



An  
Bord  
Pleanála

## Inspector's Report

### ABP-317406-23

<b>Development</b>	Electrical Cabling with upgrades to roads etc, and all associated project development works. An NIS and EIAR accompany the application.
<b>Location</b>	Townlands of Cummeenavrick, Glashacormick, Clydaghroe, Cummeennabuddoge Co. Kerry
<b>Planning Authority</b>	Kerry County Council
<b>Planning Authority Reg. Ref.</b>	22816
<b>Applicant(s)</b>	Knocknamork Ltd.
<b>Type of Application</b>	Full.
<b>Planning Authority Decision</b>	Refuse
<b>Type of Appeal</b>	First Party
<b>Appellant(s)</b>	Knocknamork Ltd
<b>Observer(s)</b>	None
<b>Date of Site Inspection</b>	16 <sup>th</sup> of June 2023 & 18 <sup>th</sup> of August 2023.

**Inspector**

Karen Hamilton

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## 1.0 Site Location and Description

- 1.1. The site is a linear route located within an area of forestry in the townlands of Cummeennabuddoge (Co. Kerry) and into Caherdowney (Co. Cork) for a concurrent application. The subject site runs in length from east at an upland area and through commercial forestry at Cathair Dhúnaigh towards Cummeennabuddoge Co. Kerry. The subject site connects into a separate proposed 110kV grid connection route and substation which is a SID proposal (ABP 314275-22). The total length of both grid connections is 11.9km where this application is 3.6km and the 33 kV line is 8.3km in length.
- 1.2. The site is accessed from the old N22 which radiates off the new N22. This section of the road has been blocked off from general use although is still accessible to the public. The overall subject site (including the 110kV grid connection and substation) ends along the Cork/ Kerry boundary and within the townland of Cummeennabuddoge, to the east through the adjoining site from the Ballyvouskil substation. This is a large substation with existing overhead line connections to the substation from the east and underground gable connections.
- 1.3. The grid connection relates to an already permitted wind farm (Reg Ref 19/4972). There are currently wind farms located in the vicinity of the proposed grid connection, at elevated locations (Coomacheo/Curragh Windfarm).

## 2.0 Proposed Development

- 2.1. The proposed development would comprise of
  - i. underground electrical cabling (33kv),
  - ii. upgrade of access junctions;
  - iii. access roads (new and upgrade of existing);
  - iv. temporary access road;
  - v. borrow pit;
  - vi. site drainage;
  - vii. forestry felling; and

- viii. all associated site development ancillary works and apparatus.
- 2.2. The development subject to this application forms part of grid connection and access arrangements which will facilitate the permitted Knocknamork renewable energy development, Cork County Council Reg Ref 19/4972.
- 2.3. Concurrent planning applications in relation to the overall grid connection and access arrangements have also been granted by Cork County Council (Reg Ref No.22/5791) and submitted to An Bord Pleanála (ABP 312427-22).
- 2.4. An operational period and extended planning permission duration to align with the permitted Knocknamork renewable energy development, Cork County Council Reg Ref No. 19/4972 is sought.
- 2.5. An Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) have been prepared in respect of the proposed development and accompanies this application.

### **3.0 Planning Authority Decision**

#### **3.1. Decision**

Refuse permission for one reason as stated below:

The Planning Authority is not satisfied that the proposed development would not have an adverse impact on the water quality downstream and would not result in adverse impacts on the integrity of the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC, in view of the sites Conservation Objectives. The proposal would therefore conflict with Development Objectives KCDP 11-1 and 11-2 of the Kerry County Development Plan 2022-2028 and would be contrary to the protection of the environment, biodiversity, water and natural heritage and the proper planning and sustainable development of the area.

#### **3.2. Planning Authority Reports**

##### **3.2.1. Planning Reports**

The report of the area planner reflects the decision to refuse permission following the submission of further information as detailed below:

#### Further Information Request

- Archaeology: Request for pre-development testing on the site, an assessment of the archaeological potential of watercourses and identification of the impact on “The Paps”.
- Traffic & Transport: Frequency and time of the turning movements at the upgraded junctions, Stage 1 Road Safety Assessment, construction, and surface water details of the proposed upgrades at the junction, and further details of the weights and frequency of any proposed abnormal weight loads for construction and operation. The applicant was also requested to relook at the route options for construction/turbine for Reg Ref 19/4972.
- Ecology: Submission of a Kerry Slug and Badger Survey as part of the EIAR.
- Geotechnical issues: The provision of alternatives to the proposed development, outside the Clydagh Valley as the potential hydro morphological impact of the proposed development on the natural drainage of the area, peat and slope stability downstream will have a negative impact on the water quality in the Lough Leane Catchment

#### Further Information Response

- Archaeology: Pre-development testing and testing on the potential impact on archaeology of the watercourse did not uncover any features or deposits. An appendix to the landscape and visual impact assessment concluded no significant impact on the landscape or visual amenity on the Paps landscape.
- Traffic & Transportation: Additional drawings of the access junctions indicating the movement of abnormal loads with clarification on the Traffic and Transport of the turning movements and additional loads and a Stage 1 Road Safety Audit.
- Ecology: Submission of a dedicated Kerry Slug and Badger Survey to indicate that no Kerry Slug was detected, and no badger setts identified.

- Geotechnical Issues: Report on the potential impacts on the water quality and hydrological effects including a peat stability assessment has indicated the site is suitable for the proposed development. The PA are not satisfied with the information submitted and hence a refusal of permission.

### 3.2.2. Other Technical Reports

County Archaeologist: No objection subject to conditions

Environment Section: Recommendation for refusal of permission.

### 3.3. Prescribed Bodies

3.3.1. Health Service Executive (HSE): No objection subject to compliance with conditions.

3.3.2. Transport Infrastructure Ireland (TII): Request for additional information on:

- Demonstrate impact on the capacity, safety, or operational efficiency of the national road network.
- Additional information on the N22 temporary access and reinstatement works.
- Additional information on the haul route and size of loads.

No further comments were made on the further information submission.

### 3.4. Third Party Observations

None submitted.

## 4.0 Planning History

4.1.1. Current Applications

### **Reg Ref 22/5791 (Cork County Council)**

Permission granted for (i) Underground electrical cabling (33kV); (ii) Access roads (new and upgrade of existing); (iii) Amendments to the permitted developments (Ref. No. 19/4972), including extension to the borrow pit and the omission of the 38kV electrical substation, 38kV underground cabling and battery storage compound; (iv) Site drainage; and (v) All associated site development ancillary works and apparatus.



The proposal provides grid connection for permitted development Reg Ref 19/4921 and was accompanied by an EIAR and an NIS.

#### **ABP 314275-22**

Strategic Infrastructure Development proposal for a 110kV transmission line associated with a grid connection for permitted development Reg Ref 19/4792.

The proposal is currently before the Board.

#### 4.1.2. Previous Applications

##### **Reg Ref 19/4972 (Cork County Council)**

Permission granted for a wind farm with 7 no turbines with a blade height of up to 150m, up to 70,000m<sup>2</sup> solar photovoltaic array, 38kv substation and all other associated works.

##### **Reg Ref 18/4182 (Cork County Council)**

Permission granted for a battery energy storage facility which will comprise of rechargeable battery units contained in up to 39 No. 40 foot containers on site and the associated development of unit substations, a 110 kV substation and associated site works.

##### **Reg Ref 18/6438 (Cork County Council)**

Permission granted for the construction of one no  $\pm$  100 Mvar STATCOM transformer one (1) no. auxiliary transformer, three (3) no. reactors, one (1) no. outdoor cooling bank, control and valve building (268m<sup>2</sup>), underground connection to existing ESB substation and additional associated works.

##### **Reg Ref 20/5281 (Cork County Council)**

Permission granted for EirGrid plc at the existing ESB Ballyvouskill 200/110 kV substation for an additional (1) harmonic filter, one (1) HV circuit breaker (including CT and VT), one (1) MV disconnecter and earth switch, two (2) cable sealing ends, three (3) additional lightning masts (approximately 25m high) and other associated works.

## 5.0 Policy Context

### 5.1. National Policy

#### 5.1.1. National Planning Framework (NPF)

- National Policy Objective (NPO) 55 seeks to “promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050”.

#### 5.1.2. Climate Action Plan 2023

- The Plan seeks to identify how Ireland will achieve its 2030 targets for carbon emissions by sector and through a series of actions.

#### 5.1.3. The Climate Action and Low Carbon Development (Amendment) Act 2021

- The Climate Action and Low Carbon Development (Amendment) Act 2021 (Climate Act, 2021), commits Ireland to a legally binding 51% reduction in overall greenhouse gas emissions by 2030 and to achieving net zero emissions by 2050.

#### 5.1.4. Wind Energy Development Guidelines for Planning Authorities (2006)

#### 5.1.5. Draft Revised Wind Energy Development Guidelines 2019

### 5.2. Regional Policy

#### 5.2.1. Southern Regional Spatial and Economic Strategy (RSES)

- Section 8.2: Support for renewable energy sources and requirements for transmission and distribution infrastructure.

### 5.3. Kerry County Development Plan (KCDP) 2022-2028

#### 5.3.1. Landscape Designation

The site is located in an area designated as visually sensitive area (Map 0)

Section 11.6.3.1 of the development plan provides guidance on the appropriate development within these areas whereas they must be satisfactorily integrated into the landscape.

Views and Prospects on either side of the N22 after the Cork/ Kerry border.

#### 5.3.2. Energy

Chapter 12 includes the council's policy in relation to Energy.

Policy KCDP 12-1: supports the facilitation of energy provision from reliable and renewable energy sources whilst also seeking to maintain biodiversity, archaeology and built heritage, landscape, and residential amenity etc.

#### 5.3.3. Transmission Grid

KCDP 12-9: Facilitate electricity infrastructure.

KCDP 12-7: Facilitate enhanced generation capacity and associated networks.

KCDP 12-8: Ensure the siting of power lines is managed in line with the natural and built environment.

KCDP 12-9: Supports EirGrids roadmap plan subject to other considerations.

KCDP 12-10: Grid connection routing options should safeguard the strategic function of the national road network.

KCDP 12-11: Power lines should be sited to avoid any adverse impact on sensitive landscaped and Natura 2000 sites.

#### 5.3.4. Wind Maps

Volume 4: No. 5 Wind Zoning

### 5.4. **Natural Heritage Designations**

The site is located:

- Adjacent to the Mullaghanish to Musheramore Mountains SPA (site code 004162).
- c. 1.4km to the northeast of the Mullaghanish Bog SAC (001890).

- c. 3km to the east of Killarney National Park Macgillycuddy's Reeks and Caragh River Catchment SAC (site code 000365).
- c. 4.5km to the south of the Blackwater River (Cork/Waterford) SAC (site code 002170).
- c. 6.4km to the northeast of St Gobnet's Wood SAC (site code 000106).
- c. 14.2km to the northwest of The Gearagh SAC (site code 000108) and SPA (site code 004109).
- c. 10km to the northeast of Old Domestic Building, Curraglass Wood SAC (002041).
- c. 13 km Kilgarvan Icehouse SAC (site code 000364).

## 5.5. EIA Screening

5.5.1. The proposal forms part of a larger proposed development including:

- Permission for a wind farm/ solar farm (Reg Ref 19/4972 Cork County Council),
- 110kV line and substation (SID proposal ABP 314275-22)
- 33kV line and substation (Reg Ref 22/5791 Cork County Council).

5.5.2. An EIAR accompanied the application. The PA undertook an EIA of the proposed development. An EIAR also accompanied the other component of the proposal, detailed above. The contents of the EIAR are discussed in Section 8.0 and I have referred to in the assessment as detailed below, where I have considered appropriate.

## 6.0 The Appeal

### 6.1. Grounds of Appeal

6.1.1. The grounds of appeal are submitted from the applicant in relation to the refusal by Kerry County Council.

6.1.2. Background

It is requested that the Board deal with this application in conjunction with a SID application currently on FI (ABP VA04.314275).

A background to the site description, site location, planning history, etc is provided.

The proposed development relates to 3 components for a grid connection to a permitted development (wind and solar project). The 3 components relate to this application, a separate 33kV line in Cork County Council (Reg Ref 22/5791) and a SID 110Kv proposal.

The application was accompanied by an EIAR and an NIS.

#### 6.1.3. Local Authority Decision

- The PA issued a FI request.
- The design team had meetings with the PA which informed the FI response.

#### 6.1.4. Lack of assessment of alternatives outside the Leanne Catchment

- Chapter 3 of the EIAR includes a range of alternatives for the proposed development.
- The alternatives are presented in line with the consideration of reasonable alternatives in the EU and EPA guidance.
- The chosen route is the preferred route and the most favourable with regard construction, geotechnical and environmental risk perspective.
- The HES response to the appeal deals with the alternatives (included in appendices).

#### 6.1.5. Scale and Nature of the proposed development

- The scale of the proposed development has considered the constraints, distances and various infrastructure.
- Due to the linear nature of the proposal, works will only be carried out in one sub catchment at each time.
- The works will only be within 0.016% of the Leanne catchment and is not excessive in scale to the overall catchment and is appropriate in scale.

#### 6.1.6. The potential for hydro morphological effects

- The HES submission has addressed the hydrological impacts.
- There is a low potential for hydro morphological impacts.

6.1.7. The likely impact of natural drainage/ hydrology in the area

- The response from HES notes that the commercial forestry and drainage has already modified the natural hydrology and prevailing land use.
- The proposed development is in the most part in keeping with the existing access roads and use those existing drainage pathways.
- A water balance assessment in Chapter 9 of the EIAR assesses the worst-case scenario which represents a potential increase of c. 0.03% of the average daily/monthly runoff in comparison to the baseline pre-development which is a very small increase.
- The impact of any alterations to the Lough Leane catchment is imperceptible.
- A detailed drainage plan has been assessed in the EIAR.

6.1.8. The challenging environment with regard terrain and rainfall.

- The HES submission in Appendix 2 details the rationale for the route selection which is the most favourable in relation to the construction, environmental risk, geotechnical and hydrological perspective.
- The justification for the hydrological impacts is included in Appendix 2 and are summarised in the grounds of appeal as:
  - The distance and linear nature of the proposed development
  - The drainage proposals.
  - The mitigation measures included and timing of the works over the summer months.
  - The absence of any instream works,
  - The transient nature of works across several sub-catchment.

