count data for the two closest sites I-WeBS sites was accessed and has been presented in this report.
 - Conservation objectives of the relevant SPAs within the Proposed Development ZOI were accessed via - <https://www.npws.ie/>
 - Review of Ordnance Survey mapping and aerial photography of the proposed scheme area and its environs.

FIELD SURVEY

- 2.11. Bird surveys were completed over 6 days during the months of January, February and March of 2026. The entirety of the Application Site was covered over the following dates: 26th January, 23rd February and the 12th March 2026 (Please see **Appendix 2E – Figures 1 – 2**).
- 2.12. Wintering bird surveys involved walking pre-determined transects along all features of ecological importance to birds within the land boundary. The entirety of the Application Site was covered during this survey period, alongside a 50m extended survey area (“ESA”) outside of the development boundary. The WeBS methodology was utilised during survey, with regular stops taken during transect walks, to account for the waterbird, waterfowl and migratory species. Guidance provided by the British Trust for Ornithology (“BTO”)³ and Bird Survey Guidelines⁴.
- 2.13. All bird species observed during site visits were recorded using ArcGIS online mapping software, both within and adjacent to the Application Site. The date of sighting, location,

³ Available at: <https://www.bto.org/get-involved/volunteer/projects/winter-bird-survey/taking-part/recording#toc-survey-forms-and-instructions>.

⁴ Available at: <https://birdsurveyguidelines.org/non-breeding-walkover-survey/>.

species and number of individuals were recorded, as well as behaviour exhibited. Any species seen flying over the Application Site but not interacting with the Application Site were also recorded. BTO codes were used to denote the species and behaviour of individuals.

- 2.14. Site visits were conducted when weather conditions were deemed appropriate. Where possible, site visits were scheduled during an array of different weather conditions in order to get a representative sample of the bird populations using the Application Site. **Table 2-3** below illustrates the weather conditions during each site visit.

Table 2-3: Bird survey details

| Date | Survey Method | Survey – Time of Day | Weather |
|------------|--------------------------|----------------------|--|
| 26/01/2026 | Non-breeding Transect | Morning | Temp: 6°C Precipitation: Light to Moderate Wind: 10 m/s Cloud: 100% Visibility: Good |
| 23/02/2026 | Non-breeding Transect | Morning | Temp: 10°C Precipitation: Light to Moderate Wind: 7 m/s Cloud: 100% Visibility: Good |
| 12/03/2026 | Non-Breeding Transect | Morning | Temp: 9°C Precipitation: Heavy showers Wind: 4 m/s Cloud: 100% Visibility: Good |

- 2.15. It should be noted that while March is within the breeding season for birds, it is also within the migratory bird season (September to March). Where breeding behaviour was observed, it was recorded; however, suitability for breeding birds is not being assessed within this report and so was not further considered.

Limitations

- 2.16. The results obtained from site visits are representative of the time in which these surveys were conducted. Sightings observed after the dedicated time period cannot be considered within this assessment.

3. RESULTS

DESK STUDY

Statutory Designated Sites

- 3.1. The Proposed Development is not within or directly adjacent to any European Designated Sites. Using data provided by the Environmental Protection Agency (“EPA”), National Parks and Wildlife Services (“NPWS”) and ArcGIS mapping software, it was found that within a 15km zone of influence from the Application Site, there were three Special Protection Areas (“SPAs”); River Suck Callows SPA, Middle Shannon Callows SPA and the River Little Brosna Callows SPA.
- 3.2. The River Suck Callows SPA (located 6.49km from the Application Site) is designated for the following qualifying interests: Whooper Swan (*Cygnus cygnus*) [A038], Golden Plover (*Pluvialis apricaria*) [A140], Lapwing (*Vanellus vanellus*) [A142], Greenland White-fronted Goose (*Anser albifrons flavirostris*) [A395], Wigeon (*Mareca penelope*) [A855], Wetland and Waterbirds [A999]. It is considered to have potential ornithological connectivity with the Application Site.⁵
- 3.3. Middle Shannon Callows SPA (located 11.02km from the Application Site) is designated for the following qualifying interests: Whooper Swan (*Cygnus cygnus*) [A038], Corncrake (*Crex crex*) [A122], Golden Plover (*Pluvialis apricaria*) [A140], Lapwing (*Vanellus vanellus*) [A142], Black-tailed Godwit (*Limosa limosa*) [A156], Black-headed Gull (*Chroicocephalus ridibundus*) [A179], Wigeon (*Mareca penelope*) [A855] and Wetland and Waterbirds [A999]. It is considered to have potential ornithological connectivity with the Application Site.⁶
- 3.4. River Little Brosna Callows SPA (located 13.08km from the Application Site) is designated for the following qualifying interests: Whooper Swan (*Cygnus cygnus*) [A038], Teal (*Anas crecca*) [A052], Pintail (*Anas acuta*) [A054], Golden Plover (*Pluvialis apricaria*) [A140], Lapwing (*Vanellus vanellus*) [A142], Black-tailed Godwit (*Limosa limosa*) [A156], Black-headed Gull (*Chroicocephalus ridibundus*) [A179], Greenland White-fronted Goose (*Anser albifrons flavirostris*) [A395], Wigeon (*Mareca penelope*) [A855], Shoveler (*Spatula clypeata*) [A857], Wetland and Waterbirds [A999]. It is considered to have potential ornithological connectivity with the Application Site.⁷

