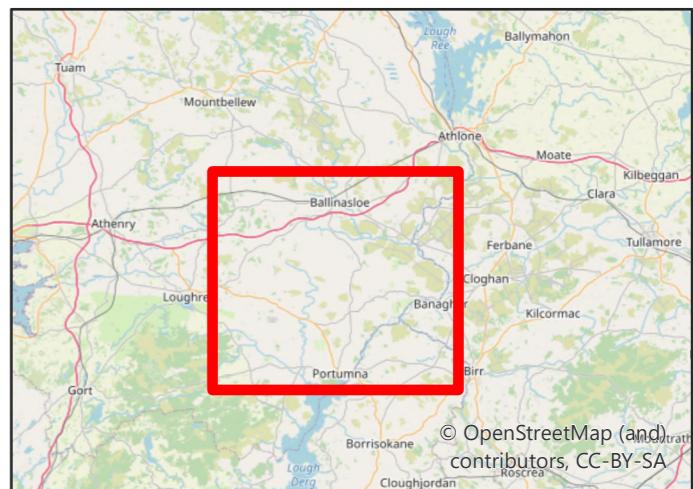


Ballydonagh Extension European Designations Map Appendix A - Figure 1

Key

The legend consists of four entries, each with a colored line icon and text. 1. 'Development Boundary' is a red square line. 2. '15km Buffer' is a black L-shaped line. 3. 'Special Areas of Conservation (SAC)' is a pink horizontal line with three segments. 4. 'Special Protection Area (SPA)' is a blue horizontal line with three segments.

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Date: 25/11/2025
Drawn By: Rhona Coghlan
Scale (A3): 1:125,000
Drawing No: NEO01216/0371



Appendix B: Wintering Bird Survey

16/12/2024



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1. INTRODUCTION

BACKGROUND

- 1.1. Neo Environmental Ltd has been appointed by Renewable Energy Systems (RES) (the “Applicant”) to undertake Environmental and Planning Services for a proposed solar farm extension (the “Proposed Development”) to the Ballydonagh Solar Farm (Ref: 23/61049) on lands at Ballydonagh, Skecoor, Cloonineen, Lisheenaguil, and Kiltormer East Co. Galway (the “Application Site”).

Development Description

- 1.2. The proposed solar farm extension will consist of the construction of PV panels mounted on metal frames, access entrances and tracks (existing, upgrading and new), underground cabling, inverter substations, perimeter fencing with CCTV cameras and access gates, watercourse crossings and a gated watercourse crossing, temporary construction compounds and all ancillary grid infrastructure and associated works.

Site Description

- 1.3. The area of the Proposed Development (the “Application Site”) lies at an elevation of approximately 65.7 – 86m AOD and covers a total area of c. 56.2 hectares across 4 sections of land. It is centred at approximate Irish Grid Reference (IGR) X (ITM) X 583053 Y 718841 and is located c. 2.3 km west of the R355. It is approximately 11km south-southwest of Ballinasloe, 15.5km north of Portumna, 17km west-northwest of Banagher and 20km east of Loughrea.
- 1.4. The Application Site comprises of 26 fields (see **Figure 4, Volume 2 - Field Numbers**) of agricultural land primarily used for pastoral farming and bound by trees, hedgerows and post-and-wire fencing. 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.
- 1.5. However, nearby settlements within the study area including Kiltormer (c. 1km northwest) and Laurencetown (c. 3.9km northeast) contain a range of land uses including commercial, recreational and ecclesiastical.
- 1.6. Access to the northwest section of the Application Site will be gained from the L4322 to the north. Access to the southeast and southwest sections of the Application Site will be accessed from an unnamed road that connects to the L8716 which is c. 1km east-northeast.

Statement of Authority

- 1.7. This bird survey and assessment was carried out by Neo Environmental Senior Ecologist, Louis Maloney.
- 1.8. Louis Maloney has circa seven years of professional ecological experience. This includes terrestrial and marine surveys covering a wide range of fauna and flora such as bird (2 years' of surveying), mammal and vegetative surveys. In addition, Louis has been involved in the management of large variety of projects involving: Environmental Impact Assessment ("EIA"), Natura Impact Statement ("NIS"), Ecological Impact Assessment ("EcIA"), Biodiversity Management Plan ("BMP") and Net Gain Assessment ("NGA") reports. He holds a BSc in Marine Science from the National University of Ireland, and an MSc in Conservation Behaviour – Marine and Terrestrial Science. Louis is in the process of applying for a Full level membership with CIEEM.
- 1.9. David Mulholland is a Graduate Ecologist with 1.5 years of experience working in the ecology and conservation sectors. David is a Qualifying member of CIEEM, holding a BSc (Hons) in Biological Sciences with Professional Studies, along with a MSc in Conservation Biology and Ecological Management. He has experience conducting Biodiversity Checklist Reports, Preliminary Roost Assessments, Dawn & Dusk Bat Surveys, Reconnaissance Bird Surveys along with aiding in the construction of Bat Survey Reports, Ecological Appraisals and Ornithology Reports.

2. METHODOLOGY

DESKTOP STUDY

2.1. 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 River Suck Callows SPA (004097), River Little Brosna Callows SPA (004086), Middle Shannon Callows SPA (004096) were accessed via - <https://www.npws.ie/>
- Review of Ordnance Survey mapping and aerial photography of the proposed scheme area and its environs.
- The supporting Natura 2000 Impact Statement, outlining nearby designated sites and their qualifying characteristics.

