Addendum to Appropriate Assessment Screening and Natura Impact Statement

White Hill Wind Farm Electricity Substation and Electricity Line

White Hill Wind Ltd

Clondargan, Stradone, Co. Cavan, Ireland

Prepared by:

SLR Environmental Consulting (Ireland) Ltd

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

SLR Project No.: 501.066103.00001

Client Reference No: n/a

4 February 2026

Revision: 0

Revision Record

Revision	Date	Prepared By	Checked By	Approved By
0	4 February 2026	Kathryn Robson	Dr Jonathon Dunn	Dr 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 White Hill Wind Ltd (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 electricity substation and electricity line for White Hill 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 reference ACP-322078-25.

The proposed alteration involves the rerouting of approximately 795 m of underground electricity line from private lands to the paved carriageways of the L6738 and L6673 local roads, the installation of the underground electricity line beneath the Shankill Stream and all associated works.

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 will cause 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

Acronyms and Abbreviations

AA	Appropriate Assessment
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 White Hill Wind Limited to prepare an addendum to the Natura Impact Statement (NIS) in support of a proposed alteration to the underground electricity line for the permitted White Hill Wind Farm electricity substation and electricity line (An Coimisiún Pleanála Reference: ACP-322078-25[1]).

This addendum to the NIS presents an assessment of the Likely Significant Effects (LSE) of the project on the receiving environment. This addendum has been provided to address a non-material amendment through the alteration of the permitted underground electricity line.

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 Environmental Impact Assessment Report (EIAR)[2] and NIS[3] for the permitted project were used to inform the current assessment.

1.1 Summary of Permitted Development

1.1.1 Electricity Substation and Electricity Line

The electricity substation and electricity line was permitted by ACP under order 322/D322078 and comprised the following:

- A 110 kilovolt (kV) 'loop-in/loop-out' Air-Insulated Switchgear (AIS) electricity substation, including 2 no. single-storey control buildings (with a total gross floor area of 620 square metres [m^2]); transformers, busbars, insulators, circuit breakers, and lightning poles, within a secure compound (with a total footprint of 10,600 m^2);
- 2 no. lattice-type interface masts, each of which will be 16 m in height, and approximately 320 m of underground electricity line between the electricity substation and interface masts to facilitate connection of the electricity substation to the existing Kellis-Kilkenny 110 kV overhead electricity transmission line;
- A new site entrance from the L66732 and approximately 1.1 km of access track to facilitate access to the electricity substation and interface masts;

[1] 322078 | An Coimisiún Pleanála -

[2] SLR (2025). White Hill Wind Farm Electricity Substation and Electricity Line. EIAR.

[3] SLR (2025). White Hill Wind Farm Electricity Substation and Electricity Line. Natura Impact Statement.

- Electrical control unit with a total gross floor area of 40 m^2 located at the permitted White Hill Wind Farm;
- A new site entrance from the L7117 and approximately 250 m of access track to facilitate access to the electrical control unit;
- Approximately 8.8 km of underground electricity line between the electricity substation and the electrical control unit; and,
- All associated and ancillary site development, excavation, construction, landscaping and reinstatement works; including a temporary construction compound and the provision of site drainage infrastructure and surface water protection measures.

1.2 Summary of Proposed Alteration

The proposed alteration to the permitted route is shown in Figure 1. The proposed alteration comprises:

- The rerouting of approximately 795 m of underground electricity line from private lands and its installation predominately within the paved carriageways of the L6738 and L6673 local roads;
- The installation of the underground electricity line beneath the Shankill Stream via horizontal directional drilling; and,
- All associated and ancillary site development, excavation, construction and reinstatement works.

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 ACP-322078-25. It should be read in conjunction with the documents submitted with the planning application for the permitted development, including the original NIS report. It should also be read in conjunction with Chapter 5 (Biodiversity) of the EIAR[4], as well as the addendum provided for this chapter[5].

1.4 Evidence of Technical Competence

This report was written by SLR Senior Ecologist Kathryn Robson. Kathryn has over seven years professional experience in the environmental consultancy sector. Her core expertise is in the provision of quality ecological consulting for renewable energy projects, primarily onshore wind farm developments. She has delivered a range of technical reports including EIAR biodiversity chapters, Appropriate Assessments and Natura Impact Statements. Kathryn has experience conducting surveys at all stages of development from supporting planning applications to operational monitoring to ensure compliance with planning consent.

A technical review was undertaken by Dr Jonathon Dunn. Jonathon wrote the NIS and EIAR biodiversity chapter for the permitted development. He is a full 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,

[4] SLR (2025). White Hill Wind Farm Electricity Substation and Electricity Line. EIAR. Chapter 5: Biodiversity

[5] SLR (2026). Addendum to EIAR Chapter 5: Biodiversity - White Hill Wind Farm.

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 having regard to the NIS for the permitted development. A full description of the AA process is described in the 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 main difference between the permitted development and the proposed alteration is the rerouting of approximately 795 m of underground electricity line from private lands, predominately agricultural fields, and its installation within the paved carriageways of the L6738 and L6673 local roads, with an additional watercourse crossing under the Shankill Stream.

Therefore, there is the potential for the following impacts:

- Habitat destruction / fragmentation / deterioration;
- Surface water run-off carrying suspended silt and contaminants, into local watercourses;
- Project related activities (noise, vibration, lighting, human presence, structures, etc.) leading to disturbance / displacement of species;
- Project related activities leading to a reduction in species populations / density;
- Air pollution due to dust and other airborne emissions; and
- Disturbance and potential spread of invasive species during the proposed works.

