Addendum to Appropriate Assessment Screening and Natura Impact Statement

Seven Hills Wind Farm

Galetech Energy Services

Clondargan, Stradone, Co. Cavan, Ireland
Telephone: +353 (0)49 555 5050
www.galetechenergyservices.com

Prepared by:

SLR Environmental Consulting (Ireland) Ltd

7 Dundrum Business Park, Windy Arbour, Dublin, D14 N2Y7

SLR Project No.: 501.065999.00001

Client Reference No: 00581

10 December 2025

Revision: 0

Revision Record

Revision	Date	Prepared By	Checked By
0	10 December 2025	Jake Matthews	Jonathon Dunn

Basis of Report

This document has been prepared by SLR Environmental Consulting (Ireland) Ltd (SLR) with reasonable skill, care and diligence, and taking account of the timescales and resources devoted to it by agreement with Galetech Energy Services (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

SLR shall not be liable for the use of or reliance on any information, advice, recommendations and opinions in this document for any purpose by any person other than the Client. Reliance may be granted to a third party only in the event that SLR and the third party have executed a reliance agreement or collateral warranty.

Information reported herein may be based on the interpretation of public domain data collected by SLR, and/or information supplied by the Client and/or its other advisors and associates. These data have been accepted in good faith as being accurate and valid.

The copyright and intellectual property in all drawings, reports, specifications, bills of quantities, calculations and other information set out in this report remain vested in SLR unless the terms of appointment state otherwise.

This document may contain information of a specialised and/or highly technical nature and the Client is advised to seek clarification on any elements which may be unclear to it.

Information, advice, recommendations and opinions in this document should only be relied upon in the context of the whole document and any documents referenced explicitly herein and should then only be used within the context of the appointment.

Executive Summary

The purpose of this report is to assess whether a proposed alteration to the permitted Seven Hills Wind Farm has the potential to lead to additional impacts on any European Sites and alter the conclusions made within the Appropriate Assessment (AA) Screening and Natura Impact Statement (NIS) submitted as part of planning application PA20.313750.

The proposed alteration involves a minor change to the permitted underground wind farm cable, which connects the wind turbine clusters to the electricity substation. In summary, the cables will be re-routed from the northern turbine cluster through the southern turbine cluster and connected to the electricity substation through a new parcel of land.

The new cable route will mostly follow existing access tracks within the permitted development; except where a new section of underground wind farm cable will be installed and a new access track constructed. The permitted section of 110kV grid connection cable from Brideswell to Monksland and the upgrade works to the Athlone 110kV electricity substation are proposed to be omitted. Following the granting of permission for the Moyvannan Substation and associated underground cabling, the cable between Brideswell and Monksland and works at the Athlone substation will no longer be required.

All European Sites have been considered for Stage 1 AA Screening in this addendum, with all previously screened in European Sites being assessed at Stage 2. The proposed alteration has been assessed as resulting in no additional impacts to any European Sites.

Overall, with the previously committed mitigation measures in place there is no possibility of the proposed alteration affecting any European Sites. Therefore, following an examination, analysis, and evaluation of the best available information, and applying the precautionary principle; it can be concluded beyond all reasonable scientific doubt that the proposed alteration, either alone or in combination with other plans and projects, will not undermine the conservation objectives or integrity of any European Sites i.e. the same conclusions to the NIS submitted as part of the permitted development still apply.

Table of Contents

Tables in Text

Appendices

Appendix A **Previous Plans of Permitted Route**

Appendix B **Addendum to EIAR Chapter 6 (Biodiversity)**

Appendix C **Table 3 from the Environmental Report**

Acronyms and Abbreviations

AA	Appropriate Assessment
ACIEEM	Associate Member of the Chartered Institute of Ecology and Environmental Management
ACP	An Coimisiún Pleanála
EcIA	Ecological Impact Assessment
EIAR	Environmental Impact Assessment Report
GES	Galetech Energy Services
kV	Kilovolts
LSE	Likely Significant Effects
MCIEEM	Member of the Chartered Institute of Ecology and Environmental Management
NIS	Natura Impact Statement
QI	Qualifying Interest
RLB	Red Line Boundary
SAC	Special Area of Conservation
SCI	Special Conservation Interest
SLR	SLR Environmental Consulting (Ireland) Ltd
SPA	Special Protection Area

1.0 INTRODUCTION

SLR Environmental Consulting (Ireland) Ltd (SLR) was commissioned by Galetech Energy Services (GES) on behalf of Energia Renewables ROI Limited (Energia) to prepare an addendum to the Appropriate Assessment (AA) Screening and Natura Impact Statement (NIS) in support of a proposed alteration to the permitted Seven Hills Wind Farm (An Coimisiún Pleanála (ACP) Reference: ABP-313750-22[1]).

This addendum to the AA Screening and NIS presents an assessment of the Likely Significant Effects (LSE) of the project on the receiving environment.

The previous Environmental Impact Assessment Report and AA / NIS for the permitted project was used to inform the current assessment.

1.1 Summary of Permitted Development

1.1.1 Seven Hills Wind Farm

Seven Hills Wind Farm was granted planning permission subject to condition by ACP as detailed under order 313/D313750. This allows for a ten-year planning permission on the following:

- 20 number wind turbines with an overall ground to blade tip height of 180 meters, a rotor diameter of 162 m and a hub height of 99 m, associated foundations and hard-standing areas;
- 15 number spoil storage areas at hardstands of turbine T1, T2, T3, T4, T5, T6 and T7 (in the townlands of Turrock, Gortaphuill, Cronin and Tullyneeny) and turbine numbers T8, T10, T11, T13, T14, T17, T19 and T20 (in the townlands of Milltown, Cuileenoolagh, Cloonacaltry, Feacle and Tawnagh);
- Provision of 1 number permanent meteorological mast with a maximum height of 100 metres for a period of 30 years from the date of commissioning the entire wind farm;
- Provision of 1 number 110 kV onsite substation in the townland of Cam, along with associated control buildings, MV switchgear building, associated electrical plant, associated security fencing, and equipment and wastewater tank;
- All underground electrical and communication cabling connecting the proposed wind turbines to the proposed onsite substation and associated control buildings and plant;
- All works associated with the connection of the proposed wind farm to the national electricity grid via underground 110 kV cabling from the site to the existing Athlone 110 kV substation located in the townland of Monksland. Cabling will be placed within the public road corridor of the R362, R363 and L2047, or on private land;
- Upgrade works to the existing 110 kV Athlone substation consisting of the construction of an additional dedicated bay to facilitate connection of the cable;
- Provision of 2 number new site accesses north and south from the R363 and upgrade of 1 number junction south of the R363;
- Provision of new access tracks or roads and upgrade of existing access tracks or roads;

[1] https://www.pleanala.ie/en-ie/case/313750

- 7 number overburden storage areas;
- 2 number temporary construction compounds;
- Site drainage works;
- Operational stage site signage;
- All associated site development works, apparatus and signage; and
- A 30-year operational life from the date of commissioning.

On 23 November 2023, ACP granted planning permission for the development subject to conditions; including, in particular, Condition No. 4 which omits turbines T9, T10 and T12 from the development as permitted.

1.2 Summary of Proposed Alteration

The proposed alteration is shown in Figure 1. The proposed alteration comprises the following:

- The omission of approximately 9km of 110kV underground cabling and associated ancillary infrastructure between Brideswell and the Athlone 110kV electricity substation;
- The omission of all permitted upgrades to the Athlone 110kV electricity substation;
- The re-routing of wind farm cabling between the wind turbines and the on-site 110kV electricity substation; and,
- The construction of approximately 520m of wind farm access track and installation of approximately 760m of wind farm cabling between turbine T18 and the on-site electricity substation.

1.3 Purpose of this Report

The purpose of this addendum is to assess whether the proposed alteration has the potential to impact any European Sites and alter the conclusions made within the NIS submitted as part of planning application ABP-313750-22. It should be read in conjunction with the documents submitted with the planning application for the permitted development, including the original AA Screening and NIS reports. It should also be read in conjunction with the Environmental Impact Assessment Report (EIAR), Chapter 6 and 7 (Biodiversity and Ornithology), as well as the addendum provided for this chapter.

1.4 Evidence of Technical Competence

This report was written by SLR Senior Ecologist Jake Matthews. Jake has over five years' experience as a consultant ecologist across several consultancies in Ireland and the UK. He is an Associate Member of the Chartered Institute of Ecology and Environmental Management (ACIEEM) and holds a BSc (Hons) in Wildlife Conservation from the University of Salford and an MSc in Ecology and Environment Management from Liverpool Hope University. Jake has prepared a range of survey reports and impact assessment reports for a variety of project types including wind farms. He is also skilled in conducting a range of surveys to inform these assessments including AA Screening and NIS reports.

A technical review was undertaken by Dr Jonathon Dunn. Jonathon co-wrote the EIAR ornithology chapter for the permitted development. He is a Member of the Chartered Institute of Ecology and Environmental Management (MCIEEM) and has extensive experience of designing and implementing baseline ecology surveys for over 20 wind farms in Ireland, along

with impact assessment including EIAR, Ecological Impact Assessment (EcIA), AA screening and NIS.

2.0 METHODOLOGY

2.1 Scope

The proposed alteration was assessed considering the 2022 Screening for AA report and NIS. A full description of the AA process is described in the AA report and NIS.

The assessment has considered the following:

- The potential for effects arising from the proposed alteration;
- Changes to stage 1 Screening for AA list of European Sites potentially impacted and conclusions;
- Changes to stage 2 NIS impact assessment;
- Changes to stage 2 NIS mitigation measures; and
- Changes to stage 2 NIS conclusions.

The only appreciable differences arising from the proposed alteration is a change to the route of the wind farm cabling and the proposed construction of c. 520m of access track and installation of c. 760m of wind farm cabling.

Therefore, there is the potential for the following impacts:

- Changes to the quantity of habitats to be affected during the construction phase;
- Potential loss or degradation of Annex I orchid-rich grassland [6210*];
- Disturbance and/or displacement of Qualifying Interest (QI) or Special Conservation Interest (SCI) species from contractors and vehicles;
- Increased dust creation during the construction and decommissioning phases; and
- Pollution events, including the release of hydrocarbons and suspended sediments, which may lead to surface and ground water degradation.

All other impacts assessed in the 2022 Screening for AA report and NIS for the permitted development are scoped out of consideration here as there is no mechanism by which any additional impacts could occur beyond those already permitted. There will be no alteration to the permitted turbines; therefore, there will be no additional impacts relating to collision risk or displacement of birds via the turbines.

2.2 Study Area

The study area included the proposed amended grid route plus a 50m buffer either side and the route of the proposed access track and underground cable plus a 50 m buffer either side. This is shown in Figure 2. Considering the small-scale nature of the proposed works, this buffer was considered sufficient to provide a detailed baseline of the proposed alteration and the surrounding area.

The revised route of the wind farm cabling that is being installed under existing tracks were not surveyed as these areas formed low value habitats that were previously mapped and are unlikely to have changed in the intervening period. Similarly, the section of underground cable from Brideswell to Monksland and the Athlone 110kV substation was not surveyed as these areas will no longer form part of the project.

2.3 Desktop Study

A desk-based study was undertaken in November 2025 to identify any changes to the baseline ecological environment for the permitted development since the previous baseline assessments.

