Revised Appropriate Assessment Screening Report

Coole Wind Farm, Co. Westmeath

DOCUMENT DETAILS

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Document Title:	**Appropriate Assessment Screening Report**
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Prepared By:	**MKO** **Tuam Road** **Galway** **Ireland** **H91 VW84**

Planning and Environmental Consultants

Rev	Status	Date	Author(s)	Approved By
01	Final	09/09/2022	LK	PR

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1. INTRODUCTION

MKO has been appointed to provide the information necessary to allow the competent authority to conduct an Article 6(3) Screening for Appropriate Assessment of the proposed construction of a 15 No. turbine wind energy development including the grid connection, near Coole, in north Co. Westmeath. This Screening Assessment report has been revised to take account of the request for further information issued by An Bord Pleanála in relation to the project on the 21st April 2022 and the submissions from the Development Applications Unit of the Department of the Department of Housing, Local Government and Heritage on the 17th May 2021. This document supersedes the Appropriate Assessment Screening Report that was submitted with the Planning Application.

Screening for Appropriate Assessment is required under Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive) and Part XAB of the Planning and Development Act 2000, as amended. Where it cannot be excluded that a project or plan, either alone or in combination with other projects or plans, would have a significant effect on a European Site then same shall be subject to an appropriate assessment of its implications for the site in view of the site's conservation objectives. The current project is not directly connected with, or necessary for, the management of any European Site consequently the project has been subject to the Appropriate Assessment Screening process.

The data underpinning this revised AA Screening Report was obtained through a desk study and field surveys undertaken between 2015 and 2020. In addition, further surveys were undertaken in 2021 and 2022 to ensure that all baseline information was up to date and relevant. Using this data, MKO has assessed the potential for the Proposed Development to result in significant effects on European sites in the absence of any best practice, mitigation or preventative measures.

This revised Appropriate Assessment Screening Report has been prepared in accordance with the European Commission's Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2021) and Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2018) as well as the Department of the Environment's Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DoEHLG, 2010) and the Appropriate Assessment Screening for Development Management. Office of the Planning Regulator, Dublin 7, Ireland OPR (2021).

In addition to the guidelines referenced above, the following relevant documents were also considered in the preparation of this report:

1. *Council of the European Commission (1992) Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. Official Journal of the European Communities. Series L 20, pp. 7-49.*
2. *EC (2007) Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence. Opinion of the commission.*
3. *EC (2013) Interpretation Manual of European Union Habitats. Version EUR 28. European Commission.*
4. *EC (2020) Guidance document on wind energy developments and nature legislation*

1.1 Appropriate Assessment

1.1.1 Screening for Appropriate Assessment

Screening is the process of determining whether an Appropriate Assessment is required for a plan or project. Under Part XAB of the Planning and Development Act, 2000, as amended, screening must be carried out by the Competent Authority. As per Section 177U of the Planning and Development Act, 2000, as amended '*A screening for appropriate assessment shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that Land use plan or Proposed Development, individually or in combination with another plan or project is likely to have a significant effect on the European site*'. The Competent Authority's determination as to whether an Appropriate Assessment is required must be made on the basis of objective information and should be recorded. The Competent Authority may request information to be supplied to enable it to carry out screening.

Consultants or project proponents may provide for the competent authority, the information necessary for them to determine whether an Appropriate Assessment is required and provide advice to assist them in the Article 6(3) Appropriate Assessment Screening decision.

Where it cannot be excluded beyond reasonable scientific doubt at the Screening stage, that a proposed plan or project, individually or in combination with other plans and projects, would have a significant effect on the conservation objectives of a European site, an Appropriate Assessment is required.

Where an Appropriate Assessment is required, the Competent Authority may require the applicant to prepare a Natura Impact Statement.

The term Natura Impact Statement (NIS) is defined in legislation[1]. An NIS, where required, should present the data, information and analysis necessary to reach a definitive determination as to 1) the implications of the plan or project, alone or in combination with other plans and projects, for a European site in view of its conservation objectives, and 2) whether there will be adverse effects on the integrity of a European site. The NIS should be underpinned by best scientific knowledge, objective information and by the precautionary principle.

This Article 6(3) Appropriate Assessment Screening Report has been prepared in compliance with the provisions of section 177U of the Planning and Development Act 2000 as amended.

1.1.2 Statement of Authority

This report has been prepared by John Hynes (BSc., MSc., MCIEEM) and Laoise Kelly (BSc., MCIEEM) and reviewed by Pat Roberts (B.Sc. Environmental Science, MCIEEM). Pat has over 17 years' experience in ecological management and assessment. John Hynes has over 10 years' professional ecological consultancy experience Laoise Kelly has over 6 years' professional ecological consultancy experience and both are full members of the Chartered Institute of Ecology and Environmental Management. The baseline ecological surveys were undertaken by John Hynes B.Sc. (Env.) M.Sc MCIEEM, Pamela Boyle (PhD), Una Nealon (PhD), Laoise Kelly B.Sc. (Env.), MCIEEM and Susan Doyle B.Sc. (Env.) M.Sc (Eco). All surveyors have relevant academic qualifications and are competent experts in undertaking habitat and ecological assessments to this level. The bird surveys are undertaken by Patrick Manley (B.Sc.) Project

[1] As defined in Section 177T of the Planning and Development Act, 2000 as amended, an NIS means a statement, for the purposes of Article 6 of the Habitats Directive, of the implications of a Proposed Development, on its own and in combination with other plans and projects, for a European site in view of its conservation objectives. It is required to include a report of a scientific examination of evidence and data, carried out by competent persons to identify and classify any implications for the European site in view of its conservation objectives

Ornithologist with MKO, Andrew O'Donoghue, Conor Rowland, Niall McHugh, Niamh Scanlon, Tom Rae, Zak O'Conor and Zuzana Erosova, all of whom are experienced, competent bird surveyors.