6.1.9. Adverse effects on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC

- The potential impacts on the Lough Leanne catchment have been fully addressed.
- No significant impacts on the water quality of those downstream waters are predicted.
- The potential impacts of the proposal on the SAC and Qualifying Interests have been assessed.
- The EIAR and conclusion of the NIS are valid.
- All mitigation measures are set out in the EIAR and NIS.

#### 6.1.10. Other matters

- Transport Infrastructure Ireland
  - TII queried the impact on the capacity of the N22, the proposed reinstatement of works and the proposed abnormal loads.
- Cumulative Impact Assessment: The cumulative and in combination impacts have been updated as presented in the NIS.

#### 6.1.11. Appendix 1: Decision Notice by Kerry County Council

#### 6.1.12. Appendix 2: HES ground of appeal submission

### 6.2. **Applicant Response**

The applicant is the appellant.

### 6.3. **Planning Authority Response**

- 6.3.1. A response from the planning authority refers to the information contained on the planning file, the planning history and (including Reg Ref 19/4972) which granted access to the lands via an alternative route outside the Clydagh Valley/ sensitive Lough Leane Catchment. It is requested the proposal is refused.

### 6.4. **Observations**

None submitted.

## 7.0 Assessment

- 7.1.1. The proposed development was refused for one reason, impact on the water quality downstream and the adjoining European Site Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365]. The grounds of appeal have made a submission on this reason for refusal and have also addressed issues raised in the TII submission.
- 7.1.2. The Board will note a concurrent SID application (ABP 314275-22). This proposed development forms part of this grid connection (although not a SID application). For this reason, I have addressed the overall environmental impacts of the proposal and have undertaken an EIAR of the overall proposal, as detailed in Section 8.0 below.
- 7.1.3. I consider the main issues of the appeal can be dealt with under the following headings:
- Principle of Development
  - Impact on the Lough Leane Catchment
  - Access from the N22
  - Appropriate Assessment.

## 7.2. Principle of Development

### Introduction

- 7.2.1. The proposed development includes the upgrade of existing forestry access roads (and construction of new roads) to allow the construction and delivery of turbines and 33kV grid cabling associated with the permitted Knocknamork Renewable Energy Development permitted by Cork County Council under Reg Ref 19/4972. The proposal forms part of and is subject to concurrent planning applications, 33kV grid connection permitted by Cork County Council (Reg Ref 22/05791) and a SID application for a 110kV grid connection and substation (ABP 314275-22) currently before the Board.
- 7.2.2. This proposal has been assessed in conjunction with the SID application currently before the Board and the Board will note that much of the information submitted in



both applications is similar. For example, an EIAR and NIS which accompanied both applications contain similar assessments.

#### Route Selection for grid connection for the permitted development

- 7.2.3. The Planners report on the FI response notes the proposed route is one of the alternatives investigated in the permitted development Reg Ref 19/4972 as Option 2a and 2b. It is considered that the alternative Option, which reduced the extent of works within the Leane Catchment, should have been more clearly assessed as part of the EIAR.
- 7.2.4. I note Chapter 3 of the EIAR for Reg Ref 19/4972 referred to Options A and B for the grid connection, both assessed for cumulative impact. The submitted EIAR with the subject application includes an assessment of both grid connection Options and notes both options are mainly located in the Laune River surface water catchment. This aside, I note the grant of permission for Reg Ref 19.4972 does not include any conditions requiring the use of either option.
- 7.2.5. Chapter 2 EIAR which accompanied the application deals with alternatives. Both Option A and B were assessed and considered as part of the EIAR. It was concluded that Option A was the most favoured having regard to the impacts on the environment. It was noted that Option B required 9 more watercourse crossings than Option A. The Board will note the alternatives considered in Section 8.0 below.

#### Conclusion

- 7.2.6. Having regard to the nature and scale of the works, the inclusion of the proposed route in the EIAR of the permitted development and the report of the area planner, I consider the principle of the development acceptable, subject to other planning considerations detailed below.

### **7.3. Access from the N22**

#### Introduction

- 7.3.1. The current forestry access is from the old N22 which radiates from the newly constructed and aligned N22. The works along the N22 include a junction upgrade to accommodate construction traffic and a temporary access for abnormal loads only used during the turbine delivery.

### Further Information

- 7.3.2. There was a further Information request on the application which the applicant responded to as follows:
- Clarification on the frequency and time of turning movements at the access junctions of the N22.
  - A Stage 1 Road Safety Audit.
  - Detailed drawings of the access junctions off the N22 and clarification in relation to surface water.
  - Clarification in relation to abnormal weight loads.

7.3.3. The Transport Section of Kerry County Council (KCC) have not raised any objection to the upgrade works at the N22 or the temporary access route. Transport Infrastructure Ireland made an initial submission with regard the impact on the capacity of the N22, the additional works at the N22 and the haul route and size of loads. No further comments were made on the further information submission.

### The Grounds of Appeal

- 7.3.4. The grounds of appeal refer to the submission from TII and the impact on the N22. The Board will note the concurrent application for the remainder of the grid connection (110kV and substation ABP 314275-22) which included a submission from TII. I concluded that having regard to the information on file and within Chapter 13 the proposed development would cause no significant impact on the strategic functioning of the N22.
- 7.3.5. This application was accompanied by an EIAR (as detailed below in Section 8.0). The Link Capacity Assessment indicates the road has the capacity to assimilate the additional movement of traffic associated with the construction activity. I have assessed the impact of the upgrade, temporary access and traffic flow below and conclude the proposal is acceptable.

### Conclusion

- 7.3.6. Having regard to the proposed upgrade of the existing junction onto the N22, the temporary access for the abnormal loads and the information in the accompanying EIAR I consider the proposed works along the N22, and movement of construction

traffic associated with both the proposed development, additional associated grid connection and permitted development would not cause a significant negative impact to the strategic functioning of the N22.

#### **7.4. Impact on the Lough Leane Catchment**

##### Introduction

- 7.4.1. The proposed development includes a grid connection through the Lough Leane catchment. The 33 kV line is 8.3km in length and forms part of the wider grid connection for the permitted development Reg Ref 19/4972. A concurrent SID application is before the Board for the part of the remaining grid connection (ABP 314275-22). The application was accompanied by an EIA and an NIS, both assessed in detail below.
- 7.4.2. The planning authority refused permission for the proposed development as they were not satisfied the proposal would not have an adverse impact on the water quality downstream. They considered that any impact on the water quality could result in adverse impacts on the integrity of the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC and the proposal would therefore conflict with Development Objectives KCDP 11-1 and 11-2 of the Kerry County Development Plan 2022-2028.

##### Grounds of Appeal

- 7.4.3. The applicant considers that sufficient information has been submitted with the application, e.g., water balance tests, hydrological assessments, and mitigation measures, to assess the potential impacts on the Lough Leane catchment and demonstrate there would be no adverse effects on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC.
- 7.4.4. The grounds of appeal were accompanied by a response by hydro environmental experts who specialise in wetland and peatland eco-hydrology. The submission addresses both the reason for refusal and issues raised in the report of the Environmental Section of Kerry County Council. These issues included:
- The lack of assessment of alternatives outside the Lough Leane Catchment,
  - The scale and nature of the proposed development,

- The potential hydro morphological affects,
- The likely impact of natural drainage/ hydrology in the area, and
- The challenging environment with regard to terrain and rainfall.

#### Assessment of alternatives

- 7.4.5. The report of the Kerry County Council Ecologist states that there has been no meaningful consideration or assessment of options outside the Clydagh Valley/ Sensitive Lough Leanne Catchment and planning permission granted under Reg Ref 19/4972 included access to the lands via an alternative route outside the Clydagh Valley/ Sensitive Lough Leanne Catchment.
- 7.4.6. The grounds of appeal refer to the assessment of alternative routes assessed in the EIAR. It is considered that any routes outside this catchment area would require significantly more earthworks and spoil management.
- 7.4.7. As stated above in Section 7.4, the permitted development included two Options (A and B) for the construction access and delivery of turbines. I note both options were included in the EIAR submitted with Reg Ref 19/4972 and detailed in the EIAR which accompanied this application. Both Options are in the Laune River surface water catchment.
- 7.4.8. Options A and B are included in Chapter 3 of the EIAR. The Board will note my assessment below in Section 8.0 and having regard to the works proposed (which utilise the current forestry track access) I am satisfied the options considered are reasonable and comply with the proposal as submitted as part of the permitted development Reg Ref 19/4972.

#### Hydrological Setting, location, and scale of works

- 7.4.9. The Environmental Section have raised concerns in relation to the impact of works such as hydrology/ bank erosion, sedimentation and slope failure and the potential on those sensitive down-gradient surface water receptors which include the Atlantic Salmon and Freshwater Pearl Mussels which are known to occur in the Rivers Clydagh and Flesk.
- 7.4.10. The grounds of appeal note the key component of the proposal is the laying of underground cabling in a shallow trench within existing or new tracks along well-

established tracks. The overall impact on the water courses along the turbine delivery route (TDR), the 33kV cable route and the 110kV cable route and substation have been assessed. The watercourse along the entire route is summarised below:

- TDR: 5 no watercourse crossings (1 no EPA/OSI mapped and 4 no forestry drains).
- 33kV route: 5 no EPA mapped a 4 no manmade drains.
- 110Kv: no water crossings within the Lough Leanne catchment.
- 110kV substation: Located within the Lough Leanne catchment but no water crossings.

7.4.11. The impact of the proposal on the water quality downstream is detailed throughout Chapter 6 (Biodiversity), Chapter 7 (Land, Soils & Geology) and Chapter 8 (Hydrology & Hydrogeology). The EIAR and my assessment below concludes that, with the integration of mitigation measures to ensure the prevention of any sedimentation or release of hydrocarbons into the connecting tributaries, the proposal will not have a significant impact on the water quality downstream.

7.4.12. In terms of the impact on the Fresh Water Pearl Mussel the EIAR notes this population located in a separate attachment. I note the conservation objectives for the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC "*The known distribution of the freshwater pearl mussel extends through the Cummeragh, Cappal and Isknagahiny Lough Rivers of the Currane catchment*".

7.4.13. The report of the Environment Section notes those mitigation measures incorporated within the overall proposal, as outlined in Section 8.4.1 of the EIAR and require a condition to ensure the attenuation/ settlement ponds are adequately designed, located and maintained to ensure sediment build up is removed. No further issues have been raised regarding the mitigation measures.

7.4.14. Overall, I find no evidence within the application or the conservation objectives for the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC to indicate that, with the appropriate mitigation measures in place, the proposed development is of an inappropriate scale and would have a negative impact on the water quality downstream.

#### Lough Leane Catchment and the WFD assessment

- 7.4.15. The report of the Environmental Section note the Lough Leanne catchment is sensitive to sediment and phosphorous input and refer to the Lough Leane Catchment Monitoring Project. I note the Lough Leane Catchment Monitoring and Management Project<sup>1</sup> was set up in early 2000 following a range of problems with the water quality in the Lough Leane Catchment, including eutrophication. There is little recent public information on the status of the waters in this catchment other than the WFD information. I note the report of the Environment Section refers to the reference in the conservation objective report for Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC<sup>2</sup> and the annual total phosphorous (TP) concentration. I note this report does not provide any further detail on the exceedance of phosphorous concentrations or the threats to same.
- 7.4.16. A Water Framework Directive (WFD) Assessment accompanied the application. The surface water status and groundwater status of all water bodies in the catchment was and classified using the latest WFD cycle (2013-2018). The majority of the site is located in the Laune-Maine-Dingle Bay catchment with a small section in the Lee, Cork Harbour and Youghal Bay catchment. The potential impact on the surface water bodies (SWB) and groundwater bodies (GWB) is assessed in the WFD assessment.
- 7.4.17. The Flesk River is in the vicinity of the site, downstream. The WFD report submitted with the application notes that most of the SWBs are "not at risk" while the Flesk (Kerry)\_020 and Flesk (Kerry)\_040 are at risk of failing to meet the WFD standards. The PA report notes that most of the sub catchment is within the Flesk (Kerry)\_020\_010 and Flesk (Kerry)\_020\_020 waterbodies. The grounds of appeal notes the site is located at the headwater of the Flesk River sub-catchment (Flesk (Kerry)\_020\_010) and 25km upstream of Lough Leane.
- 7.4.18. I note the results of the WFD Cycle 2 (2019) and the comments in the report which state<sup>3</sup> *"All rivers in this sub-catchment are Not at Risk. IFI note that the Flesk is a spring salmon fishery. It is mostly High status so there is concern that the forestry service needs to be notified of the High status and can use additional protective measures in these areas. The sub-catchment would appear to have no significant*

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<sup>1</sup> [https://epawebapp.epa.ie/licences/lic\\_eDMS/090151b2802f4f96.pdf](https://epawebapp.epa.ie/licences/lic_eDMS/090151b2802f4f96.pdf)

<sup>2</sup> [ConservationObjectives.rdl \(npws.ie\)](#)

<sup>3</sup> [Subcatchment Assessment \(catchments.ie\)](#)

*issues, apart from possibly forestry activities which in some places are impacting pH but this is not reflected in the biological status.”* I note this catchment report refers to the need for additional protective measures during forestry activities, which will allow the high status to be retained. Protective measures, in the form of mitigation measures, are incorporated into the proposed development.

- 7.4.19. Seven SWB are listed in the Lee, Cork Harbour and Youghal Bay catchment. In the absence of mitigation measures, the report notes the potential for the proposed development to impact the “status” of the SWBs in both catchments.
- 7.4.20. In relation to the groundwater, it is noted that two groundwater bodies (Cahersiveen and Ballinhassig West) are in the vicinity. The potential to impact these GWB is not considered to be significant due to the low hydrogeological regime and low rates of groundwater recharge. This aside, the accidental spillage of hydrocarbons due to construction could have a negative impact, and change the good status, in the absence of mitigation measures.
- 7.4.21. The WFD assessment concludes that, with mitigation measures, the current good and high status of all SWB and GWBs will remain unchanged.
- 7.4.22. The grounds of appeal detail the works proposed to the watercourses (generally 1<sup>st</sup> and 2<sup>nd</sup> order) and consider the total footprint of the area to be very small, having regard to the overall catchment size. The new drainage is designed to mimic the existing hydrological regime by maintaining natural flows. The potential surface water increase (c. 0.03% increase in average daily/monthly) is considered to be small, and the release of suspended solids will be controlled.
- 7.4.23. Overall, I have no evidence before me to conclude that the proposed works will have a negative impact on the water quality downstream, the Lough Leanne catchment of impact the status of those surface or groundwaters as defined for the WFD.