⁵ Available at: <https://www.npws.ie/protected-sites/spa/004097>.

⁶ Available at: <https://www.npws.ie/protected-sites/spa/004096>.

⁷ Available at: <https://www.npws.ie/protected-sites/spa/004086>.

Biological Records

- 3.5. **Table 3-1** details the bird species returned from National Biodiversity Data Centre (NBDC) datasets for the 10km grid square which encompasses the site and surrounding area. Records older than 15 years were considered no longer relevant and were not included.
- 3.6. **Table 3-1** also indicates species listed in Annex I of the EU Birds Directive and those listed in the Birds of Conservation Concern in Ireland (BoCCI) Amber or Red List⁸. Red-listed species are those of highest conservation priority, Amber-listed species are those which are of secondary priority and Green-listed species are those not currently of conservation concern, with stable or increasing populations.

Table 3-1: NBDC records of wildlife act birds for 10km grid square Q94 and R04

| Common Name | Scientific Name | Annex I | BoCCI |
|----------------------|-----------------------------------|------------|------------|
| Barn Owl | <i>Tyto alba</i> | No | Red |
| Blackbird | <i>Turdus merula</i> | No | Green |
| Blackcap | <i>Sylvia atricapilla</i> | No | Green |
| Buzzard | <i>Buteo buteo</i> | No | Green |
| Chaffinch | <i>Fringilla coelebs</i> | No | Green |
| Chiffchaff | <i>Phylloscopus collybita</i> | No | Green |
| Collared Dove | <i>Streptopelia decaocto</i> | No | Green |
| Cormorant | <i>Phalacrocorax carbo</i> | No | Yellow |
| Cuckoo | <i>Cuculus canorus</i> | No | Green |
| Herring Gull | <i>Larus argentatus</i> | No | Yellow |
| Dunnock | <i>Prunella modularis</i> | No | Green |
| Golden Plover | <i>Pluvialis apricaria</i> | Yes | Red |
| Goldfinch | <i>Carduelis carduelis</i> | No | Green |
| Grey Heron | <i>Ardea cinerea</i> | No | Green |
| Hooded Crow | <i>Corvus cornix</i> | No | Green |
| Jackdaw | <i>Coloeus monedula</i> | No | Green |
| Kestrel | <i>Falco tinnunculus</i> | No | Red |
| Meadow Pipit | <i>Anthus pratensis</i> | No | Red |
| Mistle Thrush | <i>Turdus viscivorus</i> | No | Green |
| Pheasant | <i>Phasianus colchicus</i> | No | Green |

⁸ Gilbert G, Stanbury A and Lewis L (2021), "Birds of Conservation Concern in Ireland 2020 –2026"

| Common Name | Scientific Name | Annex I | BoCCI |
|---------------------|--------------------------------|------------|--------|
| Peregrine | <i>Falco peregrine</i> | No | Green |
| Raven | <i>Corvus corax</i> | No | Green |
| Robin | <i>Erithacus rubecula</i> | No | Green |
| Rook | <i>Corvus frugilegus</i> | No | Green |
| Sparrowhawk | <i>Accipiter nisus</i> | No | Green |
| Song Thrush | <i>Turdus philomelos</i> | No | Green |
| Stonechat | <i>Saxicola torquata</i> | No | Green |
| Swift | <i>Apus apus</i> | No | Red |
| Whooper Swan | <i>Cygnus cygnus</i> | Yes | Yellow |
| Willow Warbler | <i>Phylloscopus trochilus</i> | No | Yellow |
| Wood Pigeon | <i>Columba palumbus</i> | No | Green |
| Wren | <i>Troglodytes troglodytes</i> | No | Green |

