An Bord Pleanála

Inspector's Report

ABP-321518-24

Development	Proposed 220kV Substation and Grid Connection
Location	Aghaduff, Ballinbrittig, Ballynabrannagh West, Ballynagaul, Ballynaglogh, Ballynanelagh, Ballynaskeha, Ballysallagh, Ballyvatta, Glengarriff More, Kileena and Pigeonhill, County Cork. (www.ballysallagh220kvsubstation.ie)
Planning Authority	Cork County Council
Applicant(s)	Ballysallagh Solar Farm Limited
Type of Application	Application for approval under Section 182A of the Planning and Development Act, 2000, as amended.
Prescribed Bodies	Development Applications Unit Uisce Eireann Transport Infrastructure Ireland
Observer(s)	Refer to Appendix I

Date of Site Inspection	24th March 2025
Inspector	Donogh O'Donoghue

Contents

1.0 Introduction

1.1. This case concerns an application for strategic infrastructure under section 182A of the Planning and Development Act, 2000, as amended. It is made on foot of pre-application discussions with the Board under ABP-320154-24 for a 220kV substation and associated grid connection comprising 220kV underground cabling connecting to the existing 220kV Knockraha substation, where the Board decided that the development would fall within the scope of section 182A of the Act and would be strategic infrastructure. A Natura Impact Statement has been prepared in respect of the proposed development.

1.2. The purpose of this application for a 220kV substation and grid connection is to serve a proposed solar farm, known as Ballysallagh Solar Farm. An application for Ballysallagh Solar Farm was submitted to Cork County Council in August 2024 and the council issued a request for further information in October 2025. The application is currently at Further Information stage. Prior to making any decision in respect of this file, it is recommended the Board consider the status of this planning application and whether any appeal has been received.

2.0 Site location and Description

2.1. The proposed 220kV substation will be located in the southern parcel of the proposed Ballysallagh Solar Farm in the rural area of North Cork. The site area of the substation compound is approx. 1.3 hectares within an agricultural field to the southwest of an existing farmyard. The associated grid connection route extends circa 10.2km along the local road network to the southwest to the existing Knockraha 220kV substation. The closest large settlements to the proposed site are Watergrasshill to the northwest and Carrigtwohill and Midleton to the south.

3.0 Proposed Development

3.1. The applicant is seeking a 10-year permission for the construction of a 220kV AIS electricity substation to connect to and serve a proposed solar farm and an associated grid connection between the proposed substation and the existing Knockraha 220kV substation comprising 10.2km of 220kV underground electricity cables. The purpose

of the proposed substation and grid connection is to serve the proposed Ballysallagh Solar Farm.

3.2. The development will comprise:

- Construction of new 220kV substation comprising separate 220kv EirGrid compound and 33kV customer compound;
- Underground 220kV underground cable grid connection to the existing Knockraha 220kV substation of 10.2km in length;
- Provision of vehicular construction and operational entrance and access track from the L7691.
- Temporary construction compound;
- Surface water drainage and water services;
- Site reprofiling;
- Site restoration and landscaping.
- A Natura Impact Statement has been prepared in respect of the proposed development.

3.3. **The application to the Board includes:**

- Cover Letter and Completed Application Form with An Bord Pleanála Determination dated 23rd September 2024 appended
- Letter of Consent to make application from landowner
- Statutory Undertaker Letter
- Copy of Public Notices
- Notification letters to Prescribed Bodies and Cork County Council
- Planning and Environmental Report by HW Planning
- Site Layout Plans, Elevations, Sections and Landscape Mitigation Plan by Ballysallagh Solar Farm Limited and Macro Works
- Environmental Impact Assessment (EIA) Screening Statement by HW Planning
- Ballysallagh 220kV Substation - Construction Methodology by Ballysallagh Solar Farm Limited
- Ecological Impact Assessment and Appropriate Assessment/Natura Impact Statement by Ecology Ireland

- Archaeological, Architectural and Cultural Heritage Impact Assessment prepared by Rubicon Heritage
- Site Access Report prepared by CSEA Engineering Advisors
- Landscape and Visual Impact Assessment by Macro Works
- Photomontages by Macro Works
- Noise Impact Assessment by Wave Dynamics
- Flood Risk Assessment by IE Consulting
- Electromagnetic Field (EMF)/Electromagnetic Compatibility (EMC) Impact Assessment Report by Ai Bridges (Prepared for Ballysallagh Solar Farm (Cork County Council Ref: 24/05630) and is submitted for information purposes.)
- Construction and Environmental Management Plan (CEMP) by Ballysallagh Solar Farm Limited (Prepared for Ballysallagh Solar Farm (Cork County Council Ref: 24/05630) and is submitted for information purposes).
- Construction Methodology – Electrical Infrastructure

3.4. The applicant has created a standalone website for the development, www.ballysallagh220kvsubstation.ie.

3.5. Details of community engagement are outlined in Section 5 of the Planning and Environmental Statement submitted by the applicant. This sets out that consultation was undertaken between the 11th July and 05th August 2024 and consisted of the delivery of over 50 brochures to households and a personal visit from the applicant's Community Liaison Officer to 37 no households. The household were identified as being potentially impacted primarily on the basis of proximity, visual impact, construction traffic and other environmental issues.

4.0 Consultations

4.1. Prescribed Bodies

- Minister for Housing, Local Government and Heritage.
- Minister for the Environment, Climate and Communications.
- Commission for Regulation of Utilities, Water and Energy.

- Transport Infrastructure Ireland (TII).
- The Heritage Council.
- An Taisce.
- An Chomhairle Ealaíon (The Arts Council).
- Failte Ireland.
- Uisce Eireann.
- Cork County Council.

4.2. **Submissions**

4.2.1. Development Applications Unit - DAU's correspondence includes 2 no reports dated 21st February 2024 and 24th February 2024 respectively.

The DAU report dated 21st February 2024 noted the following:

Biodiversity and protected species.

- The proposed 55m hedgerow removal should be carried out outside the bird nesting season.
- Regarding any badger setts and also any trees for removal with bat roosting potential found during the pre-construction survey the NRA/TII guidelines for same should be adhered to.
- It should be ensured through conditions of planning that all the mitigation and compensation measures outlined in the submitted reports are rigidly adhered to.
- The Board should ensure that the proposal would not have adverse impacts on the NATURA 2000 sites 004030 - Cork Harbour SPA and 001058 - Great Island Channel SAC through water quality effects and that it is compatible with the Conservation Objectives (CO's) for the sites.

Archaeology

- The Department of Housing, Local Government and Heritage has reviewed the EIAR and recommends a condition be attached to any grant of permission that a pre-development Archaeological Geophysical Survey and a pre-development Archaeological Test Excavation at the location for the sub-station be carried in advance of any site preparation works or

groundworks (a drafted archaeological condition is included in the submission).

The DAU report dated 21st February 2024 noted the following:

Underwater Archaeology

- Notes that the grid connection route incorporates waterway crossings that are proximate to recorded monuments. Accordingly, the watercourses may be considered to have the potential to contain underwater cultural heritage.
- Recommend that an underwater archaeological impact assessment of all in-stream works, enabling works, coffer dams and machinery movements that may impact upon the river/stream channels be undertaken as a condition of planning (a drafted archaeological condition is included in the submission).

4.2.2. Uisce Eireann

- No objection in principle.
- They confirm that the applicant has engaged with their Diversions department and obtained a Confirmation of Feasibility letter for all related build over/near works associated with the proposed development.
- They note that the applicant must obtain a Diversion Agreement from Uisce Eireann's Diversion team prior to any works commencing.

4.2.3. Transport Infrastructure Ireland

- TII recommend a condition to be attached to any grant of permission that prior to the commencement of development a revised Construction Traffic Management Plan be submitted to include full details of all haul routes and details of the transportation of Abnormal Loads/Exceptional Abnormal Loads in relation to the national road network (a drafted condition is included in the submission).

4.3. **Public Submissions**

4.3.1. See Appendix I

4.3.2. A total of 139 public submission were received in relation to the proposed development and are listed in Appendix 1 below. These submissions encompassed a broad

spectrum of issues, many of which presented varying degrees of overlap, yet were articulated with distinct perspectives. In an effort to provide clarity and coherence, I have endeavoured to summarise and categorise these concerns under the following headings below:

Cork County Development Plan

- Proposal is premature pending a final decision on Balysallagh Solar Farm (plan ref 24/5630).
- Proposal is premature pending the adoption of national solar planning guidelines. The proposal is not a plan led development.
- Application is premature regarding the Cork County Development Plan which does not include a framework for the appropriate designation of areas deemed acceptable for solar developments.
- Cumulative impact of solar developments across the county remains uncertain due to the lack of national policy.
- Proposed development is a material contravention of agricultural zoning.
- Proposed development is a material contravention of the Cork County Development Plan due to the close proximity of 98 residential properties and the inclusion of the site area of the Owenacurra River and Ballyerra Stream.

Site Suitability

- Cork County Council has requested re-siting of the substation as part of the associated solar farm development under planning ref 24/5630.
- Proposed development is of a size and scale that is totally unsuitable to the rural nature of the environment.
- Proposal is contrary to the proper planning and sustainable development of the area.
- Substation and grid connection would permanently alter the rural landscape, disrupt local communities and set a precedent for unchecked industrial expansion.
- Development will only add to the myriads of pylons in Knockraha area which are an eyesore.
- No justification for grid route and substation location.

- Insufficient information in relation to site selection process and alternative locations considered.
- Little consideration given to similar in situ and in progress developments raising concerns in relation to sustaining the community, encouraging the continuity of agriculture and preventing a step change on the local eco system.
- Proposal will result in a visually obtrusive feature.
- Concerns in relation to the objectivity of the Landscape Visual Impact Assessment.
- Concerns raised over impact on sensitive nature of the agricultural landscape in area.
- Concerns raised over future expansion of substation.
- To permit this development would set a precedent for future industrial projects in rural areas.

Roads/Traffic

- The local road networks are inadequate for the expected heavy construction traffic.
- Extensive roadworks required impacting residents and local infrastructure.
- Roads proposed for underground cable route are too narrow and not able to absorb the construction for this development as well as the enormous quantity of development being undertaken in area adjacent to Knockraha 220kV substation. Reference made to the Celtic Interconnector project and other energy projects in local area.
- No detailed traffic management plan submitted.
- Impacts on school buses transporting children to and from local schools.
- Development will impact on Sli na Saoirse, a heritage trail which runs along the exact trail of the proposed route on the L6989 towards the substation.
- The L7691 had a previous planning application for a nursing home refused by Cork County Council due to the unsuitability of the surrounding road infrastructure.
- Construction Environmental Management Plan lacks specific measures for monitoring and mitigating environmental impacts during construction and how unforeseen environmental issues will be addressed

Impacts on Residential Amenity

- 10-year planning permission and 40-year lifespan too long.
- Development description and public notices inadequate.
- Concerns over proximity of development to residential houses and Leamlara school.
- Impacts on residents and rural character by way of noise pollution from inverters, transformers and substation, dust and vibration during construction, light pollution, electromagnetic field exposure and visual intrusion.
- Development will lead to a depreciation of the value of properties in area.
- Construction Methodology does not consider cumulative impact of both the substation and the associated solar farm.
- Impact on private wells and water supply.
- Potential health effects of electromagnetic fields (EMF) from high voltage substations and the associated solar farm infrastructure.
- Telecommunications Interference.
- No Fire Risk Assessment submitted - Concerns raised that solar utility has potential to catch fire or explode and there is no safety and evacuation plans in place.
- Risk to property from thunder and lightning and storms.
- Lack of a decommissioning plan.
- Removal of internal and roadside hedgerows.
- Unsightly boundary treatment.

Impacts on Farming Community

- The land is zoned for agriculture and not for energy production. This is contrary to the Cork County Development Plan.
- Green fields and prime agricultural land required for food security into the future. Proposal displaces productive farming activities and is in direct conflict with Ireland's Climate Action Plan and food security goals.
- Concerns raised in relation impact on farming communities and spread of Bovine TB in area due to disruption and interference with an active badger sett.
- Impact on local equine industry – thoroughbred horses are highly sensitive animals that require a quiet and calm environment for breeding and training.