FIELD SURVEY

2.2. Surveys were completed over 6 days. The entirety of the Application Site was covered on three occasions: 24th -25th January, 21st – 22nd February, 15th – 16th of March - 2023. The wintering bird surveys consisted of walking transects parallel to all linear features on site.

2.3. The surveys aimed to determine whether the site is used as a winter roost by wildfowl, waders and migratory birds. During the surveys, all bird species heard or seen within and adjacent to the site were recorded. The surrounding fields were scanned from vantage points that gave unobstructed views over potentially suitable habitat for notable species. A note was also made of birds flying overhead.

2.4. All bird species were recorded using standard British Trust for Ornithology codes¹, and a note of the number of birds of each species present was made. The winter surveys were undertaken using Hontry 8x42 binoculars and ESSLNB Spotting Scope 25-75X70 spotting scope. As summarised in **Table 2.1**, surveys were undertaken in weather deemed appropriate for carrying out bird survey work, i.e. avoiding periods of high winds, heavy rainfall and poor visibility².

Table 2-1: Wintering bird survey details

Date	Survey Method	Survey – Time of Day	Weather
24/01/2023	Transect	Sunrise/morning	Temp: 7 - 9°C Precipitation: None Wind: 3 – 4 m/s Cloud cover: 4/8
25/01/2023	Transect	Sunrise/morning	Temp: 9 - 10°C Precipitation: None Wind: 4m/s Cloud cover: 4/8
21/02/2023	Transect	Sunrise/morning	Temp: 8 - 11°C Precipitation: None Wind: 4m/s Cloud cover: 8/8
22/02/2023	Transect	Sunrise/morning	Temp: 3 - 8°C Precipitation: None Wind: 2m/s Cloud cover: 1/8
15/03/2023	Transect	Sunrise/morning	Temp: 7 - 11°C Precipitation: Light Rain Wind: 4m/s Cloud cover: 8
16/03/2023	Transect	Sunrise/morning	Temp: 9 - 12°C Precipitation: Intermittent showers Wind: 3 – 6m/s Cloud cover: 4/8

¹ Available at: <https://www.bto.org/british-list>

² Bibby C.J., Burgess N.D., Hill D.A. & Mustoe S.H. (2000). Bird Census Techniques. Second Edition. Academic Press.

3. RESULTS

DESK STUDY

3.1. **Table 3-1** details bird species present in National Biodiversity Data Centre (NBDC) datasets for the 10km grid square within which the site is situated (M81 and M82).

3.2. **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 List³. Red-listed species are those of highest conservation priority and Amber-listed species are those which are of secondary priority. These species include those that the SPAs and SACs outlined in the Natura 2000 Impact Statement are designated for.

Table 3-1: NBDC records of wildlife act birds for 10km grid square M81 & M82

Common Name	Scientific Name	Annex I	BoCCI
Barn Owl	<i>Tyto alba</i>	No	Red
Barn Swallow	<i>Hirundo rustica</i>	No	Amber
Black-billed Magpie	<i>Pica pica</i>	No	Green
Blackcap	<i>Sylvia atricapilla</i>	No	Green
Black-headed Gull	<i>Larus ridibundus</i>	No	Red
Blue Tit	<i>Cyanistes caeruleus</i>	No	Green
Brambling	<i>Fringilla montifringilla</i>	No	Green
Chaffinch	<i>Fringilla coelebs</i>	No	Green
Coal Tit	<i>Periparus ater</i>	No	Green
Common Blackbird	<i>Turdus merula</i>	No	Green
Common Bullfinch	<i>Pyrrhula pyrrhula</i>	No	Green
Common Buzzard	<i>Buteo buteo</i>	No	Green
Common Chiffchaff	<i>Phylloscopus collybita</i>	No	Green
Common Cuckoo	<i>Cuculus canorus</i>	No	Green
Common Grasshopper Warbler	<i>Locustella naevia</i>	No	Amber
Common Kestrel	<i>Falco tinnunculus</i>	No	Red
Common Kingfisher	<i>Alcedo atthis</i>	Yes	Amber

³ Gilbert G, Stanbury A and Lewis L (2021), “Birds of Conservation Concern in Ireland 2020 –2026”

Common Linnet	<i>Carduelis cannabina</i>	No	Yellow
Common Moorhen	<i>Gallinula chloropus</i>	No	Green
Common Pheasant	<i>Phasianus colchicus</i>	No	Green
Common Raven	<i>Corvus corax</i>	No	Green
Common Redshank	<i>Tringa totanus</i>	No	Red
Common Sandpiper	<i>Actitis hypoleucos</i>	No	Yellow
Common Snipe	<i>Gallinago gallinago</i>	No	Red
Common Starling	<i>Sturnus vulgaris</i>	No	Yellow
Common Swift	<i>Apus apus</i>	No	Red
Common Whitethroat	<i>Sylvia communis</i>	No	Green
Common Wood Pigeon	<i>Columba palumbus</i>	No	Green
Corn Crake	<i>Crex crex</i>	Yes	Red
Dunlin	<i>Calidris alpina</i>	Yes	Red
Eurasian Collared Dove	<i>Streptopelia decaocto</i>	No	Green
Eurasian Curlew	<i>Numenius arquata</i>	No	Red
Eurasian Jackdaw	<i>Corvus monedula</i>	No	Green
Eurasian Jay	<i>Garrulus glandarius</i>	No	
Eurasian Siskin	<i>Carduelis spinus</i>	No	
Eurasian Sparrowhawk	<i>Accipiter nisus</i>	No	
Eurasian Teal	<i>Anas crecca</i>	No	Yellow
Eurasian Treecreeper	<i>Certhia familiaris</i>	No	Green
Eurasian Wigeon	<i>Anas penelope</i>	No	Yellow
Eurasian Woodcock	<i>Scolopax rusticola</i>	No	Yellow
European Golden Plover	<i>Pluvialis apricaria</i>	Yes	Red
European Goldfinch	<i>Carduelis carduelis</i>	No	
European Greenfinch	<i>Carduelis chloris</i>	No	
European Robin	<i>Erithacus rubecula</i>	No	
Fieldfare	<i>Turdus pilaris</i>	No	
Goldcrest	<i>Regulus regulus</i>	No	
Great Cormorant	<i>Phalacrocorax carbo</i>	No	Yellow
Great Tit	<i>Parus major</i>	No	Green