2.4 Field Survey

An updated field survey was undertaken on 15th and 16th October 2025 by SLR Senior Ecologist Jake Matthews to ground-truth the baseline environment (including additional lands associated with the proposed alteration) and to confirm that no appreciable changes to biodiversity had occurred since baseline surveys were conducted in 2019 to 2022. Weather conditions were suitable for survey and are presented in Table 1 below.

Table 1: Survey weather conditions and metadata

Date	Surveyor	Weather conditions	
15/10/2025	Jake Matthews	Temp. (°C)	10
		Wind speed (Bft[2])	3
		Cloud cover (Oktas)	8/8
		Precipitation	Drizzle
16/10/2025		Temp. (°C)	11
		Wind speed (Bft)	2
		Cloud cover (Oktas)	8/8
		Precipitation	None

3.0 UPDATES TO THE EXISTING ENVIRONMENT

The results of the updated desktop study and 2025 field survey determined that there was one area of Annex I habitat Orchid-rich grassland [6210*] in proximity to and likely to be affected by the proposed alteration. This was located between turbine T18 and the electricity substation (at approximate ITM coordinates 590580 744781) and was identified using the NPWS database for Annex I habitats[3]. Figure 2 shows the location and extent of this habitat. No other Annex I habitat, or Annex II or IV species were recorded within proximity of the proposed alteration during the survey. This accords with the existing environment described in the 2022 NIS.

4.0 CHANGES TO STAGE 1 - AA SCREENING

In the previous combined 2022 Screening for AA and NIS report, 17 European Sites were considered for screening.

The proposed alteration is considered minor and will not affect any of the previously described pathways for impact on designated sites nor, it is assessed, will it introduce any additional pathways for impacts to occur. Moreover, the works for the proposed alteration will be similar in nature to those of the permitted development.

There will be a reduction in the footprint of the development due to the proposed alteration with approximately 9km of the permitted 110kV underground cable route from Brideswell to

[2] Wind speed measured using the Beaufort scale.

[3] https://storymaps.arcgis.com/collections/1a721520030d404f899d658d5b6e159a?item=1 (last accessed December 2025).

Monklsland and works to the Athlone 110kV substation being omitted. However, an additional area between turbine T18 and the electricity substation will be affected by the proposed alteration. Therefore, all distances between the proposed alteration and any European designated sites have been updated in Table 2.

Table 2: Updated distances of European Sites and the updated RLB and the proposed alteration

Site name [site code]	Minimum direct- line distance to the updated RLB (km)[4]	Minimum direct-line distance to the proposed alteration (km)
Special Areas for Conservation (SAC)		
Ballynamona Bog And Corkip Lough SAC [002339]	0.79	1.63
Killeglan Grassland SAC [002214]	0.62	2.95
Lough Croan Turlough SAC [000610]	1.03	3.75
Castlesampson Esker SAC [001625]	3.05	3.24
Four Roads Turlough SAC [001637]	2.57	7.34
Lough Funshinagh SAC [000611]	4.71	5.63
Lisduff Turlough SAC [000609]	6.54	11.16
Lough Ree SAC [000440]	6.16	8.98
Aughrim (Aghrane) Bog SAC [002200]	9.67	14.78
Ballygar (Aghrane) Bog SAC [002199]	9.85	14.95
Ballinturly Turlough SAC [000588]	10.5	15.04
River Shannon Callows SAC [000216]	9.75	12.48
Special Protection Areas (SPA)		
Lough Croan Turlough SPA [004139]	1.03	3.83
River Suck Callows SPA [004097]	2.17	4.19
Four Roads Turlough SPA [004140]	2.57	7.35
Lough Ree SPA [004064]	6.14	8.98

[4] As shown via the RLB on Figure 1. This includes all aspects of the development including the permitted wind turbines and the proposed alteration.

Site name [site code]	Minimum direct- line distance to the updated RLB (km)[4]	Minimum direct-line distance to the proposed alteration (km)
Middle Shannon Callows SPA [004096]	9.75	12.48

Due to the omission of 110kV underground cabling and works to the Athlone 110kV substation and the consequential alteration of the of the Red Line Boundary (RLB), five European Sites are now located at a further distance than previously reported in the NIS for the permitted development. No European Sites are located closer as a result of the proposed alteration.

The five European Sites with updated distances and are now located further from the project (and updated RLB) include the following:

- Castlesampson Esker SAC [001625]
- Lough Ree SAC [000440]
- River Shannon Callows SAC [000216]
- Lough Ree SPA [004064]
- Middle Shannon Callows SPA [004096]

Given that all work practices will be consistent with that of the permitted development and no European Sites are located closer or with any additional pathways, the proposed alteration will not result in any changes to the list of European Sites requiring consideration for Stage 1 Screening for AA and there will be no change to the conclusions of the Stage 1 Screening for AA report because of the proposed alteration. This conclusion states:

> *"Following an examination, analysis and evaluation of the relevant data and information set out within this AA 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:*
>
> - *Ballynamona Bog and Corkip Lough Special Area of Conservation (SAC);*
> - *Killeglan Grassland SAC;*
> - *Four Roads Turlough SAC and Special Protection Area (SPA);*
> - *River Shannon Callows SAC;*
> - *Lough Croan Turlough SPA;*
> - *River Suck Callows SPA;*
> - *Lough Ree SPA; and*
> - *Middle Shannon Callows SPA"*

5.0 CHANGES TO STAGE 2 – NIS

Changes to the impact assessment have been considered for the European Sites screened in and are described below.

For the purposes of assessing changes to the Stage 2 NIS impact assessment, the European Sites that have been considered for Stage 2 assessment include the following:

- Ballynamona Bog and Corkip Lough SAC;
- Killeglan Grassland SAC;
- Four Roads Turlough SAC and SPA;
- River Shannon Callows SAC;
- Lough Croan Turlough SPA;
- River Suck Callows SPA;
- Lough Ree SPA; and
- Middle Shannon Callows SPA

Given that the work practices for the proposed alteration are consistent with those in the permitted development, that no European Sites are located closer to the project or updated RLB and that no new pathways are present, there is no risk of new detrimental LSE occurring to any of the European Sites. Alternatively, there is likely to be a reduction of impacts occurring to the five European Sites located at an increased distance to the project (including updated RLB) (including Castlesampson Esker SAC [001625], Lough Ree SAC [000440], River Shannon Callows SAC [000216], Lough Ree SPA [004064], and Middle Shannon Callows SPA [004096]).

5.1 Potential for Likely Significant Effects to European Sites

The proposed alteration will not alter any element of the permitted wind turbines. Therefore, any LSE relating to collision risk or displacement from the turbines is not relevant for the proposed alteration. The works for the proposed alteration will be consistent with those of the permitted development. Therefore no additional impacts are likely to occur.

LSE from the proposed alteration are considered for the following impacts:

- Surface water and ground water effects caused mainly during the construction and decommissioning phases although may occur in smaller and rarer occurrences during the operational phase;
- Deterioration of habitats caused by dust deposition during the construction and decommissioning phases;
- Habitat loss to facilitate the proposed alteration including the new cable route and access tracks during the construction and decommissioning phases; and
- Disturbance and displacement of QI/SCI species during the construction and decommissioning phases.

No other potential impacts will occur to these European Sites above and beyond what was identified for the permitted wind farm.

5.1.1 Potential Effects due to Pollution to Surface Water or Ground Water

The following European Sites and QI were considered for LSE via surface water or ground water:

- Ballynamona Bog and Corkip Lough SAC - [3180] Turloughs
- Four Roads Turlough SAC – [3180] Turloughs
- River Shannon Callows SAC - [1355] Otter, [7230] Alkaline fens, [91E0] Alluvial forests
- River Suck Callows SPA – [A999] Wetlands and Waterbirds
- Four Roads Turlough SPA - [A999] Wetlands and Waterbirds
- Lough Ree SPA - [A999] wetlands and waterbirds.
- Lough Croan Turlough SPA - [A999] wetlands and waterbirds.
- Middle Shannon Callows SPA - [A999] wetlands and waterbirds.

Killeglan Grassland SAC is designated for its calcareous grassland habitats, which are not dependent on surface water or groundwater, and therefore are not vulnerable to pollution impacts. Therefore, there can be no effects of water pollution on this SAC.

No European Sites will be located closer to the project (or updated RLB) as a result of the proposed alteration. No new pathways have been identified (including hydrological pathways) for surface water or ground water as a result of the proposed alteration. Works will be consistent with those of the permitted development with only minor changes required to the permitted development.

Therefore, no other potential impacts will occur to these European Sites above and beyond what was identified for the permitted wind farm.

5.1.2 Potential Effects due to Dust Contamination

Only one European Site is assessed for dust contamination. This comprises Killeglan Grassland SAC for [6210] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (*important orchid sites). No other European Sites brought forward for Stage 2 assessment (see Section 5.0) are considered susceptible for dust contamination because they comprise of primarily hydrological or wetland habitats that are less sensitive to dust deposition because the vegetation is either periodically submerged or not dependent on low nutrient soils. Similarly, dust deposition would not affect the suitability of habitats for any QI or SCI species.

The proposed alteration will cause increased levels of dust creation during the construction and decommissioning phases; however, these will be minor given the small-scale nature of the proposed alteration and off-set at least in part by the omission of 9 km of 110kV underground cabling.

Generally, dust particles that have a relatively high mass deposit within 100 m of the source with the remainder being deposited within 200 – 500 m of source[5]. Killeglan Grassland SAC is located 2.95 km south-west of the proposed alteration, which is beyond the potential impact zone of depositing dust. Moreover, Ireland has a generally south-west prevailing wind direction. As such, dust is highly unlikely to reach this SAC from the proposed alteration and no potential impacts are likely to occur.

[5] IAQM (2016). Guidance on the Assessment of Mineral Dust Impacts for Planning. Available online: https://iaqm.co.uk/text/guidance/mineralsguidance_2016.pdf. Accessed December 2025.

No other potential impacts will occur to this European Site above and beyond what was identified for the permitted wind farm.

5.1.3 Potential Effects due to Habitat Loss

The following additional habitat losses are required to facilitate the proposed alteration:

- The permanent removal of 0.001 ha of Annex I habitat Orchid-rich grassland;
- The temporary removal of c.0.25 ha improved agricultural grassland;
- The permanent removal of c.0.26ha improved agricultural grassland;
- The permanent removal of c.0.004 ha of scrub; and
- The permanent removal of c.42 m of hedgerow.

The proposed alteration does not overlap with any European Site. Therefore, there will be no direct LSE to any European Site as a result of the habitat loss required to facilitate the proposed alteration. However, several European Sites are designated for SCI species that forage outside SPAs, and these SCI species may be impacted by the habitat loss outside the SPA.

QI otters from River Shannon Callows SAC are not considered further as no losses of riparian habitats will occur because of the proposed alteration. Similarly, QI habitats from Ballynamona Bog and Corkip Lough SAC, Four Roads Turlough SAC and River Shannon Callows SAC are not mobile and are found within the boundary of the SAC only, precluding any direct effects due to habitat loss from the proposed alteration.