1.1.3 Data Collected to Carry Out Assessment

In preparation of the report, the following sources were used to gather information:

- Review of existing information obtained during the application made in 2017 as part of the permitted Coole Wind Farm.
- Review of NPWS Conservation Objectives supporting documents, site synopsis, standard data forms and supporting documents for EU Designated Sites,
- Review of online web-mappers: National Parks and Wildlife Service (NPWS), Environmental Protection Agency (EPA), EPA (Envision), Water Framework Directive (WFD), Geological Survey of Ireland (GSI) and Inland Fisheries Ireland (IFI)
- Review of the publicly available National Biodiversity Data Centre (NBDC) web-mapper,
- Inland Fisheries Ireland (IFI) reports, where relevant/available,
- Review of NPWS Article 17 metadata and GIS database.
- Review of NPWS Article 12 metadata and GIS database.
- Records from the NPWS web-mapper and review of specially requested records from the NPWS Rare and Protected Species Database for the hectads in which the Proposed Project is located.
- Review of OS maps and aerial photographs of the site of the Proposed Development
- Review of other plans and projects within the area.
- MKO field assessments and bird surveys carried out between 2015 and 2022 and as provided in full in the EIAR, NIS and associated appendices.

2. DESCRIPTION OF THE PROPOSED DEVELOPMENT

2.1 Site Location

The proposed wind farm site is located approximately 2.4 kilometres north of Coole village (i.e. distance from Coole village centre to the main wind farm site boundary). The town of Castlepollard is located approximately 6.7 kilometres southeast of the wind farm site boundary, at its nearest point. The Proposed Development will connect to the national electricity grid via Mullingar 110 kV substation. Mullingar Substation is located in the townland of Irishtown approximately 2 kilometres northwest of Mullingar town. The proposed grid connection route measures approximately 26m from the proposed wind farm site to the existing substation near Mullingar.

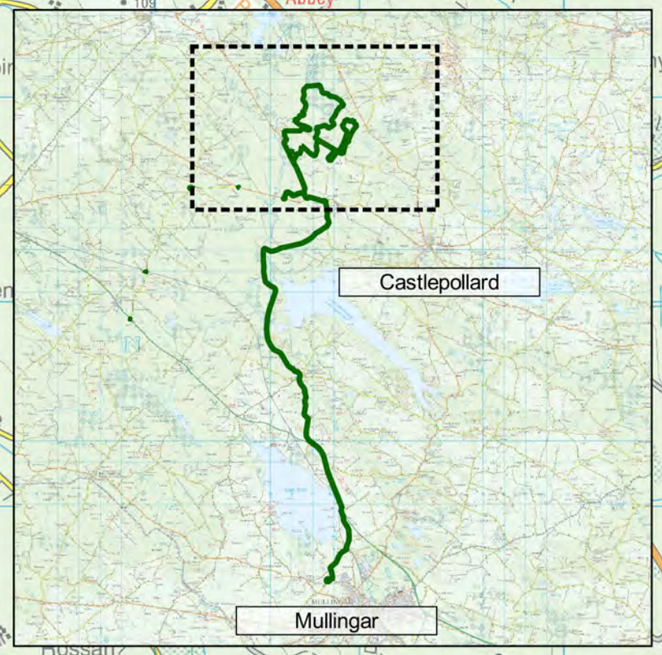
The townlands in which the proposed wind farm site, ancillary works, grid connection route and junction accommodation works are located include; Camagh, Carlanstown, Coole, Clonrobert, Clonsura, Doon, Monktown, Mullagh, and Newcastle, Mullagh, Boherquill, Coole, Corralanna, Culvin, Joanstown, Mayne, Fearmore (Fore by), Newtown (Fore by), Simonstown (fore by), Ballinealoe, Shrubbywood, Clonava, Lackan (Corkaree by), Soho, Ballynaclonagh, Abbeyland, Rathganny, Ballindurrow, Cullendarragh, Culleenabohoge, Ballynafid, Knightswood, Portnashangan, Culleen More, Farranistick, and Irishtown (Moyashel by).

The location of the proposed works is shown in Figure 2-1.

2.2 Characteristics of the Proposed Development

Project Description

A previous application for a wind farm development at this location was submitted by Coole Wind Farm Ltd. to Westmeath County Council on the 19th October 2017 and was considered under Pl. Ref. 17/6292. This application comprised of a wind farm consisting of up to 13 No. wind turbines with a tip-height of up to 175 metres, upgrade of existing internal access roads and provision of new internal access roads, an on-site substation, underground cabling, temporary construction compound and all ancillary infrastructure. Westmeath County Council issued their decision to refuse to grant permission on 12th December 2017 based on 1 no. refusal reason. This decision was appealed to An Bord Pleanála on 14th January 2018 and was considered under ABP-300686-18. An Bord Pleanála issued the decision to grant permission for the wind farm on 27th March 2019.



Map Legend

- EIAR Site Boundary
- Proposed Turbine Layout
- Proposed Hardstand
- Proposed Borrow Pit
- Construction Compound
- Internal Roads (new)
- Internal Roads (Upgrades to existing)
- Proposed Junction Works
- External Roads (Upgrades to Existing)
- Proposed Onsite Substation
- Proposed Grid Connection Route
- Proposed Upgrade Works to Existing Mullingar Substation
- Turbine Delivery Route
- Temporary Hardcore Surfacing Areas

N

Drawing Title: **Site Location**

Project Title	
Coole Wind Farm, Co. Westmeath	
Drawn By: HW	Checked By: LK
Project No.: 200445	Drawing No.: Figure 2-1
Scale: 1:30000	Date: 2021.01.27

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The Proposed Development will comprise the construction and operation of up to 15 No. wind turbines and all associated works. The proposed turbines will have a tip height of up to 175 metres. The full description of the Proposed Development, as per the public planning notices, is as follows:

i. Up to 15 No. wind turbines with a tip height of up to 175 metres and all associated foundations and hardstanding areas;
ii. 1 no. onsite electrical substation including a control building, associated electrical plant and equipment, welfare facilities and a wastewater holding tank;
iii. 1 no. temporary construction compound;
iv. Provision of new site access roads, upgrading of existing access roads and hardstand areas;
v. Excavation of 1 no. borrow pit;
vi. All associated underground electrical and communications cabling connecting the turbines to the proposed onsite substation;
vii. Laying of approximately 26 km of underground electricity cabling to facilitate the connection to the national grid from the proposed onsite substation located in the townland of Camagh to the existing 110kV Mullingar substation located in the townland of Irishtown;
viii. Upgrade works to the existing 110kV Mullingar substation consisting of the construction of an additional dedicated bay to facilitate connection of the cable;
ix. Construction of a link road between the R395 and R396 Regional Roads in the townland of Coole to facilitate turbine delivery;
x. Junction improvement works to facilitate turbine delivery, at the N4 junction with the L1927 in the townland of Joanstown, on land to the South East of railway line level crossing on the L1927 in the townland of Culvin, the L1927 and L5828 junction in the townland of Boherquill and the L5828 and R395 junction in the townland of Corralanna;
xi. Site Drainage;
xii. Forestry Felling;
xiii. Signage, and;
xiv. All associated site development works.