- Cable route details do not show how bridges and underpasses will be accommodated.
- Impacts on farming community transporting cattle and fodder.
- Proposal contravenes multiple National policy Objectives by compromising agricultural activity, rural economic sustainability and landscape preservation including NPO 23, 14 and 52.
- Concerns raised by farming families with lands on both sides of proposed grid connection route and the impact the development will have on their plans to construct underpasses in the futures
- Proposal is contrary to Action Plan for Rural Development 2017.

Impacts on Local Community

- Lack of consultation from developer
- No proposed community benefit package to compensate for disruption and negative effects.
- Proposal represents project splitting forcing the community to respond to multiple applications.
- Concerned that an application for an additional battery storage will become inevitable.
- Not opposed to renewable energy but scale of proposal is inappropriate.
- A complaints procedure and an independent complaints process is required
- Request ABP to seek further information as per Cork County Council's Further Information request.
- No details provided on consultation with Eirgrid in relation to the grid connection route crossing underneath EirGrids Celtic Interconnector cable at Pigeon Hill.
- No reason provided why the grid route cannot route cannot follow the same stretch of road from Pigeon hill to Knockraha substation.
- Impacts on human health and health of persons with pre-existing conditions.
- Alternative locations for renewable energy projects proposed – brownfield sites, marginal farmland, rooftops.
- Impact on Midleton's water quality.
- Proposal will impact on local tourism

Culture and Heritage

- No comprehensive Archaeological Impact Assessment (AIA) has been conducted. Full AIA with test trenching required.
- Further investigation into potential undiscovered archaeological features on site
- Archaeological surveys may alter site layout plan.
- Omissions in the AIA.
- The proposal conflict with Cork County Development plan objectives HE16-9 and HE16-13 which protects cultural heritage.

Flooding

- Flood Risk Assessment lacks detailed hydrological studies or flood modelling to assess how the development might affect local drainage patterns or increase flood risk in the area.
- Increased flood risk in Leamlara river and Owenacurra river catchment particularly during 24-month construction process. Site-specific Flood Risk Assessment lacks empirical data.
- Site is located near Owenacurra river which ultimately flows into Midleton town which has a history of flooding.
- Concerns over surface water flow off the site and potential for flooding.
- No soil/subsoil tests undertaken.
- Soakpits at entrance are in effective when ground is waterlogged.
- Part of site is designated a floodzone in the Cork County Development Plan.

Ecology and Environmental Concerns

- EIA Screening fails to adequately assess cumulative environmental impact, particularly in conjunction with nearby developments.
- Full EIA should be undertaken particularly concerning the assessment of cumulative impacts – a number of cases mentioned including case C-392/96 Commission v Ireland and C-2/07 Abraham and Others referenced.
- Incomplete biodiversity assessment, failing to evaluate cumulative effects on species such as bats and honeybees.
- Proposal will impact on local ecology and biodiversity e.g. birds bats, bees, trees and hedgerow.

- Project does not align with circular economy as it removes fertile land from food production.
- Development will impact on Leamlara Woods pNHA and its associated biodiversity e.g red squirrel, bats, Hay Scented Buckler fern and Smooth newt.
- Applicant has not considered at least two additional watercourse crossing locations where the proposed cable route will be required to cross, therefore concerns raised in relation to the completeness of the applicant's assessment.
- Water Framework Directive not adequately addressed.
- Concerns over transformer/lithium battery pollution
- Application fails to address the issue of Sulphur Hexafluoride (SF6) gas within transformers.
- Potential contamination risk from gas, oils, and underground cabling not fully mitigated.

AA Issues

- Concerns raised in relation to potential contamination and ecological disruption to nearby Natura 2000 sites.
- NIS considered incomplete.
- No conclusive scientific evidence that there will be no adverse impacts on protected sites.

4.4. Planning Authority

4.4.1. The Planning Authority submitted a report to the Board on the 21st February 2025. In its submission, the Planning Authority support the proposal in principle. However, they note that as the proposed development relates to supporting infrastructure for a proposed solar farm which is still under consideration by the council (Planning Ref 24/5630) this proposed development could be considered premature.

4.4.2. The report outlines european, national, regional and local planning policy in relation to renewables, and highlights specific policies in the development plan on the electricity network, specifically ET 13-1; ET 13-21 and ET 13-22. These policies generally look favourably on facilitating improvements to the regions electricity infrastructure subject to environmental and amenity considerations.

4.4.3. The Planning Authority draws the Boards attention to a number of items where they consider that further information is required. These are:

- It is considered that the Landscape Visual Impact Assessment (LVIA) does not sufficiently assess the potential extent of visual impact arising from the development in shorter views, particularly from the south along the public road (i.e. L-7691). They request that an updated LVIA with associated photomontages and further detailed landscaping proposals to enable a full assessment of the potential visual impact of the development.
- Updated landscaping proposals in accordance with the principle of biodiversity net gain as per the requirements of policy objective BE 15-6 of the Cork County Development Plan to be submitted. Specifically, the submission of an updated detailed Site Landscape Mitigation Plan which shall include proposals to bolster/augment the southern and eastern site boundaries and detailed method statement for outlined reinstatement of hedgerow post construction.
- An assessment of potential of works along the grid connection route within Root Protection Zones of the peripheral trees to include protective measures where appropriate to be submitted.
- A site-specific and species-specific Invasive Species Management Plan for the proposed grid connection route to be submitted.
- Given the size of the application area, it is important to establish at an early stage the presence or absence of subsurface archaeology in order to guide the design and layout of the development given that Preservation in situ (avoidance by re-design) is the preference of both the National Monuments Service and Cork County Council. The suggested timing of archaeological investigations post planning (i.e. through the post compliance process) is not acceptable. They request that a Geophysical survey and licensed archaeological testing of the substation compound site be undertaken.
- They request that additional details on noise monitoring/emissions and construction stage noise mitigation be submitted. The assessment should include:

1.0 A suitably scaled map showing the locations and distances of all noise sensitive locations in the vicinity of the proposed development with respective distances presented in tabular form

2.0 Full descriptive details of the selected noise monitoring locations used to quantify and establish the existing prevailing environment.

3.0 Elaboration of details outlined and assumptions in respect of predicted audible tonality at the noise sensitive locations and site context.

4.0 Implementation of construction stage noise mitigation to be implemented as part of the construction phase noise management plan to include resultant additional impact of the adoption of such mitigation on the predicted construction noise levels at noise sensitive locations.

- In line with the Roads Directorate policy off-road options for the routing of cables should be considered in the first instance and only when it is demonstrated to be non-feasible should consideration be given to allowing routing along roads or perhaps a combination of both. Evidence of exploration of alternative off-road options for the proposed grid connection route and a detailed justification for the final selected grid connection route should be submitted.
- They request that proposals for the on-site disposal of foul effluent be submitted.

4.4.4. Should the board decide to grant permission the Planning Authorities report has recommended 29 no conditions. These have been formulated on basis that assume that all issues raised by the planning authority have been adequately addressed.

4.4.5. The report includes internal technical report (Archaeology, Environment - Surface water and Groundwater, Environment – Noise, Environment – Waste, Roads and Transportation, Ecology and Conservation) reflecting the overall comments in the report above.

4.4.6. Summary of Internal Technical Reports

<u>Archaeology</u>

- No Geophysical Survey has been undertaken

- No archaeological investigations of potential sub-surface archaeology took place
- The Archaeological, Architectural and Cultural Heritage Impact Assessment Report adequately assessed the known and existing archaeology and cultural heritage through cartographic and documentary analysis. Sub-surface archaeology has not been explored.
- The proposed grid connection will have an indirect effect on two RMP sites where the proposed route crosses their associated Zones of Notification: CH007 (C0064-074) and CH011 (CO064-071).
- Request that a Geophysical survey and licensed archaeological testing of the proposed substation compound site be undertaken prior to any decision being made.
- Recommend 3 no conditions to be attached to any grant of permission should the board be minded to grant permission.

Environment – Surface water and Groundwater

- No objections - The proposed substation site is relatively well drained & soil type is free draining mineral soils. The site is relatively level. With good management there should be low risk to surface water or groundwater quality.
- 9 no conditions in relation to protection of water quality recommended.

Environment – Noise

- Requests additional details on noise monitoring/emissions and construction stage noise mitigation be submitted.
- In the event the Board decided to grant permission 5 no conditions to safeguard the amenities of the area and control noise emissions recommended.

Environment report – Waste

- The applicant is required to submit an Outline Resource & Waste Management Plan and a Site Restoration Plan for the construction and restoration stages of the proposed development which attend to issues likely to cause adverse environmental risks to surface and groundwater.

Roads and Transportation

- Concerns raised with the proposed siting of the grid connection route within public roads and strongly suggests that off-road options for the routing of cables should be considered in the first instance in line with Roads Directorate policy and only when it is demonstrated to be non-feasible should consideration be given to allowing routing along roads or perhaps a combination of both.

Ecology

- Notes that the measures proposed, and conclusions of the NIS are reasonable.
- Concerns raised that works within the Root Protection Zones of trees along the grid route could impact the viability (long-term health, balance, growth and life expectancy) of the trees through severance of root system during excavation works in relation. Recommends an assessment of potential of works within Root Protection Zones of the peripheral trees be carried out as part of further information.
- A site-specific and species-specific Invasive Species Management Plan for the proposed grid connection route to be submitted as part of further information.
- 4 no conditions in relation to the protection of ecological receptors and biodiversity recommended should the board decide to grant permission

Conservation Report

- Some concern expressed that there may be some impacts on the extant/upstanding sections of walls from the site preparation works and other similar activities. Recommends that a condition be attached to any grant of permission that a detailed method statement prepared by a suitably qualified and experienced conservation consultant to include record of the feature before works and detailed measures for the reconstruction/repair after works be submitted.

4.5. Applicant's Response

4.5.1. Response to Prescribed Bodies submissions

- Response to DAU

  Ecology

  - Hedgerow removal for site access will be carried out outside of the bird nesting season as per the submitted Ecological Impact Assessment.
  - No impacts on badger or bat species have been identified as part of the proposed development. Notwithstanding, NRA/TII guidelines will be adhered to in respect of pre-construction surveys.
  - The applicant confirms that they will adhere to all identified mitigation measures set out in the submitted environmental reporting.
  - It has been demonstrated through the Appropriate Assessment process that the proposed development will not have any adverse impact on designated Natura 2000 sites during the construction or operational stages.

  Archaeology

  - The submissions made by the DoHLGH recommend the inclusion of conditions to any grant of permission related to geophysical survey/testing. It follows that they are satisfied that all associated matters can be dealt with post planning consent and prior to implementation of any permission.
  - The applicant confirms that the archaeological requirements listed in the DAU's submission dated 21st February have been reviewed and will be adhered to in full. There is no objection to the inclusion of the drafted archaeological conditions.
  - Further to the observation dated 24th February, the applicant is happy to accept the recommended conditions set out by the DoHLGH in respect of preparation of an Underwater AIA. This will be completed as per the stipulated requirements
  - Overall the applicant confirms their acceptance of the proposed conditions by DoHLGH.

- Response to Uisce Eireann
    - The observation from Uisce Eireann is noted. This confirms the applicant has engaged with their Diversion Department and has obtained a Confirmation of Feasibility letter. The applicant is committed to obtaining a follow-on Diversion Agreement to execute any grant of permission.
- Response to TII
    - A final Construction Traffic Management Plan detailing the final particulars of haul routes, will be prepared as requested. All construction stage deliveries will comply with TII publications and ensure ongoing safety for road users. Special measures will be put in place for the abnormal load delivery consistent with now standard operating procedures. This will include a detailed route plan, risk assessment and transport management plan which considers all requirements related to the length and weight of abnormal loads to be agreed in full with Cork County Council.

4.5.2. **Response to Cork County Council**

Cork County Council raise the matter of whether permitting the subject substation/grid connection would be premature pending the final assessment of the solar farm application. The applicant respectfully submits that the council do not express a strong view either way on this. The applicant sets out that a favourable grant of planning permission for the substation/grid connection does not affect the final determination of the solar farm application. It is not the fault of the applicant that a dual consent process applies and having regard to EU and national policy, the objective is to secure planning permission for all necessary project components as expeditiously as possible to urgently deliver much needed renewable energy projects.