Therefore, the following European Sites were considered for LSE due to Habitat Loss:

- Lough Croan Turlough SPA - European golden plover (wintering), [A395] Greenland white-fronted goose (wintering).
- River Suck Callows SPA - [A038] whooper swan (wintering), Eurasian wigeon (wintering), [A140] European golden plover (wintering), [A142] northern lapwing (wintering), [A395] Greenland white-fronted goose (wintering).
- Four Roads Turlough SPA - [A140] European golden plover (wintering), [A395] Greenland white-fronted goose (wintering).
- Lough Ree SPA - [A050] Eurasian wigeon (wintering), [A052] Eurasian teal (wintering), [A053] mallard (wintering), [A065] common scoter (breeding), [A125 Eurasian coot (wintering), [A140] European golden plover (wintering), [A142] northern lapwing (wintering).
- Middle Shannon Callows SPA - [A050] Eurasian wigeon (wintering), European golden plover (wintering), [A142] northern lapwing (wintering), [A179] black-headed gull (wintering).
- Lough Croan SPA - [A140] European golden plover (wintering), [A395] Greenland white-fronted goose (wintering), and [A999] wetlands and waterbirds.

The NIS for the permitted development concluded that none of the habitat loss related to the permitted development was of importance to SCI birds. The habitats due to be lost for the proposed alteration are similar to those of the permitted development; and primarily dry grasslands or heavily farmed grasslands, which are generally not of importance for the SCIs considered (i.e., wildfowl and waders). These SCIs were found to be associated with mainly wetland habitats, such as turloughs, as demonstrated by the baseline bird reports in the ornithology chapter for the permitted wind farm.

No other potential impacts will occur to these European Sites above and beyond what was identified for the permitted wind farm.

5.1.4 Potential Effects due to Disturbance or Displacement

Potential disturbance or displacement effects because of the proposed alteration can only occur for European Sites with ex-situ, mobile QI or SCI species because the proposed alteration does not overlap with any European Site.

Therefore, the following European Sites were considered for LSE due to disturbance or displacement:

- River Shannon Callows SAC - [1355] Otter
- Lough Croan Turlough SPA - European golden plover (wintering), [A395] Greenland white-fronted goose (wintering).
- River Suck Callows SPA - [A038] whooper swan (wintering), Eurasian wigeon (wintering), [A140] European golden plover (wintering), [A142] northern lapwing (wintering), [A395] Greenland white-fronted goose (wintering).
- Four Roads Turlough SPA - [A140] European golden plover (wintering), [A395] Greenland white-fronted goose (wintering).
- Lough Ree SPA - [A050] Eurasian wigeon (wintering), [A052] Eurasian teal (wintering), [A053] mallard (wintering), [A065] common scoter (breeding), [A125 Eurasian coot (wintering), [A140] European golden plover (wintering), [A142] northern lapwing (wintering).
- Middle Shannon Callows SPA - [A050] Eurasian wigeon (wintering), European golden plover (wintering), [A142] northern lapwing (wintering), [A179] black-headed gull (wintering).

The NIS for the permitted development assessed that disturbance and displacement was highly unlikely. The proposed alteration will now cause the project (and updated RLB) to be located further from Lough Ree SPA and Middle Shannon Callows SAC and SPA, less likely to be used by SPA birds, and QI otters are less likely to be affected by disturbance or displacement as a result.

Similarly with the potential effects to habitat loss, the habitats due to be lost for the proposed alteration are similar to those of the permitted development; and primarily dry grasslands or heavily farmed grasslands, which are generally not of importance for the SCIs considered (i.e., wildfowl and waders). These SCIs were found to be associated with mainly wetland habitats, such as turloughs, as demonstrated by the baseline bird reports in the ornithology chapter for the permitted wind farm.

Therefore, no other potential impacts will occur to these European Sites above and beyond what was identified for the permitted wind farm.

5.2 Effects on Integrity ‘Alone’

The 2022 NIS stated that the following adverse impacts were likely:

- Ballynamona Bog and Corkip Lough SAC: waterborne pollution and hydrogeological changes for GWDTE QI turlough habitat;
- Killeglan Grassland SAC: dust pollution for dry grassland and scrubland habitat;
- Four Roads Turlough SAC: waterborne pollution and hydrogeological changes for GWDTE QI turlough habitat; and

- River Shannon Callows SAC: waterborne pollution for otter, alkaline fens, alluvial forests.
- Lough Croan Turlough SPA: none;
- River Suck Callows SPA: waterborne pollution and alteration of local hydrology on wetland and waterbirds habitat;
- Four Roads Turlough SPA: waterborne pollution and alteration of local hydrology on wetland and waterbird habitat;
- Lough Ree SPA: waterborne pollution and alteration of local hydrology on wetland and waterbird habitat; and
- Middle Shannon Callows SPA: waterborne pollution and alteration of local hydrology on wetland and waterbird habitat.

As detailed in Section 5.1, no additional LSE will occur from the proposed alteration that will adversely affect the integrity of any of the European Sites when the proposed alteration is considered 'alone'. Therefore, the effects on the integrities of the European Sites 'alone' are the same as reported in the 2022 NIS.

No other potential impacts will occur to these European Sites above and beyond what was identified for the permitted wind farm.

5.3 Effects on Integrity 'In Combination'

The 2022 NIS stated that potential cumulative impacts in relation to other projects and plans were limited to those that could affect water quality during the construction and decommissioning phases, which could subject the QIs screened in for Ballynamona Bog and Corkip Lough SAC, Four Roads Turlough SAC and River Shannon Callows SAC to additional adverse effects beyond those from the permitted development 'alone'. There is no mechanism by which the proposed alteration could affect waterborne pollution or hydrogeology, the effects on the integrity of SACs 'in combination' are the same as reported in the 2022 NIS.

There is also no potential for the proposed alteration to contribute to significant in combination effects in relation to habitat loss, construction and operational phase disturbance / displacement effects.

There are no additional effects predicted on SCIs or QIs because of the proposed alteration, there are no additional cumulative effects with any other projects or plans predicted beyond those identified for the permitted development or those identified within Table 3 of the Environmental Report to accompany this alteration request. As there is no mechanism by which the proposed alteration could affect waterborne pollution or hydrogeology above and beyond what was predicted for the permitted wind farm.

5.4 Changes to Stage 2 NIS Mitigation Measures

The proposed alteration will not change the connectivity of the permitted development to any European Site, nor change any of the alone or in-combination effects identified. Therefore, there is no need to alter any of the mitigation measures outlined in the 2022 NIS. All mitigation measures described in Section 6.2 of the 2022 NIS will be implemented in full.

5.5 Changes to Stage 2 NIS Conclusions

The likely effects of the proposed alteration have been assessed regarding the conclusions of the permitted Seven Hills Wind Farm 2022 NIS. Overall, it is assessed that the proposed alteration presents no mechanism by which any likely significant effects could occur on any

European Site beyond those described in the 2022 NIS. It is assessed that, with the implementation of all previously committed-to mitigation measures, there is no possibility of the proposed alteration affecting the integrity any European Site. Therefore, following an examination, analysis, and evaluation of the best available information, and applying the precautionary principle; it can be concluded beyond all reasonable scientific doubt that the proposed alteration, either alone or in combination with other plans and projects, will not undermine the conservation objectives or integrity of any European Sites. Accordingly, therefore, it is assessed that the proposed alteration does not affect the conclusion of the 2022 NIS, which states:

> *"All identified potential pathways for impact are robustly prevented through the use of avoidance, appropriate design and mitigation measures as set out within this report and its appendices. The measures ensure that the construction and operation of the Proposed Development does not adversely affect the integrity of European Sites.*
>
> *Therefore, it can be objectively concluded, following an examination, analysis and evaluation of the relevant information, including in particular the nature of predicted impacts from the Proposed Development, and with the implementation of mitigation measures proposed, that the Proposed Development, individually or in combination with other plans or projects, will not adversely affect the integrity of any European Site and there is no reasonable scientific doubt in relation to this conclusion".*

FIGURES

Figure 1: Site Location Plan

Figure 2: Updated Habitat Plan

Figure 3: Designated Site Plan

Figure 4: Hydrological Connectivity

585000 587500 590000 592500

747500

745000

Island
Lough Croan
Inchnagower
Inchnagreeve
R357
L2015
L2016
L2013
L2013
L2017
Curraghboy
L2017
R362
Dooloughan Lough
Fair Hill
Cuilleenirwan Lough
L2016
L2015
Dysart
R363
R363
L2016
R363
R363
R357
L2028
L2028
R357
Feacle Lough
Athlone Mo
Flying Clu
0 1 2
Kilometres

N

LEGEND

Site Boundary

Lough Ree
Irelan
Athlone
Ballinasloe

SLR

SEVEN HILLS WIND FARM

NIS ADDENDUM

SITE LOCATION

FIGURE 1

Scale 1:30,000 @ A3

Date DECEMBER 2025

501.065999.00001.0003.0 Site Location Plan

585000
587500
590000
592500
747500
745000

R357
R357
R357
R357
R363
R363
R363
R362
Figure 2B

N

LEGEND

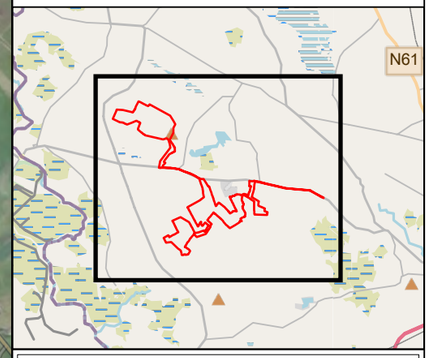
Site Boundary
Proposed Track
Proposed Cable Route
Survey Area
Area Not Surveyed
Annex I Habitat [6280] Orchid-rich Grassland

Fossit Habitat (Linear)

WL1 - Hedgerow

Fossit Habitats (Areas)

GA1 - Improved Agricultural Grassland
WS1 - Scrub



0
1
2
Kilometres

SLR

SEVEN HILLS WIND FARM

NIS ADDENDUM

HABITAT SURVEY RESULTS

FIGURE 2A

Scale 1:30,000 @ A3

Date DECEMBER 2025

501.065999.00001.0002.0 Habitat Plan

Aerial Imagery (2024):
Earthstar Geographics, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Map data © OpenStreetMap contributors, Microsoft, Facebook, Google, Esri Community Maps contributors, Map layer by Esri

590500

591000

745000

N

GA1

WL1

GA1

WS1

WL1

GA1

WL1

GA1

WL1

GA1

0

200

400

Metres

LEGEND

Site Boundary

Proposed Track

Proposed Cable Route

Survey Area

Area Not Surveyed

Annex I Habitat [6280] Orchid-rich Grassland

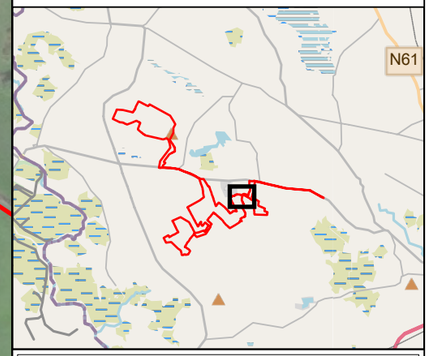
Fossit Habitat (Linear)

WL1 - Hedgerow

Fossit Habitats (Areas)

GA1 - Improved Agricultural Grassland

WS1 - Scrub



SLR

SEVEN HILLS WIND FARM

NIS ADDENDUM

HABITAT SURVEY RESULTS

FIGURE 2B

Scale 1:3,000 @ A3

Date DECEMBER 2025

501.065999.00001.0002.0 Habitat Plan

Aerial Imagery (2024):
Microsoft, Vantor, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Map data © OpenStreetMap contributors, Microsoft, Facebook, Google, Esri Community Maps contributors, Map layer by Esri