#### Potential Impact and Mitigation Measures

- 7.4.24. The proposed development includes the cut and fill of peatland to upgrade existing forestry tracks and provide new access road connections. The proposal has the potential to have direct and/or indirect impact on the water quality due to:
- Increase suspended solids in the watercourses from construction traffic over exposed soils,

- Nutrient release and suspended solids from the clear felling of coniferous plantation.
- Drainage and seepage of water from excavations for the road upgrades, new roads,
- Reduction in groundwater levels from the dewatering of lands for borrow pits.
- The release of hydrocarbons into the groundwater and surface water from the accidental spillage of construction plant,
- Release of effluent from on-site temporary wastewater treatment systems.

7.4.25. The proposed development includes a range of mitigation measures to prevent the release of suspended solids and hydrocarbons into the watercourse and/or forestry drains detailed in Section 5.0 of the NIS and throughout the EIAR which include, inter alia:

- 50m buffer zones around all watercourses to ensure adequate space is maintained to prevent the entry of suspended sediment from earthworks/construction into the watercourse.
- Use of source controls (inceptor drains, vee-drains, diversions drain, sandbags, filter fabrics etc) to restrict sediment movement.
- Use of small working area, covering stockpiles, weathering stockpiles to prevent sediment run-off.
- In-line controls proposed include those source controls and silt bags/ fences. Collection sumps, temporary sumps, sediment traps settlement ponds.
- Settlement systems will be used to ensure the treatment of sediment before any surface water can flow downstream.
- No direct discharge (without treatment for sediment reduction, and attenuation for flow management) before runoff to the drainage network.
- Drains running parallel to existing roads will be widened and upgraded with velocity and silt control measures.

7.4.26. I am satisfied that having regard to the range of mitigation measures included the suspended solids will not enter the watercourse, as stated above, the Environment



Section Report requires the location and details of all attenuation/ settlement ponds to be agreed before construction, which I consider reasonable.

#### Policies KCDP 11-1 and 11-2

7.4.27. The reason for refusal refers to the impact of the proposed development on the integrity of the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC. The reason for refusal references policies KCDP 11-1 and 11-2 of the Kerry County Development Plan 2022-2028 both of which relate to the protection of European Sites as detailed below:

- KCDP 11-1 Ensure that the requirements of relevant EU and national legislation, are complied with by the Council in undertaking its functions, including the requirements of the EU Birds and Habitats Directives
- KCDP 11-2 Maintain the nature conservation value and integrity of Special Areas of Conservation, Special Protection Areas, Natural Heritage Areas (NHAs) and proposed Natural Heritage Areas (pNHAs). This shall include any other sites that may be designated at national level during the lifetime of the plan in co-operation with relevant state agencies.

7.4.28. Having regard to my assessment above, and in the Appropriate Assessment, which concludes that the proposed development would not cause a significant negative impact on the conservation objectives of the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC, I do not consider the proposal would contravene objectives KCDP 11-1 or KCDP 11.2.

#### Conclusion

7.4.29. Having regard to the nature and scale of the proposed works, the drainage patterns, and the limited increase of surface water runoff, I consider the proposed development, in conjunction with mitigation measures, will not cause any increase in the release of suspended solids or hydrocarbons or negatively impact the water quality downstream. Therefore, I do not consider the proposed development would have a negative impact on the Lough Leanne catchment.

## 7.5. Appropriate Assessment (AA)

### 7.5.1. AA Screening Assessment

#### Background to the Application

- 7.5.2. The proposed development is accompanied by a Screening for Appropriate Assessment and a Natura Impact Statement (NIS). These documents are similar to those submitted with the concurrent SID application (ABP 314275-22) also before the Board.
- 7.5.3. The proposal includes an access road (new and upgrades) for turbine and construction delivery, 33kV grid connection and substation, along with alterations to the permitted development Reg Ref 19/4972 to accommodate the alterations to the grid connection. The proposal was refused by Kerry County Council as the PA was not satisfied the proposed development would not result in adverse impacts on the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365] having regard to the impact on water quality downstream.
- 7.5.4. The grounds of appeal consider the proposal will have no negative impact on the Lough Leane Catchment and all issues with regard to drainage works, mitigation measures to prevent any release of suspended solids and hydrocarbons have been sufficiently dealt with in the applications. The grounds of appeal were accompanied by a response from hydro environmental experts who specialise in wetland and peatland eco-hydrology. The submission addresses both the reason for refusal and issues raised in the report of the Environmental Section of Kerry County Council. These

#### Characteristics of the proposed development

- 7.5.5. The cabling will require the removal of peat and subsoil and there will be c. 22.3ha of trees felled. The study area is 631 ha and located between two regional surface water catchments in the Southwestern River Basin District (SWRBD). The 110kV substation and borrow pit are in the Laune River SWBD and the 110kV cable is in the River Lee SWBD. The remaining 38kV and 110kV route is between the two SWBD. In terms of sub catchment, the Flesk River sub-catchment (Felsk (Kerry)\_SC\_020) and flows downstream along the north of the proposed development, from east to west. In the River Lee sub catchment, the site is in the

Foherish\_SC\_010 (c. 5.5km downstream) and Sullane\_SC\_010 sub catchment (c. 4.5km downstream) both to the south of the proposed development. A Water Framework Assessment accompanied the application. I have undertaken a full and detailed assessment of the impact on the Lough Leanne Catchment above in Section 7.4.

#### 7.5.6. European Sites

Table 3.1 of the AA screening report details all the European site within the likely Zone of Impact.

European Site (Code) and distance to site	List of Qualifying Interest/Special Conservation Interest	Connections (Source, pathway, receptor)	Considered further in screening. Y/N
<b>Special Area of Conservation (SAC)</b>			
Mullaghanish Bog SAC [001890]  <a href="#">Mullaghanish Bog SAC   National Parks &amp; Wildlife Service (npws.ie)</a>  0.3km	[7130] Blanket bogs (* if active bog)	No – there is no complete source- pathway-receptor chain between the site and the blanket bog	N.
Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC [000365]  <a href="#">Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC   National</a>	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110]  Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojunceteta [3130]  Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]  Northern Atlantic wet heaths with Erica tetralix [4010]	Y-the site is located downstream with a hydrological connection via the Clydagh River	Y- Based on a hydrological pathway

European Site (Code) and distance to site	List of Qualifying Interest/Special Conservation Interest	Connections (Source, pathway, receptor)	Considered further in screening.  Y/N
<b>Special Area of Conservation (SAC)</b>			
<a href="#">Parks &amp; Wildlife Service (npws.ie)</a>  0.7km	<p>European dry heaths [4030]</p> <p>Alpine and Boreal heaths [4060]</p> <p>Juniperus communis formations on heaths or calcareous grasslands [5130]</p> <p>Calaminarian grasslands of the <i>Violetalia calaminariae</i> [6130]</p> <p>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410]</p> <p>Blanket bogs (* if active bog) [7130]</p> <p>Depressions on peat substrates of the <i>Rhynchosporion</i> [7150]</p> <p>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]</p> <p>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0]</p> <p><i>Taxus baccata</i> woods of the British Isles [91J0]</p> <p><i>Geomalacus maculosus</i> (Kerry Slug) [1024]</p> <p><i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029]</p> <p><i>Euphydryas aurinia</i> (Marsh Fritillary) [1065]</p>		

European Site (Code) and distance to site	List of Qualifying Interest/Special Conservation Interest	Connections (Source, pathway, receptor)	Considered further in screening.  Y/N
<b>Special Area of Conservation (SAC)</b>			
	Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Lampetra fluviatilis (River Lamprey) [1099] Salmo salar (Salmon) [1106] Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303] Lutra lutra (Otter) [1355] Trichomanes speciosum (Killarney Fern) [1421] Najas flexilis (Slender Naiad) [1833] Alosa fallax killarnensis (Killarney Shad) [5046]		
St. Gobnet's Wood SAC [000106] <a href="#">St. Gobnet's Wood SAC   National Parks &amp; Wildlife Service (npws.ie)</a>  2.9km	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	N- The site is downstream although the QI for the SAC is entirely terrestrial	N

European Site (Code) and distance to site	List of Qualifying Interest/Special Conservation Interest	Connections (Source, pathway, receptor)	Considered further in screening.  Y/N
<b>Special Area of Conservation (SAC)</b>			
Blackwater River (Cork/Waterford) SAC [002170]  <a href="#">Blackwater River (Cork/Waterford) SAC   National Parks &amp; Wildlife Service (npws.ie)</a>  4.km	Estuaries [1130]  Mudflats and sandflats not covered by seawater at low tide [1140]  Perennial vegetation of stony banks [1220]  Salicornia and other annuals colonising mud and sand [1310]  Atlantic salt meadows (Glauco- Puccinellietalia maritimae) [1330]  Mediterranean salt meadows (Juncetalia maritimi) [1410]  Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation [3260]  Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]  Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]  Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]  Austropotamobius pallipes (White-clawed Crayfish) [1092]  Petromyzon marinus (Sea Lamprey) [1095]	N- There is no hydrological connection between the proposed developmetn and the SAC.	N

European Site (Code) and distance to site	List of Qualifying Interest/Special Conservation Interest	Connections (Source, pathway, receptor)	Considered further in screening.  Y/N
<b>Special Area of Conservation (SAC)</b>			
	<p>Lampetra planeri (Brook Lamprey) [1096]</p> <p>Lampetra fluviatilis (River Lamprey) [1099]</p> <p>Alosa fallax fallax (Twaite Shad) [1103]</p> <p>Salmo salar (Salmon) [1106]</p> <p>Lutra lutra (Otter) [1355]</p> <p>Trichomanes speciosum (Killarney Fern) [1421]</p>		
<p>Old Domestic Building, Curraglass Wood SAC [002041]</p> <p><a href="#">Old Domestic Building, Curraglass Wood SAC   National Parks &amp; Wildlife Service (npws.ie)</a></p> <p>9.7km</p>	<p>Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303]</p>	<p>N- The proposed development is located outside the foraging range of the Lesse Horseshoes Bat, therefore there is no source -pathway- receptor.</p>	<p>N</p>
<p>Kilgarvan Ice House SAC [000364]</p> <p><a href="#">Kilgarvan Ice House SAC   National</a></p>	<p>Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303]</p>	<p>N- The proposed development is located outside the foraging range of the Lesse Horseshoes Bat,</p>	<p>N</p>

European Site (Code) and distance to site	List of Qualifying Interest/Special Conservation Interest	Connections (Source, pathway, receptor)	Considered further in screening.  Y/N
<b>Special Area of Conservation (SAC)</b>			
<a href="#">Parks &amp; Wildlife Service (npws.ie)</a>  12.6km		therefore there is no source -pathway-receptor.	
The Gearagh SAC [000108]  <a href="#">The Gearagh SAC   National Parks &amp; Wildlife Service (npws.ie)</a>  13.2km	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation [3260]  Rivers with muddy banks with Chenopodium rubri p.p. and Bidention p.p. vegetation [3270]  Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]  Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]  Lutra lutra (Otter) [1355]	N- The proposed development is outside the designated area and there is no hydrological connection between the SAC and the subject site	N
<b>Special Protection Area (SPA)</b>			
Mullaghanish to Musheramore Mountains SPA [004162]  <a href="#">Mullaghanish to Musheramore</a>	Hen Harrier (Circus cyaneus) [A082]	Y- This European site overlaps slightly with the EIAR study area and there is a potential for direct effects on the supporting habitats of the SPA and suitable	Y



European Site (Code) and distance to site	List of Qualifying Interest/Special Conservation Interest	Connections (Source, pathway, receptor)	Considered further in screening.  Y/N
<b>Special Area of Conservation (SAC)</b>			
<a href="#">Mountains SPA   National Parks &amp; Wildlife Service (npws.ie)</a>		roosting or hunting for the hen harrier	
The Gearagh SPA [004109]  <a href="#">The Gearagh SPA   National Parks &amp; Wildlife Service (npws.ie)</a>  13.4km	Wigeon ( <i>Anas penelope</i> ) [A050] Teal ( <i>Anas crecca</i> ) [A052] Mallard ( <i>Anas platyrhynchos</i> ) [A053] Coot ( <i>Fulica atra</i> ) [A125] Wetland and Waterbirds [A999]	N- The proposed development is located outside the designated site and there is no hydrological connection. The location of the site over 13km from the European Site would make it an unlikely site for any foraging species.	N

### Potential Impact on European Sites

7.5.7. The proposal includes the upgrade of existing forestry roads for underground cabling and construction traffic associated with the 33kV grid connection. There will be short section of new road (209m) along with the upgrade of existing forestry track roads. These works have the potential to have direct and/or indirect impact on the European Sites due to:

- Increase suspended solids in the watercourses from construction traffic over exposed soils,
- Nutrient release and suspended solids from the clear felling of coniferous plantation.

- Drainage and seepage of water from excavations for the road upgrades, new roads,
- Reduction in groundwater levels from the dewatering of lands for borrow pits.
- The release of hydrocarbons into the groundwater and surface water from the accidental spillage of construction plant,
- Release of effluent from on-site temporary wastewater treatment systems.

7.5.8. In general, the proposal has the potential to cause deterioration of water quality in ground or surface water flowing downstream into the European sites via on-site tributaries, through the release of suspended solids and hydrocarbons. Any impact on water quality can impact the supporting habitat for the Hen Harrier.

7.5.9. Two sites have been screened in, having regard to presence of a hydrological connection, and a source-pathway -receptor to the European Sites as follows:

- Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365]
- Mullaghanish to Musheramore Mountains SPA [004162]

7.5.10. The remaining sites within the identified Zone of Influence for the proposed development have been screening out as listed below. I have had regard to the qualifying interest for each of these European Sites and associated conservation objectives.