The applicant notes that the submission on behalf of Cork County Council confirms their acceptance in relation to the principle of the proposed development at the subject location. The report of the Council raises a couple of other matters which it is recommended could be dealt with by way of Request for Further Information or applied planning condition to any grant of permission. These are dealt with by the applicant as follows:

Landscape and Visual

- The Council's submission confirms their satisfaction that there are no issues in respect of longer-range views of the proposed substation.
- The Council suggest that the development may benefit from additional landscaping/screening along the southern/eastern site boundary and that further consideration maybe required in relation to views from the south. Elsewhere, there is a query from the Environmental Department of the council in relation to root protection zones for trees and demonstrating biodiversity net gain for the project.
- These matters have been reviewed by the project landscape architects Macro Works and are addressed in a Landscape Response Statement attached to applicant's submission.
- The Macro Works Landscape Response confirms the findings of the original Landscape and Visual Impact Assessment (LVIA) namely that the existing baseline in respect of landscape character can accommodate the proposed substation/grid connection and that the selection of representative viewpoints was undertaken using best practice measures, including bare-ground Zone of Theoretical Visibility (ZTV) mapping.
- Viewpoint 5 (VP5) is located to the southeast of the site, and it is considered that the photomontage depicted at VP5 is representative of the general visibility of the substation and wider solar farm from this location. Of most importance is the fact that VP5 represents the nearest residential cluster to this part of the site. This is one of the principal reasons for its inclusion in the submitted assessment.
- It is further demonstrated that the local road to the south of the proposed development is heavily enclosed by dense vegetation, with only fleeting views afforded in the direction of the site. The Landscape Response statement includes Digital Surface Model (DSM) visibility mapping for illustrative purposes which indicates that there is very limited potential for visibility along the L-6791 local road to the south of the site.
- In addition, once landscape mitigation measures have fully established, there will be a clear reduction in potential visibility within the study area and along the L-6791.

- The remaining potential for visibility once the proposed screen planting has fully matured relates to the lighting mast structures. The proposed end masts are of a slender form and, if visible, will not have a prominent visual presence, resulting in very limited residual visual effects.
- With regard to the protection of the existing tree-lined hedgerows located in the near vicinity of the proposed underground cable corridor, protection measures have been adopted for use in the proposed development. As per the ESB guidance, a precautionary zone is calculated by multiplying the radius of the tree's girth at chest height by a factor of 4. This identifies a protection zone around the tree known as the 'precautionary zone.' In the majority of instances, the proposed underground cable corridor will divert around the 'precautionary zones' and has been sited well away from mature tree lines in so far as possible. However, where it is unavoidable for the cable corridors and interconnector cables to pass near larger trees, the 'precautionary zones' will also be fenced off to protect the existing planting from and construction stage works. It is not expected that any trees will need to be removed to facilitate the proposed underground cables, be it on private agricultural lands or adjacent to the public road.

Noise

- The Council's submission requested some additional resource for the file. These request items are addressed in a response letter by Wave Dynamics which confirms the items raised have been addressed during the submitted noise impact assessment and are further clarified in the letter.
- The response letter from Wave Dynamics sets out that a robust noise impact assessment was conducted at planning stage and it determined that the noise impact from both the construction and operational phases of the proposed development including both the substation/grid connection and the solar farm would not provide a negative noise impact when assessed in accordance with industry best practice standards.
- The overall conclusion is that the noise impact of the proposed substation, solar farm and underground grid connection has been assessed at the worst-case facades of all noise sensitive locations and compared to the relevant criteria of

EPA NG4 and BS4142 and are predicted to comply at all noise sensitive locations with no tonality or impulsivity.

Archaeology

- The report of Cork County Council acknowledges that the submitted Archaeological, Architectural and Cultural Heritage Impact Assessment (AIA) has adequately assessed the known and existing archaeology and cultural heritage.
- It raises a possible issue in respect of potential sub-surface archaeology and the absence of geophysical survey and/or testing at this time to verify same.
- The substation field is the only greenfield component of the project, with the majority of the underground cabling grid connection 'on-road' in previously disturbed areas.
- There are no recorded monuments within the part of the site which accommodates the 220kV substation.
- The 2016 National Monuments Service (NMS) Guidelines make clear that geophysical survey/and testing should only be sought where there are specific or verifiable indicators of archaeology observed during detailed field surveys. This is not the case here.
- The findings and recommendations in the assessment completed by Rubicon Heritage provide for certainty in approach that all archaeology matters will be resolved in full and in consultation with the DoHLGH prior to the construction of the proposed development.
- The submissions made by the DoHLGH recommend the inclusion of conditions to any grant of permission related to geophysical survey/testing. It follows that they are satisfied that all associated matters can be dealt with post planning consent and prior to implementation of any permission.
- Notably, the internal archaeological report of the Council also discounts established precedent in the area for other SID substation developments i.e. ABP 308979-20.
- The Cork County Council report on this SID application to the Board recommended that a condition be applied to any grant of planning permission to undertake pre-commencement geophysical survey in areas of identified

archaeological potential. This is wholly reasonable and reflects other conditioning applied to solar farm developments in the area

- The applicant is fully committed to completing the archaeological geophysical survey and testing (where necessary) after permission is granted.

Suggested Planning Conditions

- The applicant has no issue in principle with the majority of Cork County Council's suggested conditions.
- The applicant has concerns regarding suggested Condition No. 3, which specifies that permission should be granted for a period of 40 years from the date of commissioning of Ballysallagh Solar Farm. It is not necessary to time-limit the operational period for the substation. 40 years is the requested permission timeline sought for the solar farm in its respective planning application. However, the substation will be owned and operated by EirGrid and after the decommissioning of the solar farm it will remain in situ as part of valuable functioning infrastructure on the national electricity transmission network. Having regard to nature of the proposed development and established precedent on such matters, it is requested that no time-limited condition be applied to any grant of permission for the proposed 220kV substation/grid connection.

Foul Effluent

- It is submitted in the Council's report that proposals should include provision for on-site disposal of foul effluent. It is made clear in the plans that a 5m³ foul holding tank is proposed as part of the operational development. These tanks are used in ESB substations given the low frequency of visits and uses. It will be emptied periodically and is the accepted approach for the management of such facilities.

Off-Road Grid Connection Options

- There is no policy in the Cork County Development Plan 2022-2028 which restricts underground cabling in public roads and no alternative policy position has been raised or shared by the Council as part of pre-application discussions.

- Notwithstanding this, selecting the optimal route for the underground grid connection cabling, the applicant considered the following key criteria:
    - Technical Considerations: Section 13.16.3 of the Cork County Development Plan 2022-2028 states in the context of underground and overhead power lines "the siting of overhead power lines can have a significant impact on the visual character of an area" and the following should be considered in any such assessment:
        - Avoid areas of high value landscape where practical;
        - Avoid sites and areas of nature conservation and archaeological interest;
        - Minimise their visual impact;
        - Consider the use of underground technology in areas of special sensitivity where appropriate.

      With regard to the above, it was determined that underground grid connection cabling option was optimal in this case. Furthermore, consideration of overhead lines as a viable option is dependent on the availability of land and no suitable additional land was available. As such, underground cabling was the only viable technology option for this development.

    - Available Land Considerations: From the planning, technical and commercial criteria analysis the underground cable interconnector is the preferred grid connection option. However, one of the key parameters for any route feasibility analysis is the availability of land and its options can be strictly defined as follows:
        - Locate the underground cable in public owned lands (including road networks).
        - Locate the interconnector cable in privately owned lands subject to legal agreement with respective landowners.
        - A combination of the above options

      As part of the development of the wider solar farm project including the grid connection cable, Ballysallagh Solar Farm Limited consulted with several landowners. There were 17 no. landowners in total consulted adjacent to

the proposed grid connection route with the public roads. Unfortunately, however it was not possible to reach agreement with these landowners for inclusion of their lands as part of the proposed development.

- Planning History: There is established precedent for substation grid connections in public roads in the local area and this is often accepted as a primary means of delivering such connections in the absence of available land for off-road routing.

- It is considered that the approach to identifying the most appropriate grid connection route is entirely consistent with the County Development Plan as well as the 'Interim Guidelines to Roads Authorities regarding the proposed placement of Medium or High voltage electricity assets, including ducts, cables and associated infrastructure under public roads' published by the Department of Transport in March 2025.

4.5.3. **Response to Public Submission**

Need for development at this location

There is a very clear rationale for the proposed solar farm project at this location.

- Favourable Irradiance Resource Location
  - The location of Ballysallagh Solar Farm benefits from an annual irradiance resource of just under 970 kWh/m2. This is approximately 3.7% - 4.7% above the average level across the country and this means the project will benefit from an improved 'capacity factor' and will output a higher amount of green electricity each year for the same given installed capacity than if it was in a lower irradiance location. This is an important factor for the location of large-scale solar farms as it delivers a higher contribution to carbon emission reduction for the same time and cost.

- Access to the Transmission Grid Network
  - Once irradiance study areas have been assessed, the Applicant then considers the viability of connecting a future solar farm development to the electricity transmission grid.

- In this case, the proposed development is located circa 5km north-east of the existing EirGrid 220/110kV Knockraha substation which is the intended connection point to the national transmission network.
- Knockraha is a particularly important substation on the transmission network, as it has multiple ways of receiving and transmitting large power volumes. This type of substation is known as a "meshed node" and makes Knockraha substation very suitable for accommodating large renewable generation projects. Its suitability is characterized by the following:
    - Knockraha substation has multiple high voltage connections to counties Cork (east & west), Waterford & Limerick and can transmit large volumes of renewable electricity to these locations.
    - Under the EirGrid ECP-2.4 constraint studies published on 31st March 2025, Knockraha substation (Area I) has a constraint forecast within the range of 0-2%. This is some of the lowest levels of any substation in the country and is because Ballysallagh Solar Farm's proposed grid connection is at a point where the grid system is not constrained and can accommodate a national strategic generation project which will transmit large volumes of electricity to the south and east of the country.

- The feasibility of the grid connection method was informed through the applicant's early engagements with EirGrid. A customer clinic was held between the applicant and EirGrid in April 2024, where EirGrid were supportive in principle of a strategic renewable project in this location. Facilitating volumes of generation at the scale of Ballysallagh Solar Farm through a single tail" connection into an existing bay in Knockraha substation is a preference for EirGrid.
- The Ballysallagh Solar Farm is in a key strategic location, with an efficient and effective means of connecting to the national electricity grid. There are only a limited number of substations in existence across the country that have these connection characteristics for large-scale solar generation and therefore they are a finite resource.

Principle of Development

- Specific mention is made in the observation on behalf of Leamlara Preservation Group to Section 18.3.45 (Agriculture AG zoning) of the Cork County Development Plan 2022-2028 and policy objective ZU 18-19 on the basis that the proposed development is not planned and that development should not be allowed on the basis that the land is "zoned agriculture".
- A review of the Cork County Council land use zoning map confirms that neither the subject lands, are located within the Agriculture AG zoning objective. As the wording of the Agriculture AG objective implies, the Cork County Development Plan 2022-2028 uses this designation within/at the edge of some urban settlements to safeguard their future developability. There is no basis to the claim that the subject lands are protected under the Agriculture AG zoning objective. By extension there is no justification to the suggestion that the proposed development materially contravenes the development plan on that basis.
- Independent of the policy point, the observation on behalf of Leamlara Preservation Group and others implies the proposed development would result in a loss of good quality agricultural land. This statement is made in the wider context of solar farm developments in rural areas. Any reference to the loss of 'good quality' agricultural land is also purely subjective in an Irish context due to the absence of a formal land classification system in Ireland. The proposal represents a form of agricultural diversification on agricultural lands in a countryside setting, as supported by national, regional and local policy. The suitability of agricultural lands for solar farm development, including associated substations/grid connections, is well established nationally and internationally, with co-location of green-energy compatible with the continuation of agricultural activities.

Procedural aspects of the application

- Some of the third party observations question why the subject application has been made to An Bord Pleanála on a separate basis to the solar farm application which was made to Cork County Council. The requirement for a "dual consent' process for such development is well established in the planning

system and the Board will note that statutory provisions necessitated that the applicant make the two separate applications in question. There is no basis to any third party suggestions that the two applications have been made intentionally by the applicant to circumvent any planning consenting process.