The application is seeking a 10-year planning permission, that is that the planning consent would remain valid for 10 years following a final grant of planning permission.

An Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) were prepared for the project to accompany the planning application.

Project Location & Access

The Proposed Development site measures approximately 498 hectares and is located in north Co. Westmeath, approximately 2.4 kilometres north of Coole village. The town of Castlepollard is located approximately 6.7 kilometres southeast of the site, at its nearest point. The Grid Reference co-ordinates for the approximate centre of the site are E641172, N776072.

Access to the site is via regional and local roads. The site is accessed via the R396 Regional Road, which travels in a southeast-northwest direction between Coole and Granard. From the R396, the L5755 local road traverses the site, linking to the R394 Regional Road, east of the Proposed Development site.

Grid Connection

The planning application includes for the construction of underground electricity cabling from the proposed onsite substation located in the townland of Camagh. This connection is carried out via an underground cable which is almost entirely contained within the public road corridor to the existing 110kV Mullingar substation located in the townland of Irishtown. Proposed upgrade works at the

existing Mullingar substation will consist of the construction of an additional dedicated bay to facilitate connection of the cable. The total length of the proposed cable route is approximately 26 kilometres.

3. IDENTIFICATION OF RELEVANT EUROPEAN SITES

3.1 Identification of the European Sites within the Likely Zone of Impact

The following methodology was used to establish which European Sites are within the Likely Zone of Impact of the Proposed Development:

- Initially the most up to date GIS spatial datasets for European designated sites and water catchments were downloaded from the NPWS website (www.npws.ie) and the EPA website (www.epa.ie) on the 03/03/2021. The datasets were utilised to identify European Sites which could feasibly be affected by the Proposed Development.
- All European Sites that could potentially be affected were identified using a source-pathway - receptor model. To provide context for the assessment, European Sites within a distance of 15km surrounding the development site are shown on Figure 3.1. Information on these sites with regard to their conservation objectives is provided in Table 3-1[2]. Sites that were further away from the proposed development were also considered. Given the nature, scale and location of the Proposed Development no potential for significant effect on sites that are located outside the 15km buffer were identified. The nearest downstream site outside the 15km buffer is Lough Ree SAC and SPA located over 40km hydrological distance from the proposed works and buffered by the intervening waterbody of Lough Iron. Consequently, based on distance and the existing intervening waterbodies (e.g. Lough Iron and Lough Ennell) no pathway for significant effect on these or any other European sites outside the 15km buffer was identified.
- In relation to Special Protection Areas, in the absence of any specific European or Irish guidance in relation to such sites, the Scottish Natural Heritage (SNH) Guidance, '*Assessing Connectivity with Special Protection Areas* (SPA)' (2016) was consulted. This document provides guidance in relation to the identification of connectivity between proposed development and Special Protection Areas. The guidance takes into consideration the distances species may travel beyond the boundary of their SPAs and provides information on dispersal and foraging ranges of bird species which are frequently encountered when considering plans and projects.
- The site of the proposed development was not found to lie on any significant migration route for any species. The results of these surveys (including those submitted in response to the Further Information Request), provide the scientific evidence to support this conclusion.
- In addition, the results of the detailed bird surveys that were undertaken between 2015 and 2022 were taken into account during the assessment.
- The catchment mapping was used to establish or discount potential hydrological connectivity between the site of the Proposed Development and any European Sites. The hydrological catchments are also shown in Figure 3.1.
- The hydrological studies and analysis that was presented in the EIAR that supports the application were also taken into account in this AA Screening assessment, as was the hydrological information that is presented in response to the request for further information.
- Table 3.1 provides details of all relevant European Sites as identified in the preceding steps and assesses which are within the likely Zone of Impact.
- The results of the extensive bird surveys carried out between 2015 and 2022 were consulted in the course of this screening exercise and provided information on whether the birds recorded on the site could potentially be associated with any European Site.

[2] *Office of the Planning Regulator (2021) guidance; 'OPR Practice Note PN01 Appropriate Assessment Screening for Development Management', utilises the Source-Pathway-Receptor model. This Appropriate Assessment Screening Report follows this guidance as well as providing information on European sites located within 15km of the proposed development as recommended in guidance provided by DEHLG (2010).*

- The site synopses and conservation objectives of these sites, as per the NPWS website (www.npws.ie), were consulted and reviewed at the time of preparing this report. Figure 3.1 shows the location of the Proposed Development in relation to all European sites within 15km of the Proposed Development.
- Where potential pathways for Significant Effect such as habitat or hydrological connectivity are identified, the site is included within the Likely Zone of Impact.

3.2 Assessment of Potential for Significant Effects on European Sites

This Appropriate Assessment Screening Report considers any potential for likely direct or indirect impacts of the Proposed Development, both alone and in combination with other plans and projects, on European Sites by virtue of the following criteria: size and scale, land-take, distance from the European Site or key features of the site, resource requirements, emissions, excavation requirements, transportation requirements and duration of construction, operation and decommissioning were considered in this screening assessment.

Table 3.1 below identifies which European Sites are located within the Zone of Likely Impact and identifies pathways by which impacts may occur. All European Sites that are within the Zone of Likely Impact are Screened In following the precautionary principle and assessed within the Natura Impact Statement. In addition, the individual pathways by which effects may occur are identified in Table 3-1 below.