- Mullaghanish Bog SAC [001890]
- St. Gobnet's Wood SAC [000106]
- Blackwater River (Cork/Waterford) SAC [002170]
- Old Domestic Building, Curraglass Wood SAC [002041]
- Kilgarvan Icehouse SAC [000364]
- The Gearagh SAC [000108]
- The Gearagh SPA [004109]

#### AA Screening Conclusion

7.5.11. The proposed development was considered in light of the requirements of Section 177U of the Planning and Development Act 2000 as amended. Having carried out Screening for Appropriate Assessment, it has been concluded that the proposed development individually or in combination with other plans or projects would not be likely to have a significant effect on Mullaghanish Bog SAC [001890], St. Gobnet's Wood SAC [000106], Blackwater River (Cork/Waterford) SAC [002170], Old Domestic Building, Curraglass Wood SAC [002041], Kilgarvan Icehouse SAC [000364], The Gearagh SAC [000108], The Gearagh SPA [004109], or any other European site (other than those two listed below), in view of the site's Conservation Objectives, and Appropriate Assessment (and submission of a NIS) is not therefore required. This determination is based on the following:

- The qualifying criteria of each of the European Sites,
- The distance from the application site and study area,
- The absence and lack of meaningful ecological connections to those site...

This screening determination is not reliant on any measures intended to avoid or reduce potentially harmful effects of the project on a European Site.

#### 7.5.12. **Appropriate Assessment Stage II**

7.5.13. The site is located upstream from Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365] and adjacent to Mullaghanish to Musheramore Mountains SPA [004162]. The site is hydrological linked to the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365] is a range of tributaries which flow into the Clydagh River and the Lough Leanne Catchment Area. The location of the site, adjacent to the Mullaghanish to Musheramore Mountains SPA [004162], which lists the Hen Harrier as a qualifying species, as the potential to be used as foraging by this species.

7.5.14. The AA Screening assessment, above in Section 7.5.1, could not rule out any potential impacts on either of these European Sites, having regard to the nature and scale of the proposed development, the proximity of the project to the European sites, to the nature of the qualifying interest habitats and species, and the special conservation interest species, and the conservation objectives of the European sites,

and the potential impact ground and surface water pathways between the project and the European sites.

7.5.15. The AA Screening Assessment submitted with the application had the same determination and considered that mitigation measures must be implemented to ensure no significant impact on either European Site. The application was accompanied by a Stage II assessment, Natura Impact Statement (NIS).

Natura Impact Statement (NIS).

7.5.16. The application includes a NIS which examines and assesses the potential adverse effects of the proposed development on:

- Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC [000365]
- Mullaghanish to Musheramore Mountains SPA [004162]

7.5.17. The NIS provides a summary of the AA Screening Report, provides a description of the proposed development, the characteristics of the receiving environment and details the potential effects on both European Sites, the associated mitigation measures which are intended to avoid and/or reduce any negative impact and provides an overview of any residual effects.

7.5.18. The NIS is informed by the best available data on the above European Sites (NPWS), European and national information on the habitats and species within the European Sites, habitat surveys, otter surveys, bird surveys and other relevant desk top surveys.

7.5.19. **Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC [000365]**

7.5.20. The AA notes that there is an identified hydrological pathway between the subject site and the Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC. This link is via tributaries which link the subject site with the Clydagh River which is located within the Lough Leane Catchment. It is noted that there is a potential for the proposal to impact the water quality which would result in a negative impact on those qualifying interest which are water dependant as the following

- [1095] Sea Lamprey (*Petromyzon marinus*)
- [1096] Brook Lamprey (*Lampetra planeri*)
- [1099] River Lamprey (*Lampetra fluviatilis*)
- [1106] Salmon (*Salmo salar*)
- [1355] Otter (*Lutra lutra*)
- [1833] Slender Naiad (*Najas flexilis*)
- [3110] Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*)
- [3130] Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or *Isoeto-Nanojuncetea*
- [3260] Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation
- [5046] Killarney Shad *Alosa fallax killarneyensis*
- [91E0] Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)

7.5.21. The overall proposal includes the felling of coniferous forestry and excavation of lands for the 110kV cable route, substation, borrow pit and 33kV cable route. The proposed works include instream works to seven EPA/OSI mapped watercourses.

7.5.22. The AA includes an assessment of the impact on the above species and habitats having regard to the nature and scale of the proposed development, the location of the site and the site-specific pressures and threats to each of the qualifying interests. Four habitats are Annex I habitats (Oligotrophic waters, Oligotrophic to mesotrophic waters, Water course of plain to montane levels and Alluvial Forests (priority).

#### Potential impacts

7.5.23. The proposed development includes instream works along a number of watercourses and the extraction of peat associated with the cable routes and the associated temporary and permanent road construction and c. 22.3ha of forestry felling.

7.5.24. The main hydrological link between the site and this European Site is the watercourse, into the Clydagh River Catchment which has down water surface water connectivity. I consider the habitats and species which have the potential to be affected are restricted to sensitive watercourses. As summarised below, I do not consider there is a source-pathway-receptor to any terrestrial qualifying interests.

7.5.25. A summary of the potential impacts is listed below:

- Entrainment of suspended sediment in watercourse due to the vehicle tracking through watercourses, extraction close to watercourses.
- Damage to roads and increase if suspended sediment into the surface water,
- Release of sediment attached to the timber in stacking areas,
- Nutrient release from the tree feeling,
- Stockpiled excavated material providing point source of exposed sediment,
- Erosion of sediment from emplaced site drainage channels.
- Dewatering of borrow pits and 110kV substation platform has the potential to impact local groundwater flows and levels.
- Potential for groundwater/surface water seepage from excavations.
- Release of hydrocarbons during construction and the impact on groundwater and surface water quality which can ultimately deplete dissolved oxygen in the waters.
- Diversion, culverting and bridge crossing can result in morphological changes to the drainage patterns of watercourses, interfere with water flows and quality.

7.5.26. In general, the impact of an increase in suspended sediment load will result in increased turbidity which could affect the water quality and fish stocks downstream water bodies.

7.5.27. In the interest clarity and considering a precautionary approach, I have assessed the impact of the proposal all those habitat and species listed in this SAC, as summarised in the table below.

#### Mitigation Measures

7.5.28. Mitigation measures are required to prevent any impact on the identified qualifying features of interest in the European Sites. Details of all mitigation measures are included in Section 5.0 of the NIS. These have also been detailed throughout the EIAR and included in the CEMP. Specific mitigation measures are proposed during construction and operation.

7.5.29. During construction mitigation is proposed by avoidance and design as summarised:

- 50m buffer zones around all watercourses to ensure adequate space is maintained to prevent the entry of suspended sediment from earthworks/construction into the watercourse.
- Use of source controls (inceptor drains, vee-drains, diversions drain, sandbags, filter fabrics etc) to restrict sediment movement.
- Use of small working area, covering stockpiles, weathering stockpiles to prevent sediment run-off.
- In-line controls proposed include those source controls and silt bags/ fences. Collection sumps, temporary sumps, sediment traps settlement ponds.
- Settlement systems will be used to ensure the treatment of sediment before any surface water can flow downstream.
- No direct discharge (without treatment for sediment reduction, and attenuation for flow management) before runoff to the drainage network.
- Drains running parallel to existing roads will be widened and upgraded with velocity and silt control measures.

7.5.30. Details of all prevention control measures are specified along with pre-emptive site drainage management measures. Monitoring will be undertaken as per the CEMP.

7.5.31. I note those mitigation measures proposed which I consider are appropriate to prevent an increase in sedimentation in the surface waters. The proposed mitigation measures in relation to construction and protection of water quality are well established and in line with best practice development and the protection of water courses. I also consider that the proposed construction methodologies and details supplied are sufficiently comprehensive to remove any lack of clarity regarding the potential for adverse effects to arise.

7.5.32. I note no reference to an Ecological Clerk of Works (EcOW) during mitigation and monitoring although included in the CEMP. I consider the inclusion of a EcOW can ensure that the location of the preventative measures is at the optimum location to prevent any sedimentation of surface waters and ensure those construction methods are in keeping with the NIS. It is reasonable to include this as a condition on any grant of permission.

#### Submissions

7.5.33. Kerry County Council refused the proposal for the potential impact on the water quality downstream, the Lough Leanne catchment and ultimately the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC. The Environment Section Report refers to the potential negative impact on the qualifying species within the SAC and specifically refer to the sensitive species such as Atlantic Salmon and Fresh Water Pearl Mussel.

7.5.34. As stated above I have undertaken an assessment on the potential impact to the Fresh Water Pearl Mussel. Whilst I acknowledge that this specific is susceptible to impacts from increase sedimentation, the Board will note that the local population is located within a separate catchment (Cummeragh, Cappal and Isknagahiny Lough Rivers of the Currane catchment). This aside, mitigation measures to control the release of sedimentation into the watercourse is considered to be acceptable.

7.5.35. The impact on the Atlantic Salmon is also similar as this species is susceptible to negative impacts from impacts to water quality. I am satisfied that those mitigation measures included in the proposal to control the release of sedimentation and hydrocarbons from construction activities will ensure the protection of water quality downstream.



Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365]

Source content: (accessed 11<sup>th</sup> of August 2023) [Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC | National Parks & Wildlife Service \(npws.ie\)](#)

Qualifying Interest Feature	Conservation Objectives Targets and Attributes	Potential Adverse effects	Mitigation measures	In combination effects	Can Adverse effects on integrity be excluded?
Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110]	To <b>restore</b> the favourable conservation condition of.....:	Y- Pathway between the site and habitat via surface water. Lough Guitane is the closest mapped lake. Pressures such as eutrophication, overgrazing, forestry and peat-cutting may have reduced vegetation depth in some lakes. Dissolved and organic carbon (OC) can increase the DOC.	Y- The prevention of sedimentation of the watercourse will prevent a negative impact on the water quality. A summary of the mitigation measures is listed above	None arising post mitigation	Yes
Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea [3130]	To <b>restore</b> the favourable conservation condition of.....:	Y- Pathway between the site and habitat via surface water. Muckross Lake is the closest mapped lake. Pressures such as eutrophication, overgrazing, forestry and peat-cutting may have reduced vegetation depth in some lakes. Dissolved and organic carbon (OC) can increase the DOC.	Y- The prevention of sedimentation of the watercourse will prevent a negative impact on the water quality. A summary of the mitigation measures is listed above	None arising post mitigation	Yes

Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation [3260]	To <b>maintain</b> the favourable conservation condition of.....:	Y- Pathway between the site and habitat via surface water. These habitats support those aquatic species of qualifying interest listed in the SPA. The rivers require good hydrochemistry.	Y- The prevention of sedimentation of the watercourse will prevent a negative impact on the water quality and reduce water pollution. A summary of the mitigation measures is listed above	None arising post mitigation	Yes
Northern Atlantic wet heaths with Erica tetralix [4010]	To <b>restore</b> the favourable conservation condition of.....:	No pathway between the subject site and no potential for adverse effects to this habitat due to the location on hillsides of the SAC combined with the nature of the QI and character of the proposed development.	N/A	None arising – no likely significant in-combination effects	Yes
European dry heaths [4030]	To <b>restore</b> the favourable conservation condition of.....:	No direct habitat removal from the site or likely indirect impact on the habitat.	N/A	None arising – no likely significant in-combination effects	Yes
Alpine and Boreal heaths [4060]	To <b>restore</b> the favourable conservation condition of.....:	No direct habitat removal from the site or likely indirect impact on the habitat.	N/A	None arising – no likely significant in-combination effects	Yes
Juniperus communis formations on heaths or calcareous grasslands [5130]	To <b>maintain</b> the favourable conservation condition of.....:	No direct habitat removal from the site or likely indirect impact on the habitat.	N/A	None arising – no likely significant in-combination effects	Yes

Calaminarian grasslands of the <i>Violetalia calaminariae</i> [6130]	To <b>maintain</b> the favourable conservation condition of.....:	No direct habitat removal from the site or likely indirect impact on the habitat.	N/A	None arising – no likely significant in-combination effects	Yes
Molinia meadows on calcareous, peaty or clayey-silt-laden soils ( <i>Molinion caeruleae</i> ) [6410]	To <b>restore</b> the favourable conservation condition of.....:	No direct habitat removal from the site or likely indirect impact on the habitat.	N/A	None arising – no likely significant in-combination effects	Yes
Blanket bogs (* if active bog) [7130]	To <b>restore</b> the favourable conservation condition of.....:	No direct habitat removal from the site or likely indirect impact on the habitat.	N/A	None arising – no likely significant in-combination effects	Yes
Depressions on peat substrates of the <i>Rhynchosporion</i> [7150]	To <b>restore</b> the favourable conservation condition of.....:	No direct habitat removal from the site or likely indirect impact on the habitat.	N/A	None arising – no likely significant in-combination effects	Yes
Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]	To <b>restore</b> the favourable conservation condition of.....:	No direct habitat removal from the site or likely indirect impact on the habitat.	N/A	None arising – no likely significant in-combination effects	Yes
Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> ( <i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i> ) [91E0]	To <b>restore</b> the favourable conservation condition of.....:	No direct pathway. Potential indirect impact on the water quality.	Mitigation measures will ensure no decline in the woodland structure or the hydrological regime necessary for the maintenance of the forest.	None arising – no likely significant in-combination effects	Yes

Taxus baccata woods of the British Isles [91J0]	To <b>restore</b> the favourable conservation condition of.....:	No direct habitat removal from the site or likely indirect impact on the habitat.	N/A	None arising – no likely significant in-combination effects	Yes
Geomalacus maculosus (Kerry Slug) [1024]	To <b>maintain</b> the favourable conservation condition of.....:	A Kerry Slug Survey Report and Management Plan was submitted as part of a further information request. No species was detected and the proposed development will not have an indirect impact on this species.	N/A	None arising – no likely significant in-combination effects	Yes
Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]	To <b>restore</b> the favourable conservation condition of.....:	(As per Map 8 of the SSCOs (NPWS 2017), the Conservation Objective population is located in a separate catchment (Caragh River catchment) and no source-pathway-receptor chain was identified).	N/A	None arising – no likely significant in-combination effects	Yes
Euphydrias aurinia (Marsh Fritillary) [1065]	To <b>restore</b> the favourable conservation condition of.....:	Map 9 of the SSCOs (NPWS 2017)).	N/A	None arising – no likely significant in-combination effects	Yes
Petromyzon marinus (Sea Lamprey) [1095]	To <b>maintain</b> the favourable conservation condition of.....:	Yes - Potential for effects on juveniles, spawning habitat and water quality arising from excessive sedimentation and discharges during construction activities in relation to Sea Lamprey, Brook Lamprey, River Lamprey and Salmon.	Y- The prevention of sedimentation of the watercourse will prevent a negative impact on the water quality. A summary of the mitigation measures is listed above	None arising post mitigation	Yes
Lampetra planeri (Brook Lamprey) [1096]					
Lampetra fluviatilis (River Lamprey) [1099]					
Salmo salar (Salmon) [1106]					

Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303]	To <b>maintain</b> the favourable conservation condition of.....:	No- (As per Map 10 of the SSCOs (NPWS 2017) the EIAR Study Area is located outside the core foraging range (2.5km) of Lesser Horseshoe Bat (NPWS, 2013)).	N/A	None arising – no likely significant in-combination effects	Yes
Lutra lutra (Otter) [1355]	To <b>maintain</b> the favourable conservation condition of.....:	N- No instream works are proposed and there will be no impact on any connectivity along the watercourse. There was no recorded sighting of the otter during the site survey. Construction will be restricted to daytime hours.	N- only those relating to the protection of water quality.	None arising – no likely significant in-combination effects	Yes
Trichomanes speciosum (Killarney Fern) [1421]	To <b>maintain</b> the favourable conservation condition of.....:	No pathway for effect was identified.	N/A	None arising – no likely significant in-combination effects	Yes
Najas flexilis (Slender Naiad) [1833]	To <b>maintain</b> the favourable conservation condition of.....:	No pathway for effect was identified.	N- only those relating to the protection of watercourses.	None arising – no likely significant in-combination effects	Yes
Alosa fallax killarnensis (Killarney Shad) [5046]	To <b>restore</b> the favourable conservation condition of.....:	No pathway for effect was identified.	N/A	None arising – no likely significant in-combination effects	Yes

**Overall conclusion: Integrity test**

Following the implementation of mitigation, the construction and operation of this proposed development will not adversely affect the integrity of the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC, either alone or in combination is European site and no reasonable doubt remains as to the absence of such effects.