* Annex I or BOCCI status cannot be determined

- 3.7. The Application Site is not covered by an Irish Wetland Bird Survey (I-WeBS site). **Table 3-2** details survey data available for the nearest I-WeBS site, located approximately 14km east of the study area: Shannon Callows (Aerial) (**OR320**).

Table 3-1: I-WeBS site OR320 Shannon Callows (Aerial) survey count information

| Common Name | Scientific Name | Peak Count (2018/19) | Peak Count (2020/21) | Annex I | BoCCI |
|--------------|----------------------------|----------------------|----------------------|---------|--------|
| Common Gull | <i>Larus canus</i> | | 10 | No | Yellow |
| Cormorant | <i>Phalacrocorax carbo</i> | 9 | 9 | No | Yellow |
| Tufted Duck | <i>Aythya fuligula</i> | | 20 | No | Red |
| Herring Gull | <i>Larus argentatus</i> | 1 | | No | Yellow |
| Dunlin | <i>Calidris alpina</i> | | 20 | Yes | Red |
| Wigeon | <i>Anas penelope</i> | 1655 | 3863 | No | Yellow |
| Redshank | <i>Tringa totanus</i> | 12 | 1 | No | Red |

| Common Name | Scientific Name | Peak Count (2018/19) | Peak Count (2020/21) | Annex I | BoCCI |
|----------------------|-----------------------------------|----------------------|----------------------|------------|--------|
| Black-tailed Godwit | <i>Limosa limosa</i> | | 600 | No | Red |
| Whooper Swan | <i>Cygnus cygnus</i> | 478 | 907 | Yes | Yellow |
| Grey Heron | <i>Ardea cinerea</i> | 2 | 2 | No | Green |
| Lapwing | <i>Vanellus vanellus</i> | 1284 | 2127 | No | Red |
| Black-headed Gull | <i>Larus riidibundus</i> | 581 | 1273 | No | Yellow |
| Golden Plover | <i>Pluvialis apricaria</i> | 6500 | 2860 | Yes | Red |
| Teal | <i>Anas crecca</i> | 115 | 867 | No | Yellow |
| Mallard | <i>Anas platyrhynchos</i> | 47 | 51 | No | Yellow |
| Curlew | <i>Numenius arquata</i> | 71 | | No | Red |
| Little Egret | <i>Egretta garzetta</i> | 1 | 4 | Yes | Green |
| Mute Swan | <i>Cygnus olor</i> | 356 | 420 | No | Yellow |

*Records shown in bold indicate they are Annex 1 listed species

FIELD SURVEY

- 3.8. A total of 19 bird species were recorded within the Application Site and 50m ESA including one Annex I species Snipe.
- 3.9. The majority of species recorded were green-listed under Bids of Conservation Concern in Ireland (“BoCCI”); however, two amber-listed species, House Sparrow and Goldcrest and three red-listed species, Snipe, Meadow Pipit and Redwing, were recorded. **Table 3-3** below shows all species recorded during survey and **Appendix 2E - Figures 1-2** illustrate the survey findings.