Greater White-fronted Goose	<i>Anser albifrons</i>	Yes	Yellow
Greenland White-fronted Goose	<i>Anser albifrons</i> subsp. <i>flavirostris</i>	No	Yellow
Grey Heron	<i>Ardea cinerea</i>	No	Red
Grey Partridge	<i>Perdix perdix</i>	No	Yellow
Grey Wagtail	<i>Motacilla cinerea</i>	No	Red
Dunnock	<i>Prunella modularis</i>	No	Green
Hen Harrier	<i>Circus cyaneus</i>	Yes	Yellow
Herring Gull	<i>Larus argentatus</i>	No	Yellow
Hooded Crow	<i>Corvus cornix</i>	No	Green
House Martin	<i>Delichon urbicum</i>	No	Yellow
House Sparrow	<i>Passer domesticus</i>	No	Yellow
Jack Snipe	<i>Lymnocryptes minimus</i>	No	Green
Lesser Black-backed Gull	<i>Larus fuscus</i>	No	Yellow
Lesser Redpoll	<i>Carduelis cabaret</i>	No	Green
Little Egret	<i>Egretta garzetta</i>	Yes	Green
Little Grebe	<i>Tachybaptus ruficollis</i>	No	Yellow
Long-eared Owl	<i>Asio otus</i>	No	Green
Long-tailed Tit	<i>Aegithalos caudatus</i>	No	Green
Mallard	<i>Anas platyrhynchos</i>	No	Red
Meadow Pipit	<i>Anthus pratensis</i>	No	Red
Merlin	<i>Falco columbarius</i>	Yes	Yellow
Mistle Thrush	<i>Turdus viscivorus</i>	No	Green
Mute Swan	<i>Cygnus olor</i>	No	Yellow
Northern Lapwing	<i>Vanellus vanellus</i>	No	Red
Red Grouse	<i>Lagopus lagopus</i>	No	Red
Redwing	<i>Turdus iliacus</i>	No	Green
Reed Bunting	<i>Emberiza schoeniclus</i>	No	Green
Rock Pigeon	<i>Columba livia</i>	No	Green
Rook	<i>Corvus frugilegus</i>	No	Green
Sand Martin	<i>Riparia riparia</i>	No	Yellow
Sedge Warbler	<i>Acrocephalus schoenobaenus</i>	No	Green

Sky Lark	Alauda arvensis	No	Yellow
Song Thrush	Turdus philomelos	No	Green
Spotted Flycatcher	Muscicapa striata	No	Yellow
Stock Pigeon	Columba oenas	No	Yellow
Stonechat	Saxicola torquata	No	Green
Tufted Duck	Aythya fuligula	No	Yellow
Bewicks Swan	Cygnus columbianus	Yes	Red
Water Rail	Rallus aquaticus	No	Yellow
White Wagtail	Motacilla alba	No	Green
Whooper Swan	Cygnus cygnus	Yes	Yellow
Willow Warbler	Phylloscopus trochilus	No	Green
Winter Wren	Troglodytes troglodytes	No	Green
Yellowhammer	Emberiza citrinella	No	Red

3.3. Each winter volunteers, NPWS Rangers and BirdWatch Ireland staff monitor wintering waterbird populations at defined wetland sites across the Republic of Ireland to keep track of species trends.

3.4. The study area is not covered by an Irish Wetland Bird Survey (I-WeBS site). **Table 3-2** details survey data was available for the nearest I-WeBS sites (**OR301** and **OR303**). The two sites being; Little Brosna Callows (code: OR301) (c. 0.12km from Proposed Site) and the Shannon Callows (OR303) (c. 0.10km from Proposed Site).

Table 3-2: I-WeBS sites

Common Name	Scientific Name	Subsite	Recording Wintering	Annex I	BoCCI
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	Shannon Callows	2011/12 – 2012/13, 2014/15, 2016/17 – 2019/20	No	Red
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	Little Brosna Callows	2011/12 – 2020/21	No	Red
Black-tailed Godwit	<i>Limosa limosa</i>	Shannon Callows	2014/15	No	Yellow
Black-tailed Godwit	<i>Limosa limosa</i>	Little Brosna Callows	2011/12 – 2020/21	No	Yellow