570000 580000 590000 600000 610000

760000 750000 740000

N63 N60 N61 N55 N62 M6

Roscommon Ballymahon Mountbellew Athlone Ireland Galway Limerick Kilkenny Culliaghmore Woodlawn Woods Augharane Woods unty Galway

Ballinturly Turlough pNHA
Ballinturly Turlough SAC
Aughrim (Aghrane) Bog SAC
Aughrim Bog NHA
Lisduff Turlough SAC
Lisduff Turlough pNHA
Kilmore Bog NHA
Ballygar Bog NHA
Ballygar (Aghrane) Bog SAC
Four Roads Turlough SAC
Four Roads Turlough pNHA
Four Roads Turlough SPA
Lough Funshinagh pNHA
Lough Funshinagh SAC
Lough Croan Turlough SPA
Lough Croan Turlough NHA
Lough Croan Turlough SAC
River Suck Callows SPA
Castle Ffrench East Bog NHA
Castle Ffrench West Bog NHA
Suck River Callows NHA
Feacle Turlough pNHA
Ballynamona Bog and Corkip Lough SAC
Killeglan Grassland SAC
Annaghbeg Bog NHA
Castlesampson Esker SAC
Castlesampson Esker pNHA
Crit Island West NHA
Killure Bog NHA
Cranberry Lough pNHA
Ballinasloe Esker pNHA
Clorhane Wood pNHA
Glenloughaun Esker SAC
Cloonascragh Fen And Black Wood pNHA
Middle Shannon Callows SPA
Lough Slawn pNHA
Lough Ree SAC
Lough Ree pNHA
Lough Ree SPA
Waterstown Lake pNHA
Carn Park Bog pNHA
River Shannon Callows pNHA
Crosswood Bog SAC
Carn Park Bog SAC
Carrickynaghtan Bog NHA
Crosswood Bog pNHA
Pilgrim's Road Esker SAC
River Shannon Callows SAC
Mongan Bog SPA
Mongan Bog SAC
Mongan Bog pNHA
Mongan Bog
River Shannon Callows pNHA
Pilgrim's Road Esker pNHA
Fin Lough (Offaly) pNHA
Fin Lough (Offaly) SAC
Lough Nanag Esker pNHA

N

LEGEND

- Site Boundary
- Proposed Cable Route Alteration
- Proposed Cable Route Alteration 20 km Buffer
- RAMSAR Wetland Sites
- Nature Reserves
- Special Area of Conservation (SAC)
- Special Protection Area (SPA)
- Natural Heritage Area (NHA)
- Proposed Natural Heritage Area (pNHA)

Note:
Labels only shown for sites intersecting 20 km Buffer

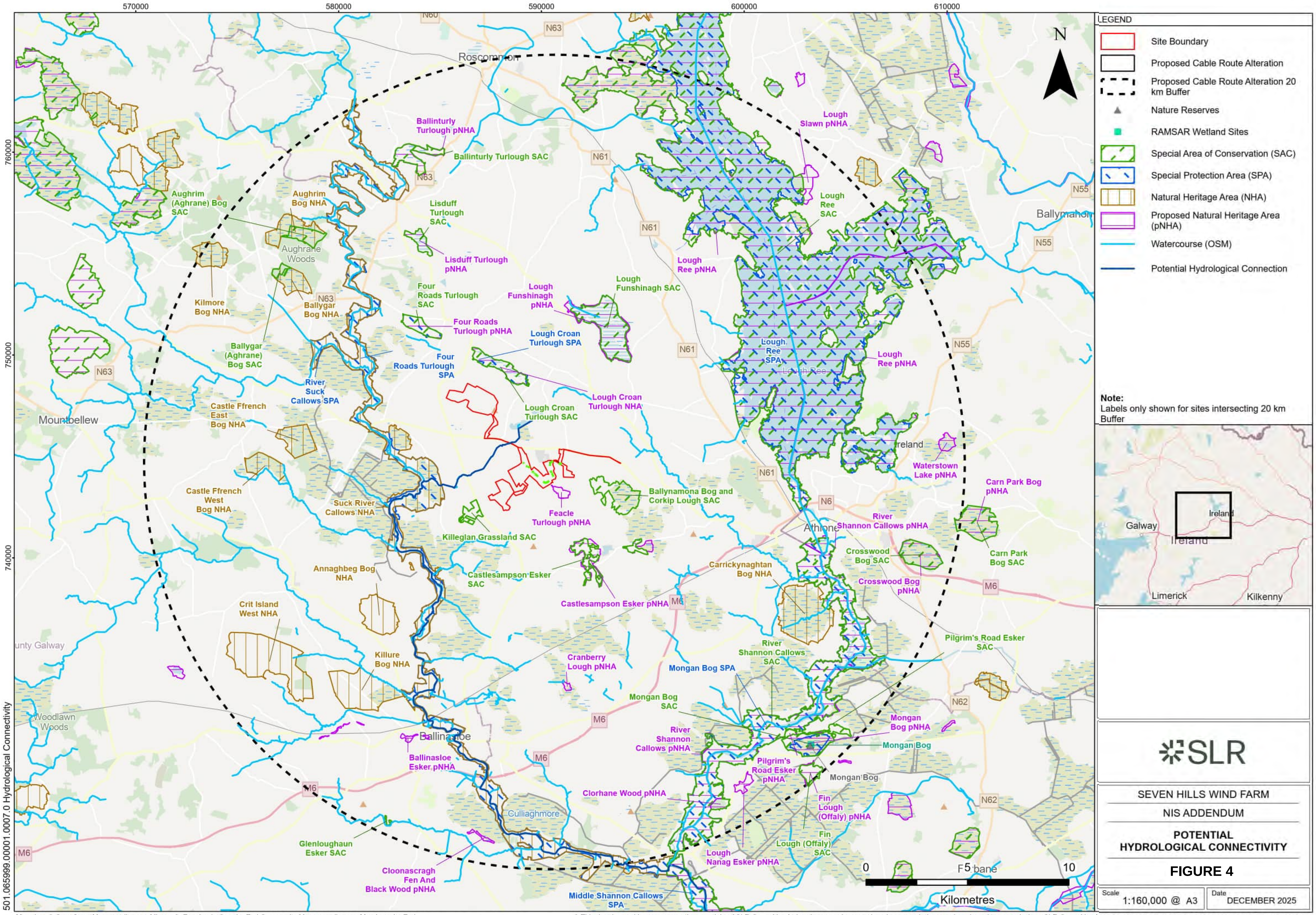
0 5 10
Kilometres

SLR

SEVEN HILLS WIND FARM
NIS ADDENDUM
DESIGNATED SITES
FIGURE 3

Scale 1:160,000 @ A3
Date DECEMBER 2025

501.065999.00001.0005.0 Designated Sites



570000
580000
590000
600000
610000
760000
750000
740000
LEGEND
Site Boundary
Proposed Cable Route Alteration
Proposed Cable Route Alteration 20 km Buffer
Nature Reserves
RAMSAR Wetland Sites
Special Area of Conservation (SAC)
Special Protection Area (SPA)
Natural Heritage Area (NHA)
Proposed Natural Heritage Area (pNHA)
Watercourse (OSM)
Potential Hydrological Connection
Note:
Labels only shown for sites intersecting 20 km Buffer
Galway
Ireland
Limerick
Kilkenny
N
Roscommon
Ballymahon
Mountbellew
Athlone
Ballinasloe
Culliaghmore
Aughrane Woods
Woodlawn Woods
County Galway
Ballinturly Turlough pNHA
Ballinturly Turlough SAC
Aughrim (Aghrane) Bog SAC
Aughrim Bog NHA
Lisduff Turlough SAC
Lisduff Turlough pNHA
Kilmore Bog NHA
Ballygar Bog NHA
Ballygar (Aghrane) Bog SAC
Four Roads Turlough SAC
Four Roads Turlough pNHA
Four Roads Turlough SPA
Lough Funshinagh pNHA
Lough Funshinagh SAC
Lough Croan Turlough SPA
Lough Croan Turlough NHA
Lough Croan Turlough SAC
River Suck Callows SPA
Castle Ffrench East Bog NHA
Castle Ffrench West Bog NHA
Suck River Callows NHA
Killeglan Grassland SAC
Feacle Turlough pNHA
Ballynamona Bog and Corkip Lough SAC
Lough Slawn pNHA
Lough Ree SAC
Lough Ree pNHA
Lough Ree SPA
Waterstown Lake pNHA
Carn Park Bog pNHA
Carn Park Bog SAC
River Shannon Callows pNHA
Crosswood Bog SAC
Crosswood Bog pNHA
Carrickynaghtan Bog NHA
Castlesampson Esker SAC
Castlesampson Esker pNHA
Annaghbeg Bog NHA
Crit Island West NHA
Killure Bog NHA
Cranberry Lough pNHA
Mongan Bog SPA
Mongan Bog SAC
Mongan Bog pNHA
Mongan Bog
River Shannon Callows SAC
River Shannon Callows pNHA
Pilgrim's Road Esker SAC
Pilgrim's Road Esker pNHA
Ballinasloe Esker pNHA
Clorhane Wood pNHA
Fin Lough (Offaly) pNHA
Fin Lough (Offaly) SAC
Lough Nanag Esker pNHA
Glenloughaun Esker SAC
Cloonascragh Fen And Black Wood pNHA
Middle Shannon Callows SPA
N60
N63
N61
N55
N6
N62
M6
0
5
10
Kilometres
SLR
SEVEN HILLS WIND FARM
NIS ADDENDUM
POTENTIAL HYDROLOGICAL CONNECTIVITY
FIGURE 4
Scale 1:160,000 @ A3
Date DECEMBER 2025
501.065999.00001.0007.0 Hydrological Connectivity