Table 3-3: Bird species recorded during bird surveys

| Scientific Name | Common Name | BTO Code | Annex 1 | BoCCI Listed Species |
|---------------------------------|---------------|----------|---------|----------------------|
| <i>Turdus merula</i> | Blackbird | B. | No | Green |
| <i>Turdus viscivorus</i> | Blue Tit | BT | No | Green |
| <i>Fringilla Coelebs</i> | Chaffinch | CH | No | Green |
| <i>Anthus pratensis</i> | Bullfinch | BF | No | Green |
| <i>Periparus ater</i> | Coal Tit | CT | No | Green |
| <i>Prunella modularis</i> | Dunnock | D. | No | Green |
| <i>Parus major</i> | Great Tit | GT | No | Green |
| <i>Motacilla alba yarrellii</i> | Pied Wagtail | PW | No | Green |
| <i>Corvus frugilegus</i> | Rook | RO | No | Green |
| <i>Erithacus rubecula</i> | Robin | R. | No | Green |
| <i>Palumba columbus</i> | Wood Pigeon | WP | No | Green |
| <i>Troglodytes troglodytes</i> | Wren | WR | No | Green |
| <i>Corvus cornix</i> | Hooded Crow | HC | No | Green |
| <i>Buteo buteo</i> | Buzzard | BZ | No | Green |
| <i>Passer domesticus</i> | House Sparrow | HS | No | Amber |
| <i>Regulus regulus</i> | Goldcrest | GC | No | Amber |
| <i>Anthus pratensis</i> | Meadow Pipit | MP | No | Red |
| <i>Gallinago gallinago</i> | Snipe | SN | No | Red |
| <i>Turdus iliacus</i> | Redwing | RE | No | Red |

***Bold indicates an Annex 1 species**

- 3.10. Surveys undertaken in March did not record any sighting within the Application Site and therefore, a figure was not included in **Appendix 2E – Figure 1-2**.

4. DISCUSSION

- 4.1. The Application Site comprises mainly on agricultural farmland with a small area of mixed woodland and scrub. Hedgerows and treelines border majority of the Application Site, with some areas of waterlogged soil. The construction phase will involve removal of some areas of agricultural grassland and minimal removal of some hedgerows and trees. Due to the size of the development, this will not be significant and is unlikely to have a significant negative effect.
- 4.2. The aim of Wintering Bird surveys is to obtain data which will create a representative sample of the local bird population outside of the breeding season, as well as migratory species which may appear. Waterfowl and wetland species are a special focus during these surveys, particularly in areas where soils are waterlogged and considered suitable for certain species that may be qualifying interests for certain SPAs.
- 4.3. A total of 19 species were recorded throughout all site visits. As said above, the majority of bird species recorded during these surveys were green-listed bird species common of agricultural landscapes. Two amber-listed species were recorded within the Application Site and 50m ESA: Goldcrest and House Sparrow. Three red-listed species were also recorded: Snipe Meadow Pipit and Redwing. Snipe is a species which is included in Annex II of the Birds Directive.
- 4.4. Species of conservation concern recorded within the Application Site and wider ESA during the bird surveys are discussed individually below.

RED-LISTED SPECIES

- 4.5. The following, red-listed species were noted during the wintering bird surveys: Snipe and Redwing.

Snipe

- 4.6. Snipe, a red-listed species under BoCCI, is also an Annex II species that is commonly found in wet or boggy areas nesting on the ground in tussocky grasses.⁹ They forage in similar areas and commonly sighted in waterlogged areas or around inland lakes. They feed largely on invertebrates and plant matter. Snipe were seen throughout the Application Site concentrated in areas of waterlogged soil dominated by rushes.
- 4.7. While there are some small areas within the Application Site that are suitable as foraging areas due to waterlogged conditions during wet conditions, this is not in consistent and

⁹ Available at: <https://birdwatchireland.ie/birds/snipe/>.

plentiful supply throughout the Application Site. Because of this, the Application Site is not considered to be suitable as a habitat for Snipe overall, particularly due to current management as pastoral farmland. Because of this, the Proposed Development is not predicted to give rise to significant adverse effects on the Snipe.

Redwing

- 4.8. Redwing are a migratory species that are common in Ireland from October to March. They are commonly seen in open fields of agricultural landscapes and feed largely on plant matter and small invertebrates.¹⁰ The construction phase will involve the removal of 721.5m² of hedgerow, as well as 18 trees. 23m of hedgerow will also be removed to facilitate swept paths.
- 4.9. Given the small scale of the development and plentiful alternative habitat within the wider landscape, this removal will have an insignificant effect on Redwing populations. It is also noted that infill planting of hedgerows is proposed, which will compensate for any loss of habitat.

Meadow Pipit

- 4.10. Meadow pipits are a common passerine bird in Ireland, seen to use rough pastures, bogs, uplands, scrub and pasture for breeding.¹¹ Meadow pipit were observed flying over the site during the January and February surveys.
- 4.11. The Proposed Development will largely retain habitats of value for the species including woodland, forestry, hedgerows and treelines, with only small amounts of removal scheduled which will be compensated by infilling of existing hedgerows. No significant impacts to goldcrest are predicted to arise as a result of the Proposed Development subject to mitigation.