Coot	<i>Fulica atra</i>	Shannon Callows	2017/18, 2019/20 – 2020/21	No	Yellow
Coot	<i>Fulica atra</i>	Little Brosna Callows	2012/13 -2013/14	No	Yellow
Cormorant	<i>Phalacrocorax carbo</i>	Shannon Callows	2011/12 – 2012/13, 2014/15, 2017/18 – 2018/19	No	Yellow
Cormorant	<i>Phalacrocorax carbo</i>	Little Brosna Callows	2011/12 – 2015/16, 2017/18 – 2020/21	No	Yellow
Curlew	<i>Numenius arquata</i>	Shannon Callows	2011/12, 2014/15, 2017/18, 2019/20 – 2020/21	No	Red
Curlew	<i>Numenius arquata</i>	Little Brosna Callows	2011/12 – 2013/14 & 2016/17 – 2020/21	No	Red
Dunlin	<i>Calidris alpina</i>	Shannon Callows	2014/15	Yes	Yellow
Dunlin	<i>Calidris alpina</i>	Little Brosna Callows	2011/12 – 2019/2020	Yes	Yellow
Gadwall	<i>Mareca strepera</i>	Shannon Callows	2011/12	No	Yellow
Gadwall	<i>Mareca strepera</i>	Little Brosna Callows	2011/12 – 2014/15, 2017/18	No	Yellow
Glossy Ibis	<i>Plegadis falcinellus</i>	Shannon Callows	2018/19	No	Yellow
Golden Plover	<i>Pluvialis apricaria</i>	Shannon Callows	2011/12 – 2012/13, 2014/15 – 2016/17, 2018/19	Yes	Red
Golden Plover	<i>Pluvialis apricaria</i>	Little Brosna Callows	2011/12 – 2020/21	Yes	Red
Great Black-backed Gull	<i>Larus marinus</i>	Shannon Callows	2014/15	No	Yellow
Great Black-backed Gull	<i>Larus marinus</i>	Little Brosna Callows	2018/19	No	Yellow
Great Crested Grebe	<i>Podiceps cristatus</i>	Shannon Callows	2012/13, 2014/15	No	Yellow
Great Crested Grebe	<i>Podiceps cristatus</i>	Little Brosna Callows	2012/13 &2019/20	No	Yellow

Greenland White-fronted Goose	<i>Anser albifrons flavirostris</i>	Little Brosna Callows	2011/12 – 2019/20	Yes	Yellow
Greylag Goose	<i>Anser anser</i>	Little Brosna Callows	2017/18 – 2020/21	No	Yellow
Grey heron	<i>Ardea cinerea</i>	Shannon Callows	2012/13, 2014/15., 2017/18 – 2019/20	No	Green
Grey heron	<i>Ardea cinerea</i>	Little Brosna Callows	2011/12 – 2020/21	No	Green
Golden Eye	<i>Bucephala clangula</i>	Shannon Callows	2012/13	No	Yellow
Glossy ibis	<i>Plegadis falcinellus</i>	Shannon Callows	2018/19	No	N/A
Herring Gull	<i>Larus argentatus</i>	Shannon Callows	2011/12 – 2012/13	No	Yellow
Herring Gull	<i>Larus argentatus</i>	Little Brosna Callows	2019/20	No	Yellow
Kingfisher	<i>Alcedo atthis</i>	Little Brosna Callows	2015/16 – 2016/17 & 2018/19 – 2019/20	Yes	Yellow
Lapwing	<i>Vanellus vanellus</i>	Shannon Callows	2011/12 – 2012/13, 2014/15 – 2020/21	No	Red
Lapwing	<i>Vanellus vanellus</i>	Little Brosna Callows	2011/12 – 2020/21	No	Red
Lesser Black-black backed gull	<i>Larus fuscus</i>	Shannon Callows	2011/12 – 2012/13, 2014/15, 2017/18, 2019/20		Red
Lesser Black-black backed gull	<i>Larus fuscus</i>	Little Brosna Callows	2012/13 – 2014/15	No	Yellow
Little Egret	<i>Egretta garzetta</i>	Shannon Callows	2017/18, 2019/20	Yes	Green
Little Egret	<i>Egretta garzetta</i>	Little Brosna Callows	2011/12 – 2016/17 & 2019/19	Yes	Green
Little grebe	<i>Tachybaptus ruficollis</i>	Shannon Callows	2011/2012, 2014/15, 2017/18	No	Yellow
Little grebe	<i>Tachybaptus ruficollis</i>	Little Brosna Callows	2011/12 – 2012/13 & 2019/20	No	Yellow

Mallard	<i>Anas platyrhynchos</i>	Shannon Callows	2011/12 – 2012/13, 2014/15, 2017/18 – 2018/19	No	Yellow
Mallard	<i>Anas platyrhynchos</i>	Little Brosna Callows	2011/12 – 2020/21	No	Yellow
Moorhen	<i>Gallinula chloropus</i>	Shannon Callows	2011/12 – 2012/13, 2014/15, 2016/17 – 2018/19	No	Green
Moorhen	<i>Gallinula chloropus</i>	Little Brosna Callows	2012/13 – 2012/14 & 2018/19 – 2020/21	No	Green
Mute Swan	<i>Cygnus olor</i>	Shannon Callows	2011/12 – 2012/13, 2014/15, 2016/17 – 2020/21	No	Yellow
Mute Swan	<i>Cygnus olor</i>	Little Brosna Callows	2011/12 – 2020/21	No	Yellow
Oystercatcher	<i>Haematopus ostralegus</i>	Shannon Callows	2018/19		Yellow
Pink-footed Goose	<i>Anser brachyrhynchus</i>	Little Brosna Callows	2013/14	No	Green
Pintail	<i>Anas acuta</i>	Shannon Callows	2015/16, 2019/20 – 2020/21		Red
Pintail	<i>Anas acuta</i>	Little Brosna Callows	2011/12 – 2020/21	No	Red
Pochard	<i>Aythya ferina</i>	Little Brosna Callows	2013/14 & 2015/16 & 2017/18 – 2019/2020	No	Yellow
Redshank	<i>Tringa totanus</i>	Shannon Callows	2017/18 – 2018/2019	No	Red
Redshank	<i>Tringa totanus</i>	Little Brosna Callows	2012/13 & 2018/19	No	Red
Ruff	<i>Philomachus pugnax</i>	Shannon Callows	2014/15	No	Green
Ruff	<i>Philomachus pugnax</i>	Little Brosna Callows	2013/14	No	Green
Shelduck	<i>Tadorna tadorna</i>	Little Brosna Callows	2011/12 & 2017/18	No	Yellow
Shoveler	<i>Spatula clypeata</i>	Shannon Callows	2011/12, 2017/18 – 2020/21	No	Red