Appendix A Previous Plans of Permitted Route

Addendum to Appropriate Assessment Screening and Natura Impact Statement

Seven Hills Wind Farm

Galetech Energy Services

SLR Project No.: 501.065999.00001

10 December 2025


Carrowntemple
Correal
Four Roads
Tigh Sratha
Carrickmagal
Barrow
R362
Inchmore
Lough Funshinagh
Inchaderra
Inchin celoe
Lissanisky
Fisfolim
Mound
Barrow
Carnagh West
Carrowphadeen
Cross Rds
Carrowphadeen
Carranrissoge Point
Kilmore Bay
Kilmore Point
Carnagh Point
Carnagh East
Cribby Isds
Curry Hill
Curry Point
Carnagh Bay
Cullakeeve
R357
Carrowntleve
Carrownurlar
Jamestown
Lisnagavragh
Barrow
Lismoyle
Caltraghbeg
Grange
Fulach Fia
Corraleal
Lysterfield
Kilcurmy
Ballynasaggart
Inchinroe and Gortnee
Carrick
Gortnasoolboy
Loch Funsheann
Lough Funshinagh
Cartron
Bredagh
Carrownderry
N61
Lisselim
Grahauns
Loughcup (Seasonal)
Florians
Standing Stone
Holy Wl
Kiltoom Church
Carrowmore
Mucklin Bog
Fox Rock
Muck in Point
Long Isd
Little Isd
Yew Point
Wh n Island
Robins Isd
Sedgy Island
Horse Island
Carrowmurragh
Ports
Williams Lough
Bally Bay
Goose Isd
Hodson's Pillar
Hodson's Bay
Yellow Isla (Large)
Yellow Is and (Little)
Barry More
Barry Beg
Crb Isd
Bog Isd
Cushlea Bog
Cushlea
Bellanamulla
Béal Átha na Muille
Monksland
R362
R445
Cuilglass
Cuilleen
Creagh
Crannagh Bog
Ardacawna
Cross River
Abhainn na Cranna
Newtownlo
Glannagh More
Taduff West
Taduff East
Drum
Belrea
Currynn
Kilmoolmock
Keelogues
Keelty
Ballyhaw
Cappallsheen
Cornaseer
Cornaslogh
Glophans Glebe
Lisbaun
Carrowncloghan
Carrowkeeny
Carrowkeeny Hill
Feamore
Kiltoom
Cill Tuama
Castle
Moyvannan
Pound Hill
Carrowmore
Ardmullan
Sweat House
Standing Stone
Curraghboy
An Currach Bui
PO
Sch
Cillin
Rackans
Carrowkeel
Cronin
Gortaphuill
Tullyneeny
Fair Hill
Cross
Moated Site
Glenrevagh
Carrowmore
Carrowneurly
Thomas Street
Dysert
An Dissart
Garrynagan
Lisnamucklagh
Commons
Cornalee
Coolaghy
Coolaghy Lough
Doolough Lough
Kilcar
Earthwork
Barrows
Gornasythe
Derryglad
Eskorbaun
Sweat House
Cam
Cam Hill
Cullenirwan
Cullenirwan Lough
Curry
Brecagh
Mound
Moated Site
Church
Cross
Barrow
Carrowmartin
Ardcalman
Tirconnellbeg
Ballymirran
Sweat House
Cillin
Mound
Ballyglass Br
Ballyglass
Cartronk lly
Commeen
Cooldoragh
Castle
Cunnanoolagh
Cloonacallry
Milltown
Cross
House
Bo eyduff
Skeavalla
Feacle
Feacle Lough
Tawnagh
Corkip Lough (Seasonal)
Pollalaher
Ballynamona
R363
Ballymullavill
Knocknamool
Corraclotan
Ahnamin Cross River
Derrynasee
Corkip
Carrowkeeran
House
Skeanamuck
Tobermacloughlin
Barrow
Cairn
Lugboy
Breegle
Feevagh
Cillin
Foovagh Bog
Sch
Porteen and Rallycvagh
Killeglan
Castle
Loughmore (Seasonal)
Goats Loughs
Lough Nacreeva (Seasonal)
Killeglan River
Cloonkeen
Coolfree
Cillin
Sheep Hill
Rockland
Barrow
Cross
Onagh
Sheean
Kilkenny
Castle
Castlesampson
Ardcacloon Hill
Rooskagh
Jamard's Cross Rds
Bellanamulla
Béal Átha na Muille
Monksland
Cuilglass
Cuilleen
Creagh
Curraghaleen
Eskerbeg
Esker
Cloonrollagh
Corraree and Ballygatta
Cullmore
Ardnanure
Weyshill Tomb
Mound
Cillin
Church
Tullaghmore
Dundonnell
Clennanea
Carrowduff and Carbally
Cloonoghil
Newtown
Newtown Cross
Taghmaconnell
Teach Mhic Conaill
House
Cloonbigny
Glenmore
Camlagh
Creggangarra
Rellanceny
Priory
Cillin
Castle
Church
Cillin
Corraleehia
House
Holy Well
Brideswell
Tobar Bride
Barrow
Sweat House
Millbrook
Millbrook Mill
Ratawragh
Wells
Ballycreggan
Gortacobsan
Millbrook Pass
Keadagh
Toonahulla
Carranroe
Attleach
Mound
Lesycreaghan
Ballyhaw Br
Cillin
Mound
Ballyglass Br
Cartronk lly
Foovagh Bog
Feevagh
Cillin
Lugboy
Breegle
Porteen and Rallycvagh
Killeglan

Map Legend

- EIAR Site Boundary
- Extended Survey Area
- Arable crops
- Stone walls and other stonework
- Buildings and artificial surfaces
- Spoil and bare ground
- Recolonising bare ground
- Turloughs
- Improved agricultural grassland
- Scrub
- Areas of Annex 1 Priority Grassland
- Hedgerows
- Stone walls
- Turbine Locations
- Proposed Hardstands
- Proposed Substation Location
- Proposed Spoil Storage Areas
- Infrastructure Spoil Storage Areas
- Met Mast Location
- Proposed Construction Compound
- Proposed Access Roads

N

Drawing Title: Habitat Map - Northern CLuster

Project Title: Seven Hills Wind Farm, Co. Roscommon

Drawn By:	Checked By:
PE	JH
Project No:	Figure No:
190907	6-12
Scale:	Date:
1:13000	2022-06-01

MKO
Planning and Environmental Consultants
Tuam Road, Galway
Ireland, H91 VW84
+353 (0) 91 735611
email:info@mkoireland.ie
Website: www.mkoireland.ie

Appendix B Addendum to EIAR Chapter 6 and Chapter 7 (Biodiversity and Ornithology)

Addendum to Appropriate Assessment Screening and Natura Impact Statement

Seven Hills Wind Farm

Galetech Energy Services

SLR Project No.: 501.065999.00001

10 December 2025

Addendum to the EIAR Biodiversity Chapter

Seven Hills Wind Farm

Galetech Energy Services

Clondargan, Stradone, Co. Cavan, Ireland
Telephone: +353 (0)49 555 5050
www.galetechenergyservices.com

Prepared by:

SLR Environmental Consulting (Ireland) Ltd

7 Dundrum Business Park, Windy Arbour, Dublin, D14 N2Y7

SLR Project No.: 501.065999.00001

Client Reference No: 00581

10 December 2025

Revision: 0

Revision Record

Revision	Date	Prepared By	Checked By
0	10 December 2025	Jake Matthews	Jonathon Dunn

Basis of Report

This document has been prepared by SLR Environmental Consulting (Ireland) Ltd (SLR) with reasonable skill, care and diligence, and taking account of the timescales and resources devoted to it by agreement with Galetech Energy Services (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

SLR shall not be liable for the use of or reliance on any information, advice, recommendations and opinions in this document for any purpose by any person other than the Client. Reliance may be granted to a third party only in the event that SLR and the third party have executed a reliance agreement or collateral warranty.

Information reported herein may be based on the interpretation of public domain data collected by SLR, and/or information supplied by the Client and/or its other advisors and associates. These data have been accepted in good faith as being accurate and valid.

The copyright and intellectual property in all drawings, reports, specifications, bills of quantities, calculations and other information set out in this report remain vested in SLR unless the terms of appointment state otherwise.

This document may contain information of a specialised and/or highly technical nature and the Client is advised to seek clarification on any elements which may be unclear to it.

Information, advice, recommendations and opinions in this document should only be relied upon in the context of the whole document and any documents referenced explicitly herein and should then only be used within the context of the appointment.

Executive Summary

The purpose of this report is to assess whether a proposed alteration to the permitted Seven Hills Wind Farm has the potential to lead to additional impacts on ecological receptors and alter the conclusions made in the Environmental Impact Assessment Report (EIAR), Volume I, Chapters 6 (Biodiversity) and 7 (Ornithology).

The proposed alteration involves a minor change to the permitted underground wind farm cable, which connects the wind turbine clusters to the electricity substation. In summary, the cables will be re-routed from the northern turbine cluster through the southern turbine cluster and a new parcel of land to the electricity substation. The new cabling route will follow existing and new access tracks; while a section of access track (c. 520 m) between turbine T18 and the electricity substation following the alignment of the underground cable will also be created. The permitted section of 110kV grid connection cable from Brideswell to Monksland and the upgrade works to the Athlone 110kV electricity substation are proposed to be omitted. Following the granting of permission for the Moyvannan Substation and associated underground cabling, the cable between Brideswell and Monksland and works at the Athlone substation will no longer be required.

Other than an additional loss of 0.001 ha of Annex I Orchid-rich grassland, which has been appropriately compensated for in the Biodiversity Management and Enhancement Plan, there will be no significant differences in impacts to flora and fauna by the proposed alteration. The proposed alteration will result in only marginal vegetation loss including improved agricultural grassland, hedgerow and scrub.

Overall, with the previously committed mitigation measures in place, there are no changes to the assessment of residual effects on biodiversity because of the proposed alteration, and the conclusions to EIAR Chapters 6 for the permitted development still apply.

Table of Contents

Acronyms and Abbreviations

AA	Appropriate Assessment
ACP	An Coimisiún Pleanála
BCT	Bat Conservation Trust
BMEP	Biodiversity Management and Enhancement Plan
EcIA	Ecological Impact Assessment
EIAR	Environmental Impact Assessment Report
GES	Galetech Energy Services
KER	Key Ecological Receptors
NIS	Natura Impact Statement
NPWS	National Parks and Wildlife Service
SLR	SLR Environmental Consulting (Ireland) Ltd
S-P-R	Source-Pathway-Receptors

1.0 INTRODUCTION

SLR Environmental Consulting (Ireland) Ltd (SLR) was commissioned by Galetech Energy Services (GES) on behalf of Energia Renewables ROI Limited (Energia) to prepare an addendum to the Environmental Impact Assessment Report (EIAR) in support of a proposed alteration to the permitted Seven Hills Wind Farm (An Coimisiún Pleanála (ACP) Reference: ABP-313750-22[1]).

This addendum to EIAR Chapter 6 – Biodiversity and Chapter 7 - Ornithology presents an assessment of the likely significant effects of the project on the receiving environment.

This chapter addendum provides:

- A baseline study of the receiving ecological environment, including survey methodology and results;
- An assessment of the likely significant effects of the project during construction, operation and decommissioning phases;
- An assessment of likely significant cumulative effects;
- Mitigation measures to avoid or reduce the likely significant effects anticipated;
- Residual impacts; and,
- Enhancement measures.

The previous EIAR[2] and AA / NIS[3] for the permitted project was used to inform the current assessment.

1.1 Summary of the Permitted Development

1.1.1 Seven Hills Wind Farm

Seven Hills Wind Farm was granted planning permission subject to condition by ACP on 23 November 2023 as detailed under order 313/D313750. This allows for a ten-year planning permission on the following:

- 20 number wind turbines with an overall ground to blade tip height of 180 meters, a rotor diameter of 162 metres and a hub height of 99 metres, associated foundations and hard-standing areas;
- 15 number spoil storage areas at hardstands of turbine numbers 1, 2, 3, 4, 5, 6 and 7 (in the townlands of Turrock, Gortaphuill, Cronin and Tullyneeny) and turbine numbers 8, 10, 11, 13, 14, 17, 19 and 20 (in the townlands of Milltown, Cuileenoolagh, Cloonacaltry, Feacle and Tawnagh);
- Provision of 1 number permanent meteorological mast with a maximum height of 100 metres for a period of 30 years from the date of commissioning the entire wind farm;
- Provision of 1 number 110 kV onsite substation in the townland of Cam, along with associated control buildings, MV switchgear building, associated electrical plant, associated security fencing, and equipment and wastewater tank;

[1] https://www.pleanala.ie/en-ie/case/313750

[2] MKO (2022a). Proposed Seven Hills Wind Farm Co. Roscommon – EIAR Ch. 6 – Biodiversity – F – 2022.06.03 - 190907

[3] MKO (2022b). Proposed Seven Hills Wind Farm Co. Roscommon – Article 6 (3) Appropriate Assessment Screening Report. AASR – F – 2022.06.03 - 190907

- All underground electrical and communication cabling connecting the proposed wind turbines to the proposed onsite substation and associated control buildings and plant;
- All works associated with the connection of the proposed wind farm to the national electricity grid via underground 110 kV cabling from the site to the existing Athlone
- 110 kV substation located in the townland of Monksland. Cabling will be placed within the public road corridor of the R362, R363 and L2047, or on private land;
- Upgrade works to the existing 110 kV Athlone substation consisting of the construction of an additional dedicated bay to facilitate connection of the cable;
- Provision of 2 number new site accesses north and south from the R363 and upgrade of 1 number junction south of the R363;
- Provision of new access tracks or roads and upgrade of existing access tracks or roads;
- 7 number overburden storage areas;
- 2 number temporary construction compounds;
- Site drainage works;
- Operational stage site signage;
- All associated site development works, apparatus and signage; and
- A 30-year operational life from the date of commissioning.