- The Board will also note, that in making the two applications, a robust 'one-project' approach was adopted by the design team in the presentation and assessment of the separate solar farm and substation/grid connection components of the collective Ballysallagh Solar Farm project.
- More generally, it is submitted in the observation by Councillors Peter O'Donoghue and William O'Leary that there is a lack of guidance on solar farm developments. The international, national, regional and local policy framework support for the proposed substation/grid connection is set out clearly in the submitted Planning and Environmental Statement for the subject application.
- There is no basis to the claims that the public notices or submitted plans are inadequate and the applicant is satisfied that all statutory provisions have been complied with.

Environmental Impact Assessment

- It is submitted in the observation on behalf of the Leamlara Preservation Group that an Environmental Impact Assessment Report is required for the proposed development. Reference is made, inter alia, to perceived agricultural restructuring of rural landholdings, as well as general statement that electricity projects require EIA under the regulations. The proposed development has been screened for EIA having regard to relevant thresholds and it has been objectively concluded that the preparation of an Environmental Impact Assessment Report is not required.
- As established in the submitted EIA Screening, Part 1 and Part 2 of Schedule 5 of the Regulations defines the categories and thresholds of development that require EIA. The proposed 220kV substation and grid connection, as well as Ballysallagh Solar Farm are not of a type identified in Part 1 of Schedule 5, nor does it meet any prescribed thresholds for mandatory EIA under Part 2.
- The recent statutory instrument S1 383 of 2023 does mean that the solar farm projects are now a project type that potentially falls within scope for sub-threshold EIA Screening. Based on the information provided in accordance with

Annex IIA and Annex III of the 2014 Directive, it is considered that a sub-threshold EIA is not required for the proposed development, as adequate measures are in place to avoid reduce or mitigate likely impacts, such that neither the construction nor operational, nor decommissioning phases of the overall development will have a significant negative impact on the environment.

Landscape and Visual Impact Assessment

- Many of the submissions make general reference to perceived landscape and visual impacts arising from the proposed development.
- As noted, this submission includes a dedicated Landscape Response statement by Macro Works.
- The prepared landscape and visual impact assessment was prepared in full accordance with the Environmental Protection Agency (EPA) publication "Guidelines on the Information to be contained in Environmental Impact Statements (2022) and the accompanying Advice Notes on Current Practice in the Preparation of Environmental Impact Statements (2015), and Landscape Institute and the Institute of Environmental Management and Assessment publication entitled Guidelines for Landscape and Visual Impact Assessment (2013).
- With regard to the proposed development's appropriateness in this landscape context, it is not considered to be heavily constrained in terms of sensitive landscape areas or receptors, and the robust nature of the landscape is reflected in the surrounding working land uses, such as agricultural farmland and coniferous forestry plantations, which as the primary influences on this local landscape context.
- While the proposed development introduces a new form of development within this local landscape context, it is not considered to represent an incongruous form of development. In fact, the development respects the pastoral nature of the surrounding landscape and will generate some localised positive landscape effects through new and enhanced areas of planting.
- It should also be noted that the wider solar farm development is entirely reversible in nature, aside from the proposed substation, which will likely remain as part of the wider national grid network,

- Overall, and as stated in the submitted LVIA, the proposed Ballysallagh 220kV substation and grid connection is not considered to give rise to any significant residual landscape and visual effects.

Noise Impact Assessment

- It is submitted in some of the observations that the subject areas meets the definition of an 'EPA Quiet Area' and that the submitted Noise Impact Assessment is flawed on that basis. This matter is dealt with specifically in the submitted Noise Impact Assessment by Wave Dynamics. Section 4.2 of the report includes a Quiet Area Screening and confirms the area does not meet the EPA definition of a Quiet Area.
- As the Noise Sensitive Locations are located less than 7.5km from the M9 motorway, the development does not meet the EPA definition of a "quiet area" which is a separate noise area categorisation, and therefore the "areas of low background noise" criteria is applicable for the operational phase of the project.
- The noise levels from the substation, and wider solar farm, were assessed using criteria set out by EPA NG4 and BS4142 2014 A1-2019 Methods for rating and assessing industrial and commercial sound, which predicted that there is an unlikely adverse impact at all noise sensitive receptors for the daytime, evening and night-time periods. It follows that there will be no potential for adverse noise impacts on local residential amenities
- A number of statements made in the observation by Knockraha Environmental Group are factually incorrect. For example, the submitted Noise Impact Assessment does consider the cumulative impact of noise from the proposed substation alongside the wider solar farm.

Flood Risk

- It is submitted in a number of the observations that the proposed development will give rise to flood risk. A Flood Risk Assessment was prepared for the subject application. The site of the substation component of the proposed development does not fall within an indicative, predictive, historic or anecdotal flood zone, and therefore there is no potential flood risk associated with this area.

- Notwithstanding this, surface water drainage proposals for the proposed development have been developed to mimic the natural drainage patterns of the site and thereby be in accordance with the best management practices of Sustainable Drainage Systems (SuDS).
- Elsewhere, the FRA prepared by IE Consulting has identified that minor and limited areas of the proposed grid connection route may be susceptible to an extreme flood event associated with the Glenmore River. However, the proposed connection and cables are to be constructed underground within the public road network and designed in a manner to prevent the ingress of water. This is an industry standard for development of the subject nature.

Compliance with Water Framework Directive

- It is submitted in the observation on behalf of Leamlara Preservation Group that submitted ecological reporting does not have regard to the Water Framework Directive. As per the enclosed response by Ecology Ireland, the Water Framework status of relevant watercourses are discussed in Section 2.1 of the Natura Impact Statement (NIS) and in relation to cumulative and in-combination effects in Section 4.12 of the NIS.
- There will be no change in the WFD status of any hydraulically connected waterbodies as a result of this proposed development.
    - There will be no effects on downstream protected areas
    - The good status of the waterbodies or the potential of any waterbodies will not be put at risk.
    - The proposed development will not inhibit any waterbodies within the same water basin from progressing towards good status or potential;
    - There will be no conflict with the objectives set in the River Basin Management Plant
    - It can therefore be concluded that the proposed development is compliant with the requirements of the Water Framework Directive (2000/60/EC).

Planning and Operational Period

- It is submitted in a number of the observations that the requested 10-year planning permission is too long in duration and that the proposed 40-year

operational life of the Ballysallagh Solar Farm (Cork County Council Reference 24/05630) is also excessive.

- The 40-year operational life for the solar farm is now an accepted norm for solar farms and in this case is a matter for the Section 34 application made to Cork County Council.
- It is not necessary to time-limit the operational period for the substation. In the event that the solar farm component is decommissioned at the end of the 40-year period, the substation will remain in situ as part of valuable functioning infrastructure on the national electricity transmission network.
- The applicants have applied for a 10-year planning permission, as per the Planning Considerations advisory guidance of the Irish Solar Energy Association, who advise generally that 10-year planning permissions should be sought for projects of this nature, having regard to commercial and technical considerations beyond the control of solar farm developers.
- Post any grant of permission, the applicant will require a grid connection offer to connect the proposed development to the grid. Beyond this, application and access to subsidies including the Renewable Electricity Support Scheme auction must be factored in. Beyond this, it will be necessary to confirm the appointment of various Contractors responsible for the construction of the proposed development and a procurement process undertaken to source all necessary equipment and materials.
- The solar farm, substation and grid connection then needs to be constructed. This process may take up to 24 months and is subject to market conditions.

Health and Safety

- A number of community observations suggest that the proposed substation/grid connection will give rise to health concerns in respect of electromagnetic fields.
- The submitted Planning and Design Statement included a focused section on potential health and safety aspects. It confirms that there is no credible evidence to suggest that solar farms pose any health and safety concerns.
- There will be no electromagnetic health impacts from the project. Magnetic fields are produced through both natural and man-made means, with electromagnetic fields (EMF) a by-product of electricity. The submitted statement outlines that EMF strength decreases with distance relatively quickly.

When directly on top of a 220 kV cable the magnetic field is 2.32 μT, which is well below the 100 μT public limit. The EMF levels from the proposed development will be considerably lower than the International Commission on Non-Ionizing Radiation Protection (ICNIRP) recommendation of 100 μT.

- Elsewhere, it has been robustly demonstrated through the application reporting that there will be no impact on adjoining residential amenities. The proposed substation is an inland development, set back from public roads and residential properties. The nearest third party dwelling to the substation compound area is approximately 135 metres away to the southeast, separated by an intervening field and hedgerow boundaries.
- It has been demonstrated through the preparation of the Noise Impact Assessment Report by Wave Dynamics that there will be no operational noise impacts at local residential properties. The construction phase of development due to its nature is temporary and therefore any potential impacts will be short term and managed in full accordance with a final Construction and Environmental Management Plan to be submitted and agreed with Cork County Council.

Potential Equine Impacts

- It is submitted in one of the community observations by Mr. Alan Broderick that the proposed development will impact his equine business for which a "quiet environment" is needed.
- Based on a review, the stables in question are located c.325 metres to the nearest part of the substation compound.
- The potential for operational substations (as part of wider solar farm developments) to impact on equine enterprises, including horse breeding has previously been discounted by a number of local authorities and An Bord Pleanála. Neither Horseracing Ireland or the Irish Thoroughbred Breeders Association are objecting to solar farm applications. Indeed, some of the biggest stud farms in Ireland have lodged planning applications for solar farms. This includes a 100 MW solar farm at Killough by Coolmore Stud.
- It has been demonstrated through the prepared Noise Impact Assessment that the local noise environment will not be materially affected by the operational development. In practice, the extent of any potential impacts on any business

is confined to the temporary construction phase only. The Noise Impact Assessment confirms there will be no construction or vibration impacts outside of allowable limits.

- The applicant will engage with the owners of the subject business as part of this process to address any queries and ensure they are full informed of construction processes and sequencing.

Community Consultation

- It is submitted in some of the third party submissions that appropriate community consultation was not undertaken for the project. The applicant strongly refutes those claims. Section 5 of the submitted Planning and Environmental Statement includes a summary of consultation undertaken for the project, summary issues raised and how specific feedback from some third parties directly informed the design approach.

5.0 Planning History

5.1. The relevant planning history is as follows:

5.1.1. It is intended that the proposed 220kV substation and grid connection will service the proposed Ballysallagh Solar Farm, which is currently under consideration by Cork County Council, planning ref 24/5630.

Cork County Council, PA Reg Ref 24/5630 – Current application under consideration by Cork County Council for a 10 year planning permission for a solar farm with a total area of circa 179 hectares. The solar farm will consist of solar panels on ground mounted frames, 25no. single storey electrical inverter/transformer stations, 3 no. single storey spare parts containers, 3 no. Ring Main Units, 7 no. weather stations, underground electrical ducting and cabling within the development site, private lands and within the L7691 and L7692 public roads to connect solar farm field parcels, security fencing, CCTV, access tracks, 7 no. stream/drain deck crossings, temporary construction compounds, landscaping and all associated ancillary development and drainage works. Construction and operational access will be 4 no. entrances from the R626, L7691 and L7692. The operational lifespan of the solar farm will be 40 years

and planning permission is requested for this duration. A Natura Impact Statement (NIS) has been prepared and forms part of the application.

This application is currently at Further Information stage (Cork County Council issued a further information request on the 21st October 2024).

5.1.2. ABP-320154-24 – A request was received by the Board for pre-application consultation for a 220kV Air Insulated Switchgear (AIS) tail fed substation with associated grid connection comprising 220 kV underground cabling connecting to the existing 220 kV Knockraha substation to facilitate the proposed Ballysallagh solar farm. The Board decided that the development falls within the scope of S.182A of the Planning and Development Act 2000 (as amended).

5.2. Other relevant planning history

5.2.1. 306768-20 – Outline permission for a nursing home refused on a site to the immediate south of the proposed substation.

5.2.2. 310798-21 – Permission granted to Eirgrid for the Celtic Interconnector. The permitted development connects to the National Grid at the existing Knockraha substation. This permission was altered by way of 2 no applications under Section 146B respectively (ABP-316191-23 and 318258-23). The alterations entailed minor alterations and associated extension to the substation at Knockraha and were deemed not to be material.