## Assessment and Conclusion

- 7.5.36. I have had regard to the information contained in the submitted NIS, the NPWS Site Synopsis for each site and the threats and pressures to the habitats and species and I am satisfied that there would be no direct impacts on the SAC because of the proposed works. The potential for indirect effects because of construction- water pollution from the unmitigated release of fine sediments in runoff during construction work and hydrocarbons by way of accidental spillages from machinery; can be adequately mitigated using surface water and drainage management and the appointment of a Project Ecologist to oversee works.
- 7.5.37. Following the implementation of mitigation, the construction and operation of this proposed development I am satisfied the proposed development will not adversely affect the integrity of the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC, either alone or in combination is European site and no reasonable doubt remains as to the absence of such effects.
- 7.5.38. **Mullaghanish to Musheramore Mountains SPA [004162]**
- 7.5.39. The Mullaghanish to Musheramore SPA is located to the south of the site. This European Site lists the Hen Harrier as the only qualifying species of interest. A Stage II assessment was undertaken having regard to the location of the site beside the subject site. Bird Surveys undertaken in the EIAR study area did not record any presence of Hen Harrier and therefore a dedicated species survey was not required. A summary of the potential impact on the Hen Harrier is detailed below.
- 7.5.40. I note the conservation objectives for this European Site and the location, nature and scale of the works proposed and I do not consider there is a potential for any impact on the Hen Harrier. The NIS includes an assessment of the potential residual impacts and considers in-combination impacts. There was no pathway identified for adverse effects on the conservation condition of the hen harrier associated with the proposed development. I do not consider there is any potential for either direct or indirect impacts as a result of the proposed development.
- 7.5.41. Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the Mullaghanish to Musheramore Mountains SPA

[004162], or any other European site, in view of the site's Conservation Objectives. This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.

7.5.42. This conclusion is based on:

- A full and detailed assessment of all aspects of the proposed project in relation to the Conservation Objectives (Hen Harrier) of the Mullaghanish to Musheramore Mountains SPA [004162]
- Detailed assessment of in combination effects with other plans and projects including historical projects, current proposals, and future plans.
- No reasonable scientific doubt as to the absence of adverse effects on the integrity of the Mullaghanish to Musheramore Mountains SPA [004162]

Mullaghanish to Musheramore Mountains SPA [004162]

Source content: (accessed 11<sup>th</sup> of August 2023): [Mullaghanish to Musheramore Mountains SPA | National Parks & Wildlife Service \(npws.ie\)](https://www.npws.ie/en/our-work/our-work-areas/nature-conservation/protected-areas/mullaghanish-to-musheramore-mountains-spa)

Qualifying Interest Feature	Conservation Objectives Targets and Attributes	Potential Adverse effects	Mitigation measures	In combination effects	Can Adverse effects on integrity be excluded?
Hen Harrier (Circus cyaneus) [A082]	To <b>restore</b> the favourable conservation condition of the Hen Harrier in Mullaghinish to Musheramore Mountains SPA	N- The site is located entirely outside the subject site. No potential adverse effects are envisaged as the works are mainly to commercial forestry plantation will be short term and no recorded sighting of the Hen Harrier during surveys.	None required	A range of plans and projects (including the permitted development Reg Ref 19/4972 and other wind developments) have been assessed had there is no potential for any in-combination effects.	Yes

**Overall conclusion: Integrity test**

Following the implementation of mitigation, the construction and operation of this proposed development will not adversely affect the integrity of the Mullaghanish to Musheramore Mountains SPA, either alone or in combination is European site and no reasonable doubt remains as to the absence of such effects.



#### 7.5.43. **Appropriate Assessment Conclusion**

- 7.5.44. The proposed 33kV grid connection and associated works has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act 2000 as amended. Having carried out screening for Appropriate Assessment of the project, it was concluded that it may potentially have a significant effect on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365] and Mullaghanish to Musheramore Mountains SPA [004162]. Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of that site in light of its conservation objectives.
- 7.5.45. Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the European site Code No. 000365 or No. 004162, or any other European site, in view of the site's Conservation Objectives. This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.
- 7.5.46. This conclusion is based on:
- A full and detailed assessment of all aspects of the proposed project including proposed mitigation measures and ecological monitoring in relation to the Conservation Objectives of the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365] and Mullaghanish to Musheramore Mountains SPA [004162].
  - Detailed assessment of in combination effects with other plans and projects including historical projects, current proposals, and future plans.
  - No reasonable scientific doubt as to the absence of adverse effects on the integrity of the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365] and Mullaghanish to Musheramore Mountains SPA [004162].

## 8.0 Environmental Impact Assessment

### 8.1. Legislation and Introduction

8.1.1. This application was submitted to the Board after 1st September 2018 and therefore after the commencement of the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 which transpose the requirements of Directive 2014/52/EU into Irish planning law.

- Schedule 5, Part 1 and Part 2 of the Planning and Development Regulations 2001, as amended set out the classes of development for the purposes of EIA.
- Section 20 of Part 1 provides that a mandatory EIAR is required for the 'Construction of overhead electrical power lines with a voltage of 220 kilovolts or more and a length of more than 15 km'.

8.1.2. Section 3(b) of Part 2 provides that a mandatory EIAR is required for 'Industrial installations for carrying gas, steam and hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables not included in Part 1 of this Schedule, where the voltage would be 200 kilovolts or more'.

8.1.3. The proposed development of a 33kV underground cabling and connection to the existing 110kV line would not come within the projects outlined within either Annex I or Annex II to Directive 2011/92/EU as amended by 2014/52/EU nor is it a class as set out in either Part 1 or Part 2 of Schedule 5 (Planning and Development Regulations 2001, as amended) and therefore a mandatory EIAR is not required.

8.1.4. The proposal is linked to the delivery of permitted development Reg Ref 19/4972 which comprises of 7 no turbines, solar panels and associated works. Amendments to this permitted development Reg Ref 19/4972 are included in the concurrent SID application to align with this electricity connection. Accordingly, the proposed development which constitutes the provision of an electrical substation and grid connection forms part of a larger renewable energy development (windfarm) at this location and falls within a class of development in Schedule 5, Part 2 (3) (1) wind

farms with more than 5 turbines or having a total output of greater than 5 megawatts and accordingly an EIA is required for the proposed development.

8.1.5. The applicant has submitted an EIAR with the application. The EIAR includes the 110kV connection and substation within the study area. This proposed 110kV connection is currently on appeal before the Board (ABP 314275-22) and was accompanied by an EIAR and NIS. The EIAR “study area’ extends beyond the application site boundary depending on the requirements of individual assessments and is larger the combined proposed development and 33kV cabling and substation. I have had regard to the impact of the cumulative impact of those works in the overall study area, where necessary, and the permitted development by Cork County Council (Reg Ref 19/4972), further detailed below.

8.1.6. I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality, and that the information contained in the EIAR and supplementary information provided by the applicant adequately identifies and describes the direct, indirect and cumulative effects of the proposed development on the environment and complies with all relevant requirements. I have carried out an examination of the information presented by the applicant, including the EIAR, and the written submissions.

## 8.2. **Consideration of Reasonable Alternatives**

8.2.1. Chapter 3 deals with the site selection and consideration of alternatives. In line with the EPA Guidance (EPA, 2022) the applicant provided 8 alternatives to the proposal:

- Do Nothing Option
- Alternative locations;
- Alternative layout Arrangement Options;
- Alternative Grid Connection Options;
- Road Layout;
- Location of Ancillary Structures,
- Alternative Mitigation Measures

### Do Nothing Option

- 8.2.2. Without the grid connection the proposed wind farm could not proceed. The long-term effect would be a reduction in renewable energy supply to the national grid. The do nothing alternative has been assessed against environmental criteria. It is considered the do something and development of the permitted development and proposed development would have greater long-term positive impacts on the environment.

#### Alternative Locations

- 8.2.3. The proposed development will facilitate the permitted development. The permitted wind farm needs to connect into the Ballyvouskil 220kV substation and any alternative locations will require the redesign, land acquisition etc. Environmental assessments also demonstrate the location will have no demonstrable harm to the environment.

#### Alternative Grid Connection Options

- 8.2.4. Two underground grid connection options were assessed. The permitted development application was accompanied by an EIAR and included a connection, to the national grid, via an on-site 38kV substation to the existing Garrow 110kV substation. The grid connection offer permits a connection to the Ballyvouskil 220kV substation. The applicant notes this option is required by the electricity board.
- 8.2.5. There was insufficient space to accommodate the 110kV substation within the permitted development. This substation will be screened by forestry.
- 8.2.6. Two 110kV cable route options were assessed. Option 1 was along the forestry and public roads (c.5.7km) and Option 2 was along the forest roads/land and agricultural lands (c. 3.6km). No dwellings were impacted by Option 2 and there was less dust emissions and noise impacts from construction, this was considered the most optimal route.
- 8.2.7. Two potential 33kV route options were assessed. Option A is along existing farm tracks/ permitted roads in the area of permitted road, then off road to the 100kV substation. Option B leaves the permitted development and goes in an easterly direction along a combination of existing road within the adjacent wind farm site and existing forestry tracks. Option B requires widening and upgrade of roads, 9 no extra

watercourse crossings and landowner consents. Option A was considered the most optimal options.

#### Road Layout

- 8.2.8. Options to build a new road network were assessed against the use and upgrade the existing roads. It was considered the environmental impacts of new roads was considered more significant. The EIAR also notes the options considered for the turbine delivery route in the permitted development (Reg Ref 19/4972) as from the east via the R582 and the L5226 and from the N22 (current proposal). It was deemed the N22 was more suitable for abnormal load due to the quality of the road and the need for less upgrades.

#### Location of ancillary structures.

- 8.2.9. Alternative locations for the borrow pits and options for transporting materials into the site were considered. The environmental impacts of were considered. The transporting of materials was considered a greater impact, rather than extending the borrow pit.

#### Alternative Mitigation Measures

- 8.2.10. Additional options for road layouts, alternative locations for the borrow pits and mitigation measures have been considered. The choice and location of infrastructure and mitigation are such to avoid any environmentally sensitive areas to impacts.

#### Conclusion

- 8.2.11. The EIAR concluded that the proposed development represents the optimum solution taking into account access to land, cost and environmental effects. Having examined the alternatives and the options proposed I am satisfied the applicant has considered sufficient alternative and concur with the proposal as the optimum route.

### **8.3. Description of Project**

- 8.3.1. The proposed development has been detailed in Section 3.0 above and is summarised as follows:

- 110 kV electrical substation with 2 no. control buildings with welfare facilities, all associated electrical plant and apparatus, security fencing, underground cabling, waste water holding tank and all ancillary works;
- Underground electrical cabling (110kV);
- New access roads;
- Borrow pit;
- Site Drainage;
- Forestry Felling; and
- All associated site development works and apparatus

#### 8.3.2. Cork County Council – Planning Notice Project Description

- Underground electrical cabling (33kV);
- Access roads (new and upgrade of existing);
- Amendments to the Permitted Development (Ref. No. 19/4972), including extension to the borrow pit and the omission of the 38kV Electrical Substation, 38KV underground cabling and Battery Storage compound;
- Site Drainage;
- All associated site development ancillary works and apparatus

#### 8.3.3. Kerry County Council – Planning Notice Project Description

- Underground electrical cabling (33kV);
- Upgrade of access junctions;
- Access roads (new and upgrade of existing);
- Temporary access road;
- Borrow pit;
- Site Drainage;
- Forestry Felling; and
- All associated site development works and apparatus.

8.3.4. The EIA details the different components of the project and identifies and summarises the likely significant effects of the proposed development on the environment with respect to several key receptors in the receiving environment. It identifies the main mitigation measures and any residual impacts following the implementation of these measures. I have assessed the EIAR under the same headings as presented for ease of reference.

8.4. **Population & Human Health**

Chapter 5 deals with Population & Human Health. Population trends of the state and local area have been provided. The study area (14 persons per km<sup>2</sup>) is in an area which has a significantly lower than national density (70 persons per km<sup>2</sup>). The EIAR assesses five DEDs within the study area (c. 15,000ha) and notes 331 farms employing c. 646 persons. There are tourist attractions within a 20km area, although not within the study area. There are 3 no occupied dwellings within 500m from the proposed development. The closest dwelling is 157m to the north of the proposed road upgrade works at the nearest point and the closest dwelling to the 110kV substation is c.2.2km.