Shoveler	<i>Spatula clypeata</i>	Little Brosna Callows	2011/12 – 2020/21	No	
Snipe	<i>Gallinago gallinago</i>	Shannon Callows	2014/15	No	
Snipe	<i>Gallinago gallinago</i>	Little Brosna Callows	2011/12 – 2012/13 7 2014/15 & 2016/17 & 2018/19 – 2020/21	No	
Teal	<i>Anas crecca</i>	Shannon Callows	2012/13, 2014/15, 2017/18		
Teal	<i>Anas crecca</i>	Little Brosna Callows	2011/12 – 2020/21	No	
Tufted Duck	<i>Aythya fuligula</i>	Shannon Callows	2014/15, 2017/18, 2019/20 – 2020/21	No	
Tufted Duck	<i>Aythya fuligula</i>	Little Brosna Callows	2011/12 – 2020/21	No	
Water Rail	<i>Rallus aquaticus</i>	Shannon Callows	2017/18	No	
Water Rail	<i>Rallus aquaticus</i>	Little Brosna Callows	2017/18	No	
Wigeon	<i>Anas penelope</i>	Shannon Callows	2011/12 – 2012/13	No	
Wigeon	<i>Anas penelope</i>	Little Brosna Callows	2011/12 – 2020/21	No	
Whooper Swan	<i>Cygnus cygnus</i>	Shannon Callows	2011/12 – 2012/13, 2014/15, 2017/18 – 2020/21	Yes	
Whooper Swan	<i>Cygnus cygnus</i>	Little Brosna Callows	2011/12 – 2020/21	Yes	
Woodcock	<i>Scolopax rusticola</i>	Little Brosna Callows	2014/15	No	

FIELD SURVEY

3.5. A total of 25 species of bird were recorded at the Proposed Development Site and adjacent survey area. Common Snipe, a red listed species was identified along with an Annex 1 species, Hen Harrier.

3.6. Of the remaining species recorded, five BoCCI amber species were recorded, the remaining 19 species are green status. **Table 3-3** summarises the species recorded during the wintering bird

surveys, along with their BoCCI status. Species recorded during each wintering bird survey (i.e. months January, February and March) are displayed in **Appendix 2E** of this report.

Table 3-3: Bird species recorded during wintering bird surveys

Common Name	Scientific Name	BoCCI	Annex I
Blackbird	<i>Turdus merula</i>		
Blue Tit	<i>Parus caeruleus</i>		
Bullfinch	<i>Pyrrhula pyrrhula</i>		
Chaffinch	<i>Fringilla coelebs</i>		
Coal Tit	<i>Periparus ater</i>		
Common Snipe	<i>Gallinago gallinago</i>		
Dunnock	<i>Prunella modularis</i>		
Goldfinch	<i>Carduelis carduelis</i>		
Great Tit	<i>Parus major</i>		
Hooded Crow	<i>Corvus cornix</i>		
Hen Harrier	<i>Circus cyaneus</i>		✓
Jackdaw	<i>Corvus monedula</i>		
Magpie	<i>Pica pica</i>		
Mistle thrush	<i>Turdus viscivorus</i>		
Pheasant	<i>Phasianus colchicus</i>		
Pied wagtail	<i>Motacilla alba</i>		
Redwing	<i>Turdus iliacus</i>		
Robin	<i>Erithacus rubecula</i>		
Rook	<i>Corvus frugilegus</i>		
Skylark	<i>Alauda arvensis</i>		
Song thrush	<i>Turdus philomelos</i>		
Starling	<i>Sturnus vulgaris</i>		
Tree Sparrow	<i>Passer montanus</i>		
Woodpigeon	<i>Columba palumbus</i>		
Wren	<i>Troglodytes troglodytes</i>		