5.2.3. Knockraha substation is a large electrical complex situated within agricultural lands. There is a substantial history associated with the infrastructure on this site and there have been a number of planning application at and in proximity to the substation in recent times. These include

- Cork Coco Plan Ref 25/4155 - Application for a Battery Energy Storage Compound – currently on a Further information request.
- ABP-314972-22 (Cork Coco Plan Ref 22/4488) – Permission granted for a synchronous compensator (energy grid stabilisation).
- Cork Coco Plan Ref 23/4234 – application for a grid support facility refused on the grounds that the development would impact archaeology.

Undecided to-date cases

- ABP-320276-24 (Cork Coco Plan Ref 23/5992) – Application for an Energy Storage facility currently under consideration by ABP.
- ABP-320532-24 – Application for a 110kV substation to connect a solar farm to the 220kV Knockraha substation currently under consideration by ABP.

5.3. Permitted solar farms in the vicinity:

5.3.1. ABP-300434-17 – Permission granted to Lightsource Renewable Energy Ireland Ltd. for a 10-year planning permission for a solar farm with a total area of 48.4ha at Ballyvatta and Clash, Knockraha, Leamlara, Co. Cork. This site is located circa 1.7km west of the proposed substation site and is northeast of Knockraha substation. This permission is extant until June 2028. Amendments were granted to this permission under planning ref 23/4564 in March 2024 to increase the size of the site by 7.8ha and the lifespan of the permitted solar farm from 25 to 35 years. The necessary support infrastructure to connect this solar farm to the Knockraha substation is currently under consideration by ABP (ABP-320532-24).

5.3.2. ABP-311238-21 – Permission granted to Terra Solar II Ltd. for a 10 year planning permission for a solar farm with a total area of 47.2ha at Ballynaclashy and Ballycurrany East, Midleton, Co. Cork. This site is located circa 4km east of the proposed site. This permission is extant until December 2031.

5.3.3. ABP-308979-20 - Permission granted to Terra Solar II Ltd for a 110kV electricity substation to connect to and serve a solar farm, associated loop-in infrastructure and all ancillary works at Lysaghtstown, Midleton, Co. Cork. This site is located circa 5.6km east of the proposed site. This permission is extant until June 2031.

6.0 Policy Context

6.1. EU, National and Regional Legislation/Policy

EU, national and regional policy documents are relevant in respect of the proposed development and include:

- EU Directive 2009/28/EC and Directive 2018/2001/EU (Renewable Energy).
- National Planning Framework, Project Ireland 2040.

- National Planning Framework – First Revision, April 2025.
- Climate Action and Low Carbon Development Act 2015, as amended.
- National Mitigation Plan, 2017.
- National Adaption Framework, 2018.
- National Biodiversity Action Plan 2023-2030
- Climate Action Plan, 2025.
- Climate Action Plan, 2024.
- Regional Spatial and Economic Strategy for the Southern Region (RSES).

The legislation and policy documents essentially promote, and set targets for, transition to a low carbon and climate resilient society and support the development of associated infrastructure, including the development of the electricity transmission system, to support this transition (e.g., to accommodate more diverse flows), subject to environmental safeguards.

6.2. Cork County Development Plan 2022-2028

6.2.1. The development plan supports renewable energy development. Chapter 13 Energy and Telecommunications has the following overarching objective for Renewable Energy:

Objective 13-2 (a) Renewable Energy

a) Support Ireland's renewable energy commitments as outlined in Government Energy and Climate Change policies by facilitating the development of renewable energy sources such as wind, solar, geothermal, hydro and bio-energy and energy storage at suitable locations within the county where such development has satisfactorily demonstrated that it will not have adverse impacts on the surrounding environment (including water quality), landscape, biodiversity or amenities.

6.2.2. Section 13.8 of the CCDP sets out detail in respect of Solar Energy. The following are considered relevant:

Objective 13-14 Solar Energy

a) In recognition of national targets and commitments to significantly increase renewable energy production, support will be given to solar farm projects at

appropriate locations, where such development does not have a negative impact on the surrounding environment, landscape, historic buildings, or local amenities.

b) Promote the development of solar energy infrastructure in the county, in particular for on-site energy use, including solar PV, solar thermal and seasonal storage technologies. Such projects will be considered subject to environmental safeguards and the protection of natural or built heritage features, biodiversity views and prospects.

c) Require that new solar farm development proposals be assessed against the criteria listed in this Plan until such time as Section 28 Guidelines on Solar Farm Developments from the Department of Housing, Planning and Local Government are published to supersede same.

g) Proposals for development of new solar developments and associated infrastructure including grid connections will be subject to ecological impact assessment and, where necessary Appropriate Assessment, with a view to ensuring the avoidance of negative impacts on designated sites, protected species and on-sites or locations of significant ecological value.

Objective 13-21 Electricity Network

a) Support and facilitate the sustainable development, upgrade and expansion of the electricity transmission grid, storage, and distribution network infrastructure.

b) Support the sustainable development of the grid including strategic energy corridors and distribution networks in the region to international standards.

c) Facilitate where practical and feasible, infrastructure connections to wind farms, solar farms, and other renewable energy sources subject to normal proper planning considerations.

d) Proposals for development which would be likely to have a significant effect on nature conservation-sites and/or habitats or species of high conservation value will only be approved if it can be ascertained, by means of an Appropriate Assessment or other ecological assessment, that the integrity of these sites will not be adversely affected.

6.2.3. It is noted that paragraph 13.8.5 of Section 13.8 Solar Energy lists a range of issues that should be considered in the context of solar farm developments. These are

considered in Section 9 below where relevant to this substation and grid connection application.

6.2.4. Other relevant Policies

- Appendix F - Landscape Character Assessment of County Cork outlines the site is located within the Landscape Character Type of 'Fissured Fertile Middleground' which has a landscape value rating of medium and sensitivity rating of high.
- The CCDP contains a range of policy objectives across a number of topics. This includes objectives in relation to climate action as set out in Chapter 17 and the protection for designated as well as non-designated sites and environmental receptors. These are all noted.

6.3. **Cork County Council Climate Action Plan**

This plan aims to create a low carbon and climate resilient County, by delivering and promoting best practice in climate action, at the local level and to align to the Government's overall National Climate Objective, which seeks to pursue and achieve, by no later than the end of 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy.

7.0 Natural Heritage Designations

7.1. The nearest pNHA's are the Leamlara Woods, Ballynaclashy House and Great Island Channel.

8.0 EIA Screening

8.1. The proposed development has been subject to preliminary examination for environmental impact assessment (refer to Form 1 and Form 2 in Appendices of this report). Having regard to the characteristics and location of the proposed development and the types and characteristics of potential impacts, it is considered that there is no real likelihood of significant effects on the environment. The proposed development, therefore, does not trigger a requirement for environmental impact assessment screening and an EIAR is not required.

9.0 Planning Assessment

9.1. Context

The proposed substation and grid connection application seeks to serve a proposed solar farm (Ballysallagh Solar Farm) and in this regard is considered to be acceptable. Having examined the application details and all other documentation on file, including all of the submissions received in relation to the application, and inspected the site, I consider that the main issues in the planning assessment relate to the following matters:

- Overview
- Compliance with Policy
- Visual impacts and local amenity
- Traffic and Infrastructure
- Cable Route
- Noise
- Residential Amenity
- Cultural heritage
- Water and drainage
- Ecology
- Water Framework Directive
- Other issues

Issues raised in respect of EIA are addressed in Section 8 and Appendix 2 of this report.

Issues raised in respect of Appropriate Assessment are addressed in section 10 of this report.

9.2. Overview

9.2.1. The proposed development is to serve a proposed solar farm, known as Ballysallagh Solar Farm. An application for Ballysallagh Solar Farm was submitted to Cork County Council in August 2024 and is currently under consideration by the Council, planning ref 24/5630. The Board will note that statutory provisions necessitated that the applicant make the two separate applications – a section 182A application directly to

board for the substation/grid connection and a section 34 application to Cork County Council for the associated solar farm. Prior to making any decision in respect of this file, it is recommended the Board consider the status of the solar farm planning application (planning ref 24/5630) and whether any appeal has been received.

9.2.2. Following a pre-application consultation under ABP-320154-24 which included for a 220kV Air Insulated Switchgear (AIS) tail fed substation with associated grid connection comprising 220 kV underground cabling connecting to the existing 220 kV Knockraha substation to facilitate the proposed Ballysallagh solar farm, the Board decided that the development falls within the scope of Section 182A of the Planning and Development Act, 2000 as amended.

9.2.3. I note the proposed development at this planning application stage is as per that indicated in the pre-application consultation stage (ABP-320154-24).

9.2.4. An NIS was deemed required by the applicant as the proposed development site has hydrological connectivity with the Cork Harbour SPA and Great Island Channel SAC.

9.2.5. The proposed substation compound has a site area of approximately 1.3 hectares within an agricultural field. The site forms part of lands that are high quality farmland, used for pasture farming with native hedges around the field boundaries. The substation compound will be accessed via an internal access track and an upgraded access along the L7690 local road. This entrance, which is also part of the proposed Ballysallagh solar farm under planning reference 24/5630, will be subject to upgrade works to ensure sightlines are available.

9.2.6. In relation to the proposed development connection methods, the applicant outlines that it is proposed to connect the proposed 220kV substation to the existing 220kV Knockraha substation by means of a 220kV underground grid connection which is approximately 10.2 km in length. The grid connection route is to be located in the public road network. The route travels southwest from the proposed solar farm on the L7690 and L3604. At Pigeon Hill Junction the route continues travelling southwest on the L2966 before turning north on the L6990 and then east on the L6989 where it enters the existing Knockraha 220kV substation.

9.2.7. Overall, the proposed substation/grid connection would not be required without the solar farm and the solar farm could not be constructed without the grid connection/substation. Notwithstanding the dual consent process the applicant makes

it clear that the various submitted reports considered the substation and grid connection development and the wider solar farm development for the purpose of completing a robust assessment of the entire project.

9.3. Compliance with Policy

9.3.1. The proposed development comprises a 220kV AIS electricity substation and associated grid connection, which is required to connect a proposed solar farm to the national grid.

9.3.2. National Policy (including the NPF, NPF First Revision, April 2025 and Climate Action Plan 2025 and Climate Action Plan 2024) include objectives to support proposals which aim to achieve a climate neutral economy. In line with EU ambition, the Programme for Government, Our Shared Future commits to achieving a 51% reduction in Ireland's overall GHG emissions from 2021 to 2030, and to achieving net-zero emissions no later than 2050.

9.3.3. The National Planning Framework (First Revision) National Strategic Outcome (NSO) 8 focuses on the 'Transition to a Low Carbon and Climate Resilient Society' and includes National Policy Objective (NPO 70) 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', while the need for new energy systems and transmission grids are recognised.

9.3.4. At a regional level, the Regional Spatial and Economic Strategy (RSES) for the Southern Region, Policy Objectives RPO 100 and RPO 219 support the integration of indigenous renewable energy production and grid injection and the sustainable reinforcement and provision of new energy infrastructure by infrastructure providers.

9.3.5. At a local level, the proposed development accords with the Cork County Development Plan Objective 13-21 which facilitates where practical and feasible, infrastructure connections to wind farms, solar farms, and other renewable energy sources subject to normal proper planning considerations.

9.3.6. The site is located in a rural location on agricultural lands which is not covered by any specific land use zoning objective in the development plan. There is nothing in terms of policy context to preclude such a type of development being considered The

principle of solar farms has been accepted under planning refence ABP 300434-17, ABP 302853-18 and 311238-21.

9.3.7. I note the concerns raised in the submissions in relation to the lack of Ministerial Guidelines or a solar energy strategy for County Cork. I consider this should not be a reason for refusing permission in this instance or to preclude the consideration and adjudication of applications for such type of development. In the absence of a plan-led approach, applications are to be considered on their individual merits and subject to normal planning considerations including the range of issues listed in section 13.8.5 in the Development Plan.

9.3.8. It is my opinion that the principle of any development required to enable the proposed associated solar farm development should therefore also be acceptable in principle subject to an assessment under any other relevant criteria, as set out below.

9.3.9. Overall having regard to the nature and scale of the proposed development, the location of the site and the national, regional and local planning policy which supports the development of renewable energy, I consider the principle of the development to be acceptable.