Submissions	Concerns raised
None	None
Potential Impacts	Assessment and Mitigation measures
<i>Construction Phase</i>	
Health & Safety of works during construction.  Increase in need of skilled employees and specialists.  Increase in noise levels because of heavy machinery.	Compliance with all health and safety legislation.  Mitigation measures to restrict hours of deliveries, noise muffling equipment etc will prevent any significant impact.  Minimal transportation of material to the site, and use of onsite aggregate

<p>Impact on nearby residential properties due to dust emissions from extraction and movement of materials.</p>	<p>materials. Use of best practice measures including, dust suppression will reduce any impacts. There is limited impact due to the absence of properties in the vicinity. The impact will be imperceptible due to those mitigation measures to prevent excessive dust emissions.</p>
<p><i>Operation Phase</i></p>	
<p>The electric and magnetic fields associated with the operation of the cable.</p> <p>Impact on residential amenity by way of noise, dust, visual and traffic impacts</p>	<p>Compliance with all international guidelines set by the international Commission on Non-Ionising Radiation Protection (ICNIRP). Monitoring of sites to ensure access is restricted and warning signs are maintained.</p> <p>Detailed assessments in Chapter 10 (noise) 12 (Visual) and 13 (Traffic) highlight mitigation during construction. The operation will have no negative impact.</p>
<p><b>Residual Effects</b></p>	
<p>There will be some increase in noise, dust &amp; emissions during construction and mitigation but not significant due to the implementation of mitigation measures</p>	
<p><b>Cumulative Effects</b></p>	
<p>Cumulative effects of the proposed and permitted developments (wind farm) are detailed in Chapter 2 with minor impacts on population &amp; human health relating to the noise, landscape &amp; visual and traffic, none are predicated to be significant during operation.</p>	
<p><b>Conclusion</b></p>	



No written submissions were made in relation to population & human health. I am satisfied that any impacts identified in this section of the report have been appropriately addressed in terms of the application and that no significant adverse effect on population & human health is likely to arise

## 8.5. Biodiversity

Chapter 6 deals with Biodiversity. An Ecological Impact Assessment informed the assessment. Detailed surveys on habitats, bats, and aquatic species were undertaken. A Kerry Slug Report and Management Plan was submitted as part of a further information request.

The main habitats throughout the site relate to a mosaic of degraded heath/ upland blanket bog, existing forestry tracks and conifer plantation. Detailed habitat maps illustrate the existing habitats in conjunction with the proposed development and the lands included for the concurrent application, 110kV grid connection and substation. Seven watercourses are in the entire study area.

The likely zone of impact includes the Kilarney National Park, Magillicuddys Reeks and Caragh River Catchment SAC (000365). The impact on designated sites is detailed and an NIS accompanied the application (further detailed in Section 11 below) and includes the potential impacts on this European site, *inter alia*, and Mullaghanish to Musheramore mountains SPA (004162).

Submissions	Concerns raised
Kerry County Council	Potential impact on sensitive habitats within the watercourse such as Atlantic Salmon and Fresh Water Pearl Mussel.
Potential Impacts	Assessment and Mitigation measures
<i>Construction Phase</i>	
Habitat loss or deterioration	Potential impact upland Blanket bog (PB2), wet heath (HH3) as areas of high biodiversity. These are located immediately beside the cabling route



Impact on Birds/ Hen Harrier	<p>possible during construction would not lead to any long-term negative impacts.</p>
Impact on Kerry Slug	<p>No observations of the Hen Harrier were recorded during the bird surveys.</p> <p>A Kerry Slug Survey Report and Management Plan accompanied the application was submitted following an FI request. Five Kerry Slugs were recorded in metric traps in conifer plantations adjoining the grid connection route and none within the proposed route. A Kerry Slug management plan has been drawn up, in consultation with the NPWS, to prevent any impact. These include a series of pre-construction measures (site surveys), prevention during construction and identification of habitat enhancement areas. I am satisfied with the results in the survey and consider the management plan would prevent any significant negative impact on the Kerry Slug.</p>
Impact on badger	<p>The desk study identified the potential for badger in the study area. Cork and Kerry CC submissions on the concurrent application (ABP 314275-22) refer to the protection of the badger and require protection plans. The EIAR did not elaborate on further badger surveys. The habitat on site comprises of conifer forestry and upland mosaic. The ideal habitat for badger is a mixture of deciduous or mixed woodland and open country. The habitat is not ideal, and no impacts are proposed. This aside mitigation measures in the form of protection plans can ensure no potential impact.</p> <p><i>Rhododendron ponticum</i> was recorded within the EIAR Study Area boundary. Invasive species</p>

Spread of Invasive Species	encountered within the EIAR Study Area are shown below in Figures 4-1G and 4-1H. No works are proposed in the vicinity of these invasive species.
<i>Operation Phase</i>	
No impacts identified.	
<i>Decommissioning phase</i>	
It is not proposed to remove the cabling and following the lifespan of the permitted development it is envisaged the substation infrastructure will be an integral part of the electricity network. No impacts are identified.	
<b>Residual Effects</b>	
No significant residual effects	
<b>Cumulative Effects</b>	
An assessment of all plans and projects in the vicinity of the site indicates no cumulative impact. The cumulative impact of loss or deterioration of habitats and species is not considered significant due to the low biodiversity value. The overall connection (including the 110kV) is included in the study area and surveys and assessment relate to the entire network. An EIAR accompanied the application for the permitted development which concluded no significant impacts on the biodiversity of the site, <i>inter alia</i> , ecology and birds.	
<b>Conclusion</b>	
I have considered all the written submissions made in relation to biodiversity, in addition to those specifically identified in this section of the report. I am satisfied that they have been appropriately addressed in terms of the application and the further information request and that no significant adverse effect is likely to arise.	

## 8.6. Lands, Soils & Geology

Chapter 7 deals with land, soils and geology. The site comprises mostly of forestry on blanket bog and is accessible via a network of farm tracks and forestry roads.

The site is elevated and ranges from c. 255 to 530m OD. It is orientated east – west along the side of a mountain range and slopes north to south from the central ridgeline. The proposed 110kV line is mainly along forestry tracks while the 38kV route is along the south facing slopes of Derrynsaggart Mountain. The substation and borrow pits are on lands which has been subject to forestry feeling. Trial hole investigations indicate a range of peat depths between 0.5m and 3.25m with the average depth recorded at 0.85m. 92% of peat depths are recorded at less than 2.0m.

The cabling will require the removal of peat and subsoil and there will be c. 22.3ha of trees felled. 41,500m<sup>3</sup> of rock is available from the borrow pit and 20,000m<sup>3</sup> from the excavation of the substation. A further 18,000m<sup>2</sup> from the permitted development borrow pit indicates a total volume for fill at 79,500m<sup>3</sup>. The total volume of material requiring placement/reinstatement is 98,500m<sup>3</sup>. The remaining spoil will be used for landscaping.

Appendix 7.1 includes a Geotechnical and Peat Stability Assessment Report. The results from the assessment indicate a Factor of Safety (FoS) of the load capacity of the site in both the drained analysis and the undrained analysis is recorded as low risk to peat stability.

Submissions	Concerns raised
Kerry County Council	No specific comments on the Geotechnical elements of the application (soil & geology) including peat stability should be evaluated for potential impact on water quality downstream.
Potential Impacts	Assessment and Mitigation measures
<i>Construction Phase</i>	
Reduction in land take for the 33Kv cable.	There will be a negative impact on land take due to the reduction in agricultural land take. The actual impact will be slight as it is minimal for the 110Kv (600m).

<p>Reduction of peat due to road upgrade, additional access road and borrow pits.</p>	<p>The excavation of peat and subsoil during construction will involve the reuse of excess material on site. The granular peat and soil are of low value and the work will have no significant impact. The impact on peat will be slight, negative and permanent mitigated by the amount of habitat remaining and the reuse of soils within the proposal.</p>
<p>Contamination of soil by leakages</p>	<p>Hydrocarbon spillage during construction will be eliminated using mitigation measures during construction.</p>
<p>Erosion of subsoil during construction</p>	<p>The peat depth along the cable route and throughout the entire EIAR study area is relatively low. A small number of trial holes investigations recorded peat depth over 2.0m although these are mainly outside the proposed development works (Fig 7.3). Geotechnical investigation and stability assessments undertaken by experts conclude that there is a low FoS for an instability. There is a low risk of peat failure and control measures are not envisaged.</p>
<p><i>Operation Phase</i></p>	
<p>Erosion of subsoil due to the movement of vehicles to maintain the substations.</p>	<p>There is a potential for a slight negative impact from the movements of vehicles. The use of the CEMP will ensure there are no accidents spills, and the substation transformer will include a concrete banded area and stored oil volume. Vehicles will use the tracks upgrades/ built during construction and will not cause any negative impact.</p>
<p><i>Decommissioning phase</i></p>	

The electricity infrastructure will be left in place and roads associated with the permitted development will be left for forestry access

### **Residual Effects**

Peat and soils can be eroded by vehicle movements, wind action etc. The use of a Peat and Spoil Management Plan will implement measures to remove residual effects.

### **Cumulative Effects**

The cumulative impact of land works for both the 33kV and 110kV line and substation are detailed and assessed in the EIAR. Reference to the borrow pit and spoil volume from the permitted development is included in the EIAR and assessment. The PA carried out an EIA of the permitted development (Reg Ref 19/4972) and found no significant issues about the land, soils and water, I note the EIAR submitted with the permitted development included a Peat and Spoil Management Plan and the Peat Stability Assessment .

### **Conclusion**

I have considered all the written submissions made in relation to land, soil & water, in addition to those specifically identified in this section of the report. I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.

## **8.7. Hydrology & Hydrogeology**

Chapter 8 deals with Hydrology and hydrogeology. The study area is 631 ha and located between two regional surface water catchments in the Southwestern River Basin District (SWRBD). The 33kV cable are in the Laune River SWBD and the 110kV cable is in the River Lee SWBD.

In terms of sub catchment, the Flesk River sub-catchment (Felsk(Kerry)\_SC\_020) flows along the north of the proposed development, from east to west. The 2019 WFD report on this catchment <sup>4</sup> notes some areas at risk due to abstractions and potential quarry and waste impacts along the south. In the River Lee sub

<sup>4</sup> [Subcatchment Assessment \(catchments.ie\)](http://catchments.ie)

catchment, the site is in the Foherish\_SC\_010 (c. 5.5km downstream) and Sullane\_SC\_010 sub catchment (c. 4.5km downstream) both to the south of the proposed development. The ecological status of the Foherish is under pressure from windfarm development <sup>5</sup>. There are several tributaries connecting the site to these rivers.

There are 9 no. open watercourses along the offroad section of the 33kV cable (5 no mapped and 4 no. are drains). There are 2 existing culvert crossings near the proposed 110kV substation (one mapped and one a drain). There are 22 no watercourses along the 110kV line, one is mapped the rest are drains.

The existing forestry drainage pattern is most significantly influenced by topography. Mound drains and ploughed ribbon drains are spaced every 15m and 2m respectively. Culverts are located at stream locations. Forestry drains are primarily drained towards natural streams. Flows in higher elevated drains are noted to be slower.

Groundwater vulnerability ranges from High to Extreme along the full study area. There is low permeability of the Devonian bedrock aquifer and groundwater flow paths are likely to be short with recharge close to surface streams. There is low potential for groundwater dispersions and movement within the aquifer. The site is split between two groundwater bodies (GWB) Cahersiveen GWB (IE\_SW\_G\_022) and Ballinhassig West GWB (IE\_SW\_G\_005). The WFD study for the local groundwater body in terms of water quality is good.

Old Red Sandstones (ORS) are classified as a local important aquifer and having bedrock which is moderately productive. The coal bedrock comprises of sandstone and siltstone with low transmissivity and storeavity.

There are potential hydrological connections between the site and the Kilarney National Parks, Macgillycuddy Reeks and Caragh River Catchments SAC via the Flesk catchment (c. 1-2.5km upstream) and the Mullaghansih to Musheramore Mountains SPA. Groundwater flow seepage would flow north towards the Flesk River and there is also a potential groundwater path to the Mullaghansih to Musheramore Mountains SPA.

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<sup>5</sup> [Subcatchment Assessment \(catchments.ie\)](http://catchments.ie)



The proposed drainage will link with the existing forestry drainage network. There will be silt traps and settlement ponds during construction to control diffuse release into the drainage network and no direct discharge to the existing drains or watercourse. The works are in keeping with the best practice in wind energy infrastructure.

Sensitive receptors including dwellings, are mapped, and it is assumed that all dwellings have private wells. As stated above, the site has a potential hydrological connection to European Sites downstream.

<b>Submissions</b>	<b>Concerns raised</b>
Kerry CCC	<p>Recommendation for refusal of permission based on the potential impact of the proposal on the water quality downstream.</p> <p>Flesk (Kerry)_010 and the Flesk (Kerry)_020 waterbodies, the latter is considered at risk of achieving good status with hydro morphological issues identified as pressure.</p> <p>There are concerns about the risk to the water quality and the profile of the Lough Leane Catchment.</p>
<b>Potential Impacts</b>	<b>Assessment and Mitigation measures</b>
<i>Construction Phase</i>	
Deterioration of <b>water quality</b> downstream	<p>Local surface waters such as the Flesk River, Sullane River and Foherish River along with the downstream River Lee and Laune River can be considered very sensitive to potential contamination due to their fisheries potential and because all the above watercourses drain to downstream European Sites. Mitigation measures and controls included in the design include, <i>inter alia</i>, a 50m buffer area around all water course, upgrade of primary drainage measures and use of existing forestry drains, use of silt fences and settlement ponds. The water quality will be protected by ensuring the control of hydrocarbons.</p>



estimated at c. 0.03% average daily/monthly in comparison to pre-development run-off. This result also considers all surface to be impermeable which is not the case as many tracks are permeable stone aggregate. The Ecological Clerk of Works (EcoW) will inspect the site during operation to ensure all necessary mitigation measures are in place.

#### *Decommissioning phase*

The Decommissioning Plan (Appendix 4.7 of the EIAR) details the proposed works during decommissioning. The cabling will be pulled from the duct at each joint/ pull pit and fully reinstated. Access roads will be reused during decommissioning. Mitigation measures detailed above will be used during decommissioning and prevent any surface water, ground water degradation.