AMBER-LISTED SPECIES

- 4.12. The following amber-listed species were noted during wintering bird surveys: House Sparrow. and Goldcrest.

Goldcrest

- 4.13. Goldcrest are a resident passerine bird typically found in coniferous forests throughout Ireland¹². They can breed in broadleaf forests, dense coniferous forests, hedgerows and suburban gardens. Goldcrest are resident wintering birds in Ireland.

¹⁰ Available at: <https://birdwatchireland.ie/birds/redwing/>.

¹¹ Meadow Pipit. Available at: <https://birdwatchireland.ie/birds/meadow-pipit/>

¹² Goldcrest. Available at: <https://birdwatchireland.ie/birds/goldcrest/>

- 4.14. Goldcrest were noted foraging, singing, calling, and perching within the Application Site during the January and February surveys. The Proposed Development will largely retain habitats of value for the species including woodland, forestry, hedgerows and treelines, with only small amounts of removal scheduled which will be compensated by infilling of existing hedgerows. No significant impacts to goldcrest are predicted to arise as a result of the Proposed Development subject to mitigation.

House Sparrow

- 4.15. House Sparrow are one of Ireland's most widespread garden birds. They breed throughout Ireland, primarily around buildings, nesting in cavities and under eaves and commuting and foraging in hedgerows and treelines¹³.
- 4.16. House Sparrows were recorded foraging, singing, calling, and perching in January 2026. As there are no buildings or structures on site which can be considered as potential breeding sites for this species, it is unlikely that these species are breeding within the Application Site but may be breeding in adjacent farmyards.
- 4.17. The Proposed Development will largely retain habitats of value for the species including woodland, hedgerows and treelines, with a small amount of removal scheduled which will be compensated for using infill planting. No significant impacts to house sparrow are predicted to arise as a result of the Proposed Development subject to mitigation.

RECOMMENDED MEASURES AND MITIGATION

Recommended Measures and Mitigation

- 4.18. Given that the Proposed Development will involve the loss of habitat with potential to support nesting birds including hedgerows and trees, such works would have potential to give rise to adverse effects upon a wide range of bird species which are likely to utilise such habitats for nesting.
- 4.19. To prevent an offence under the Wildlife Acts and to minimise potential adverse effects to these species any tree or vegetation removal works that are required as part of this development shall be done outside of the bird nesting season, from March 1st until August 31st inclusive.
- 4.20. This mitigation will effectively address any potential adverse effects upon the vast majority of species recorded within the Application Site.
- 4.21. Given the presence of ground-nesting bird species such as Snipe, which may be negatively affected without mitigation, it is recommended, on a precautionary basis, that a dedicated

¹³ Available at: <https://birdwatchireland.ie/birds/house-sparrow/>

Ecological Clerk of Works (ECoW) or a suitably qualified ornithologist carries out pre-commencement surveys of the site prior to any vegetation removal. Construction works should ensure that Snipe present on site are not subject to undue disturbance and are appropriately buffered from construction works until the birds move off-site of their own accord.

- 4.22. Should a ground nesting species nest or evidence of nest building be recorded during these pre-commencement surveys the ECoW will implement an appropriate buffer, as recommended by NatureScot (2022)¹⁴ from construction works, in line with relevant guidance which will remain in place until nesting has completed and the birds have fledged, to be established through monitoring.
- 4.23. The proposed construction of the development would occur in a phased manner, ensuring that substantial portions of the site at any given time would not be subject to live construction works, thus reducing the area which is subject to disturbance and allowing breeding species to establish new territories within the completed parts of the development.
- 4.24. The associated Biodiversity Management Plan puts forth various biodiversity enhancement measures, which will increase ecological value of existing habitats within the Application Site, which will benefit various generalist and specialist species, including ground-nesting species. Wildlife shelters, including bird boxes, have also been proposed which will offer breeding sites for various species of passerine birds, which will also benefit birds of prey, offering prey items. Invertebrate hotel will increase in the invertebrate population which will benefit species that rely on invertebrates, particularly chicks which require protein-rich food for development. The aforementioned enhancement measures will have an overall beneficial, positive impact on the local bird population, including red-listed, amber-listed and Annex I/II species.
- 4.25. The majority of the other bird species are common generalist species which will adapt to change in the landscape and are seen within grasslands, hedgerows, woodlands and gardens. General good management of hedgerow will benefit all species as the infilling of hedgerow with native species planting will improve sheltering and foraging opportunities for a variety of species.
- 4.26. There is potential for short-term disturbance to ground nesting species such as skylark and snipe. Best-practice construction safeguards will be implemented to ensure disturbance is kept to a minimum and is not expected to result in any reduction in numbers.