All other impacts assessed in the 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.

2.2 Study Area

The study area included the proposed altered underground electricity line plus a 20 m buffer either side for most receptors, which was extended to 50 m for terrestrial mammal searches and 150 m for otter either side of the proposed watercourse crossing. This 20 m buffer 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.

2.3 Desktop Study

A desk-based study was undertaken in January 2026 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 14th January 2026 by SLR Senior Ecologist Kathryn Robson to ground-truth the baseline environment (including the proposed altered underground electricity line) and check that no appreciable changes to biodiversity had occurred since baseline surveys were conducted in 2024 and 2025. Weather conditions were suitable for survey and are presented in Table 1 below.

Table 1: Survey weather conditions and metadata

Date	Surveyor	Weather conditions	
14/01/2026	Kathryn Robson	Temp. (°C)	5
		Wind speed (Bft[6])	3
		Cloud cover (Oktas)	8/8
		Precipitation	Drizzle

3.0 CHANGES TO THE EXISTING ENVIRONMENT

The results of the updated desktop study and 2026 field survey determined that no other Annex I habitats, or Annex II or IV species were recorded within proximity of the proposed alteration. This accords with the existing environment described in the NIS for the permitted development.

4.0 CHANGES TO STAGE 1 - AA SCREENING

In the NIS report for the permitted development, three European Sites were considered for screening. These European Sites are shown in Figure 3 and Figure 4.

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 (despite the new watercourse crossing, no new hydrological pathways exist that were not already considered for the permitted development). Moreover, the works for the proposed alteration will be similar in nature to those of the permitted development.

All distances between the proposed alteration and any European designated sites have been updated in **Table 2**.

Table 2: Updated distances between European Sites and the proposed alteration

Site name [site code]	Minimum direct-line distance to the proposed alteration (km)
River Barrow and River Nore SAC [002162]	3.22

[6] Wind speed measured using the Beaufort scale.

Site name [site code]	Minimum direct-line distance to the proposed alteration (km)
Blackstairs Mountains SAC [000440]	15.62
River Nore SPA [004233]	13.24

No European Sites are located closer to the updated red line boundary (RLB) as a result of the proposed alteration.

Given that all work practices will be consistent with those 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 because of the proposed alteration. This conclusion states:

"This AA Screening concludes that it cannot be excluded based on objective evidence and in view of best scientific knowledge, that there will not be any likely significant effects from the construction or operation activities from the project alone, and in combination with other plans or projects, on:

- *River Barrow and River Nore SAC.*

Therefore, a Natura Impact Statement and associated mitigation measures are required.

This AA Screening also concludes that it can be excluded on the basis of objective evidence and in view of best scientific knowledge, that there will not be any likely significant effects from the Project alone, and in combination with other plans or projects, on:

- *Blackstairs Mountains SAC;*
- *River Nore SPA; and*
- *Any other European sites."*

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 Stage 2 of the NIS, the European Site that has been considered for Stage 2 NIS assessment is the River Barrow and River Nore SAC.

Given that the work practices for the proposed alteration are consistent with those in the permitted development and that this European Site is not located closer to the updated RLB or no new pathways are present, there is no risk of new detrimental LSEs occurring to this European Site.

5.1 Potential for Likely Significant Effects to European Sites

LSEs from the proposed alteration on the River Barrow and River Nore SAC are considered for the following impacts:

- Surface water run-off carrying suspended silt and contaminants, into local watercourses;
- Project related activities (noise, vibration, lighting, human presence, structures, etc.) leading to disturbance / displacement of species;
- Project related activities leading to a reduction in species populations / density; and
- Disturbance and potential spread of invasive species during the proposed works.

No other potential impacts will occur to this European Site beyond those identified for the permitted electricity substation and electricity line.

5.1.1 Potential Effects due to Surface Water Run-off

The following QIs of the River Barrow and River Nore SAC were considered for LSE via surface water run-off:

- Water courses of plain to montane levels;
- Hydrophilous tall herb fringe communities;
- Alluvial forests;
- Desmoulin’s whorl snail;
- White-clawed crayfish;
- Sea lamprey;
- Brook lamprey;
- Twaite shad;
- Atlantic salmon;
- Otter; and
- Freshwater pearl mussel.

The River Barrow and River Nore SAC is not located closer to the updated RLB as a result of the proposed alteration. No new pathways have been identified (including hydrological pathways) for surface 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 this European Site beyond those identified for the permitted electricity substation and electricity line.

5.1.2 Potential Effects due to Disturbance or Displacement

The following QI of the River Barrow and River Nore SAC was considered for LSE via project related activities (noise, vibration, lighting, human presence, structures, etc.) leading to disturbance / displacement of species:

- Otter

The NIS for the permitted development assessed the risk of undermining the conservation objectives for this species and affecting the integrity of the European Site to be low in the absence of mitigation. The proposed alteration does not cause the updated RLB to be located closer to the River Barrow and River Nore SAC, and no otter signs / sightings were recorded during updated baseline surveys. Furthermore, the works for the proposed alteration will be similar in nature to those of the permitted development. Therefore, no other potential impacts will occur to this European Site beyond those identified for the permitted electricity substation and electricity line.

5.1.3 Potential Effects due to a Reduction in Species Population / Density

The following QIs of the River Barrow and River Nore SAC were considered for LSE as a result of project related activities leading to a reduction in species populations / density:

- Otter;
- White-clawed crayfish;
- Sea lamprey;
- Brook lamprey;
- River lamprey;
- Twaite shad;
- Atlantic salmon; and
- Freshwater pearl mussel.