#### **Residual Effects**

The residual effect of tree felling will be negative, imperceptible, indirect, temporary, likely effect on downstream water quality and aquatic habitats. Mitigation measures will ensure the risk of release of sediments is reduced and break the pathway between potential sources and sensitive receptors.

#### **Cumulative Effects**

The cumulative impact of land works for both the 33kV and 110kV line and substation are detailed and assessed in the EIAR. Reference to the impact on the European sites is highlighted as a sensitive receptor and this has been further assessed in detail in the AA below. The PA carried out an EIA of the permitted development and found no significant issues about the hydrology or hydrogeology, I note the EIAR submitted with the permitted development included an assessment of the impact on the hydrology and hydrogeology.

#### **Conclusion**

I have considered all the written submissions made in relation to Hydrology and the Hydrogeology, in addition to those specifically identified in this section of the report. I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.

## 8.8. Air & Climate

Chapter 9 deals with Air and Climate.

The site is located c. 6km southwest of Millstreet and c. 3km to the northwest of Ballyvourney. The land use in the surrounding townlands is predominantly commercial forestry, wind development, peat extraction and low intensity agriculture. The air quality of the area (Zone D) is good and there are no major sources of air pollution. EPA reports on the Ozone (O<sub>3</sub>) and Carbon Monoxide (CO), Particle Matter (PM<sub>10</sub>) for Zone D and at this site are low.

The EIAR refers to the Climate Action Plan 2021 (CAP 2021). The plan supports the increase in renewable energy to targets of 80% by 2030. The national and regional support for renewable energy and associated grid infrastructure is translated into both the Kerry and Cork County Council, where there is no adverse impact on landscape of sensitive sites (further discussed elsewhere in the report).

Section 15 of the Climate Action and Low Carbon Development Act 2015 states. *A relevant body shall, in so far as practicable, perform its functions in a manner consistent with. (a) the most recent approved climate action plan, (b) the most recent approved national long term climate action strategy, (c) the most recent approved national adaptation framework and approved sectoral adaptation plans, (d) the furtherance of the national climate objective, and (e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.* The EIAR refers to the CAP 2021 and other relevant national guidance on climate change. I note this has been updated since the submission of the application with the adoption of the Climate Action Plan 2023 (the amended version of CAP 2021). This Plan seeks to reduce the State's greenhouse gas emissions by 51% by 2030. The renewable energy section can reduce a proportion of CHG reliance, and the plan includes a target of 9GW by 2030. The proposal includes a grid connection for a permitted renewable energy development which can support those targets set out in CAP 2023.

The carbon losses and savings for the renewable energy development were assessed in the original application (Reg Ref 19/4972). It is estimated that 36,577 tonnes of carbon dioxide will be displaced per annum.

Submissions	Concerns raised
None	
Potential Impacts	Assessment and Mitigation measures
<i>Construction Phase</i>	
Impact on the air quality from the construction traffic	<p>There is a potential negative, short-term impact on air quality from construction activity. The indicative construction schedule in the CEMP predicts the construction works over c. 2 years. The borrowing of cables and construction of sub-stations will require the operation of construction traffic. The movement of traffic during construction phase is not considered to emit a considerable amount of Green House Gases (CHG).</p> <p>Mitigation measures include the use of aggregate materials from the site, compliance with best practice construction measures and use of a Materials Recovery Facility (MRF) for recycling and recovery of waste.</p> <p>Dust emissions will be controlled through the best practice construction methods.</p>
<i>Operation Phase</i>	
Impacts on climate change and carbon emissions	<p>The proposed substation would serve to connect a permitted windfarm to the electricity grid which will contribute to the achievement of the achieve a climate neutral economy by no later than 2050. The proposal will have a long-term positive impact on carbon emissions by the reduction in CHG and meeting EU &amp; National targets.</p>
<i>Decommissioning phase</i>	

Short term negative impact on CHG emissions	The construction traffic associated with the decommissioning of the permitted development, the 33kV line and the 110kV line has been considered. The scale and nature of works will not have a significant impact and the main infrastructure will be retained for the national grid/ commercial forestry works.
<b>Residual Effects</b>	
No residual effects on air and climate are envisaged.	
<b>Cumulative Effects</b>	
The cumulative impacts of the proposal and the permitted renewable energy proposal will have a long-term, moderate, positive impact on air quality and climate. The national policy, in particular the Climate Action Plan 2023 promote the long-term delivery of renewable energy projects, and this objective is enshrined in regional and local policy.	
<b>Conclusion</b>	
I have considered all the written submissions made in relation to Air and Climate, in addition to those specifically identified in this section of the report. I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.	

## 8.9. Noise & Vibration

Chapter 10 deals with Noise & Vibration.

A baseline noise survey was undertaken in line with best practice. Three noise survey locations were used with 19 noise sensitive locations (NSLs) assessed. The site is mainly rural, and those sensitive receptors are mostly one-off dwellings. Average baseline noise levels ranged from 50 dB  $L_{Aeq}$  (along the N22) to 36 dB  $L_{Aeq}$ .

The noise emission levels from typical machinery plant were used to assess the impact on the NSLs. The closest NSL to the 110kV substation is 820m. A worst-case scenario is used for all assessments and a level of 45 dB  $L_{Aeq, T}$  (T:8 hrs over a 12-hr assessment period).

One NSL is located within 200m of the proposed temporary road (35m). The highest predicted noise level during construction at the edge of the works is 62 dB  $L_{Aeq, T}$ . One NSL is located 160m from the access road. Noise levels from construction activity are predicted at 49 dB  $L_{Aeq, T}$ . Noise levels from Forestry Felling is predicted to cumulatively be 52 dB  $L_{Aeq, T}$  at the nearest NSL (150m).

Two scenarios for the construction of the borrow pits have been assessed. Scenario A: blasting and Scenario B: rock breaking. Blasting will be undertaken over a 9–12-week period (10- 15 blasts in total). The noise levels at all NSL have been provided. The blasting proposal generates the lowest noise level, both are within the relevant construction guidance (65 dB  $L_{Aeq, T}$ ).

Submissions	Concerns raised
None submitted	
Potential Impacts	Assessment and Mitigation measures
<i>Construction Phase</i>	
Impact residential amenities during construction phase.	<p>The impact of noise and vibration on sensitive receptors has been considered as moderate and short term. Noise levels during construction phase are within the best practice guidance for day and night, which I consider reasonable to ensure no significant negative impact. The impacts on the NSL are short term during construction with no significant noise generated during operational phase.</p> <p>Any potential impact will be short term and moderation, mitigated by measures during construction works which include noise</p>

	abatement measures, restriction of hours of blasting, selection of plant etc and adherence to an agreed CEMP.
<i>Operation Phase</i>	
The noise generated from the substation is predicted to be 93 dB (A) L <sub>w</sub> (power level) with the level of noise at the closest NSL at 18 dB L <sub>Aeq, T</sub> . This level is well below the appropriate guidance <sup>6</sup> .	
<i>Decommissioning phase</i>	
Mitigation measures in relation to decommissioning will be the same as those proposed or the construction phase.	
<b>Residual Effects</b>	
Impacts predicted to be minor subject to implementation of mitigation measures.	
<b>Cumulative Effects</b>	
The analysis presented in the EIAR includes consideration of the cumulative impact of noise in conjunction with the permitted wind farm. I consider this analysis is acceptable and agree that the potential cumulative impacts would not result in an exceedance of the noise limits prescribed under Ref. 19/ 4972	
<b>Conclusion</b>	
No written submissions were made in relation to noise & vibration. I am satisfied that any impacts identified in this section of the report have been appropriately addressed in terms of the application and that no significant adverse effect on the noise & vibration is likely to arise.	

## 8.10. Archaeology & Cultural Heritage

Chapter 11 deals with Archaeology and Cultural Heritage.

An Archaeological Assessment was undertaken using a desktop analysis of the national and local inventory and a walkover survey/ field works associated with the

<sup>6</sup> BS 8233:2014 Guidance on Sound Insulation and Noise Reduction for Buildings



permitted wind farm (Reg Ref 19/4972). The assessment has regard to both the public database and newly recorded archaeological monuments (walkover survey). Excavations recorded under [www.excavations.ie](http://www.excavations.ie) where also noted.

The “Papa” archaeological landscape area is located to the north of the site. The nearest recorded monument to the 110kv cable route is a five stone circle (CO048-056) c. 455m to the north of the site. One recorded monument (KE076-086) is located c.77m to the east of the new access road. The nearest National Monument is located c. 3.9km to the east of the proposed 110kv cable routes. The nearest recorded “newly recorded archaeological monument” is a possible standing stone situated c. 2.1km to the west of the proposed 110kv substation.

The nearest NIAH or Record of Protected Structures (RPS) is the Cloghboola National School (1802) located c. 2,4km to the north-east of the eastern end of the proposed route and Ballyvourney Bridge (RPS 00366) (NIAH Reg 20905805) located c. 3.4km to the south-east.

A portion of the EIAR study area is in the Gaeltacht area (Múscraí Gaeltacht).

Submissions	Concerns raised
County Archaeologist (KCC)	Further information submission on pre-development archaeological testing, archaeological potential of watercourse and impact on the Paps archaeological landscape.
Potential Impacts	Assessment and Mitigation measures
<i>Construction Phase</i>	
Impact on the unrecorded standing stones	The newly recorded archaeological monument survey recorded several standing stones which may be impacted by moving machinery. Any potential for a negative impact will be mitigated by the inclusion of a 10m buffer zone is proposed around these stones. Archaeological monitoring works along the section of the 33kv line will be undertaken.

Impact on unrecorded sub-surface areas of interest.	Archaeological monitoring of all ground works associated with the underground cabling routes, borrow pits, substation and associated road works will be compiled and submitted to the relevant authorities on completion of the project. If detected the site will be protected. The potential for adverse impacts on yet undiscovered artifacts would be removed using EIAR mitigation measures & compliance with planning conditions (incl. testing, monitoring & recording).
<i>Operation Phase</i>	
No impacts identified.	
<i>Decommissioning phase</i>	
No impacts identified.	
<b>Residual Effects</b>	
Residual impacts are not predicted to be significant subject to the implementation of mitigation measures	
<b>Cumulative Effects</b>	
Although there are no recorded/ national monuments or buildings of cultural heritage, the EIAR notes the site and its location in area which has recorded a range of monument types ranging from re historic period. Appropriate pre-development testing, recoding and coordination with the PA and Department will ensure no cumulative impact.	
<b>Conclusion</b>	
I have considered all the written submissions made in relation to cultural heritage and note the EIAR and associated mitigation measures proposed pretesting and archaeological monitoring in line with the request from the County Council and Department. I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.	

## 8.11. Landscape & Visual

Chapter 12 deals with Landscape and Visual.

A Landscape and Visual Impact Assessment (LVIA) is included in the EIA. The landscape assessment takes account of the permitted development and 7 existing wind farms, 1 proposed and 3 permitted within a 2 km radius of the site. The proposed 110kV substation will be the only structure above ground. The LVIA notes the location on an elevated and isolated plateau within an upland landscape. There will be limited visibility due to the topographical features and isolated location.

The site is in an area designated as visually sensitive area (Map 0) in the Kerry County development plan where Section 11.6.3.1 requires development to be satisfactory integrated. There are views and prospects protected along either side of the N22 just on either side after the Cork/Kerry Border.

The Cork County Development plan designates the area as landscape character type: Ridged and Peaked Upland. There is a Designated scenic route to the south (S22) Road from Ballyvourney to Mullaghanish to Caherdowney. There is a national waymarked trail “Sli Gaeltacht Mhúscraí” which runs from south to north.

The EIAR provides an assessment of the 110kV cabling, substation and the 33 kV cabling, borrow pits, and all associated roads and works and the impact on the Landscape Value and Sensitivity of the area in both Cork County and Kerry County, having regard to the characteristics of the environment and the sensitivities. Landscape sensitivity is generally considered medium to low due to the presence of other windfarms in the area and the impact from the works.

Submissions	Concerns raised
Non submitted	
Potential Impacts	Assessment and Mitigation measures
<i>Construction Phase</i>	
Impact on the landscape from the	The construction works are envisaged to last c. 12 months. There will be a short-term change to the character of parts of the landscape due to the creation of temporary

construction of new access road.	structures e.g., Berms and borrow pits. These impacts are localised and will not impact the wider landscape.
<i>Operation Phase</i>	
Visual impact of the substation on a sensitive landscape area	The substation will be the only structure above ground. This substation is located along the site of the existing local road on a site which is not elevated. The elevated masts associated with the substation may be visible from the S22 scenic route although will not be significant or dominant. The closest sensitive receptor to the substation is a dwelling, c.2.4km to the xxx of the site. Due to the presence of trees and the topography of the site it will not be visible and will not be significant.
<i>Decommissioning phase</i>	
No impacts identified.	
<b>Residual Effects</b>	
Residual impacts are not predicted to be significant subject to the implementation of mitigation measures	
<b>Cumulative Effects</b>	
The EIAR includes an assessment of the impact of the proposed development and the 33 kV line on the existing receiving environment and those permitted, proposed and existing windfarms. I note the impact of the permitted development (Reg Ref 19/4872) was considered by the Planning Authority. The impact was considered acceptable in terms of direct, indirect, and cumulative landscape and visual impacts. The proposed connection and associated works will not cause any significant additional impact to the permitted development.	
<b>Conclusion</b>	
I have considered all the written submissions made in relation to landscape and visual, in addition to those specifically identified in this section of the report. I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.	

**8.12. Material Assets**

Chapter 13 deals with Material Assets.

The preliminary traffic management plan is included this chapter and the CEMP proposes to develop and implement a Traffic Management Plan. There are two options for the TDR, from the west on the N22 (Option 1) and from the east in the direction of Macroom (Option 2). The site will be accessed from an existing access track off the N22 and will require permanent upgrade. This is also the access for the permitted renewable energy development.

During turbine delivery there will be 5 transporter loads per working day for a total of 11 days. It is estimated that 2,412 truckloads of materials will be required for the permitted development. It is estimated that the proposed development of 110 kV cable, substation and 33 kV cabling will require a total of 1,617 HGV 2-ways trips during the construction period (c. 12 months).