Newry, Fane, Glyde and Dee
Erne
Upper Shannon
Boyne
Lower Shannon
Clooneen Bog SAC
Ballykenny-Fisherstown Bog SPA
Lough Forbes Complex SAC
Brown Bog SAC
Mount Jessop Bog SAC
Fortwilliam Turlough SAC
Lough Ree SAC
Carn Park Bog SAC
Crosswood Bog SAC
River Shannon Callows SAC
Middle Shannon Callows SPA
Ardagullion Bog SAC
Lough Kinale and Derragh Lough SPA
Lough Sheelin SPA
Lough Sheelin SPA
Lough Sheelin SPA
Moneybeg And Clareisland Bogs SAC
Moneybeg And Clareisland Bogs SAC
Lough Kinale and Derragh Lough SPA
Derragh Bog SAC
Garriskil Bog SAC
Garriskil Bog SPA
Glen Lough SPA
Glen Lough SPA
Lough Derravaragh SPA
Lough Iron SPA
Scragh Bog SAC
Lough Owel SAC
Lough Owel SPA
Wooddown Bog SAC
Ballymore Fen SAC
Lough Ennell SPA
Lough Ennell SAC
Split Hills And Long Hill Esker SAC
White Lough, Ben Loughs And Lough Doo SAC
White Lough, Ben Loughs And Lough Doo SAC
Lough Bane And Lough Glass SAC
Lough Bane And Lough Glass SAC
Lough Lene SAC
Killyconny Bog (Cloghbally) SAC
River Boyne and River Blackwater SPA
River Boyne And River Blackwater SAC
Girley (Drewstown) Bog SAC
River Boyne And River Blackwater SAC
River Boyne And River Blackwater SAC
River Boyne and River Blackwater SPA
River Boyne and River Blackwater SPA
Mount Hevey Bog SAC

Map Legend

- EIAR Site Boundary
- 15km Buffer from Site
- Special Area of Conservation (SAC)
- Special Protection Area (SPA)
- WFD Catchments
- EPA Mapped Watercourses

Drawing Title: 15km Buffer to EU Designated Sites	
Project Title: Coole Wind Farm, Co. Westmeath	
Drawn By: HW	Checked By: LK
Project No.: 200445	Drawing No.: Figure 3-1
Scale: 1:200000	Date: 2021.01.27

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Table 3-1 Identification of Designated Sites within the Likely Zone of Impact and assessment of potential for significant effects

European Sites and distance from Proposed Development	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 03/09/2021)	Conservation Objectives	Likely Zone of Impact Determination and assessment of potential for significant effect
Special Area of Conservation (SAC)			
Lough Owel SAC (000688) **Distance:** Grid connection route is located within the existing N4 corridor along the boundary of the European Site. 12.5km from the windfarm site.	› White-clawed crayfish *Austropotamobius pallipes* [1092] › Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp. [3140] › Transition mires and quaking bogs [7140] › Alkaline fens [7230]	Detailed conservation objectives for this site (Version 1, May 2018) were reviewed as part of the assessment and are available at www.npws.ie	There will be no direct effect on this SAC in relation to the windfarm site, which is separated from it by a distance of over 12km. There will be no direct effects associated with the grid connection route as where it runs along the SAC boundary is located entirely within the existing N4 road corridor. A watercourse flows under the N4 where the cable is to be laid and provides hydrological connectivity with this SAC. As a result, there is potential for indirect effects on the SAC, in the form of deterioration of water quality resulting from pollution associated with the construction phase of the development Consequently, the potential for significant effects on this European Site cannot be excluded at this stage of the Appropriate Assessment process. This site is therefore considered to be **within the Likely Zone of Impact**.
Garriskil Bog SAC (000679)	› Active raised bogs* [7110] › Degraded raised bogs still capable of natural regeneration [7120]	Detailed conservation objectives for this site (Version 1, November 2015) were reviewed as part of the assessment and are available at www.npws.ie	There will be no direct effects as the Proposed Development is located entirely outside the boundary of the designated site.

European Sites and distance from Proposed Development	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 03/09/2021)	Conservation Objectives	Likely Zone of Impact Determination and assessment of potential for significant effect
Distance: 0.06km east of the proposed grid connection route. 4.5km from windfarm site.	› Depressions on peat substrates of the *Rhynchosporion* [7150]		The SAC is located approximately 60m east of the proposed grid connection route (at its closest point.) and 4.5km from the proposed windfarm site. Following a review of the detailed hydrological assessment that was undertaken and presented in the EIAR and in the response to the further information request, it is concluded that, in the absence of mitigation There are no direct/indirect hydrological pathways between the Grid Connection Route and Gariskil Bog SAC There is no connectivity pathway for pollution or drainage related impacts. No complete impact source-pathway-receptor chain was identified. **The site is not in the Likely Zone of Impact and no further assessment is required.**
Scragh Bog SAC (000692) **Distance:** 0.3km east of the proposed grid connection route. 14.4km from windfarm site.	› Slender green feather-moss *Drepanocladus vernicosus* [1393] › Transition mires and quaking bogs [7140] › Alkaline fens [7230] ›	Detailed conservation objectives for this site (Version 1, May 2018) were reviewed as part of the assessment and are available at www.npws.ie	There will be no direct effects as the Proposed Development is located entirely outside the boundary of the designated site. The SAC is located approximately 300m east of the proposed grid connection route and 14.4km from the proposed windfarm site. Following a review of the detailed hydrological assessment that was undertaken and presented in the EIAR and in the response to the further information request, it is concluded that, in the absence of mitigation There are no direct/indirect hydrological pathways between the Grid Connection Route and Scragh Bog SAC/pNHA. There is no connectivity pathway for pollution or drainage related impacts. No

European Sites and distance from Proposed Development	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 03/09/2021)	Conservation Objectives	Likely Zone of Impact Determination and assessment of potential for significant effect
			complete impact source-pathway-receptor chain was identified. **The site is not in the Likely Zone of Impact and no further assessment is required.**
Derragh Bog SAC (002201) **Distance:** 2.4km north of the windfarm site. 4.9km from the proposed grid connection.	› Degraded raised bogs still capable of natural regeneration [7120] › Bog woodland* [91D0]	This site has the generic conservation objective: "To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected." (NPWS (2022) Conservation objectives for Derragh Bog SAC [002201]. Generic Version 9.0. Department of Housing, Local Government and Heritage.	There will be no direct effects as the Proposed Development is located entirely outside the boundary of the designated site. The SAC is located approximately 2.4km north of the proposed windfarm site and 4.9km from the proposed grid connection and is designated for terrestrial habitats. There is no connectivity pathway for pollution or drainage related impacts. No complete impact source-pathway-receptor chain was identified. **The site is not in the Likely Zone of Impact and no further assessment is required.**
Moneybeg and Clareisland Bogs SAC (002340) **Distance**: 3.1km from wind farm site 6.1km from the proposed grid connection route	› Active raised bogs* [7110] › Degraded raised bogs still capable of natural regeneration [7120] › Depressions on peat substrates of the Rhynchosporion [7150]	Detailed conservation objectives for this site (Version 1, February 2016) were reviewed as part of the assessment and are available at www.npws.ie	There will be no direct effects as the Proposed Development is located entirely outside the boundary of the designated site. The SAC is located approximately 3.1km north of the windfarm site 6.1km north of the proposed grid connection route and is designated for terrestrial habitats. There is no connectivity pathway for pollution or drainage related impacts. No complete impact source-pathway-receptor chain was identified. **The site is not in the Likely Zone of Impact and no further assessment is required.**