The effects on water quality mentioned above in Section 5.1.1 could cause a reduction in prey species, which could prevent downstream QI species foraging and could lead to a loss of condition.

The River Barrow and River Nore SAC is not located closer to the updated RLB as a result of the proposed alteration. No new pathways that could cause a reduction in species population / density have been identified. Furthermore, the works for the proposed alteration will be similar in nature to those of the permitted development. Therefore, no other potential impacts will occur to the QIs of this European Site beyond what was identified for the permitted electricity substation and electricity line.

5.1.4 Potential Effects due to Disturbance and Potential Spread of Invasive Species

The following QIs of the River Barrow and River Nore SAC were considered for LSE due to disturbance and potential spread of invasive species:

- Water courses of plain to montane levels,
- Hydrophilous tall herb fringe communities, and

- Alluvial forests.

No invasive species were recorded during the updated field survey. Therefore, no other potential impacts will occur to this European Site in addition to those as identified for the permitted electricity substation and electricity line.

5.2 Effects on Integrity 'Alone'

The NIS stated that the following adverse impacts on the River Barrow and River Nore SAC were likely:

- Surface water run-off carrying suspended silt and contaminants into local watercourses for the following eleven QI's: water courses of plain to montane levels, hydrophilous tall herb fringe communities, alluvial forests, Desmoulin's whorl snail, white-clawed crayfish, sea lamprey, brook lamprey, twaite shad, Atlantic salmon, otter and freshwater pearl mussel;
- Related activities (noise, vibration, lighting, human presence, structures, etc) leading to disturbance / displacement of species for the following QI: otter;
- Related activities leading to a reduction in species populations / density for the following eight QI's: otter, white-clawed crayfish, sea lamprey, brook lamprey, river lamprey, twaite shad, Atlantic salmon and freshwater pearl mussel; and
- Disturbance and potential spread of invasive species during the proposed works for the following three QI's: water courses of plain to montane levels, hydrophilous tall herb fringe communities and alluvial forests.

As detailed in Section 5.1, no additional LSE will occur from the proposed alteration that will adversely affect the integrity of the River Barrow and River Nore SAC when the proposed alteration is considered 'alone'. Therefore, the effects on the integrity of this European Site 'alone' is the same as reported in the NIS for the permitted development.

No other potential impacts will occur to this European Site beyond those identified for the permitted electricity substation and electricity line.

5.3 Effects on Integrity 'In Combination'

The NIS for the permitted development stated that "*the project alone could have effects on European sites screened in via downstream hydrological connections and ecological connections through mobile ex-situ riparian QI species*". Therefore, potential cumulative impacts in relation to other projects and plans are limited to those connections.

There is no additional mechanism by which the proposed alteration could affect waterborne pollution and therefore the effects on the integrity of the River Barrow and River Nore SAC 'in combination' are the same as reported in the NIS for the permitted development.

There is also no potential for the proposed alteration to contribute to significant in combination effects in relation to disturbance / displacement effects or a reduction in species population / density.

In addition, there is no potential for the proposed alteration to contribute to significant in combination effects as a result of the disturbance and potential spread of invasive species.

There are no additional effects predicted on the QIs of the River Barrow and River Nore SAC 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.

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 NIS for the permitted development i.e. horizontal directional drilling (HDD) will be used to cross the new Shankill Stream watercourse crossing, so no instream works are proposed, which is the same as for the permitted development. All mitigation measures described in Section 6.6 of the 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 NIS for the permitted electricity substation and electricity line for White Hill Wind Farm. 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 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 NIS, which states:

“This NIS contains information which the competent authority may consider in making its own conclusions and upon which it can determine that all reasonable scientific doubt has been removed as to the effects of the project on the integrity of the relevant European sites. The potential impacts that could arise from the project during the construction, operational and decommissioning phases are set out in this report and a proposed mitigation measures for the respective development phases is described with all mitigation measures being implemented in full.

With the identified mitigation measures in place, it can be concluded, beyond all reasonable scientific doubt that the project, either alone or in combination with other plans or projects will not undermine the conservation objectives of any European sites or have any significant effects thereon. It can therefore be concluded that the project will not have an adverse effect on the integrity of any European site.”

FIGURES

662000
664000
666000
664000
662000
501.066103.00001.0006.0 Site Location

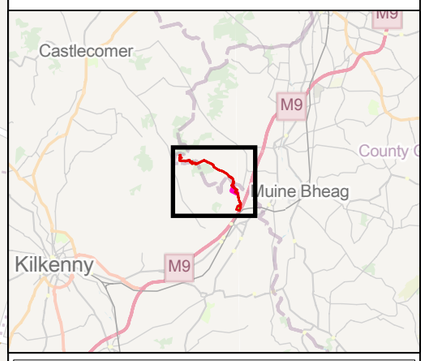
N

L3036
L3036
M9
M9
M9
L1840
L1840
Castle Hill
ewarren
Railway Field
Stone Field
Laundry Field
Paddock
Saint John's Graveyard

0 0.5 1
Kilometres

LEGEND

- Proposed Electricity Line Amendment
- Permitted Electricity Line
- Revised Site Boundary
- Access Track
- Control Unit
- Permitted Site Infrastructure



White Hill Wind Farm

SLR
7 DUNDRUM BUSINESS PARK
WINDY ARBOUR
DUBLIN D14 N2Y7
IRELAND
T: 0129 64667
www.slrconsulting.com