DISCUSSION

- 3.7. The Application Site's primary habitats are improved agricultural grassland, wet grassland, scrub, dry calcareous and neutral grassland with mature hedgerows, treelines and drainage ditches along the site boundaries.
- 3.8. The wintering bird survey's primary objective is to assess whether the Proposed Development has the potential to support qualifying bird species from the surrounding SPAs as outlined in the supporting Natural 2000 Impact Statement, with particular focus on species that are known to occur in grassland habitats.
- 3.9. A total of 25 species of bird were recorded within, or immediately adjacent to, the proposed site during the six surveys undertaken from January 2023 to March 2023. Of these 19 were seen only in flight commuting over the site. The majority of the species recorded within the Application Site were common, green-listed bird species that are typical of farmland habitats.
- 3.10. Hen Harrier was identified within the development boundary of the Application Site during the wintering bird survey performed in March 2023. The Hen Harrier was perched on a branch of a tree which then proceeded to fly across the site till out of view. The large areas of improved agricultural grassland present, combined with high populations of passerine prey birds offer a valuable hunting habitat for Hen Harrier.
- 3.11. Oak-Ash-Hazel Woodland offers roosting habitats on the boundaries of the Application Site that further support their population. There will be no impact on these woodland habitats and there are no proposals to remove or otherwise damage them.
- 3.12. Due to the low area coverage of the proposed construction, disruption to Hen Harriers is likely to only occur during construction, with surrounding fields offering equally viable habitats to foraging within. **Therefore, it is considered that there will be no significant impact on Hen Harriers by the Application Site.**
- 3.13. Skylark are on the amber list due to agricultural intensification leading to a loss of suitable nesting habitat and lack of winter and summer food. Six Skylark were observed during the March wintering bird survey foraging/perching within the site boundary, see **Appendix 2 – Figure 1.3.**
- 3.14. Common Snipe are a BoCCI red listed species and are similarly threatened by agricultural intensification and the destruction of natural boggy and wet grasslands due to their ground-nesting behaviour. Snipe have experienced significantly declining breeding and wintering populations due to this loss of habitat.
- 3.15. As outlined in the LEMP (**Vol 3, Technical Appendix 1, Figure 1.9a**), it is recommended that species rich grassland is seeded on the application site to accommodate ground nesting birds.
- 3.16. The LEMP suggests that having a lightly sheep-grazed pasture with a tussocky native sward of varying heights from 20-50cm with a low stock rate through the spring and summer can be

beneficial. Providing a species rich grassland and preserving existing wet grassland habitats within the Application Site, the development will benefit local biodiversity by encouraging invertebrate prey which are key to the sole diet of both Skylark and Common Snipe chicks and important to adults in the spring and summer months. Overall, it is expected that the proposed development will have no significant impact

- 3.17. Tree Sparrow is an Amber listed species with a stable breeding population in Ireland. Tree Sparrow was identified during wintering bird surveys at the Application Site. The Application Site offers valuable foraging and nesting habitat for Tree Sparrow, with access to both hedgerows, improved agricultural grassland and Oak-Ash-Hazel woodland. Only c.728.5m² of vegetation and three trees will be removed during the construction period.
- 3.18. Due to the low area of the site that will be impacted by the proposed construction and the availability of adjacent, equally valuable and undisturbed habitat, the impact on Tree Sparrow will not be significant.
- 3.19. 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. Best practice management of hedgerows will benefit them all alongside infilling any gaps using native species planting and a rich wildflower grassland mix. This both improves the habitat and biodiversity for these generalist species.
- 3.20. 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.

4. CONCLUSION

- 4.1. The results of the six wintering bird surveys undertaken between January and March 2023 indicate that the proposed site predominantly supports common and widespread bird species typical of farmland habitats present.
- 4.2. Results from the wintering bird surveys also conclude that the site is known to support one raptor species. Hen Harrier was identified perching and then flying across the site during one of the wintering bird surveys. The site also supports small numbers of wildfowl (Skylark and Common Snipe).
- 4.3. With the implementation of habitat enhancement measures it is considered that the Proposed Development is unlikely have negative effect on local bird species' populations. As the development will improve habitats for local bird species, there will likely be a positive effect, increasing foraging resources for common passerines and species of wildfowl, thus improving foraging resources of Hen Harrier.
- 4.4. Safeguards will be implemented to ensure any disturbance of such species is kept to a minimum.
- 4.5. Recommendations will be made in the **Biodiversity Management Plan (Volume 3, Technical Appendix 2, Appendix 2C)** for the improvement of the land under the solar panels to ensure that important habitats are not lost.

5. REFERENCES

1. Gilbert G, Stanbury A and Lewis L (2021), "Birds of Conservation Concern in Ireland 2020 – 2026". *Irish Birds* 43: 1–22
2. Bibby C.J., Burgess N.D., Hill D.A. & Mustoe S.H. (2000). *Bird Census Techniques*. Second Edition. Academic Press.
3. Gilbert G, Stanbury A and Lewis L (2021), "Birds of Conservation Concern in Ireland 2020 – 2026". *Irish Birds* 9: 523—544
4. Gilbert, G., Gibbons, D.W. & Evans, J. (1998) *Bird Monitoring Methods - a Manual of Techniques for Key UK Species*. RSPB: Sandy.

6. APPENDICES

- Figure 1.1 – January Wintering Bird Survey
- Figure 1.2 - February Wintering Bird Survey Map
- Figure 1.3– March Wintering Bird Survey Map