¹⁴ Available at: <https://www.nature.scot/doc/naturescot-research-report-1283-disturbance-distances-review-updated-literature-review-disturbance>.

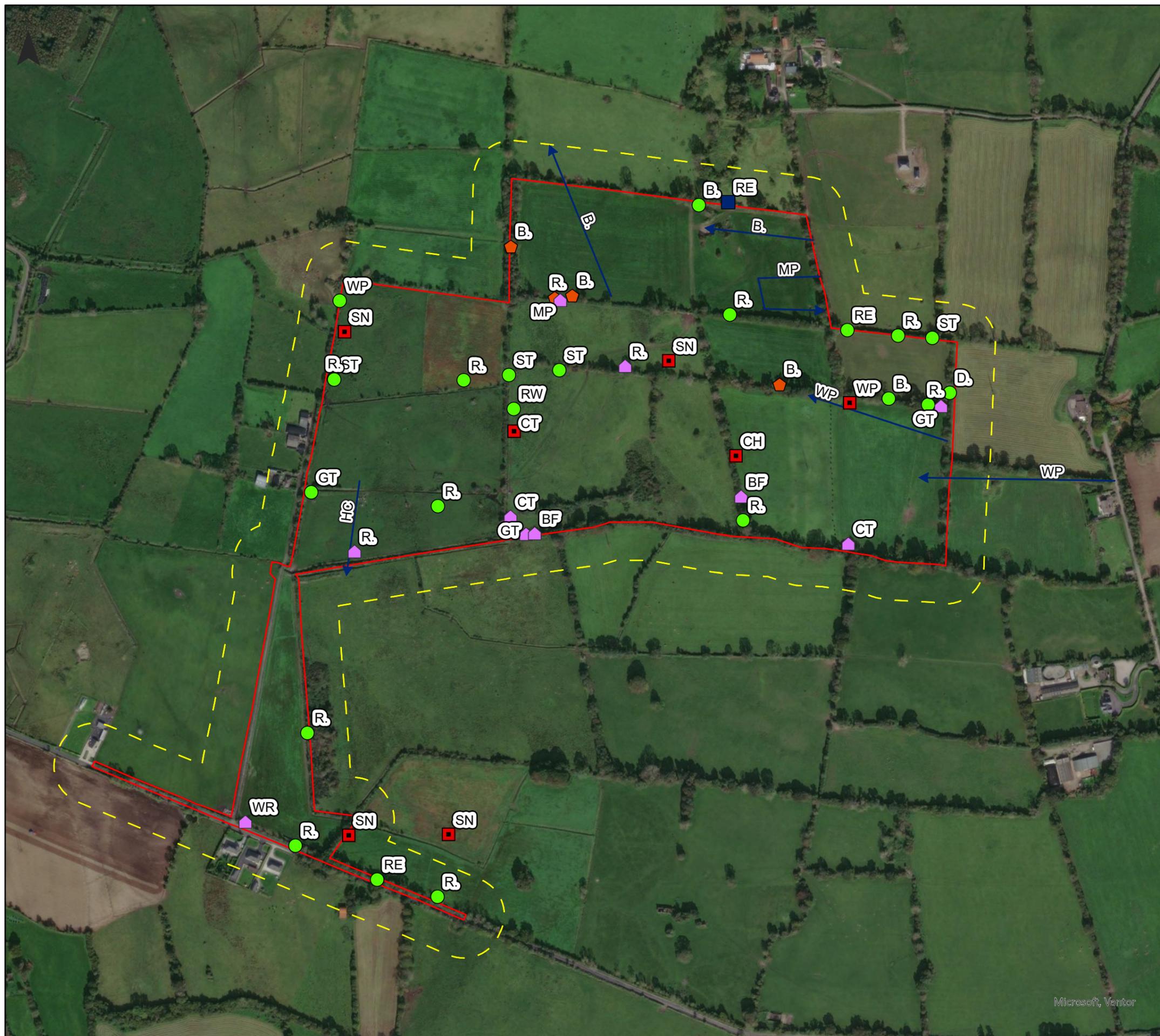
5. CONCLUSION

- 5.1. The results of the three non-breeding bird surveys undertaken in January, February and March of 2026 indicate that the proposed site predominantly supports common and widespread bird species typical of farmland habitats present.
- 5.2. Results from the wintering bird surveys also conclude that the site supports wintering common snipe which were found using improved grassland and wet grassland habitat within the Application Site. The Application Site was also recorded to support a number of red- and amber-listed passerine species which were recorded calling, singing and foraging within the site boundary. Some of these species are considered to be probably breeding within the Application Site or adjacent to it.
- 5.3. With the implementation of habitat enhancement measures for locally important bird species, it is considered that the Proposed Development is unlikely to give rise to a significant negative effect on local bird species' populations. As