WHITE HILL
ELECTRICITY SUBSTATION

NIS ADDENDUM

SITE LOCATION

FIGURE 1.1

Scale 1:20,000 @ A3

Date FEBRUARY 2026

664800 665000 665200 665400 665600

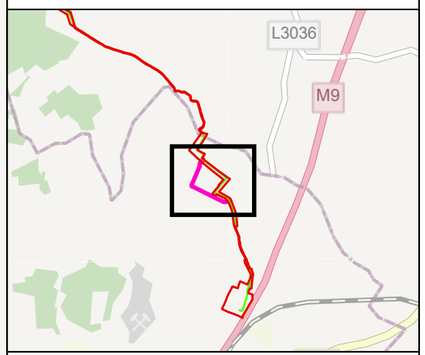
662400 662200 662000 661800

501.066103.00001.0006.0 Site Location

N

LEGEND

- Proposed Electricity Line Amendment
- Permitted Electricity Line
- Revised Site Boundary



0 100 200

Metres

White Hill Wind Farm

7 DUNDRUM BUSINESS PARK
WINDY ARBOUR
DUBLIN D14 N2Y7
IRELAND
T: 0129 64667
www.slrconsulting.com

WHITE HILL
ELECTRICITY SUBSTATION

NIS ADDENDUM

SITE LOCATION

FIGURE 1.2

Scale 1:3,000 @ A3

Date FEBRUARY 2026

664800 665000 665200 665400 665600

662200

662000

N

LEGEND

Proposed Electricity Line Amendment

Permitted Electricity Line

Ecology Survey Area (2026)

Ground Level Tree Assessment

PRF-I (Individual Bats)

Fossitt Habitat

BL1 - Stone Wall and Other Stonework

FW1 - Eroding/Upland River

FW4 - Drainage Ditch

GS2 - Dry Meadow and Grassy Verge

WL1 - Hedgerow

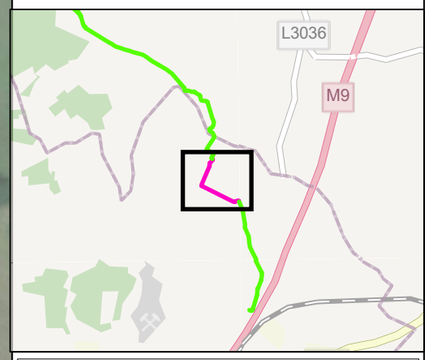
GA1 - Improved Agricultural Grassland

GS2 - Dry Meadows & Grassy Verges

WD1 - Mixed Broadleaved Woodland

WL1 - Hedgerows

N/A - Private 3rd Party Land



PRF10: Oak

0 100 200

Metres

501.066103.00001.0009.0 Extended Habitat Survey

White Hill Wind Farm

SLR

7 DUNDRUM BUSINESS PARK
WINDY ARBOUR
DUBLIN D14 N2Y7
IRELAND
T: 0129 64667
www.slrconsulting.com

WHITE HILL
ELECTRICITY SUBSTATION

NIS ADDENDUM

EXTENDED HABITAT SURVEY

FIGURE 2

Scale 1:2,500 @ A3

Date FEBRUARY 2026

640000 660000 680000

680000 660000

501.066103.00001.0007.0 Nature Conservation Sites

LEGEND

- Proposed Electricity Line Amendment
- Permitted Electricity Line
- Proposed and Permitted Electricity Line 20 km Buffer

Nature Conservation Site

- Special Area of Conservation (SAC)
- Special Protection Area (SPA)

Note
Only Nature Conservation Sites that intersect/ are within the electricity line 20 km buffer are labelled.

Ireland Dublin Cork

White Hill Wind Farm

SLR
7 DUNDRUM BUSINESS PARK
WINDY ARBOUR
DUBLIN D14 N2Y7
IRELAND
T: 0129 64667
www.slrconsulting.com