A link capacity assessment was undertaken on the N22 and R582. Capacity is based on road types and width and has been assessed in line with the TII standards <sup>7</sup>. During construction the link capacity on the background level of the N22 and R582 will increase by 1%. No significant impact on junctions on the N22/Old N22 is envisaged.

In terms of other material assets there will be no overhead cables. A Waste Management Pan (WMP) informed the CEMP.

Submissions	Concerns raised
Transport Infrastructure Ireland (TII)	Request for additional information to: <ul style="list-style-type: none"> <li>• Demonstrate impact on the capacity, safety, or operational efficiency of the national road network.</li> <li>• Additional information on the N22 temporary access and reinstatement works.</li> </ul>

<sup>7</sup> TII Standards Document DN-GEO-03031 Road Link Design.

	<ul style="list-style-type: none"> <li>• Additional information on the haul route and size of loads.</li> </ul>
<b>Potential Impacts</b>	<b>Assessment and Mitigation measures</b>
<i>Construction Phase</i>	
Increase volumes of construction traffic along the N22 and/or R582	<p>The TDR and construction traffic associated with the permitted development (Reg Ref 19/4972) included an assessment of the route options and impact on traffic and transport. No significant impact was identified. The submission from TII notes no record of any observations on this report. This aside, the principle of the proposal has been addressed above in Section 8.3. I have concluded that having regard to the use of an existing access, albeit intensification, the use of a temporary access for the turbine delivery and the nature and scale of the works, the proposal does not conflict with the policies of the national or local policy for national roads. There would be no significant negative impact on the flow of traffic along the N22.</p> <p>In relation to the environmental impact, an increase of construction traffic, the Link Capacity Assessment indicates that the road network has sufficient capacity to assimilate the traffic volumes.</p>
<b>Residual Effects</b>	
Residual impacts are not predicted to be significant subject to the implementation of mitigation measures.	
<b>Cumulative Effects</b>	
Minor impacts would occur in-combination with the construction of the permitted windfarm, but none predicted during the operational phase.	
<b>Conclusion</b>	
I have considered all the written submissions made in relation to material assets, in addition to those specifically identified in this section of the report. I am satisfied	

that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.

### 8.13. Interaction of Effects

8.13.1. I have also considered the interrelationships between the key receptors and whether this might as a whole affect the environment, even though the effects may be acceptable when considered on an individual basis. In particular, the potential arises for the following interactions and interrelationships:

Population & Human Health	<ul style="list-style-type: none"> <li>• Air &amp; Climate</li> <li>• Noise &amp; Vibration</li> <li>• Land, Soils &amp; Geology</li> <li>• Material Assets</li> </ul>
Biodiversity	<ul style="list-style-type: none"> <li>• Land, Soils &amp; Geology</li> <li>• Hydrology &amp; Hydrogeology</li> <li>• Landscape &amp; Visual</li> <li>• Air &amp; Climate</li> </ul>
Land, Soils & Geology	<ul style="list-style-type: none"> <li>• Hydrology &amp; Hydrogeology</li> <li>• Archaeology &amp; Cultural Heritage</li> <li>• Landscape &amp; Visual</li> </ul>
Hydrology & Hydrogeology	<ul style="list-style-type: none"> <li>• Population &amp; Human Health</li> <li>• Biodiversity</li> <li>• Land, Soils &amp; Geology</li> </ul>
Air & Climate	<ul style="list-style-type: none"> <li>• Population &amp; Human Health</li> <li>• Biodiversity</li> <li>• Land, Soils &amp; Geology</li> </ul>
Noise & Vibration	<ul style="list-style-type: none"> <li>• Population &amp; Human Health</li> </ul>
Archaeology & Cultural Heritage	<ul style="list-style-type: none"> <li>• Population &amp; Human Health</li> <li>• Landscape &amp; Visual</li> </ul>

Landscape & Visual	<ul style="list-style-type: none"> <li>• Archaeology &amp; Cultural Heritage</li> <li>• Population &amp; Human Health</li> </ul>
Material Assets	<ul style="list-style-type: none"> <li>• Population &amp; Human Health</li> </ul>

8.13.2. In conclusion, I am satisfied that any such impacts can be avoided, managed and mitigated by the measures which form part of the proposed development.

**8.14. Reasoned Conclusion**

8.14.1. Having regard to the examination of environmental information contained above, and in particular to the EIAR and the submissions from the planning authorities and prescribed bodies in the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment have been identified in section 7.0 of this report. It is considered that the proposed development would not give rise to any significant direct or indirect impacts of the environment, and the minor direct and indirect impacts are as follows:

- The risk of pollution of ground and surface waters during the construction phase through a lack of control of surface water during excavation and construction, the mobilisation of sediments and other materials during excavation and construction and the necessity to undertake construction activities in the vicinity of existing watercourses. The construction of the proposed project could also potentially impact negatively on ground and surface waters by way of contamination through accidents and spillages. These impacts would be mitigated by the agreement of measures within a Construction and Environment Management Plan, and the implementation of mitigation measures related to control and management of sediments, accidental spills and contamination, and drainage management.
- The proposed development would give rise to a short-term increase in vehicle movements and resulting traffic impacts during the construction phases. These impacts would be mitigated by the agreement of measures within a Construction and Environment Management Plan.



- The overall proposed project, including the permitted development (Reg Ref 19/4972), the concurrent Strategic Infrastructure Development Application before the Board for part of the grid connection (ABP314275-22) and the proposed development for this 33kV cable would have a direct long term positive impact on the climate by supplying electricity to the national grid from renewable energy sources.

## 9.0 Recommendation

- 9.1. I recommend that planning permission should be **GRANTED** for the proposed development for the reasons and considerations set down below, and subject to the attached conditions.

## 10.0 Reasons and Considerations

Having regard to the nature and scale of the proposed development, mitigation measures proposed for the construction, and operation of the site and subject works, the planning history including the planned renewable energy development (Reg Ref 19/4972), and the policies and objectives of the Kerry County Development Plan 2022-2028, it is considered that subject to compliance with the conditions set out below, the proposed development would not have a significant negative impact on the water quality downstream and would not have a serious adverse impact on the conservation objectives of the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365], the traffic flow along the N22 or the visual or residential amenities of the area. The proposed development would therefore be in accordance with the proper planning and sustainable development of the area.

## 11.0 Conditions

1.	The development shall be carried out and completed in accordance with the plans and particulars lodged with the application as amended by the further plans and particulars received by An Bord Pleanála, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning
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	<p>authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.</p> <p><b>Reason:</b> In the interests of clarity and of proper planning and sustainable development of the area.</p>
2.	<p>Apart from any departures specifically authorised by this permission, the development shall be carried out and completed in accordance with the terms and conditions of the permission(s), planning register reference number 19/4972, and any agreements entered into thereunder.</p> <p>Reason: In the interest of clarity and to ensure that the overall development is carried out in accordance with the previous permission(s).</p>
3.	<p>(a) All of the environmental, construction, ecological and heritage-related mitigation measures, as set out in the Environmental Impact Assessment Report, the Natura Impact Statement, and the Construction and Environmental Management Plan, and other particulars submitted with the application, shall be implemented by the developer in conjunction with the timelines set out therein, except as may otherwise be required in order to comply with the conditions of this Order.</p> <p>(b) Prior to commencement of development a badger survey shall be undertaken, in the event of badger sett(s) being identified appropriate mitigation and avoidance will be agreed in writing with the Planning Authority.</p> <p>(c) There shall be no felling or scrub clearance within the bird nesting season (1<sup>st</sup> March to 31<sup>st</sup> August).</p> <p>(d) A finalised Invasive Species Management plan detailing the methodology of control of Invasives and monitoring to be agreed with the Planning Authority prior to commencement of development.</p>

	<p>(e) Submission of an “Annual Environmental Report’ on the Habitat Enhancement Area should be submitted to the planning authority on an annual basis.</p> <p>(f) Submission of a Mitigation and Monitoring report prepared by a suitably qualified ecologist clearly indicating compliance with all ecological conditions listed in those reports from Section a).</p> <p><b>Reason:</b> In the interests of clarity and of the protection of the environment during the construction and operational phases of the development.</p>
4.	<ol style="list-style-type: none"> <li>1. All mitigation measure in relation to Archaeology and cultural heritage as set out in Chapter 11 of the EIAR (Tobar Archaeological Services: 29<sup>th</sup> of July 2022) shall be implemented in full, except as may otherwise be required in order to comply with the conditions of this permission.</li> <li>2. The Construction Environmental Management Plan (CEMP) shall clearly identify and highlight the location of all archaeological and cultural heritage constraints located in proximity to the proposed works(Chapter 11 of the EIAR) the CEMP shall clearly describe all identified likely archaeological impacts, both direct and indirect, and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during all phases of site preparation and construction activity.</li> <li>3. The applicant is required to employ a suitably qualified, archaeologist to monitor all ground disturbance required for this development. No groundworks of any type (including any enabling works or advance site investigations) are to take place in the absence of the archaeologist without his/her express consent. The use of appropriate machinery to ensure the preservation and recording of any surviving archaeological remains shall be necessary. <ol style="list-style-type: none"> <li>a) The archaeological monitoring programme must be carried out under license from NMS and in accordance with an</li> </ol> </li> </ol>

	<p>approved method statement, note a period of 5-6 weeks should be allowed to facilitate processing and approval of the licence application and method statement.</p> <p>b) Should archaeological material be found during the course of the archaeological monitoring, the archaeologist shall have work on site stopped pending a decision regarding appropriate mitigation. The developer shall be prepared to be advised by the National Monuments Service with regard to any mitigating action (preservation <i>in situ</i> and/or excavation). The developer shall facilitate the archaeologist in recording any material found.</p> <p>4. The planning authority and National Monuments Service shall be furnished with a final archaeological report describing the results of archaeological monitoring and of any archaeological investigative work/excavation required, following the completion of all archaeological work on site and any necessary post-excavation specialist analysis. All resulting and associated archaeological costs shall be borne by the developer.</p> <p>Reason: To ensure the continued preservation (either <i>in situ</i> or by record) of places, caves, sites, features and other objects of archaeological interest.</p>
5.	<p>The construction of the development shall be managed in accordance with a Construction and Environmental Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall incorporate all mitigation measures set out in the application documentation and provide details of intended construction practice for the development, including:</p> <p>(a) Location of the site and materials compound(s) including area(s) identified for the storage of construction refuse, site offices, construction parking and staff facilities, re-fuelling arrangements security fencing and hoardings;</p>

- (b) a comprehensive construction phase traffic management plan including details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site;
- (c) a comprehensive decommissioning and operation phase traffic management plan similar to the requirements for the construction phase plan;
- (d) measures to prevent the spillage or deposit of clay, rubble, or other debris on the public road network;
- (e) details of appropriate mitigation measures for noise, dust, and vibration, and monitoring of such levels;
- (f) containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained; such bunds shall be roofed to exclude rainwater;
- (g) off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil;
- (h) means to ensure that surface water run-off is controlled such that no deleterious levels of silt or other pollutants enter local surface water drains or watercourses.
- (i) Surface water discharge from compounds will be via a class 1 oil interceptor.
- (j) An audit list of all construction and operational mitigation measures, their timelines for implementation and responsibility for reporting.
- (k) The location and specification of all attenuation/ settlement ponds.

A record of daily checks that the works are being undertaken in accordance with the Construction and Environmental Management Plan shall be kept for inspection by the planning authority.

**Reason:** In the interest of environmental protection, amenities, public health, and safety

6.	<p>(a) During the operational phase of the proposed development, the noise level arising from the development, as measured at the nearest noise sensitive location shall not exceed:</p> <ul style="list-style-type: none"> <li>i. An LAeqT value of 55 dB(A) during the period 0800 to 2200 hours from Monday to Saturday inclusive. [The T value shall be one hour.]</li> <li>ii. An LAeqT value of 45 dB(A) at any other time. [The T value shall be 15 minutes]. The noise at such time shall not contain a tonal component. At no time shall the noise generated on site result in an increase in noise level of more than 10 dB(A) above background levels at the boundary of the site.</li> </ul> <p>(b) All sound measurement shall be carried out in accordance with ISO Recommendation R 1996 “Assessment of Noise with respect of Community Response” as amended by ISO Recommendations R 1996 1, 2 or 3 “Description and Measurement of Environmental Noise” as applicable.</p> <p><b>Reason:</b> To protect the amenities of property in the vicinity of the site</p>
7.	<p>The developer shall appoint a suitably qualified ecologist to monitor and ensure that all avoidance/mitigation measures relating to the protection of flora and fauna are carried out in accordance with best ecological practice and to liaise with consultants, the site contractor, the NPWS and Inland Fisheries Ireland. A report on the implementation of these measures shall be submitted to the planning authority and retained on file as a matter of public record.</p> <p><b>Reason:</b> To protect the environmental and natural heritage of the area.</p>
8.	<p>No instream works shall be carried out from October 1<sup>st</sup> to June 30<sup>th</sup>, fish removal will take place within cofferdams prior to dewatering and Inland Fisheries Ireland to be notified in advance of any works. The Ecological Clerk of Works will ensure all mitigation detailed in application documentation relative to watercourse crossings are employed and watercourse crossings shall not lose material to the rivers.</p> <p><b>Reason:</b> In the interests of environmental protection.</p>

9.	<p>Site development and building works shall be carried out only between the hours of 0800 to 1900 Mondays to Fridays inclusive, between 0800 to 1400 hours on Saturdays and not at all on Sundays and public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.</p> <p><b>Reason:</b> In order to safeguard the amenities of property in the vicinity.</p>
10.	<p>Drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works and services.</p> <p>Reason: In the interest of public health.</p>
11.	<p>All road surfaces, culverts, watercourses, verges, and public lands shall be protected during construction and, in the case of any damage occurring, shall be reinstated to the satisfaction of the planning authority at the developer's expense. Prior to commencement of development, a road condition survey shall be carried out to provide a basis for reinstatement works. Details in this regard shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.</p> <p><b>Reason:</b> In order to ensure a satisfactory standard of development.</p>
12.	<p>Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site on cessation of the project coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.</p> <p>Reason: To ensure satisfactory reinstatement of the site.</p>
13.	<p>The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by</p>

	<p>or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.</p> <p><b>Reason:</b> It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.</p>
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I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

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Karen Hamilton  
Senior Planning Inspector

31<sup>st</sup> of August 2023