the development will improve habitats for local bird species, there will likely be a positive effect on these as a result of the development. Pre-construction surveys for wintering birds will be undertaken if works are to take place within the winter period (October to March) and summer/spring period, if needed.
- 5.4. Safeguards will be implemented to ensure any disturbance of such species is kept to a minimum, which include disturbance buffers and exclusion zones around ecologically important features.
- 5.5. Recommendations have been made in the accompanying **Biodiversity Management Plan** for the improvement of the site to ensure that important habitats are retained and compensated for, where necessary.

6. APPENDIX 2C – FIGURES

- Figure 1 – Wintering Bird Map – January 2026
- Figure 2 – Wintering Bird Map – February 2026

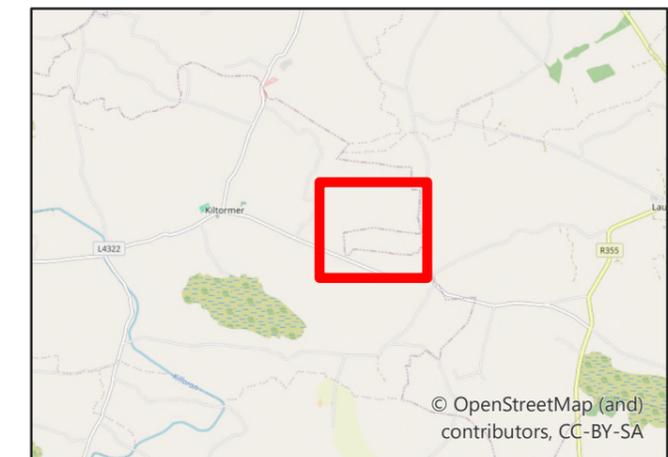
Gortnalug 110kV Substation and Grid Connection
 Wintering Bird Map - January
 Appendix 2C - Figure 1



Key

- Development Boundary
- 50m ESA
- F - Flying over
- ◆ AC - Alarm Calls
- D - Courtship and display
- DD - Distraction display
- FLU - Flushed
- ▲ PE - Perching