WHITE HILL
ELECTRICITY SUBSTATION

NIS ADDENDUM

NATURE CONSERVATION SITES

FIGURE 3

Scale 1:200,000 @ A3

Date FEBRUARY 2026

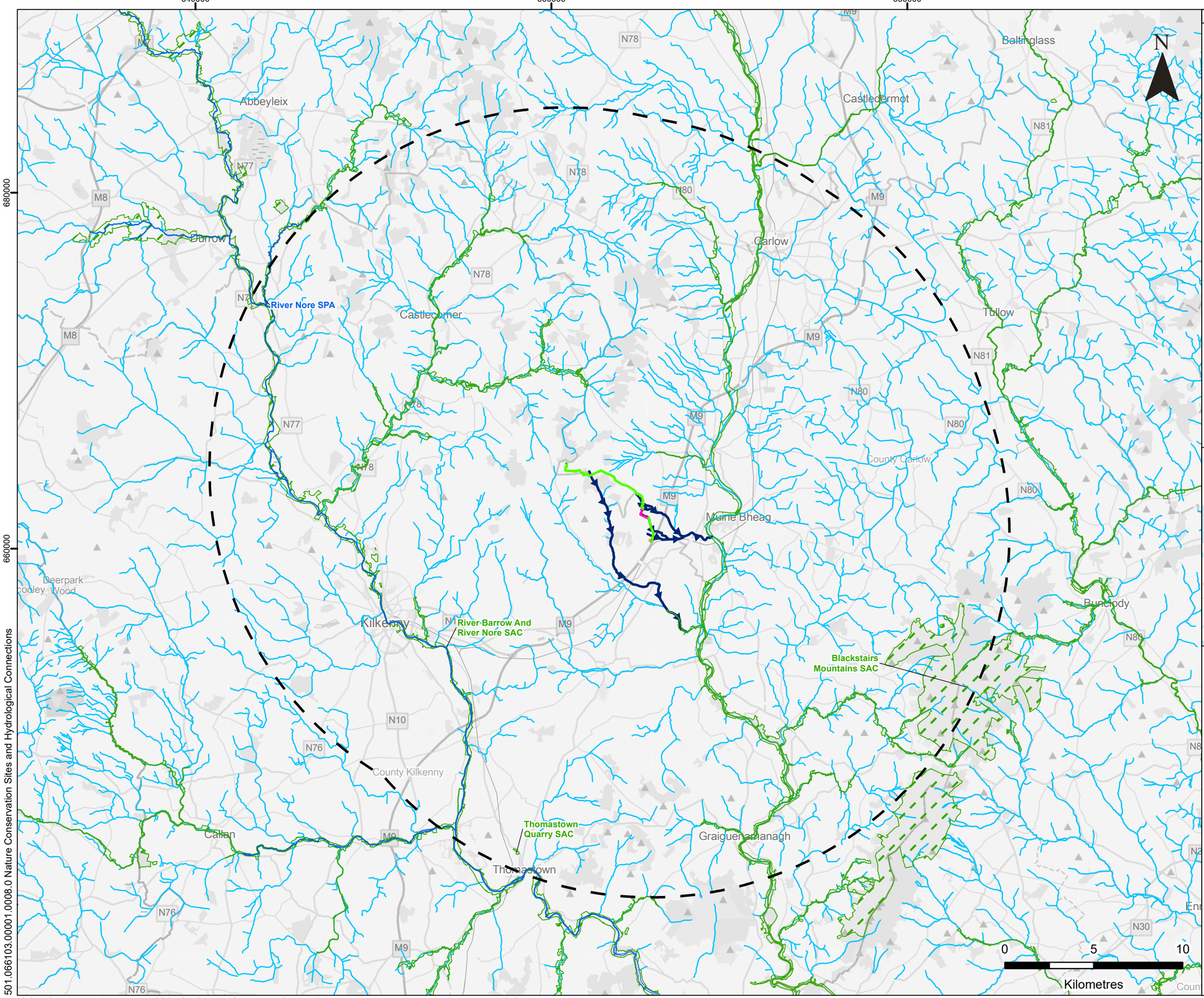
0 5 10 Kilometres

640000 660000 680000

680000

660000

501.066103.00001.0008.0 Nature Conservation Sites and Hydrological Connections



LEGEND

- Proposed Electricity Line Amendment
- Permitted Electricity Line
- Proposed and Permitted Electricity Line 20 km Buffer

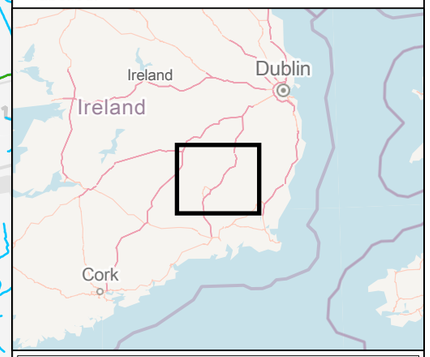
Nature Conservation Site

- Special Area of Conservation (SAC)
- Special Protection Area (SPA)

Hydrological Connections

- Downstream Hydrological Connection
- Other Watercourse

Note
Only Nature Conservation Sites that intersect/ are within the electricity line 20 km buffer are labelled.



White Hill Wind Farm

SLR
7 DUNDRUM BUSINESS PARK
WINDY ARBOUR
DUBLIN D14 N2Y7
IRELAND
T: 0129 64667
www.slrconsulting.com

WHITE HILL
ELECTRICITY SUBSTATION

NIS ADDENDUM

NATURE CONSERVATION SITES AND HYDROLOGICAL CONNECTIONS

FIGURE 4

Scale 1:200,000 @ A3

Date FEBRUARY 2026

Appendix A Addendum to EIAR Chapter 5 (Biodiversity)

Addendum to Appropriate Assessment Screening and Natura Impact Statement

White Hill Wind Farm Electricity Substation and Electricity Line – Electricity Substation and Electricity Line

White Hill Wind Limited

SLR Project No.: 501.066103.00001

04/02/2026

Addendum to the EIAR Biodiversity Chapter

White Hill Wind Farm Electricity Substation and Electricity Line

White Hill Wind Ltd

Clondargan, Stradone, Co. Cavan, Ireland

Prepared by:

SLR Environmental Consulting (Ireland) Ltd

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

SLR Project No.: 501.066103.00001

Client Reference No: n/a

4 February 2026

Revision: 0

Revision Record

Revision	Date	Prepared By	Checked By	Approved By
0	4 February 2026	Kathryn Robson	Dr Jonathon Dunn	Dr 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 White Hill Wind Ltd (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 electricity substation and electricity line for White Hill 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, Chapter 5 (Biodiversity).

The proposed alteration involves the rerouting of approximately 795 m of underground electricity line from private lands to the paved carriageways of the L6738 and L6673 local roads, the installation of the underground electricity line beneath the Shankill Steam and all associated works.

There will be no significant differences in impacts to flora and fauna due to the proposed alteration.

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 of Chapter 5 of the EIAR 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
IEF	Important Ecological Features
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 White Hill Wind Limited to prepare an addendum to the Environmental Impact Assessment Report (EIAR) in support of a proposed alteration to the electricity line for the permitted White Hill Wind Farm electricity substation and electricity line (An Coimisiún Pleanála Reference: ACP-322078-25[1]).