9.4. Visual Impacts and Local Amenity

9.4.1. A Landscape and Visual Impact Assessment (LVIA) has been carried out by Macroworks, a landscape consultancy firm specialising in LVIA. The report assesses the landscape and visual impacts of the proposed development on the receiving environment, identifying a 5km radius with a focus on receptors within 2km of the site.

9.4.2. The study is supported by 5 photomontages taken from various receptor types within the study area. Photomontages include for existing views and outlined views irrespective of screening.

9.4.3. The substation is based on EirGrid design specifications. A notable feature of the proposed development includes for the utilisation of lightning protection masts circa 19m in height and a telecom mast of circa 22m in height.

9.4.4. As per the Cork County Development Plan the proposed substation development and wider solar farm, and much of the wider study area are not contained within a High Value Landscape (HVL) designation.

9.4.5. The Landscape Character Assessment within the Cork County Development Plan (2022-2028) divides the county into 16 No. Landscape Character Types (LCTs). The proposed substation development and wider solar farm is located within LCT10b – Fissured Fertile Middleground, which is classified with a 'Medium' landscape value, 'High' landscape sensitivity, and 'County' level landscape importance. This landscape type, as a middleground, has characteristics of both the flatter fertile farmland type (Fertile Plain with Moorland Ridge) and the higher marginal hilly or rugged type (Rolling Marginal and Forested Middleground).

9.4.6. The proposed substation site will require the removal of the prevailing grassland land cover and minor reprofiling of the terrain. In addition, a new internal access/service tracks will be constructed to service the substation. The substation access including the provision to adequate sightlines at the junction with the public road will require the removal of 15m of roadside hedgerow. This will be reinstated behind the sightline post construction.

9.4.7. The main component of the proposed development that could have a visual impact is the substation compound development, with the cable route largely being laid under the existing road network and therefore will not have any visual impact following reinstatement.

9.4.8. In relation to visual impacts, the LVIA outlines that the significance from viewpoints would be no greater than Moderate-slight for the substation, grid connection and wider solar farm with the remainder of the 5km study area likely to experience Slight or Imperceptible landscape impact.

9.4.9. The nearest dwellings to the substation are generally along the nearest local road and are in excess of 120m from the proposed substation compound. The substation is set back into the landscape and is screened from visual receptors by intervening hedgerows. I agree with the applicant that only partial view of the proposed substation building and structures will be afforded through a veil of intervening vegetation.

9.4.10. I also note the LVIA outlines mitigation measures including the retention and bolstering of the existing hedgerow boundaries within and around the site. This will aid visual screening and maintains the existing field pattern. Nonetheless, residual visibility of the proposed control buildings and lightning mast structures still have the potential to be afforded over the top of the intervening vegetation.

9.4.11. In addition, in response to concerns raised in the public submissions and by the planning authority particularly in relation to views from the south, the applicants submitted a Landscape Response Statement prepared by Macro Works. This statement confirms the findings of the original Landscape and Visual Impact Assessment (LVIA) and includes Digital Surface Model (DSM) visibility mapping for illustrative purposes which indicates that there is very limited potential for visibility along the L-6791 local road to the south of the site.

9.4.12. In relation to cumulative impact assessment the assessment considers three permitted solar farm development within the 5km study area. The LVIA outlines that given the notable sense of contextual separation between these developments it is not considered there will be any notable cumulative landscape effect to occur. It concludes the proposed substation will result in limited cumulative landscape and visual effect which are not considered to be significant. I agree with those sentiments.

9.4.13. It is noted the submitted Zone of Theoretic Visibility Mapping (ZTV) indicates that there is no potential for visibility of the proposed substation from the R626 Regional Road to the north of the settlement of Lisgold Scenic Route. Following an inspection of the site, the surrounding area and an examination of the information submitted including the visual aids, I consider the receiving environment has the capacity to accommodate and absorb the proposed development at this location from a visual and landscape perspective.

9.4.14. Having regard to the topography and location of the substation site, its set back and the intervening screening by hedgerows and trees, the separation distances to residential development and the intervening vegetative screening and topography between the site and the various receptors, I consider that the proposed development would not result in an adverse impact on the visual amenities of the area. In addition, it is considered that the mitigation as outlined including additional planting would serve to further enclose the proposed scheme visually. Any views of the substation that would arise on the road network in the immediate and wider area, would be intermittent, and it is considered would not result in an adverse visual impact.

9.5. **Traffic and Infrastructure**

9.5.1. The applicants submitted a Site Access Report, a Construction and Environmental Management Plan and a Construction Methodology for the Electrical Infrastructure to address issues associated with on and off-site construction.

9.5.2. The Site Access Report outlines that the proposed substation will be accessed for both the construction and operation phases by means of an entrance from the L7691 local road. A 4.5m to 6.5 m wide compacted access track will extend from the entrance to the substation compound and this will also serve a temporary construction compound located immediately north of the substation.

9.5.3. The proposed entrance is to be located immediately adjacent to an existing laneway entrance serving a farmyard. The proposed entrance is located on straight stretch of local road and will involve the removal of 15m of hedgerow including 6 no trees.

9.5.4. During the 24-month construction period of the solar farm and substation it is anticipated that the average number of HGV vehicles will be 10 per day with an hourly average of 1. The development will be remotely operated so will generate minimal vehicle movements during its lifetime.

9.5.5. The Site Access Report includes a Swept Path Analysis of the entrance and route and concludes that it is acceptable. It is proposed that construction traffic will access the overall site from two separate delivery routes - from the west via the M8 and from the east via the N25/R626. The substation is to be accessed via the N25/R626. I note that the planning authority has no objection on this basis. I also note the comment from TII who request the Construction Traffic Management Plan be updated to include full details of all haul routes and details of the transportation of Abnormal Loads/Exceptional Abnormal Loads in relation to the national road network.

9.5.6. A significant number of submissions raise concerns about that the inadequate nature of the local road networks to cater for the expected heavy construction traffic as well as the impact the extensive road works will have on local residents and local infrastructure.

9.5.7. In relation to the construction traffic details submitted by the applicant, I am of the view that they are not unreasonable or inconsistent with other similar development proposals elsewhere. I consider that the surrounding road network is adequate in

terms of quality and capacity to accommodate the short-term construction traffic movements which would arise, subject to a final construction environmental management plan including haul routes being agreed with the local authority.

9.6. Cable Route

9.6.1. An underground 220kV grid connection cable is proposed to connect the proposed substation into the existing Knockraha 220kV substation. The proposed grid connection route is approximately 10.2km in length. The proposed route travels south -west from the proposed solar farm on the L7690 and L3604. At Pigeon Hill Junction the route continues travelling south-west on the L2966 before turning north on the L6990 and then east on the L6989 where it enters the existing Knockraha 220/110kV substation.

9.6.2. The 'Electrical Infrastructure - Construction Methodology Statement' sets out the construction techniques and methodologies which will be implemented during the construction of the grid connection cable. It is stated that trenches of 100 metres will be dug at a time to install the cable, these will be filled prior to the commencement of the following trench and so on. The restriction of trench lengths will ensure that workers can monitor and contain any dust emissions easily and therefore reduce such impacts to adjacent sensitive receptors. The statement also sets out the Horizontal Directional Drill (HDD) Methodology that will be employed to deal with a number of crossing elements such as watercourses and cattle underpasses.

9.6.3. A significant number of submissions have raised concerns in relation to the excessive nature of the grid route and the impact its construction will have on their daily lives. From Pigeon Hill junction I note the cable route travels southwest along the local road network before entering Knockraha substation from the west. I also note the comments from the Planning Authority that off-road options for the routing of cables should be considered in the first instance and only when it is demonstrated to be non-feasible should consideration be given to allowing routing along roads.

9.6.4. In response the applicant has identified a number of constraints in relation to off road options namely the lack of availability of privately owned land and the visual impact that overhead power lines would have. The applicant has indicated that they have engaged with a significant number of landowners who are proximal to the grid route

but it was not possible to reach agreement for inclusion of their lands as part of the development.

9.6.5. It must also be noted that the 400kV Celtic Interconnector route connects into Knockraha substation from the east (see Figure 03 Celtic Interconnector Crossing on page 26 of the Planning and Environmental statement). The applicant sets out that the proposed grid connection route will cross underneath the 400kV Celtic Interconnector at Pigeon Hill just southeast of Knockraha substation.

9.6.6. The applicant states that they have consulted with Eirgrid and Eirgrid has indicated its agreement in principle subject to further consideration at detailed design stage. The applicant sets out that the grid crossing location and angle at the Pigeon Hill junction is a suitable one and subject to adequate separation distance being achieved between the Celtic Interconnector and the proposed grid cable no derating effects on the Celtic interconnector would occur. It was agreed that further engagement with Eirgrid will take place at the point of the project receiving a grid offer and will involve the preparation of design risk assessments and a detailed construction programme as well as operational and maintenance arrangements.

9.6.7. I note the comments of the Planning Authority in relation to looking at alternative off road grid route options and the response from the applicant in relation to the difficulty in attaining privately owned land. Overall, in this case I deem the undergrounding of cables in the road network to be a reasonable and practical solution. I am satisfied that the impact of the laying of the grid connection will be short-term and temporary and would have no permanent impact on the road network in this area given it is underground. In addition, the works would only be carried out under a road opening licence from Cork County Council.

9.6.8. Furthermore, the EcIA sets out that the potential effect on habitats and flora from the grid route construction will be neutral/imperceptible as the habitat is of negligible conservation importance and will be returned to their original state following completion of works. The EcIA also notes that prior to any earthworks along the grid connection route taking place there will be an updated survey of Third Schedule Invasive species, and an Invasive Species Management Plan carried out and submitted for the agreement with the planning authority.

9.7. **Noise**

9.7.1. In considering the potential for noise impacts the construction and operational aspects of the proposed development must be considered. The proposed development is not located in a densely populated area, however, there is an established dispersed rural settlement pattern in the vicinity of the site. The nearest small settlements are Leamlara which is circa 1.3km from the substation site and Knockraha which is circa 1km to the north of the grid connection route.

9.7.2. A Noise Impact Assessment was prepared by Wave Dynamics. The assessment considers the construction noise associated with the construction of the substation, grid connection and solar farm, the operational noise associated with the substation as well as the cumulative operational noise from the substation and proposed solar farm.

9.7.3. A background noise survey was conducted in May 2024. The Noise Sensitive Locations (NSL) were grouped together in 12 no NSL's for the purpose of the assessment and the worst case NSL in each group has been assessed as a representative of the group. From the measurements it was determined that the NSL's meet the definition of an 'area of low background noise' as defined by the EPA.

9.7.4. I have noted the submissions with the appeal and the comments by the Environment Section of the Council regarding noise. Many of the submissions have questioned the baseline noise assumptions for the area. In response the applicant has specifically addressed this issue in the Response Letter prepared by Wave Dynamics. They set out that Section 4.2 of the Noise Impact Assessment includes a Quiet Area Screening. This confirms the area does not meet the EPA definition of a Quiet Area as the site is located less than 7.5km from the M9 motorway. Therefore, the development does not meet the EPA definition of a "quiet area" which is a separate noise area categorisation, and the "areas of low background noise" criteria is applicable for the operational phase of the project.

9.7.5. The modelling results demonstrate that construction noise levels for all stages will remain below the 65dBA threshold. Therefore, no construction noise mitigations are required as all noise from construction works falls within the criteria set out by BS 5228-1. However, I do note that noise reductive measures include the use of site

hoarding, appropriate selection of plant and equipment and ensuring all construction plant and vehicles are regularly maintained.

9.7.6. I also note that the underground cable installation will be completed in lengths of 100m per day largely in the road network. Should exceedances arise for short periods in relation to the trenching works I note that these will be short term in duration.

9.7.7. Overall, I am satisfied that the proposed development will not give rise to significant adverse noise effects during the construction period.

9.7.8. In relation to operational noise, solar farm developments are not significant producers of noise. The main sources of noise during the operational period will be from the inverter/transformer stations within the solar farm site and the proposed substation itself. It must also be noted that as the solar panels produce power only when the sun is shining the inverters will be completely silent for the hours of darkness at night.

9.7.9. The assessment outlines that noise levels at all residential receptors are below the maximum day time recommended noise levels of 45dB and night time levels of 35dB as per the criteria set out by the EPA guidance note for noise: NG4 guidelines and BS 4142 2014 + 2019 Method for rating and assessing industrial and commercial sound.