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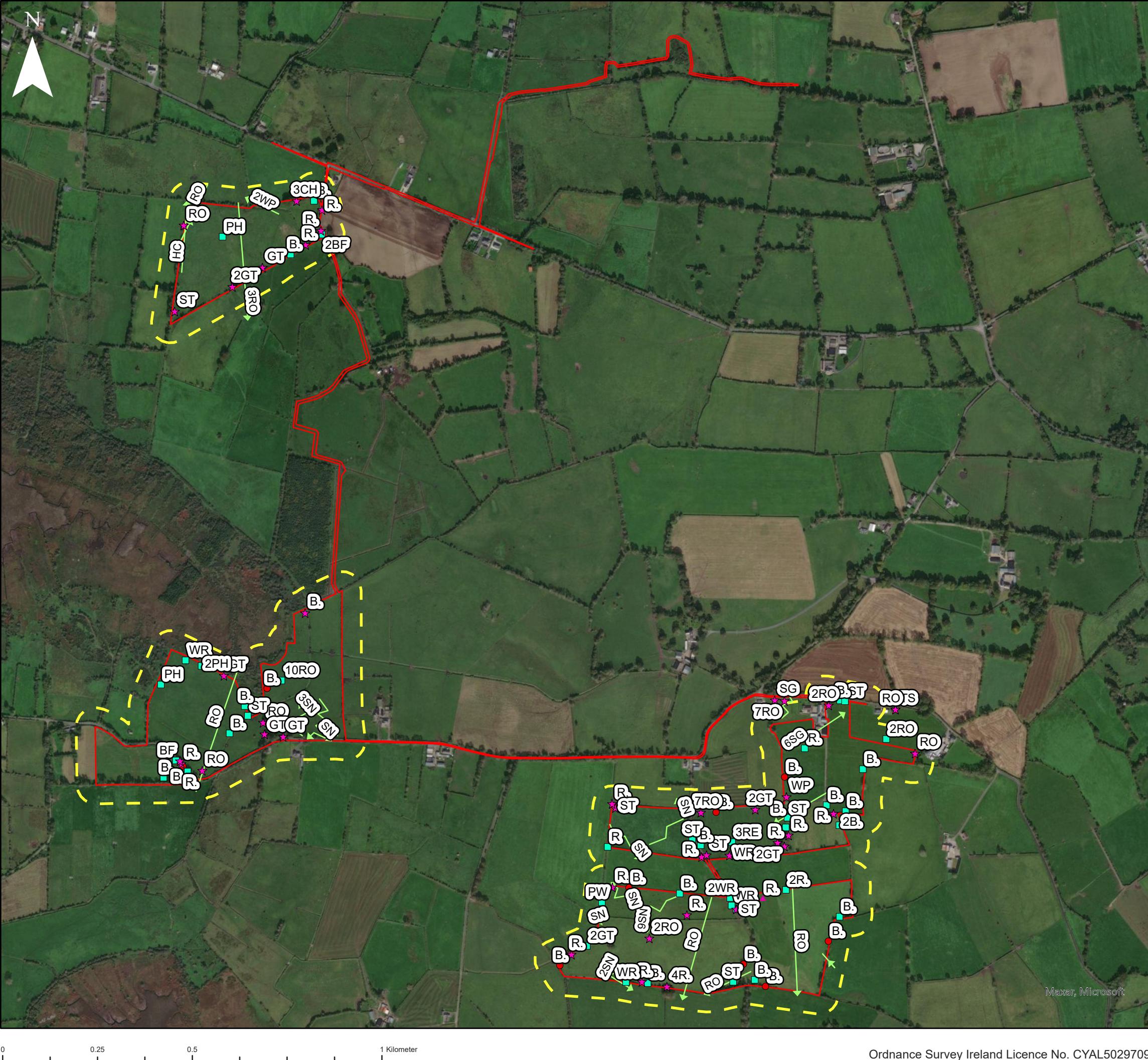
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Ballydonagh Extension
January Wintering Bird Survey Map
Appendix B: Figure 1.1

Key

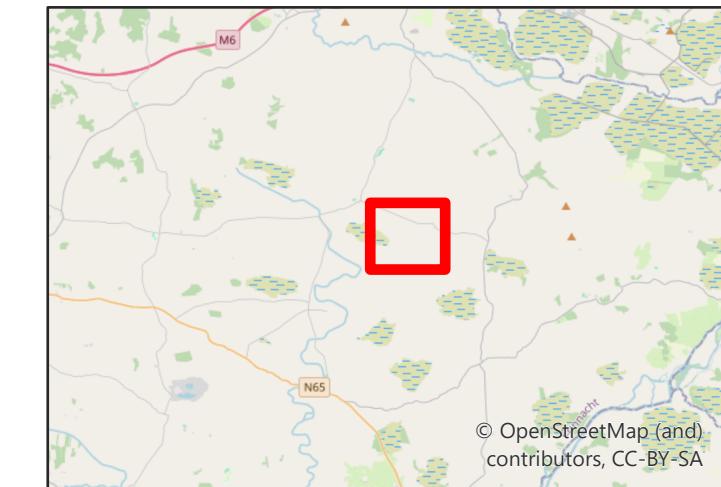
Development Boundary
ESA Ecology

Behaviour

- Alarm Calling
- ▲ Calling
- Foraging
- ★ Perching
- Fly Over

BTO Code	Bird Species
B.	Blackbird
ST	Song Thrush
RO	Rook
R.	Robin
SG	Starling
WP	Wood Pigeon
ST	Song Thrush
WR	Wren
PW	Pied Wagtail
GT	Gold Tit
RE	Redwing
RO	ROok
PH	Pheasant
BF	Bullfinch
CH	Chaffinch

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Ballydonagh Extension
February Wintering Bird Survey Map
Appendix B: Figure 1.2