This addendum to Chapter 5 (Biodiversity) of the EIAR 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 EIAR[2] and NIS[3] for the permitted development was used to inform the current assessment.

1.1 Summary of the Permitted Development

1.1.1 Electricity Substation and Electricity Line

The electricity substation and electricity line was permitted by ACP under order 322/D322078 and comprised the following:

- A 110 kilovolt (kV) 'loop-in/loop-out' Air-Insulated Switchgear (AIS) electricity substation, including 2 no. single-storey control buildings (with a total gross floor area of 620 square metres [m^2]); transformers, busbars, insulators, circuit breakers, and lightning poles, within a secure compound (with a total footprint of 10,600 m^2);
- 2 no. lattice-type interface masts, each of which will be 16 m in height, and approximately 320 m of underground electricity line between the electricity substation and interface masts to facilitate connection of the electricity substation to the existing Kellis-Kilkenny 110 kV overhead electricity transmission line;
- A new site entrance from the L6673 and approximately 1.1 km of access track to facilitate access to the electricity substation and interface masts;
- Electrical control unit with a total gross floor area of 40 m^2 located at the permitted White Hill Wind Farm;
- A new site entrance from the L7117 and approximately 250 m of access track to facilitate access to the electrical control unit;

[1] 322078 | An Coimisiún Pleanála -

[2] SLR (2025) White Hill Wind Farm Electricity Substation and Electricity Line. EIAR.

[3] SLR (2025). White Hill Wind Farm Electricity Substation and Electricity Line. Natura Impact Statement.

- Approximately 8.8 km of underground electricity line between the electricity substation and the electrical control unit; and,
- All associated and ancillary site development, excavation, construction, landscaping and reinstatement works; including a temporary construction compound and the provision of site drainage infrastructure and surface water protection measures.

1.2 Summary of Proposed Alteration

The proposed alteration to the permitted route is shown in Figure 1. The proposed alteration comprises:

- The rerouting of approximately 795 m of underground electricity line from private lands and its installation predominately within the paved carriageways of the L6738 and L6673 local roads;
- The installation of the underground electricity line beneath the Shankill Stream via horizontal directional drilling; and,
- All associated and ancillary site development, excavation, construction and reinstatement works.

1.3 Purpose of this Report

The purpose of this addendum is to assess whether the proposed alteration has the potential to impact any important ecological features and alter the conclusions made in the EIAR Volume 1, Chapter 5 (Biodiversity). It should be read in conjunction with the documents submitted with the planning application for the permitted development, including EIAR Volume 1, Chapter 5 (Biodiversity). It should also be read in conjunction with the NIS for the permitted development, as well as the addendum provided for the NIS[4].

1.4 Evidence of Technical Competence

This report was written by SLR Senior Ecologist Kathryn Robson. Kathryn has over seven years professional experience in the environmental consultancy sector. Her core expertise is in the provision of quality ecology consulting for renewable energy projects, primarily onshore wind farm developments. She has delivered a range of technical reports including EIAR biodiversity chapters, Appropriate Assessments and Natura Impact Statements. Kathryn has experience conducting surveys at all stages of development from supporting planning applications to operational monitoring to ensure compliance with planning consent.

A technical review was undertaken by Dr Jonathon Dunn. Jonathon wrote the NIS and EIAR biodiversity chapter for the permitted development. He is a full 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 scope of this assessment is informed by the potential for the proposed alteration to impact important ecological features. The main difference between the permitted development and

[4] SLR (2026). Addendum to Natura Impact Statement - White Hill Wind Farm.

the proposed alteration is the rerouting of approximately 795 m of underground electricity line from private lands, predominately agricultural fields, and its installation within the paved carriageways of the L6738 and L6673 local roads. 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:

- Potential impacts to fauna including:
  - Amphibians
  - Roosting, commuting and foraging bats;
  - Nesting birds;
  - Badgers and their setts;
  - Otters and other aquatic fauna; and
  - All other protected flora and fauna (as detailed in the *Checklist of protected and threatened species in Ireland)*[5].

An addendum to the NIS for the permitted development is provided separately[4]; therefore, we have not considered effects on European Sites in the current addendum.

2.2 Study Area

The study area included the proposed altered underground electricity line plus a 20 m buffer either side for most receptors, which was extended to 50 m for terrestrial mammal searches and 150 m for otter searches either side the new proposed watercourse crossing. This 20 m buffer is shown in Figure 2. Considering the small-scale and nature of the proposed alteration, this buffer was considered sufficient to provide a detailed baseline of the proposed alteration and the surrounding area.

2.3 Updated Field Survey

2.3.1 Habitats and Flora

A field survey of the study area was undertaken on 14th January 2026 by SLR Senior Ecologist Kathryn Robson, whereby all habitats were mapped using the Fossitt Habitat Classification system[6]. 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)[7]. 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 2.4.

[5] 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.

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

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

Table 2-1: Survey weather conditions and metadata

Date	Surveyor	Weather conditions	
14/01/2026	Kathryn Robson	Temp. (°C)	5
		Wind speed (Bft[8])	3
		Cloud cover (Oktas)	8/8
		Precipitation	Drizzle

2.3.2 Fauna

Searches for mammals were carried out as part of the extended habitat survey. 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 in Cresswell *et al.* (2012)[9].

The site's suitability for commuting and foraging bats was assessed following the current Bat Conservation Trust (BCT) guidance[10]. 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.

Invertebrate species were recorded when observed.