European Sites and distance from Proposed Development	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 03/09/2021)	Conservation Objectives	Likely Zone of Impact Determination and assessment of potential for significant effect
Ardagullion Bog SAC (002341) **Distance**: 3.7km from the proposed junction works in Boherquill 7.4km from the windfarm site	› Active raised bogs* [7110] › Degraded raised bogs still capable of natural regeneration [7120] › Depressions on peat substrates of the Rhynchosporion [7150]	Detailed conservation objectives for this site (Version 1, November 2015) were reviewed as part of the assessment and are available at www.npws.ie	There will be no direct effects as the Proposed Development is located entirely outside the boundary of the designated site. The SAC is located approximately 3.7km west of the proposed junction works in Boherquill and 7.4km west of the proposed windfarm site and is designated for terrestrial habitat. There is no connectivity pathway for pollution or drainage related impacts. No complete impact source-pathway-receptor chain was identified. **The site is not in the Likely Zone of Impact and no further assessment is required.**
Lough Ennell SAC (000685) **Distance**: 4.2km the proposed gird connection route 24km from the wind farm site	› Alkaline fens [7230]	Detailed conservation objectives for this site (Version 1, January 2018) were reviewed as part of the assessment and are available at www.npws.ie	There will be no direct effects as the Proposed Development is located entirely outside the boundary of the designated site. The SAC is located approximately 4.2km south of the proposed grid connection route and 24km from the proposed wind farm site. There is hydrological connectivity between the proposed grid connection route and the SAC approximately 8.8km (hydrological distance) downstream. As a result, there is potential for indirect effects in the form of deterioration of water quality resulting from pollution on the aquatic QI Alkaline fens [7230]. Consequently, following the precautionary principle, the potential for significant effects on this European Site cannot be excluded at this stage of the Appropriate

European Sites and distance from Proposed Development	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 03/09/2021)	Conservation Objectives	Likely Zone of Impact Determination and assessment of potential for significant effect
			Assessment process. **This site is therefore considered to be within the Likely Zone of Impact.**
Wooddown Bog SAC (002205) **Distance**: 5.8km from the proposed grid connection route 20.7km south east of the windfarm site	› Degraded raised bogs still capable of natural regeneration [7120]	This site has the generic conservation objective: "To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected." NPWS (2022) Conservation objectives for Wooddown Bog SAC [002205]. Generic Version 9.0. Department of Housing, Local Government and Heritage.	There will be no direct effects as the Proposed Development is located entirely outside the boundary of the designated site. The SAC is located approximately 5.8km east of the proposed grid connection route and 20.7km from the proposed windfarm site and is designated for terrestrial habitat. There is no connectivity pathway for pollution or drainage related impacts. No complete impact source-pathway-receptor chain was identified. **The site is not in the Likely Zone of Impact and no further assessment is required.**
Lough Lene SAC (002121) **Distance**: 7.5km from the proposed grid connection route 8.5km from the windfarm site	› White-clawed crayfish *Austropotamobius pallipes* [1092] › Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	Detailed conservation objectives for this site (Version 1, 21st October 2021) were reviewed as part of the assessment and are available at www.npws.ie	There will be no direct effects as the Proposed Development is located entirely outside the boundary of the designated site. The SAC is located approximately 7.5km east of the proposed grid connection route and 8.5km from the proposed wind farm site boundary. Lough Lene SAC is located in a separate hydrological catchment to the proposed works. No complete impact source-pathway-receptor chain was identified. **The site is not in the Likely Zone of Impact and no further assessment is required.**

European Sites and distance from Proposed Development	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 03/09/2021)	Conservation Objectives	Likely Zone of Impact Determination and assessment of potential for significant effect
White Lough, Ben Loughs and Lough Doo SAC (001810) **Distance**: 8.0km from the proposed windfarm site 9.2km from the grid connection route	› White-clawed crayfish *Austropotamobius pallipes* [1092] › Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	Detailed conservation objectives for this site (Version 1, 21st October 2021) were reviewed as part of the assessment and are available at www.npws.ie	There will be no direct effects as the Proposed Development is located entirely outside the boundary of the designated site. The SAC is located approximately 8.0km east of the proposed wind farm site and 9.2km from the proposed grid connection route in a separate hydrological catchment. No complete impact source-pathway-receptor chain was identified. **The site is not in the Likely Zone of Impact and no further assessment is required.**
Lough Bane and Lough Glass SAC (002120) **Distance:** 10.7km from the proposed wind farm site 11.4km from the grid connection route	› White-clawed crayfish *Austropotamobius pallipes* [1092] › Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] ›	Detailed conservation objectives for this site (Version 1, 21st October 2021) were reviewed as part of the assessment and are available at www.npws.ie	There will be no direct effects as the Proposed Development is located entirely outside the boundary of the designated site. The SAC is located approximately 10.7km east of the proposed windfarm site and 11.4km from the proposed grid connection route in a separate hydrological catchment. No complete impact source-pathway-receptor chain was identified. **The site is not in the Likely Zone of Impact and no further assessment is required.**
River Boyne and River Blackwater SAC (002299) **Distance:** 12.7km from the proposed grid connection route	› River lamprey *Lampetra fluviatilis* [1099] › Salmon *Salmon salar* [1106] › Otter *Lutra lutra* [1355] › Alkaline fens [7230] › Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*)*	Detailed conservation objectives for this site (Version 1, 03 Dec 2021) were reviewed as part of the assessment and are available at www.npws.ie	There will be no direct effects as the Proposed Development is located entirely outside the boundary of the designated site. The SAC is located approximately 12.7km east of the proposed grid connection route and 14.4km from the proposed windfarm site in a separate hydrological catchment. No complete impact source-pathway-receptor