9.7.10. The report concludes that the substation and solar farms will comply with the noise levels as set out in guidance and will not produce a negative noise impact.

9.7.11. Overall, I do not consider that significant effects by way of noise are likely to arise during the operational phase, however, I consider a condition limiting operational noise be included, should the Board be minded to grant permission.

9.8. **Residential Amenity**

9.8.1. The site is located within a large agricultural holding with the site of the proposed substation in excess of 120 metres from the nearest residential dwelling. I note the concerns raised in relation to impacts on residents and the rural character by way of proximity, noise, traffic and visual intrusion. A Construction Environmental Management plan and a Methodology Construction for the Electoral equipment has been submitted which outlines the construction period for the overall development including the associated solar farm will take 24 months.

9.8.2. Having regard to the separation distance between the proposed development and existing residential developments including the intervening hedgerows, the temporary nature of the construction phase, and my assessment in relation to issues of noise, visual impacts and traffic, I do not consider that significant impacts on residential amenity are likely to occur during the construction phase.

9.8.3. In relation to the operational phase, having regard to separation distances, the low density of residential development and the assessment of issues such as noise, visual impacts and traffic, I consider that no significant adverse impacts on residential amenity during the operational stage are likely to arise.

9.9. Cultural Heritage

9.9.1. The applicant has submitted a document entitled 'An Archaeological, Architectural and Cultural Heritage Impact Assessment for the Proposed Ballysallagh 220kV Substation and Grid Connection' prepared by Rubicon Heritage. This document is site specific to this application but is part of an overall survey for the associated Ballysallagh solar farm which is under consideration by Cork County Council (plan ref 24/5630).

9.9.2. The archaeological assessment has identified 27 sites of archaeological, and/or cultural heritage significance within the defined study area for this planning application. A map of the study area is set out in Figure 6 in the Impact Assessment. The proposed grid connection route is approximately 10.2km in length and is primarily confined to public roads.

9.9.3. The applicant sets out that an extensive desktop study in addition to a field inspection of the proposed development area was undertaken. A photographic record and written description were compiled for any known and/or potential sites of archaeological, architectural, and/or cultural significance.

9.9.4. The methodology used for assessing baseline value of sites was determined based on the following criteria: legal status, condition, historical associations, amenity value, ritual value, specimen value, group value and rarity. The sensitivity of a site was determined based on the presence of extant remains and/or the potential for associated subsurface remains of the feature to be present in situ.

9.9.5. There are no National Monuments sites, Protected Structures, ACAs or sites from the NIAH register within the study area. In addition, the site is considered not to include undesignated cultural heritage sites such as lime kilns, dwellings/outhouses, trackways or townland boundaries.

9.9.6. In total, there are 12 Record of Monuments and Places (RMPs) located within the study areas for the proposed development. These are listed in Table 8 (CH001-CH012) of the Impact Assessment.

9.9.7. Five are located within the study area for both the substation and grid connection while seven are located within 250m of the proposed grid connection. None of the RMPs are situated within the application boundary of the proposed substation and grid connection.

9.9.8. The proposed substation will not have any direct or indirect impact on any CH site given the that the vast majority have no upstanding remains or are located at such a distance not to be indirectly affected.

9.9.9. However, two RMPs are crossed by the route of the proposed grid connection. The proposed grid connection crosses the Zone of Notification (in-road) for two RMPS (CH007 and CH011). It must be noted that where the proposed cable route crosses the Zones of Notification, the cable is to be located 'in-road'.

9.9.10. The Impact Assessment sets out that the subsurface groundworks for the proposed grid connection could have a potentially permanent, direct effect on unknown archaeology, and as a result indirectly effect the two monuments. However, there is reduced risk in encountering archaeological deposits due to the location of the proposed grid connection within the L6990 and L6989, local roads.

9.9.11. One additional area of Archaeological Potential (CH027) was identified within the application boundary of the proposed grid connection where the proposed cable route crosses a stream (in-road).

9.9.12. There is a single result of previous archaeological excavation (CH013) undertaken within the study area, and this did not identify any archaeological deposits.

9.9.13. The Impact Assessment also includes an assessment of the cumulative impact of other developments considered to be mainly one-off houses and agricultural development on the designated sites in the zone of influence. The associated

Ballysallagh solar farm which is currently under consideration by Cork County Council (Plan Ref 24/5630) was also considered. Six RMP's were identified to be within/close to application boundary for the Ballysallagh Solar Farm. The applicant sets out that the Ballysallagh Solar Farm has been designed so that no development shall take place within Zones of Notification.

9.9.14. Section 5 of the Impact Assessment sets out the Mitigation Strategy

9.9.15. In relation to the substation site a combination of advance geophysical survey and advance archaeological test trenching, targeting the footprint Substation compound, will be carried out by a suitably qualified archaeologist under licence to the National Monuments Service.

9.9.16. A suitably qualified archaeological consultant under license will monitor subsurface groundworks undertaken in proximity to RMPs along the grid connection route.

9.9.17. Should any archaeological material be encountered, works will cease and a strategy will be proposed to the County Archaeologist and National Monuments Service to suitably record any archaeological material identified, and preserve any archaeological material in situ, where possible.

9.9.18. I note the comments in the Planning Authority's report that it is important to establish at an early stage the presence or absence of subsurface archaeology in order to guide the design and layout of the development. They request that a geophysical survey and licensed archaeological testing of the proposed substation compound site be undertaken prior to any decision being made.

9.9.19. The public submission also raises issues in relation to the incomplete nature of the Archaeological Impact Assessment and the fact no test trenching has taken place prior to the submission of the application.

9.9.20. The Departments submission recommends a condition be attached to any grant of permission that a pre-development Archaeological Geophysical Survey and a pre-development Archaeological Test Excavation at the location for the sub-station be carried in advance of any site preparation works and an underwater archaeological impact assessment of all in-stream works be undertaken.

9.9.21. Overall having regard to the fact that no RMP's are located within the substation site and the fact that the proposed grid route is primarily confined to public roads I am

satisfied that the proposed advance geophysical survey and advance archaeological test trenching is an acceptable approach. I concur with the Applicant that in light of the AIA conclusions and having regard to the National Monuments Service – Internal Guidance Document in relation to Solar Farms, I consider it reasonable that targeted test trenching be undertaken post permission. I note that the Board have adopted similar approaches in relation to other solar projects for example ABP-311760-21, ABP-312712-22 and ABP-318001-23. I also recommend that the conditions recommended by the department be attached to any grant of permission.

9.9.22. In other respects, I conclude that the overall impact on the cultural heritage of the area, either directly or by way of indirect visual or other impacts, are low and can be mitigated successfully.

9.10. Water and Drainage

9.10.1. The applicant has submitted a Site-specific Flood Risk Assessment for the proposed development.

9.10.2. The site of the proposed substation does not fall within any floodzone and therefore will not result in an increased flood risk elsewhere. There are no watercourses on the site. The proposed access track to the substation compound will be permeable allowing rainwater to infiltrate through. The Site Access Report sets out that a linear drainage system at the proposed entrance connected to soakways within the site will prevent surface water draining onto the public road.

9.10.3. The surface water generated from roofs, hardstanding and bunded area within the substation compound will discharge to soakaways via a class 1 Full Retention Oil Separator. Surface water drainage proposals have been developed to minic the natural drainage patterns on site in line with best practice. In overall terms, there would be no significant increase in run-off from the site compared to its existing agricultural use, subject to appropriate Suds measures.

9.10.4. The proposed grid connection route crosses a number of watercourses including tributaries of the Leamlara River and Glenore Rover. The Flood Risk Assessment sets out that the majority of the grid route is outside of any floodzone. The grid connection cables are to be constructed underground within the public road network and will be

designed and installed to prevent ingress of water as per the industry standard. Where the cables must cross drains or a watercourse, either a pre-cast concrete bridge deck or horizontal directional drilling (HDD) will be utilised as the method of crossing. The Flood Risk Assessment concludes that proposed grid connection cables will not result in an increased floor risk to the surrounding lands, or any of the other developments proposed in the area**.**

9.10.5. A cumulative assessment having considered other projects in the wider area concluded no cumulative impacts are predicted. Overall, I am satisfied that sufficient detail has been provided and I consider that the risk of flooding from the proposed development is low and that it will not increase the risk of flooding elsewhere.

9.11. Ecology

9.11.1. The application is accompanied by an Ecological Impact Assessment (EcIA). The applicant sets outs that the submitted EcIA considers both this substation and grid connection application and the proposed solar farm for the purposes of completing a robust assessment of the entire project.

9.11.2. A number of submissions raised concerns about the impacts on wildlife, including removal of habitat, and impacts on birds, bats, bees and other species.

9.11.3. Section 2 of the EcIA sets out the Methodology followed to establish the baseline ecological condition of the site and surrounding area. It involved undertaking a desktop review and baseline field assessments.

9.11.4. Habitats identified were classified in accordance with ‘A Guide to Habitats in Ireland’ (Fossitt 2000) and their extent and relative abundance was described using the DAFOR scale. The primary habitats recorded within the proposed development site was ‘improved agricultural grassland’ and ‘treeline’.

9.11.5. The ecological valuation of the improved agricultural grassland land habitat is considered to be of local importance (lower value). Treeline habitat is considered to be of local importance (higher value) and is present along the grid connection route. Species present included Beech, Ash, Sycamore, Oak, Sitka Spruce (Picea sitchensis), Scots Pine (Pinus sylvestris), Alder (Alnus glutinosa) and Elm.

9.11.6. In response to a concern raised in the Planning Authorities report in relation to the impact of the underground grid cable route on the root protection zones for trees the applicant has set out that protection measures will be adopted as per ESB guidance, where a ‘precautionary zone’ is calculated and in the majority of instances, the proposed underground cable corridor will divert around the 'precautionary zones’ and is sited well away from mature tree lines. It is not expected that any trees will need to be removed to facilitate the proposed underground cables. Section 4 of the EcIA notes that the road surfaces will be returned to their original state following completion of the undergrounding of the cable and as a result, impacts will be neutral, imperceptible on these habitats.

9.11.7. The field aspect of the fauna assessment involved a series of site walkovers of the study area where direct and/or indirect observations were noted in accordance with standard guidelines. In all, 6 site terrestrial walkovers of the wider solar farm area were carried out covering the summer period. In addition, a series of mammal trail cameras and passive bat detectors were installed to collect further information on the mammal species present.

9.11.8. All freshwater watercourses which could be affected directly or indirectly by the proposed development and associated infrastructure were considered as part of the assessment. A total of 15 sites listed in Table 2.2 were selected for detailed aquatic assessment and the surveys focused on both instream and riparian habitats at each aquatic sampling location and included a fisheries assessment. This holistic approach informed the overall aquatic ecological evaluation of each site/watercourse in the context of the proposed development and ensured that any habitats and species of high conservation value would be detected to best inform mitigation.

9.11.9. Section 3.4.2 summarises each of the 15 survey sites in terms of aquatic habitats, physical characteristics and overall value for fish and macrophyte/aquatic bryophyte communities. Table 3.9 provides a summary of the fish species recorded at each survey site and Table 3.10 provides a summary of the aquatic species and habitats of high conservation concern recorded during the surveys. An evaluation of the aquatic ecological importance of each survey site based on these aquatic surveys is provided and summarised in Table 3.11.

9.11.10. The watercourses in the vicinity of the proposed substation/grid connection application and the wider Ballysallagh solar farm development are typically small to medium-sized upland sandstone channels with varying degrees of historical modification. Siltation and eutrophication pressures from adjoining agricultural land uses has impacted water quality.

9.11.11. White-clawed crayfish were not recorded during targeted searches and are not known to be present in the survey area given unsuitable water chemistry. In terms of biological water quality, all survey sites failed to meet the target good status requirements of the Water Framework Directive.

9.11.12. Nevertheless, with the exception of 2 no sites, all survey sites supported high conservation value aquatic species, including Atlantic salmon, brown trout, lamprey (Lampetra sp.), European eel and/or otter. In accordance with NRA 2009 guidance titled Guidelines for Assessment of Ecological Impacts of National Road Schemes, the presence of these species (primarily brown trout) resulted in most sites being evaluated as local importance (higher value) in terms of their aquatic ecology.