No specific surveys for reptiles were conducted but signs and sightings were recorded, as NRA (2009)[11] guidance states that direct observation is an effective survey technique.

No specific surveys for amphibians were conducted; however, signs and sightings were recorded when observed.

2.4 Limitations

The updated field survey was conducted in January 2026. 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. As such, desk-based data has been relied upon to supplement any potentially missed data, and the precautionary principle has been considered during these assessments. This includes previous surveys and reports of the adjacent habitats undertaken and prepared by SLR in the White Hill Wind Farm Electricity Substation and Electricity Line EIAR Chapter 5 (Biodiversity). 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 Important Ecological Features (IEFs), other

[8] Wind speed measured using the Beaufort scale.

[9] 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.

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

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

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 NIS which accompanies the planning application for the project. An updated addendum has been provided for this report based on the proposed alteration to the permitted development (SLR, 2026)[Error! Bookmark not defined.].

The proposed alteration does not introduce any meaningful changes to the range of European or nationally designated conservation sites (e.g., natural heritage areas or NHAs and proposed NHAS or pNHAs) considered in the permitted development's EIAR. All existing Source–Pathway–Receptor (S-P-R) connections between the proposed alteration and these designated sites remain the same as outlined in EIAR Chapter 5 (Biodiversity) and the NIS (see Figures 3 and 4).

3.2 Habitats and Flora

Broadly, the habitats within the re-routed section of electricity line are similar to those in the permitted development in areas where the permitted development follows the public road network. All habitats recorded within the study area for the re-routed section of electricity line during the updated field survey were also recorded for the permitted development.

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 area. No records of threatened, protected or invasive / 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 of NPWS mapped Annex I habitats did not identify any Annex I habitats within the study area or immediate vicinity.

3.3 Fauna

3.3.1 Bats

A mature sessile oak tree with moderate ivy coverage on the trunk and lower branches was identified within the study area as having PRF-I suitability (i.e. only suitable for individual bats or a very small number of bats due to size or lack of suitable surrounding habitats). See Figure 2 for the location of this oak tree.

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.

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 Chapter 5 (Biodiversity) of the EIAR including badgers (although no new setts were recorded), birds (mainly passerine species), and potentially other species such as common frog, which are also considered in the Biodiversity chapter. No otter signs or sightings were recorded within 150 m of the proposed watercourse crossing for the Shankill Stream.

4.0 ASSESSMENT OF EFFECTS

4.1 Description of Likely Effects

The proposed alteration involves the rerouting of approximately 795 m of underground electricity line from private lands to the paved carriageways of the L6738 and L6673 local roads, the installation of the underground electricity line beneath the Shankill Steam and all associated works.

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

4.1.1 Effects to Nature Conservation Sites

An addendum to the NIS submitted with the original planning application has also been prepared[Error! Bookmark not defined.]. The conclusion of the NIS and addendum to the NIS is that the project will not, beyond reasonable scientific doubt, adversely affect the integrity of any Natura 2000 site either directly or indirectly.

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 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.

The same is true for nationally designated sites i.e. the proposed alteration will not cause any additional effects to nationally designated nature sites.

Overall, the proposed alteration will not cause any effects to nature conservation sites that were not already identified and assessed in the NIS or EIAR Chapter 5 for the permitted development.

4.1.2 Effects to Habitats and Flora

The proposed alteration will result in a marginally reduced loss of hedgerow and hedgerow x treeline mosaic (c.8 m and c. 4 m, respectively) and one additional watercourse crossing under the Shankill Stream.

The proposed alteration will not result in significant effects on habitats or flora during the construction phase, with a smaller length of linear habitats due to be temporarily lost during construction and replanted than per the permitted development. The additional watercourse crossing will be spanned via horizontal directional drilling (HDD) as for all other watercourses, with no instream works proposed.

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 5 for the permitted development.

4.1.3 Effects to Fauna

4.1.3.1 Effects to Birds

Significant disturbance / displacement effects are unlikely to occur along the proposed alteration to the electricity line, as disturbance from construction activities is unlikely to be significantly greater than that from typical traffic levels or agricultural activities. As the rerouted section of the electricity line will be predominately located within public roads, which provide less suitable habitat for birds than the fields and hedgerows affected by the permitted route,

marginally fewer suitable nesting habitats for common passerine species will be temporarily lost during construction.

Overall, there will be no appreciable differences in the effects predicted upon birds due to the proposed alteration compared to those permitted.

4.1.3.2 Effects to Bats

The proposed alteration will result in marginally less bat commuting and foraging habitat being temporarily lost due to the removal of hedgerow and hedgerow x treeline mosaics during construction, and the overall loss is consistent with the impacts already detailed in Section 5.5.2.5 of the Biodiversity chapter, which also assessed that habitat loss would result in no significant effects to bats.

An oak tree with PRF-I suitability (i.e. a potential roost suitable for individual roosting bats) was identified along the L6673 carriageway. Significant disturbance / displacement effects are unlikely to occur along the proposed alteration to the electricity line as disturbance / displacement from construction activities while the electricity line is being installed is unlikely to be significantly greater than that from typical traffic levels or agricultural activities. The oak tree will remain in place and will not be felled with or trimmed as part of construction activities.

No other potential effects on bats are possible as a result of the proposed alteration.

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

4.1.3.3 Effects to Other Fauna

No other significant effects to other fauna are expected because of the proposed alteration that were not already identified in the Biodiversity chapter for the permitted development.