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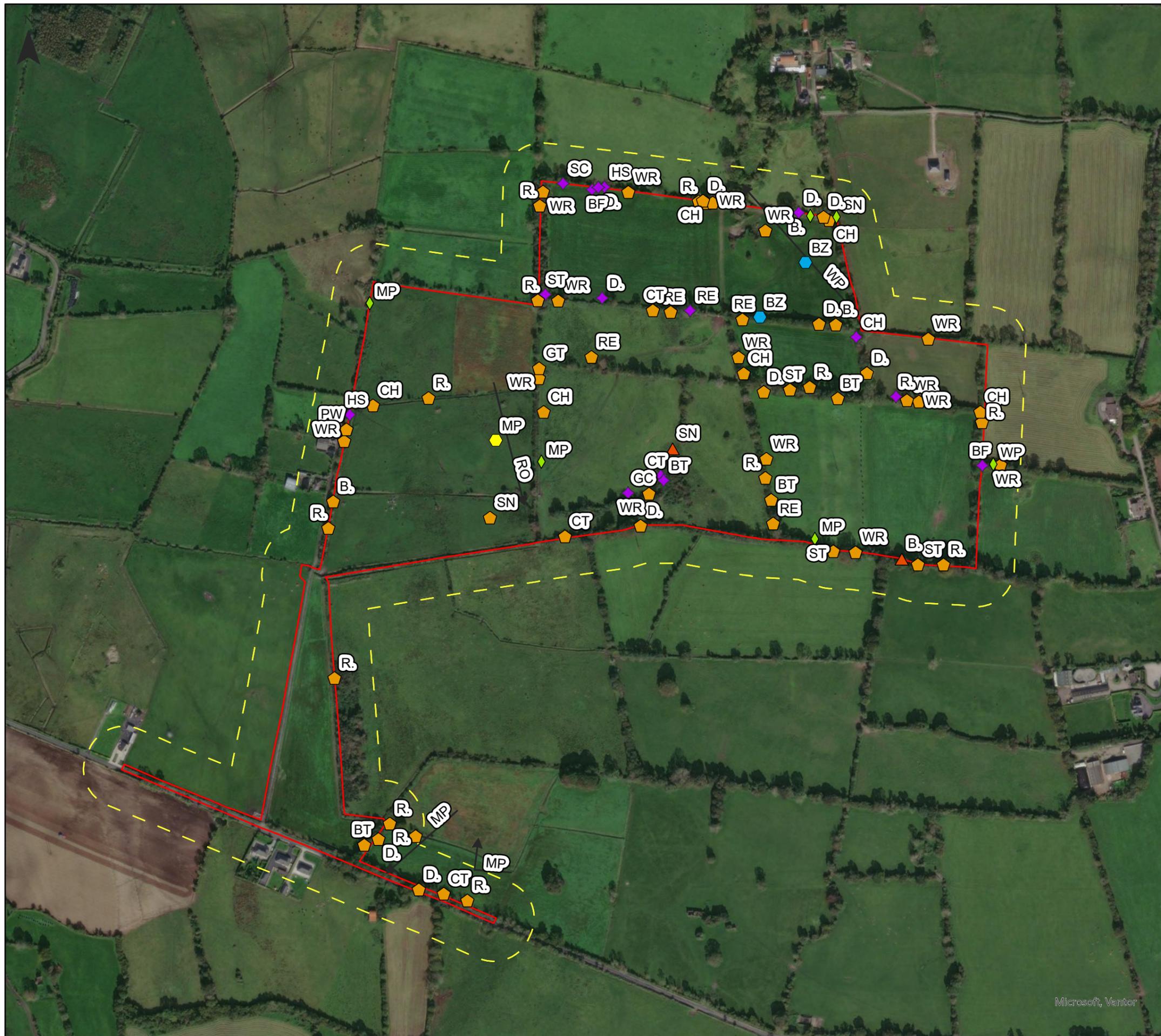
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Ordnance Survey Ireland Licence No. CYAL50297096

Date: 25/03/2026
 Drawn By: Rhona Coghlan
 Scale (A3): 1:5,000
 Drawing No: NEO01668/00291A



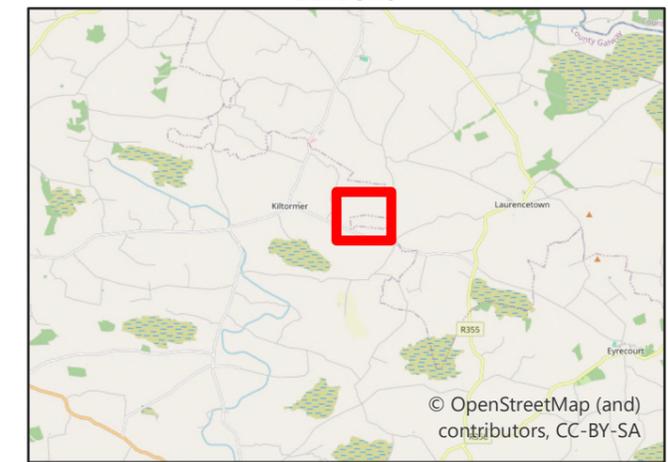
Microsoft, Vantor



Key

- Development Boundary
- 50m ESA
- F - Flying over
- ▲ AC - Alarm Calls
- ◆ D - Courtship and display
- ◆ F - Flying over
- ◆ FLU - Flushed
- ◆ HU - Hunting
- ◆ PE - Perching

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