On 23 November 2023, ACP granted planning permission for the development subject to conditions; including, in particular, Condition No. 4 which omits turbines T9, T10 and T12 from the development as permitted.

1.2 Summary of the Proposed Alteration

The proposed alteration is shown in Figure 1. The proposed alteration comprises the following:

- The omission of approximately 9km of 110kV underground cabling and associated ancillary infrastructure between Brideswell and the Athlone 110kV electricity substation;
- The omission of all permitted upgrades to the Athlone 110kV electricity substation;
- The re-routing of wind farm cabling between the wind turbines and the on-site 110kV electricity substation; and,
- The construction of approximately 520m of wind farm access track and installation of approximately 760m of wind farm cabling between turbine T18 and the on-site electricity substation.

Given that the proposed omission of the 110kV underground cabling and upgrades to the Athlone 110kV electricity substation will have no effect on ecological receptors, this assessment focuses predominately on the proposed re-routing of wind farm cabling, construction of approximately 520m of access track and installation of approximately 760m of wind farm cabling.

1.3 Purpose of this Report

The purpose of this addendum is to assess whether the proposed alteration is likely to impact any important ecological features associated with the permitted development and alter the

conclusions made in EIAR Chapters 6 and 7 (Biodiversity and Ornithology)[4]. It should be read in conjunction with the documents submitted with the planning application for the permitted development, specifically, EIAR Volume I, Chapters 6 and 7 (Biodiversity and Ornithology). It should also be read in conjunction with the addendum to the AA Screening and NIS for the proposed alteration[5] and the NIS for the permitted development[6].

1.4 Evidence of Technical Competence

This report was written by SLR Senior Ecologist Jake Matthews. Jake has over five years' experience as a consultant ecologist across several consultancies in Ireland and the UK. He is an Associate Member of the Chartered Institute of Ecology and Environmental Management (ACIEEM) and holds a BSc (Hons) in Wildlife Conservation from the University of Salford and an MSc in Ecology and Environment Management from Liverpool Hope University. Jake has prepared a range of survey reports and impact assessment reports for a variety of project types including wind farms. He is also skilled in conducting a range of surveys to inform these assessments including Ecological Impact Assessment (EcIA) and biodiversity chapters for EIAR.

A technical review was undertaken by Dr Jonathon Dunn MCIEEM. Jonathon co-wrote the EIAR ornithology chapter for the permitted development. He has extensive experience of designing and implementing baseline ecology surveys for over 20 wind farms in Ireland, along with impact assessment including EIAR, Ecological Impact Assessment (EcIA), AA screening and NIS.

2.0 METHODOLOGY

2.1 Scope

The scope of this assessment is informed by the potential for the proposed alteration to impact important ecological features. The only appreciable differences arising from the proposed alteration is a change in the route of the wind farm cabling and the proposed construction of c. 520m of access track and installation of c. 760m of wind farm cabling. There will be no alterations to the methods of construction, operation and maintenance or decommissioning / restoration.

Therefore, there is the potential for the following impacts:

- Additional habitat loss and/or degradation, including to Annex I habitat [6210*] Orchid-rich grassland;
- Potential impacts to fauna including:
  - Amphibians
  - Roosting, commuting and foraging bats;
  - Nesting birds;
  - Badgers and their setts;
  - Otters and other aquatic fauna; and

[4] MKO (2022a). Proposed Seven Hills Wind Farm, Co. Roscommon - EIAR.

[5] SLR (2025). Addendum to Appropriate Assessment Screening and Natura Impact Statement - Seven Hills Wind Farm. Ref. 501.065999.00001

[6] MKO (2022b). Proposed Seven Hills Wind Farm, Co Roscommon - Natura Impact Statement.

- All other protected flora and fauna (as detailed in the *Checklist of protected and threatened species in Ireland)*[7].

There will be a reduction of the footprint of the development due to the proposed alteration with approximately 9km of the permitted 110kV underground cable route from Brideswell to Monklsland and works to the Athlone 110kV substation being omitted. However, an additional area between turbine T18 and the electricity substation will be affected by the proposed alteration.

An addendum to the AA Screening and NIS for the permitted development is provided separately (SLR, 2025); therefore, we have not considered effects on European Sites in the current addendum.

2.2 Study Area

The study area included the proposed amended wind farm cable route plus a 50 m buffer either side and the route of the proposed access track and underground cable plus a 50 m buffer either side. This is shown in Figure 2. Considering the small-scale nature of the proposed works, this buffer was considered sufficient to provide a detailed baseline of the proposed alteration and the surrounding area.

The revised route of the wind farm cabling that is being installed under existing tracks were not surveyed as these areas formed low value habitats that were previously mapped in the EIAR and are unlikely to have changed in the intervening period. Similarly, the section of underground cable from Brideswell to Monksland and the Athlone 110kV substation was not surveyed as these areas will no longer form part of the project.

2.2.1 Habitats and Flora

A field survey of the study area was undertaken on 15th and 16th October 2025 by SLR Senior Ecologist Jake Matthews, whereby all habitats were mapped using the Fossitt Habitat Classification system[8]. Terrestrial habitats and flora (including invasive plant species) were mapped according to Fossitt (2000) and the good practice measures outlined in Heritage Council guidance (Smith et al., 2011)[9]. The locations of all habitats and any rare or invasive plant species were recorded using digital mapping.

Plant species nomenclature follows Rose's *The Wildflower Key: How to identify wildflowers, trees and shrubs in Britain and Ireland* (Rose et al., 2006). A list of the dominant and notable plant species was prepared for each habitat type.

Habitat surveys were conducted outside the optimal time of year. This limitation is detailed further in Section 2.3.

Table 2-1: Survey weather conditions and metadata

Date	Surveyor	Weather conditions	
15/10/2025	Jake Matthews	Temp. (°C)	10
		Wind speed (Bft[10])	3

[7] Nelson, B., Cummins, S., Fay, L., Jeffrey, R., Kelly, S., Kingston, N., Lockhart, N., Marnell, F., Tierney, D. and Wyse Jackson, M. (2019). Checklists of protected and threatened species in Ireland. Irish Wildlife Manuals, No. 116. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland.

[8] Fossitt J. (2000). A Guide to Habitats in Ireland. The Heritage Council.

[9] Smith G.F., O'Donoghue P., O'Hora K., and Delaney E. (2011). Best Practice Guidance For Habitat Survey And Mapping.

[10] Wind speed measured using the Beaufort scale.

Date	Surveyor	Weather conditions	
		Cloud cover (Oktas)	8/8
		Precipitation	Drizzle
16/10/2025		Temp. (°C)	11
		Wind speed (Bft)	2
		Cloud cover (Oktas)	8/8
		Precipitation	None

2.2.2 Annex I Habitats

An Annex I habitat survey was carried out for areas identified as [6210*] Orchid-rich grasslands to assess the extent and condition of this Annex I habitat. One of these areas identified was partially inside the study area from consultation with the National Parks and Wildlife Service (NPWS) Interactive mapviewer[11].

An assessment of this Annex I habitat was conducted through undertaking five relevés to assess the species composition across this habitat, following the guidance set out in the *Guidelines for a national survey and conservation assessment of upland vegetation and habitats in Ireland*.

The most recent Article 17 report on *The Status of EU Protected Habitats and Species in Ireland*[12] states that this habitat has an overall conservation status of 'bad' and that the area is 'bad'.

2.2.3 Fauna

Searches for mammals were carried out. All mammal resting / breeding places were mapped. In addition, any other signs / sightings were recorded and mapped using digital mapping. Survey methodology followed that outlined Cresswell et al. (2012)[13], with a particular focus on badger *Meles meles*.

The site's suitability for commuting and foraging bats was assessed following the current Bat Conservation Trust (BCT) guidance[14]. Similarly, all trees and buildings located within the study area were appraised for their suitability to support roosting bats, following the BCT guidance.

Searches were made for signs and sightings of terrestrial mammals within the study area and mapped using digital mapping.

The closest watercourse to the proposed alteration is the Ballyglass (EPA code: 26B15) located approximately 1.09 km north-west. Current guidance[15] states that otter holts or couches within 150 m are at risk of impacts from disturbance. Given that no watercourses were located within 150 m of the study area, otters were discounted from the survey.

Invertebrate species were recorded on an ad hoc basis during all surveys.

[11] https://storymaps.arcgis.com/collections/1a721520030d404f899d658d5b6e159a (last accessed: December 2025).

[12] NPWS (2019). The Status of EU Protected Habitats and Species in Ireland'

[13] Cresswell, W. J., Birks, J. D. S., Dean, M., Pacheco, M., Trewhella, W. J., Wells, D. and Wray, S. (2012) 'UK BAP Mammals Interim Guidance for Survey Methodologies', Impact Assessment and Mitigations. The Mammal Society, Southampton.

[14] Collins (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines. 4th edn. London: Bat Conservation Trust.

[15] NRA (2008). Guidelines For The Treatment Of Otters Prior To The Construction Of National Road Schemes

No specific surveys for reptiles were conducted and were searched for on an ad hoc basis during other surveys, as NRA (2009)[16] guidance states that direct observation is an effective survey technique.

Amphibians tend to be found within 250 m of breeding waterbodies. No waterbodies were identified within the study area, or within 250 m of it. Therefore, amphibians were discounted from the assessment.

2.3 Limitations

The updated field survey was conducted in October 2025. This is outside the optimal window for surveying flora and habitats and therefore, it is possible that certain flowering species were not evident during these surveys, including the Annex I habitat condition assessment. As such, desk-based data has been relied upon to supplement any potentially absent data and the precautionary principle has been considered during these assessments. This includes previous assessments of the adjacent habitats undertaken by MKO in the original EIAR Chapter 6 - Biodiversity, which borders the same parcel of Annex I habitat and was assessed during optimal conditions. As such, it is considered that this limitation does not pose a significant constraint to the overall assessment.

3.0 CHANGES TO THE EXISTING ENVIRONMENT

This section presents a description of the general context of the receiving (baseline) environment associated with the project. For all Key Ecological Receptors (KER), other than nature conservation sites, the results of both the desktop studies and field surveys are presented together.

3.1 Nature Conservation Sites

European sites are assessed in the AA Screening and NIS which accompanies the planning application for the project. An updated addendum has been provided based on the proposed alteration (SLR, 2025). Nationally designated sites are discussed in the following sections.

There are no meaningful changes in terms of the designated conservation sites located within 15 km for SACs and 20 km for SPAs of the proposed alteration compared to the permitted development. All Source-Pathway-Receptors (S-P-R) between the proposed alteration and all designated conservation sites are considered the same as detailed in the original EIAR Chapter 6 and 7 (Biodiversity and Ornithology) and the AA Screening and NIS.