4.2 Cumulative Effects

The EIAR found no likelihood of significant cumulative impacts as a result of the permitted development. There will be no additional effects predicted on flora and fauna as a result of the proposed alteration. Therefore, there are no additional cumulative effects with any other projects or plans predicted beyond those identified for the permitted development or those identified within Section 5.5.5 of the EIAR Chapter 5: Biodiversity.

5.0 CHANGES TO MITIGATION MEASURES

As significant effects are not considered likely to occur, and any potential effects are already appropriately mitigated or compensated, it is assessed that no additional mitigation measures are required for the proposed alteration, provided all previously committed environmental controls, mitigation measures, and design provisions are fully implemented.

Accordingly, all mitigation measures relating to water quality protection and aquatic ecology that were committed to for the permitted development will also be applied at the additional watercourse crossing associated with the proposed alteration.

Similarly, although a marginally smaller length of hedgerow and hedgerow x treeline mosaic will be temporarily removed during construction of the proposed alteration compared with the permitted development, these features will be replanted following completion of electricity line installation, consistent with previous commitments.

All other mitigation measures will be implemented in full as detailed in Chapter 5 of the EIAR.

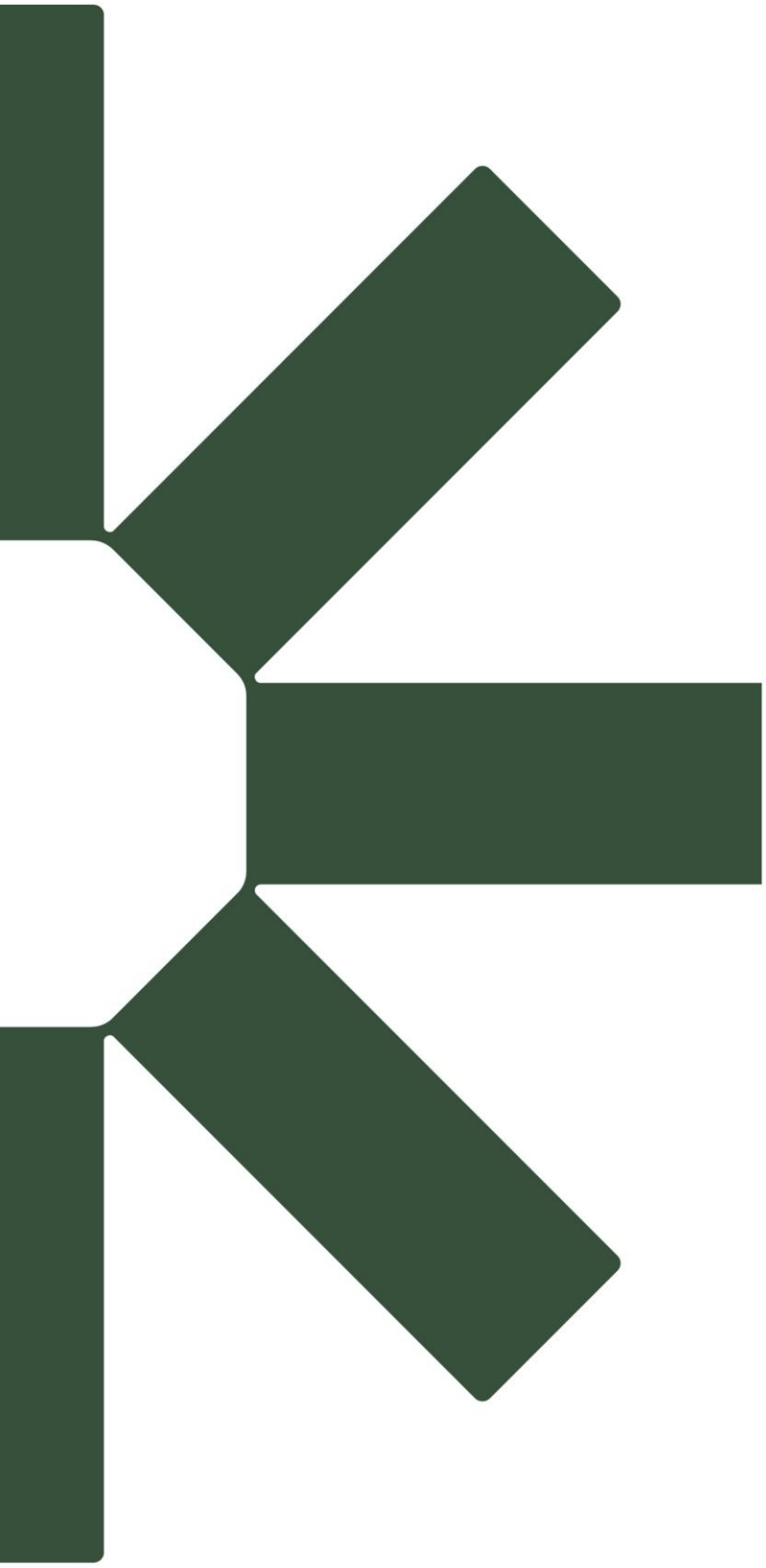
6.0 CONCLUSION

The likely effects of the proposed alteration on biodiversity have been assessed with respect to the findings of the permitted White Hill Wind Farm electricity substation and electricity line EIAR. The proposed alteration to the permitted development does not have the potential to affect any ecological receptors beyond those already assessed within the EIAR for the permitted development.

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 project, either alone or in combination with other plans or projects will not undermine the conservation objectives of any European sites or have any significant effects thereon. It can therefore be concluded that the project will not have an adverse effect on the integrity of any European site."*



Making Sustainability Happen