Key

Development Boundary

ESA Ecology

Behaviour

● Alarm Calling

▲ Calling

■ Foraging

★ Perching

✚ Singing

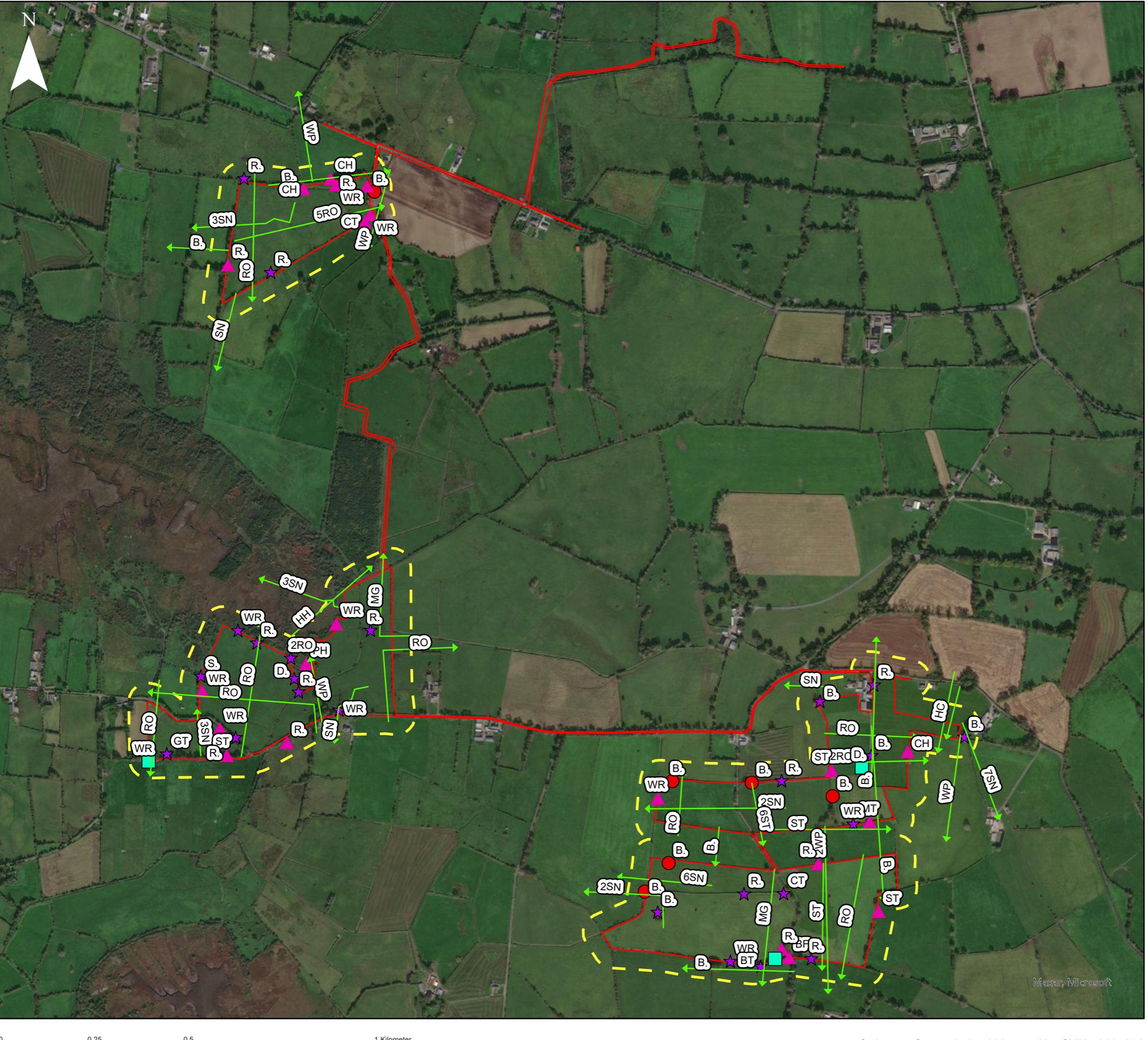
→ Fly Over

BTO Code	Bird Species
SG	Starling
SN	Snipe
JD	Jackdaw
RO	Rook
HC	Hooded Crow
MG	Magpie
RO	Rook
B.	Blackbird
WP	Wood Pigeon
D.	Dunnock
CH	Chaffinch
GO	Goldfinch
WR	Wren
R.	Robin
BF	Bullfinch
ST	Song Thrush
GT	Great Tit

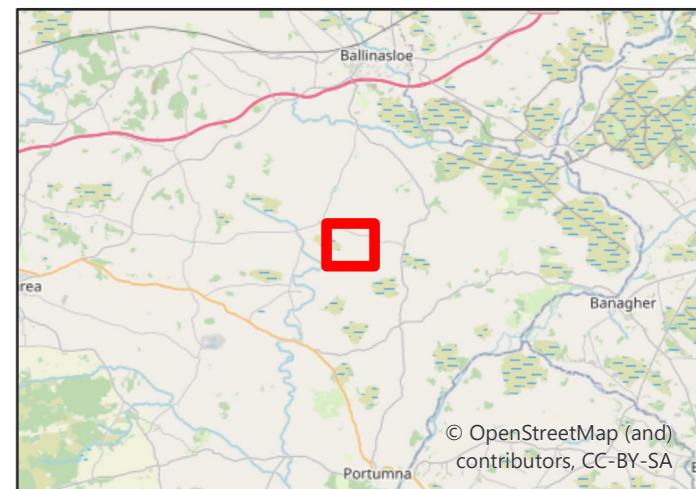
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Ballydonagh Extension
March Wintering Bird Survey Map
Appendix B: Figure 1.3



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Date: 05/12/24
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Drawing No: NEO01216/0010IA