3.2 Habitats and Flora

Broadly the habitats within the site of the proposed alteration are similar to those of the permitted development (i.e., mainly improved agricultural grassland (GA1)), Other habitats recorded included hedgerow (WL1) and scrub (WS1), which is consistent with the Biodiversity chapter for the permitted development.

Previously mapped Annex I Orchid-rich grassland [6210*] is present between turbine T18 and the electricity substation, which will be affected by the proposed alteration. This is detailed further below in Section 3.2.1.

There are no further records of Floral Protection Order species, protected bryophytes or important habitats such as ancient woodlands within the NPWS data sources within the study

[16] National Roads Authority (2009) Guidelines for Assessment of Ecological Impacts of National Road Schemes. Revision 2. Dublin: National Roads Authority.

area. No records of threatened, protected or non-native flora were yielded from the data search that were not previously identified for the permitted development.

3.2.1 Annex I Habitats

A review and NPWS mapped Annex I habitat identified Annex I [6210] Orchid-rich grassland present at approximate ITM coordinates 590491 744889. This overlapped partially with the proposed alteration (see Figure 2).

Only a minor area (c. 0.76 ha) of this Annex I habitat was located within the study area (see Figure 2), with approximately 0.001 ha within the footprint of the proposed alteration.

3.3 Fauna

3.3.1 Bats

No trees or structures suitable for roosting bats were located within the study area. Therefore, there will be no impacts to roosting bats above and beyond what was stated in EIAR Chapter 6 for the permitted development; and they have been discounted from further mention in this report.

Commuting and Foraging Bats

Overall, the study area was assessed as being of moderate potential for commuting and foraging bats due to the presence of suitable linear habitats such as hedgerows (WL1) and potential foraging habitat such as grasslands, which bats are likely to reach from nearby roost sites via suitable commuting corridors such as hedgerows.

3.3.2 Other Protected Fauna

No signs of other protected fauna were recorded during the survey. However, given the nature of the study area, it is anticipated that suitable foraging habitat is present for a range of fauna already identified in the previous EIAR Chapters 6 and 7 (Biodiversity and Ornithology), including Irish hare, badgers (although no new setts were recorded), birds (mainly passerine species), and potentially other species such as common lizard, which are also considered in the previous Biodiversity chapter.

4.0 ASSESSMENT OF EFFECTS

4.1 Description of Likely Effects

The proposed alteration includes the omission of the permitted 110kV underground cable from Brideswell to Monksland and the omission of upgrade works to the Athlone 110kV electricity substation. The omission of this permitted infrastructure will have no significant effects on ecological receptors.

Taking the above into account, the likely significant effects of the proposed alteration are described in the following sections.

4.1.1 Effects to Nature Conservation Sites

An addendum to the NIS submitted with the original 2022 planning application has also been prepared. The conclusion of the NIS and addendum to the NIS is that the project (including proposed alteration) will not, beyond reasonable scientific doubt, adversely affect the integrity of any Natura 2000 site either directly or indirectly.

The proposed alteration is sufficiently small that no appreciable differences in effects upon designated conservation sites are similar to those previously identified and suitably mitigated for in the previous NIS.

Overall, the proposed alteration will not cause any effects on European nature conservation sites that were not already identified in the previous NIS.

In addition, the proposed alteration is not likely to have a significant effect on nationally designated conservation sites having regard to the small scale and characteristics of the proposed alteration, absence of pathways for effects and the features for which the sites have been designated.

4.1.2 Effects to Habitats and Flora

The proposed alteration will cause the following habitat loss:

- The permanent removal of 0.001 ha of Annex I habitat Orchid-rich grassland (detailed further below);
- The temporary removal of c.0.25 ha improved agricultural grassland for the grid connection;
- The permanent removal of c.0.004 ha of scrub;
- The permanent removal of c.42 m of hedgerow; and
- The permanent removal of c.0.26 ha improved agricultural grassland for the tracks.
- No rare or protected plant species were recorded within the areas to be affected.

Notwithstanding the loss of Annex I habitat Orchid-rich grassland (which is detailed below), the proposed alteration will not result in significant effects on habitats or flora. There will be no appreciable difference in the effects predicted upon habitats and plants due to the proposed alteration compared to those permitted for the operational and decommissioning phases above and beyond what was stated in EIAR Chapter 6 for the permitted development.

Effects to Annex I Habitat

A 0.76 ha area of Annex I grassland is located within the study area. Of this, only 0.001 ha will require removal to facilitate the construction of the access track. This removal is considered permanent. The remaining area of Annex I habitat will be unaffected by the proposed alteration.

The area of lost Annex I habitat represents the furthest extent of the designated Annex I habitat and the relevé conducted here found it not to support the higher floral species diversity that was recorded elsewhere in the Annex I habitat area during the survey and was hence considered in bad condition.

The proposed alteration has avoided this habitat where it has been possible; thus, minimising its loss. However, any loss of Annex I habitat should be considered as significant at the scale of county importance, similar to the conclusion made in the Biodiversity Chapter for the permitted development in the EIAR Chapter 6 (Biodiversity).

Appropriate mitigation measures have been presented through the provision of a Biodiversity Management and Enhancement Plan (BMEP) (Appendix 6-5 of the EIAR for the permitted development) to compensate for the losses of 2.7 ha of Annex I Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (*important orchid sites) [6210] due to the permitted development, through the creation of 9-12 ha of species-rich semi-neutral grassland. The compensation areas represent over three times the total of Annex I habitat to be lost due to the permitted development and will therefore compensate for the very minor quantity to be lost through the proposed alteration.

4.1.3 Effects to Fauna

4.1.3.1 Effects to Birds

The proposed alteration will not result in significant effects on birds as the habitats to be lost generally comprised improved agricultural grassland, which is of generally low value and widespread across the surrounding landscape. As detailed in the EIAR Chapter 7 (Ornithology) for the permitted development, these habitats are not used by SCI birds for nearby SPAs, which were found to prefer the wetter habitat types (e.g., turloughs). The proposed alteration will result in only minor reductions of suitable nesting bird habitat for common passerine species and there will be no appreciable differences in the effects predicted upon birds due to the proposed alteration compared to those permitted for any phase.

4.1.3.2 Effects to Bats

As stated in Section 3.3.1, there will be no impacts to roosting bats because of the proposed alteration.

The proposed alteration will cause an additional loss in commuting and foraging habitat through the removal of improved agricultural grassland, hedgerow, and scrub; resulting in reduced feeding and commuting opportunities. This is consistent with the impacts already detailed in Section 6.7.3.2 of the previous Biodiversity chapter, which also assessed that habitat loss and degradation would result in no significant effects to bats. This report also detailed appropriate mitigation measures, such as the net gain of replanting of 290 m of linear habitats, which will result in an overall net gain of linear habitats following the expected additional losses (c. 42m) from the proposed alteration.

Overall, the proposed alteration will not cause any likely significant effects to bats that were not already identified in the EIAR for the permitted development.

4.1.3.3 Effects to Badgers

No badger setts were identified within the study area and there will be no loss or damage to any existing setts.

The loss of the improved agricultural grassland and hedgerows will cause a temporary loss of foraging habitat. However, the losses will not be significant to badgers given the small-scale nature of the proposed works, and badgers will be able to continue to use the study area and immediate surroundings for foraging purposes.

Overall, the proposed alteration will not cause any likely significant effects to badgers that were not already identified in the previous Biodiversity chapter.

4.1.3.4 Effects to Other Fauna

No significant effects to other fauna are likely as a result of the proposed alteration that were not already identified in the Biodiversity chapter for the permitted development.

4.2 Cumulative Effects

The EIAR for the permitted development found no likely significant cumulative impacts as a result of the permitted development. Notwithstanding the loss of 0.001 ha of Annex I habitat, there will be no likely significant additional effects predicted on flora and fauna as a result of the proposed alteration. Therefore, there are no additional likely significant cumulative effects with any other projects or plans predicted beyond those identified for the permitted development or those identified within Section 6.8 of the EIAR Chapters 6 and 7 (Biodiversity and Ornithology).

In isolation, the proposed alteration will result in the loss of 0.001 ha of Annex I Orchid-rich grassland. However, this impact could become more significant if combined with further losses from other developments, potentially leading to a cumulative effect at a national scale. However, this loss is appropriately compensated for through the creation of 9-12 ha of species-rich semi-neutral grassland (as detailed in the BMEP – Appendix 6-5 of the EIAR for the permitted development). Therefore, there will be no net loss of this habitat in the long-term and no significant cumulative impacts are likely as a result.

5.0 CHANGES TO MITIGATION MEASURES

Given that significant effects are not assessed as likely to occur, or are already appropriately mitigated / compensated for, it is assessed that with the implementation of all previously committed-to environmental controls, mitigation measures and design proposals (e.g. the compensation for Annex I habitats), no additional mitigation measures are required in respect of the proposed alteration.

All other mitigation measures will be implemented in full as described in Chapter 6 and 7 of the EIAR.

6.0 CONCLUSION

The likely effects of the proposed alteration on biodiversity have been assessed regarding the findings of the EIAR for the permitted Seven Hills Wind Farm. The proposed alteration to the permitted development is not likely to significantly affect any ecological receptors beyond those already assessed within the EIAR for the permitted development other than an additional loss of 0.001 ha of Annex I Orchid-rich grassland.

The only impacts with the potential to change because of the proposed alteration are additional losses in improved agricultural grassland, scrub, hedgerow, and Annex I habitat Orchid-rich grassland. No additional impacts to fauna are expected.

All previously committed-to environmental controls, mitigation measures and design proposals will be implemented and no additional mitigation measures are required in respect of the proposed alteration.

Therefore, with the previously committed mitigation measures in place, no changes to the assessment of residual effects on biodiversity are predicted because of the proposed alteration.

Separately, an addendum to the NIS has fully assessed the potential impacts of the proposed alteration on European Sites. The conclusion of the NIS and addendum to the NIS is that *"…the proposed alteration, individually or in combination with other plans or projects, will not adversely affect the integrity of any European Site and there is no reasonable scientific doubt in relation to this conclusion*".

Appendix C Table 3 from the Environmental Report

Addendum to Appropriate Assessment Screening and Natura Impact Statement

Seven Hills Wind Farm

Galetech Energy Services

SLR Project No.: 501.065999.00001

10 December 2025

Low	Moderate	Moderate-slight	Slight	Not Significant	Imperceptible
Negligible	Slight	Not Significant	Imperceptible	Imperceptible	Imperceptible

Table 2: Impact/Effect Significance Matrix

**Categories with dark grey shading are considered to equate with 'significant' impacts/effects*
***The significance matrix provides an indicative framework from which the significance of impact is derived.*

1.5 CUMULATIVE ASSESSMENT

This ER undertakes a full and detailed cumulative assessment of all relevant existing, permitted and proposed developments proximate to the proposed alteration which may be likely to result in in-combination environmental impacts.

In the first instance, a desktop review of available data sources (satellite imagery) was undertaken to identify existing developments in the local area. Secondly, the EIA Portal[2] was consulted to assess for the presence of proximate developments which have been subject to EIA. Finally, the respective online ePlan portals for Roscommon County Council[3], Galway County Council[4], Westmeath County Council[5], Offaly County Council[6] and Longford County Council[7] were examined to assess for extant planning permissions which had not yet been commenced.