European Sites and distance from Proposed Development	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 03/09/2021)	Conservation Objectives	Likely Zone of Impact Determination and assessment of potential for significant effect
14.4km from the windfarm site boundary			chain was identified. **The site is not in the Likely Zone of Impact and no further assessment is required.**
Special Protection Area (SPA)			
Lough Owel SPA (004047) **Distance:** Grid connection route is located within the existing N4 corridor along the boundary of the European Site. 12.5km from the windfarm site	› Shoveler *Anas clypeata* [A056] › Coot *Fulica atra* › Wetland and Waterbirds [A999]	This site has the generic conservation objective: "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests of this SPA." This site also has a second conservation objective: "To maintain or restore the favourable conservation condition of the wetland habitat at Lough Owel SPA as a resource for the regularly-occurring migratory waterbirds that utilise it." NPWS (2022) Conservation objectives for Lough Owel SPA [004047]. Generic Version 9.0. Department of Housing, Local Government and Heritage.	There will be no direct effects as the Proposed Development is located within the N4 road corridor along the boundary of the SPA at its closest point. A watercourse flows under the N4 where the cable is to be laid and provides hydrological connectivity with this SPA. Taking a precautionary approach, a potential pathway for indirect effects in the form of deterioration of water quality resulting from pollution, associated with the construction phase of the development was identified. Consequently, there is potential for deterioration of the wetland habitat of all SCI species. In addition, taking a precautionary approach, given that the proposed grid connection is located adjacent to the SPA boundary, there is potential for disturbance on the SCI species associated with the SPA. As a result, this site is considered to be **within the Likely Zone of Impact** and further assessment is required.
Lough Derravarragh SPA (004043)	› Whooper swan *Cygnus cygnus* [A038] › Pochard *Aythya farina* [A059] › Tufted duck *Aythya fuligula* [A061]	This site has the generic conservation objective:	The development is located within the potential core foraging range of Whooper Swan which is an SCI species associated with the SPA (SNH Guidelines (2016).

European Sites and distance from Proposed Development	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 03/09/2021)	Conservation Objectives	Likely Zone of Impact Determination and assessment of potential for significant effect
Distance: 0.07km from the proposed grid connection route 4.8km from the windfarm site	› Coot *Fulica atra* [A125] › Wetland and Waterbirds [A999]	"To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests of this SPA." This site also has a second conservation objective: "To maintain or restore the favourable conservation condition of the wetland habitat at Lough Derravarragh SPA as a resource for the regularly-occurring migratory waterbirds that utilise it." NPWS (2022) Conservation objectives for Lough Derravarragh SPA [004043]. Generic Version 9.0. Department of Housing, Local Government and Heritage.	Consequently, and following the precautionary principle, the potential for direct and indirect impacts on the following the SPA requires further assessment. The proposed gird connection route is located approximately 70m west of the SPA. Therefore, potential for disturbance SCI bird species associated with the SPA has also been considered. There will be no direct effects on the supporting wetland habitat of waterbirds within the SPA. Given that the SPA is located hydrologically downstream of the development site there is potential for indirect effects with regard to surface water pollution. As a result, this site is considered to be **within the Likely Zone of Impact** and further assessment is required.
Garriskil Bog SPA (004102) **Distance**: 1.4km from the proposed grid connection route 7.2km from the wind farm site	› Greenland white-fronted goose *Anser albifrons flavirostris* [A395]	This site has the generic conservation objective: "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests of this SPA." NPWS (2022) Conservation objectives for Garriskil Bog SPA [004102]. Generic	In accordance with SNH Guidelines (2016), the wind farm site is located within the potential core foraging range of SCI species associated with the SPA. However, as per the NPWS site synopsis, the last record of Greenland White-fronted Goose at the site was from *1986/87 (43 individuals).* The following is an extract from the NPWS site synopsis for the SPA "

European Sites and distance from Proposed Development	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 03/09/2021)	Conservation Objectives	Likely Zone of Impact Determination and assessment of potential for significant effect
		Version 9.0. Department of Housing, Local Government and Heritage.	*At the time this site was designated as a Special Protection Area (SPA) it was known to be utilised by part of an internationally important population of Greenland White-fronted Goose centered around the midland lakes. The geese appear to have abandoned these peatland sites in favour of grassland sites elsewhere.* Given that lack of evidence to suggest that the SCI species utilise the SPA, and the lack of potential for the proposed development to result in significant effects thereon (following detailed bird surveys at the site and as presented in the bird survey report prepared in response to the request for further information), potential impacts on the populations of the SCI species for which the SPA was designated are considered highly unlikely. However, following an extremely precautionary principle and due to the fact that the wind farm site is within the core foraging range of the SCI species, **this SPA is within the likely zone of impact and further assessment is required**
Lough Kinale and Derragh Lough SPA **Distance:** 1.8km from the windfarm site 4.4km from the proposed grid connection route	› Pochard *Aythya farina* [A059] › Tufted duck *Aythya fuligula* [A061] › Wetland and Waterbirds [A999]	This site has the generic conservation objective: "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests of this SPA."	SCI species associated with this SPA were not recorded on the site of the proposed development during the extensive and comprehensive ornithological surveys undertaken from 2015-2022. Given the distance and intervening natural buffers between the wind farm site and the SPA, displacement related impacts are not anticipated.