Developments warranting a cumulative impact assessment range from one-off rural dwellings to electrical infrastructure developments, quarrying activities and other wind energy developments. Table 3, below, provides a list of developments which have been considered in the cumulative impact assessment of this ER.

Development	Planning Register Reference	Integrated Pollution Control (IPC) or Industrial Emissions Directive (IED) License	Development Description
Existing Skrine Wind Farm	An Coimisiún Pleanála Reference PL20.208733	-	2 no. wind turbines, one meteorological tower, one substation and substation compound and associated site access roads.
Permitted Derrane Wind Farm	Roscommon County Council Planning Register Reference 11/126, 18/313, An Coimisiún Pleanála Reference ABP-303677-19 &	-	Permission to erect two number 2.3MW wind turbines, of up to 85 metre hub height and up to 82 metre rotor diameter with a total height not exceeding 126 meters, associated site works to include new internal site tracks, upgrading existing site tracks, turbine hardstands, control substation and cabling works.

[2] http://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=d7d5a3d48f104ecbb206e7e5f84b71f1
[3] https://www.eplanning.ie/RoscommonCC/searchtypes
[4] https://www.eplanning.ie/GalwayCC/searchexact
[5] http://www.eplanning.ie/westmeathCC/searchtypes
[6] https://www.eplanning.ie/OffalyCC/searchtypes
[7] https://www.eplanning.ie/LongfordCC/searchexact

	others		
Permitted Kilcash Wind Turbine	An Coimisiún Pleanála Reference ABP-319800-24	-	Construction of wind turbine with all associated site works.
Permitted Moyvannan 110KV Electricity Substation	An Coimisiún Pleanála Reference ABP-321328-24	-	110kV Electricity Substation, approximately 7.5km of Underground Electricity Line & All Associated Works.
Permitted TCD Community Solar Park	Westmeath County Council Planning Register Reference 20/36 & 21/350	-	The solar PV development will consist of solar arrays on ground mounted steel frames, with a maximum overall height of 3 metres, over an area of 60 ha and ancillary electrical equipment including string inverters and up to 13 no. transformer stations, and all other associated site development works and services, including: Internal solar PV farm underground electrical cabling and ducting; 1 no. temporary construction compound; Security fencing; CCTV camera stands; Provision of internal access tracks, including the installation of clear span bridge structures, linking the solar PV development with the consented TDC Community Solar Park track network; Site drainage and landscaping, as required to facilitate the development.
Permitted TCD Battery Energy Storage System	Westmeath County Council Planning Register Reference 23/197	-	A ten-year planning permission for the construction of a permanent Battery Energy Storage System (BESS) facility adjacent to the consented TDC Community Solar Park.
Proposed TCD 110KV Substation Facility	An Coimisiún Pleanála Reference ABP-322045-25	-	Construction of a 110 kV substation facility, electrical connection to the national grid and associated works and services.
Existing McKeons Sand and Gravel Quarry	An Coimisiún Pleanála Reference ABP-305020-19 & others	-	A continuation / resumption of use and the operation of an existing quarry including use of all existing buildings and plant and machinery. Existing buildings consist of a workshop, office/weighbridge and prefabricated canteen / stores. Machinery includes various items of mobile / semi mobile crushing and screening plant. The application and proposed development also provide for the operation of a construction and demolition (C & D) waste recycling facility within the quarry and the provision of new toilets, new wastewater treatment unit and associated percolation area. The operation of the construction and demolition (C & D) waste recycling

			facility will require the granting of a waste permit or waste licence.
Permitted Sand, Stone & Gravel Quarry	An Coimisiún Pleanála Reference ABP-317704-23	-	Permission for development consisting of the extraction of sand, stone and gravel (site area 6.938 hectares) The development will involve the extraction of sand, stone and gravel over an extraction area of 4.90 hectares (volume to be extracted = 466.766m3 approximately) over a 10 year period.
Permitted Battery Energy Storage System & Synchronous Condenser	Westmeath County Council Planning Register Reference 22/223, 23/353, & 24/60356.	-	A Battery Energy Storage System (BESS) and a Synchronous Condenser.
Permitted Infill Site at former sand/gravel quarry	Roscommon County Council Planning Register Reference 23/60269	-	Use of up to 190,000 tonnes of imported inert natural materials, principally excess soil, stones and/or broken rock to partially fill and restore a disturbed landform created by previous extraction of sand and gravel.
Existing Mannion Quarries	Roscommon County Council Planning Register Reference 01/113 and 05/811	-	Continued operation of existing activities at a 4.8 hectare site.
Existing Cam Quarry	Roscommon County Council Planning Register Reference 04/1479 and 08/393	-	Development of a quarry on a c. 68 hectare site and associated operations.
Existing Ward Bros. Quarries	Roscommon County Council Planning Register Reference 08/998 and 09/143	-	Development of a quarry on a c. 16 hectare site and associated operations.
Existing Lecarrow Quarries	Roscommon County Council Planning Register Reference 02/36, 03/979 and 18/118	-	Quarry and ancillary operations.
Existing Alexion Pharma International	Roscommon County Council Planning Register Reference 22/2	-	Development consisting of the provision of a new warehouse with ancillary accommodation and a loading bay
Existing Athlone-Lanesborough 110kV Overhead Transmission Line (including any line upgrades)	An Coimisiún Pleanála Reference ABP-320053-24	-	Overhead Electricity Transmission Line between the 110kV electricity substations at Athlone and Lanesborough.

Telecommunications Masts	Various	-	Various.
Industrial & Warehouse Development	Various	-	Various.
Agricultural Developments	Various	-	Various.
Residential Dwellings	Various	-	Various.
Commercial Forestry Plantations	Various	-	Various.

Table 3: Cumulative Assessment

2.0 DESCRIPTION OF THE PROPOSED ALTERATION

2.1 OVERVIEW

The proposed alteration comprises:-

1) The modification of all wind turbine hub heights from 99m to between 98m and 101m;
2) The modification of all wind turbine rotor diameters from 162m to between 158m and 163m; and,
3) The modification of all wind turbine overall tip heights from 180m to between 179m and 180m.

The electricity generation capacity of the permitted development will be dependent on the wind turbine model eventually installed. The proposed alteration will therefore result in an alteration to the electrical capacity of the project from 102MW (as permitted) to between 94.5MW and 122.4MW.

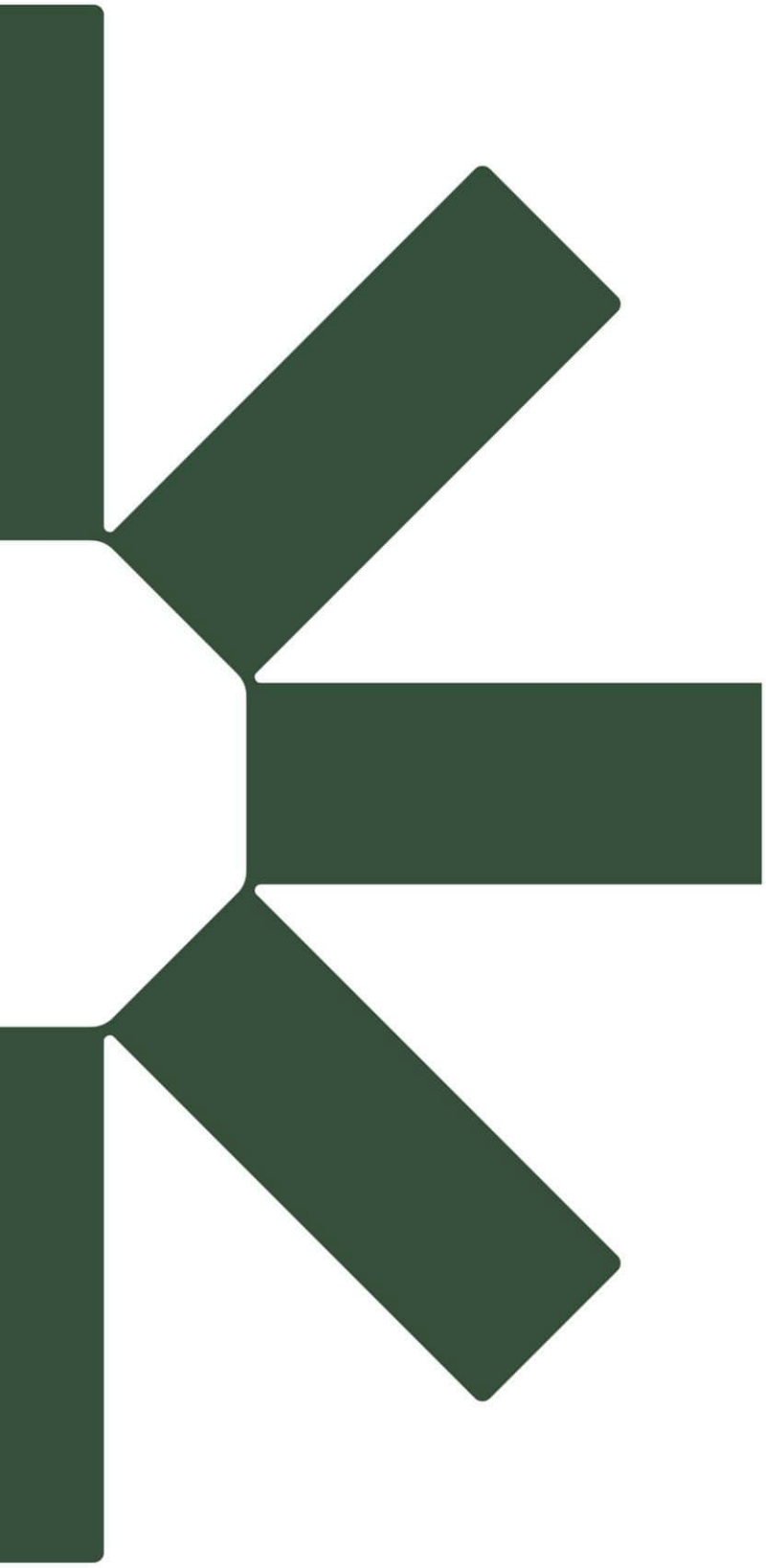
The proposed alteration does not provide for alternative specified dimensions but to install any wind turbine model whose configuration of hub height, rotor diameter and overall tip height dimensions fall within the ranges specified above. Tables 1 & 2, below, provides further detail of the proposed alteration.

	Permitted Wind Turbine Dimensions	Proposed Alteration		
		Proposed Dimensions	Proposed Change to Dimensions (m)	Proposed Change to Dimensions (%)
Hub Height	99m	Between 98m and 101m	1m (reduction) – 2m (increase)	1% (reduction) - 2% (increase)
Rotor Diameter	162m	Between 158m and 163m	4m (reduction) – 1m (increase)	2.5% (reduction) – 0.6% (increase)
Tip Height	180m	Between 179m and 180m	1m (reduction) - 0m (no change)	0.5% (reduction) - 0% (no change)

Table 1: Details of Alteration to Wind Turbine Dimensions

Electrical Capacity of Permitted Development	102MW
Electrical Capacity of Proposed Alteration	Between 94.5MW and 122.4MW
Proposed Change to Electrical Capacity (MW)	7.5MW (reduction) – 20.4MW (increase)
Proposed Change to Electrical Capacity (%)	7.4% (reduction) – 20% (increase)

Table 2: Details of Alteration to Wind Turbine Electrical Capacity



Making Sustainability Happen