European Sites and distance from Proposed Development	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 03/09/2021)	Conservation Objectives	Likely Zone of Impact Determination and assessment of potential for significant effect
		This site also has a second conservation objective: "To maintain or restore the favourable conservation condition of the wetland habitat at Lough Kinale and Derragh Lough SPA as a resource for the regularly-occurring migratory waterbirds that utilise it." NPWS (2022) Conservation objectives for Lough Kinale and Derragh Lough SPA [004061]. Generic Version 9.0. Department of Housing, Local Government and Heritage.	There will be no direct effects on the supporting wetland habitat of waterbirds within the SPA. There is no potential for indirect effects with regard to surface water pollution as the development site is located downstream of the SPA in the Shannon surface water catchment, with no identifiable pathway for impact. **The site is not in the Likely Zone of Impact and no further assessment is required.**
Lough Iron SPA **Distance**: 3km from the proposed junction works in Joanstown and 4.3km from the proposed grid connection route 11.4km from the windfarm site	› Whooper Swan *Cygnus cygnus* [A038] › Wigeon *Anas penelope* [A050] › Teal *Anas creca* [A052] › Shoveler *Anas clypeata* [A056] › Coot *Fulica atra* [A125] › Golden Plover *Pluvialis apricaria* [A140] › Greenland White-fronted Goose *Anser albifrons flavirostris* [A395] › Wetland and Waterbirds [A999]	This site has the generic conservation objective: "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests of this SPA." This site also has a second conservation objective: "To maintain or restore the favourable conservation condition of the wetland habitat at Lough Iron SPA as a resource	Whilst the windfarm site is located outside the potential core foraging range of SCI species associated with the SPA (SNH Guidelines (2016) and is also located outside the zone of sensitivity of any species that is listed as particularly sensitive to wind energy development in Mc Guinness et.al 2015 a potential pathway for indirect effects on this SPA is considered on a highly precautionary basis and further assessment is required. The proposed junction works in Joanstown occur approximately 3km north west of the SPA.. The proposed works are confined to the existing road corridor and there is no potential for effect in relation to disturbance associated with the proposed works on any

European Sites and distance from Proposed Development	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 03/09/2021)	Conservation Objectives	Likely Zone of Impact Determination and assessment of potential for significant effect
		for the regularly-occurring migratory waterbirds that utilise it." To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: (2022) Conservation objectives for Lough Iron SPA [004046]. Generic Version 9.0. Department of Housing, Local Government and Heritage.	SCI species associated with the SPA. There will be no direct effects on the supporting wetland habitat of waterbirds within the SPA. Taking a precautionary approach, a potential pathway for indirect effects in the form of deterioration of water quality resulting from pollution, associated with the construction phase of the development was identified. Consequently, there is potential for deterioration of the wetland habitat of all SCI species. Impact on this wetland habitat is considered. As a result, this site is considered to be **within the Likely Zone of Impact** and further assessment is required.
Glen Lough SPA **Distance:** 3.3km from the proposed junction works in Joanstown and 9.7km from the proposed grid connection route. 13.5 from the windfarm site	› Whooper Swan *Cygnus cygnus* [A038]	This site has the generic conservation objective: "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests of this SPA." (2022) Conservation objectives for Glen Lough SPA [004045]. Generic Version 9.0. Department of Housing, Local Government and Heritage.	The wind farm site is located in over 13.5 km from the SPA with no habitat or direct surface water connectivity. The development is located outside the identified foraging range of the SCI species associated with the SPA that are listed in SNH (2016). Bird activity surveys between 2015 and 2022 have not revealed the site of the Proposed Development to be located on an identifiable migration route for this species. In addition, the detailed survey work undertaken between 2015 and 2022 has not revealed any potential for significant effect on this species as a result of the proposed development.

European Sites and distance from Proposed Development	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 03/09/2021)	Conservation Objectives	Likely Zone of Impact Determination and assessment of potential for significant effect
			Works in relation to the junction upgrade locations and grid connection will be restricted to the existing road corridor with no potential to impact on this species. Consequently, the potential for adverse impacts on populations of SCI species associated with the SPA can be discounted and no further assessment is required. **The site is not in the Likely Zone of Impact and no further assessment is required.**
Lough Sheelin SPA **Distance:** 3.9km from windfarm site 7.8km from the proposed grid connection route	› Great crested grebe *Podiceps cristatus* [A005] › Pochard *Aythya ferina* [A059] › Tufted duck *Aythya fuligula* [A061] › Goldeneye *Bucephala clangula* [A067]	This site has the generic conservation objective: "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests of this SPA." This site also has a second conservation objective: "To maintain or restore the favourable conservation condition of the wetland habitat at Lough Sheelin SPA as a resource for the regularly-occurring migratory waterbirds that utilise it." (2022) Conservation objectives for Lough Sheelin SPA [004065]. Generic	SCI species associated with this SPA were not recorded on the wind farm site during the extensive and comprehensive ornithological surveys undertaken from 2015-2022. Given the distance and intervening natural buffers between the development site and the SPA, displacement related impacts are not anticipated. There will be no direct effects on the supporting wetland habitat of waterbirds within the SPA. There is no potential for indirect effects with regard to surface water pollution as the development site is located downstream of the SPA in the Shannon surface water catchment, with no identifiable pathway for impact. Consequently, the potential for adverse impacts on populations of SCI species associated with the SPA can be discounted and no further assessment is required. **The site is not in the Likely Zone of Impact and no further assessment is required.**

European Sites and distance from Proposed Development	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 03/09/2021)	Conservation Objectives	Likely Zone of Impact Determination and assessment of potential for significant effect
		Version 9.0. Department of Housing, Local Government and Heritage.	
Lough Ennell SPA **Distance:** 4.5km from the proposed grid connection route 24.3km from the windfarm site	› Pochard *Aythya ferina* [A059] › Tufted duck *Aythya fuligula* [A061] › Coot *Fulica atra* [A125] › Wetland and Waterbirds [A999]	This site has the generic conservation objective: "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests of this SPA." This site also has a second conservation objective: "To maintain or restore the favourable conservation condition of the wetland habitat at Lough Ennell SPA as a resource for the regularly-occurring migratory waterbirds that utilise it." (2022) Conservation objectives for Lough Ennell SPA [004044]. Generic Version 9.0. Department of Housing, Local Government and Heritage.	There will be no direct effects as the Proposed Development is located outside of the designated site. The SPA is located 4.5km south of the proposed grid connection route and 24.3km south of the windfarm site. Due to this distance, there is no potential for significant indirect effects as a result of disturbance. There is hydrological connectivity between the proposed grid connection route and the SPA approximately 9.2km (hydrological distance) downstream. Taking a precautionary approach, a potential pathway for indirect effects in the form of deterioration of water quality resulting from pollution, associated with the construction phase of the development was identified. Consequently, there is potential for deterioration of the wetland habitat of all SCI species. **This site is considered to be within the Likely Zone of Impact and further assessment is required.**

3.3 European Sites with the Potential to be Significantly Affected by the Proposed Development

The following European Sites have the potential to be significantly affected by the Proposed Development:

- Lough Owel SAC (000688)
- Lough Ennell SAC (000685)
- Lough Owel SPA (004047)
- Lough Ennell SPA (004044)
- Lough Derravaragh SPA (004043)
- Lough Iron SPA (004046)
- Garriskill Bog SPA (004102)

Lough Owel SAC

The SAC is located 12.5km south of the windfarm site and the grid connection is located within the N4 road corridor along the boundary of the SAC. There will be no direct effect on this SAC in relation to the windfarm site, which is separated from it by a distance of over 12km. There will be no direct effects associated with the grid connection route as where it runs along the SAC boundary is located entirely within the existing N4 road corridor. A watercourse flows under the N4 where the cable is to be laid and provides hydrological connectivity with this SAC. As a result, there is potential for indirect effects on the SAC, in the form of deterioration of water quality resulting from pollution associated with the construction phase of the development

Lough Ennell SAC

The SAC is located approximately 4.2km south of the proposed grid connection route and 24km from the proposed wind farm site. There is hydrological connectivity between the proposed grid connection route and the SAC approximately 8.8km (hydrological distance) downstream. As a result, there is potential for indirect effects in the form of deterioration of water quality resulting from pollution on the aquatic QI Alkaline fens [7230].

Lough Owel SPA

The SPA is located 12.5km south of the windfarm site and the grid connection is located within the N4 road corridor along the boundary of the SPA. A watercourse flows under the N4 where the cable is to be laid and provides hydrological connectivity with this SPA. Taking a precautionary approach, a potential pathway for indirect effects in the form of deterioration of water quality resulting from pollution, associated with the construction phase of the development was identified. Consequently, there is potential for deterioration of the wetland habitat of all SCI species.

In addition, taking a precautionary approach, given that the proposed grid connection is located adjacent to the SPA boundary, there is potential for disturbance on the SCI species associated with the SPA.

Lough Ennell SPA

The SPA is located 4.5km south of the proposed grid connection route and 24.3km south of the windfarm site. Due to this distance, there is no potential for significant indirect effects as a result of disturbance. There is hydrological connectivity between the proposed grid connection route and the SPA approximately 9.2km (hydrological distance) downstream. Taking a precautionary approach, a potential pathway for indirect effects in the form of deterioration of water quality resulting from pollution,

associated with the construction phase of the development was identified. Consequently, there is potential for deterioration of the wetland habitat of all SCI species.

Lough Derravaragh SPA

The development is located within the potential core foraging range of Whooper Swan which is an SCI species associated with the SPA (SNH Guidelines (2016). Consequently, and following the precautionary principle, the potential for direct and indirect impacts on the following the SPA requires further assessment. The proposed gird connection route is located approximately 70m west of the SPA. Therefore, potential for disturbance SCI bird species associated with the SPA has also been considered.

There will be no direct effects on the supporting wetland habitat of waterbirds within the SPA. Given that the SPA is located hydrologically downstream of the development site there is potential for indirect effects with regard to surface water pollution.

.Lough Iron SPA

Whilst the windfarm site is located outside the potential core foraging range of SCI species associated with the SPA (SNH Guidelines (2016) and is also located outside the zone of sensitivity of any species that is listed as particularly sensitive to wind energy development in Mc Guinness et.al 2015 a potential pathway for indirect effects on this SPA is considered on a highly precautionary basis and further assessment is required.

The proposed junction works in Joanstown occur approximately 3km north west of the SPA.. The proposed works are confined to the existing road corridor and there is no potential for effect in relation to disturbance associated with the proposed works on any SCI species associated with the SPA. There will be no direct effects on the supporting wetland habitat of waterbirds within the SPA. Taking a precautionary approach, a potential pathway for indirect effects in the form of deterioration of water quality resulting from pollution, associated with the construction phase of the development was identified. Consequently, there is potential for deterioration of the wetland habitat of all SCI species. Impact on this wetland habitat is considered.

Garriskil Bog SPA

This SPA is located 1.4km from the proposed grid connection route and 7.2km from the wind farm site. In accordance with SNH Guidelines (2016), the wind farm site is located within the potential core foraging range of SCI species associated with the SPA. However, as per the NPWS site synopsis, the last record of Greenland White-fronted Goose at the site was from *1986/87 (43 individuals).*

The following is an extract from the NPWS site synopsis for the SPA

"*At the time this site was designated as a Special Protection Area (SPA) it was known to be utilised by part of an internationally important population of Greenland White-fronted Goose centered around the midland lakes. The geese appear to have abandoned these peatland sites in favour of grassland sites elsewhere.*

Given that lack of evidence to suggest that the SCI species utilise the SPA, and the lack of potential for the proposed development to result in significant effects thereon (following detailed bird surveys at the site and as presented in the bird survey report prepared in response to the request for further information), potential impacts on the populations of the SCI species for which the SPA was designated are considered highly unlikely. However, following an extremely precautionary principle and due to the fact that the wind farm site is within the core foraging range of the SCI species, this SPA is within the likely zone of impact and further assessment is required.

3.4 Likely Cumulative Impact of the Proposed Works on European Sites, in-combination with other plans and projects

Where the potential for significant effects on European Sites has been identified in the preceding sections of this document, there is potential for the Proposed Development to result in cumulative effect. This potential is addressed in the NIS that accompanies this application.

Where no pathway for effect on a particular European Site was identified, there is no potential for cumulative effects on that site and no further assessment is required.

4. ARTICLE 6(3) APPROPRIATE ASSESSMENT SCREENING STATEMENT AND CONCLUSIONS

4.1 Concluding Statement

Following an examination, analysis and evaluation of the relevant data and information set out within this Screening Report, it cannot be excluded beyond reasonable scientific doubt, in view of best scientific knowledge, on the basis of objective information and in light of the conservation objectives of the relevant European sites, that the Proposed Development, individually or in combination with other plans and projects, would be likely to have a significant effect on the following sites:

- Lough Owel SAC (000688)
- Lough Ennell SAC (000685)
- Lough Owel SPA (004047)
- Lough Ennell SPA (004044)
- Lough Derravaragh SPA (004043)
- Lough Iron SPA (004046)

As a result, an Appropriate Assessment is required, and a Natura Impact Statement shall be prepared in respect of the Proposed Development in order to assess whether the Proposed Development will adversely impact the integrity of these European Sites.

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