9.11.13. No examples of Annex I habitats (e.g. floating river vegetation) were recorded from the survey sites in August 2024. In addition, no rare or protected macro-invertebrate species (according to national red lists) were recorded in the samples taken, with the low-diversity communities dominated by common species typical of sandstone catchments such as Gammarus duebeni and Baetis rhodani.

9.11.14. Section 3.1 of the EcIA sets out that the proposed solar farm development and underground grid connection route to Knockraha substation are not located proximate to any nationally designated sites. Only two such sites, Great Island Channel pNHA (001058) and Leamlara Wood pNHA (001064) are located within 5km of the proposed development.

9.11.15. Table 3.1 provides details of all relevant designated sites within 15km of the proposed application site. The proposed development is hydrologically connected via numerous watercourses to the Great Island Channel SAC (001058) and Cork Harbour SPA (004030), both of which are located 2.9km south of the proposed grid connection route. The potential for effects on European sites is fully considered in the Natura Impact Statement (NIS) that accompanies the application.

9.11.16. Section 3.3.1 sets out a total of 56 bird species have been recorded historically and held by the NBDC database for the 2km grid squares encompassing the application site boundary. These are listed in Table 3.3 of the EcIA and represents a wide diversity of farmland and woodland birds in addition to number of waterbird and wading bird species. Seven of the bird species are currently Red-listed (Gilbert et al. 2021) and an additional 12 of the species are Amber-listed including Annex I species Kingfisher, *Alcedo atthis.*

9.11.17. A total of 39 bird species were recorded during the breeding transect survey carried out across the wider area. Of the 39 species recorded, five of these are currently Red-listed (Gilbert et al. 2021): Grey Wagtail, Kestrel, Meadow Pipit, Stock Dove and Yellowhammer. A further six species recorded are Amber-listed. The only SCI species of Cork Harbour SPA recorded during the breeding survey at the site was Grey Heron.

9.11.18. Section 4.1, Potential Effects on Designated Sites sets out that there is potential that SCI species and other wetland bird species could utilise lands within the site for foraging purposes, albeit on an occasional basis e.g. following silage harvesting and/earthworks such species would seek to exploit foraging opportunities.

9.11.19. Table 3-5 sets out a detailed list of non-volant mammal recorded within the relevant 2km grid squares overlapping the proposed application site. Mammal species recorded historically in the area include Hedgehog, Erinaceus europaeus, House Mouse, Mus musculus, Pine Marten, Martes martes, Pygmy Shrew, Sorex minutus and Red Squirrel, Sciurus vulgaris.

9.11.20. Table 3-6 presents the mammal (and bird) species recorded on the six trail cameras as part of the surveys of the wider solar farm development. Cameras identified the presence of at least 8 mammal species: Fox, Vulpes vulpes, Rabbit, Oryctolagus cuniculus, Badger, Cat, Felis catus, Red Squirrel, Brown Rat, Rattus norvegicus, Bank Vole, Myodes glareolus and Wood Mouse, Apodemus sylvaticus. No active Fox den was located within the application site. Rabbits are widespread and relatively numerous within the application site.

9.11.21. No evidence of the presence of Otters was recorded locally either on the trail cameras or as part of the site walkovers. It is likely however that Otters may occur on the local watercourses, at least occasionally. The results of the dedicated aquatic

ecology survey undertaken at 15 no sites recorded two sites with evidence of the presence of Otter with both of these locations downstream of the development along the Owennacurra River.

9.11.22. In relation to Bats the Model of Bat Landscapes (Lundy et al. 2011) suggests that the study area is part of a landscape that has a low to moderate resource value for bats in general. There was no evidence of a bat roost within the proposed development site. Table 3.8 presents the results of the passive detector deployments from the wider solar farm area. Six species were confirmed to be present with the vast majority of registrations accounted for by Common and Soprano Pipistrelle. At the proposed substation site, the bat activity was dominated by Common Pipistrelle and Soprano Pipistrelle with a small proportion of the calls registered being identified as belonging to Daubenton's Bat, Leisler's Bat and Brown Long-eared Bat.

9.11.23. The level of activity is considered moderate-high for the time of year and the range of habitats present, particularly for Common and Soprano Pipistrelle. There are a number of dwellings and farm building in the vicinity of the development that are attractive for roosting for bats and there are mature and semi-mature trees present in the wider area that have the potential to provide roosting opportunities for bats.

9.11.24. However, the substation and grid route interact with relatively little woody vegetation attractive for foraging, commuting or roosting bats. Large agricultural fields are considered to be of low suitability for bats, due to the of linear vegetated features that are favoured by bats for commuting and foraging. None of the Irish bat species are of elevated conservation concern at present. The proposed development provides for the removal of 15m of hedgerow and 6 no trees to facilitate the access and sightlines. This hedgerow is to be fully reinstated post construction. In total circa 55 linear metres of hedgerow will be permanently removed throughout the overall solar farm and substation/grid connection sites. This will be offset by 2,621 linear meters of new hedgerow as well as the bolstering of an additional 16,613 linear meters to fill any gaps in existing hedgerows.

9.11.25. Several species of invertebrates were casually recorded at the proposed development site during the wider site walkovers in summer 2024 including: Speckled Yellow moth, Pseudopanthera macularia, Green-veined white, Pieris napi, Speckled wood, Pararge aegeria, Peacock, Aglais io, Orange-tip, Anthocharis cardamines,

Silver-Y moth, Autographa gamma, Small Tortoiseshell, Aglais urticae, Small White Butterfly, Pieris rapae, Brown Line Silver moth, Petrophora chlorosata. No suitable habitat for Marsh Fritillary Euphydryas aurinia, Ireland's only butterfly species listed on Annex II of the Habitat's Directive was identified within the development site. Overall, the improved agricultural grassland is considered to be of low value for most of these 'other taxa' species.

9.11.26. Section 3.6 concludes that the overall site evaluation is currently of Local Importance (lower to higher level) as it contains some semi-natural habitat (e.g., treelines) and regularly occurring species (e.g. Bats).

9.11.27. Section 4 of the EcIA sets out the potential impacts of the proposed substation and grid connection development on the ecology of the site. This section includes the potential effect on designated sites and potential effects on habitats and flora during both the construction and operation phase.

9.11.28. In the construction phase indirect habitat loss or deterioration of designated sites from run-off or discharge into the aquatic environment through increased siltation, nutrient release and/or contamination and disturbance/displacement of faunal species associated with designated conservation sites through noise and/or visual cues are noted.

9.11.29. No significant effects are expected on designated sites during the operational phase of the proposed development. The proposed substation will be unmanned and as such will generate small quantities of foul waste. A 5m3 foul holding tank is proposed. These are commonly used in EirGrid and ESB substations. The tank will be emptied periodically and will also be fitted with a high-level alarm connected to a manned control station.

9.11.30. The potential effects on habitat and flora will be low given that improved agricultural grassland which has a mainly low conservation value is the main habitat which will be directly affected by the proposed development. In addition, apart from short sections to facilitate access and underground cabling most of the treelines will be retained. The grid connection route habitat proposed under local roads is of negligible conservation importance and will be returned to their original state following completion of works.

9.11.31. Section 4.3 sets out that in the absence of appropriate mitigation there would be potential for negative impacts during construction on the fauna present locally. However, the substation site is located in intensively managed agricultural land and as such fauna may already be relatively tolerant of human disturbance. In addition, similar and potentially more suitable habitats are available in the surrounding landscape so that affected fauna, including bats, can disperse into the wider area if disturbed/displaced during the construction phase.

9.11.32. Section 5 deals with mitigation. Mitigation measures for Designated Sites/Aquatic Ecology include detailed water protection measures including the incorporation of buffer zones around drains and watercourses, scheduling of works to avoid wetter months and installation of appropriate run-off controls during the construction phase, the appointment of an Ecological Clerk of Works (ECoW) to oversee the works and the carry out of an updated Invasive Species Management Plan prior to any earthworks on site.

9.11.33. I note the concerns raised in some of the submissions in relation to the possible spread of Bovine TB due to potential disruption and interference with an active badger sett in the wider area. The mitigation measures for fauna include pre-construction surveys for protected species (e.g. Badger) and in the event that protected fauna are found actively using the site for breeding/roosting (e.g. bird nest, bat roosting) during the construction phase, works shall cease immediately pending advice from a suitably qualified/experienced ecologist. In addition, all excavations/trenches are to be covered at night, or a suitable means of escape provided for nocturnal mammals such as Badger and Otter and no removal of woody vegetation during the bird breeding season will take place.

9.11.34. Section 5.5 consider cumulative and in combination effects. The submitted EcIA considers both the substation/grid connection development and the proposed solar farm for the purposes of completing a robust assessment of the entire project. This section also considers recent planning history in the area and concludes that no potentially negative cumulative and in-combination ecological effects have been identified.

9.11.35. Section 5 concludes that there is some potential for positive cumulative effects on local biodiversity associated with complementary landscaping commitments

included as part of this development and at the adjoining solar farm site. This would mirror findings in by the National Biodiversity Data Centre (NBDC) guidelines on pollinator-friendly management of solar farms (2023) where studies suggest that if solar farms are managed strategically, particularly on land that was previously managed intensively for agriculture, they can have positive impacts on local biodiversity.

9.11.36. Overall section 6 of the EcIA concludes that any potential negative effects on ecology is limited to the construction phase and will be relatively short in duration and the application of environmental controls will address the potential impacts identified. I have considered the matters raised in the public submissions. Having reviewed the information set out on file I am satisfied that the EcIA provides a detailed, robust and thorough consideration and overall conclusion of all matters pertinent to an EcIA. I see no reason why the proposed development subject to mitigation measures as set out in the EcIA would significantly adversely impact on local ecology.

9.12. Water Framework Directive

9.12.1. The subject site is located within the Lee, Cork Harbour and Youghal Bay catchment and Owennacurra_SC_010 sub-catchment (Hydrometric Area 19) within the Southwest River Basin District. The substation area drains to tributaries of the Owennacurra River, the closest tributary being circa 400m from the substation site. The 10.2km grid connection route crosses tributaries of the Owennacurra River and the Butlerstown River. The Owennacurra River flows through Midleton and onwards to the Owennacurra Estuary which discharges into the Cork Harbour at Ballincurra. The Butlerstown River joins the Glashaboy River which discharges into the Cork Harbour at Dunkettle.

9.12.2. Water deterioration concerns were raised in a number of submissions, particularly by Leamlara Preservation Group. They raised concerns that the Water Framework Directive has not been adequately addressed in the application. In response to the submissions received Ecology Ireland on behalf of the applicant sets out that the Water Framework status of relevant watercourses are discussed in Section 2.1 of the NIS and in relation to cumulative and in-combination effects in Section 4.12 of the NIS.

This concludes that there will be no change in the WFD status of any hydraulically connected waterbodies as a result of the proposed development.

9.12.3. I have assessed the proposed substation and grid connection and have considered the objectives as set out in Article 4 of the Water Framework Directive which seek to protect and, where necessary, restore surface & ground water waterbodies in order to reach good status (meaning both good chemical and good ecological status), and to prevent deterioration. Having considered the nature, scale and location of the project, I am satisfied that it can be eliminated from further assessment because there is no conceivable risk to any surface and/or groundwater water bodies either qualitatively or quantitatively. The reason for this conclusion is as follows:

- the project design and the mitigation measures to be put in place during construction of the proposed development. These include the provision of buffers and exclusions zones, erection of silt fences, cut-off drains, silt traps and stilling ponds. These will ensure no effect on downstream waters.
- The impact of the development on water quality during the operational phase will be imperceptible.
- No issues were raised in the report received from the Planning Authority.

9.12.4. Overall, I conclude that on the basis of objective information, that the proposed development will not result in a risk of deterioration on any water body (rivers, lakes, groundwaters, transitional and coastal) either qualitatively or quantitatively or on a temporary or permanent basis or otherwise jeopardise any water body in reaching its WFD objectives and consequently can be excluded from further assessment.

9.13. **Other Issues**

9.13.1. Duration of Permission and Decommissioning

I note that planning permission is sought for a period of 10 years. Having regard to the nature of the development and proposed grid connection I consider the duration of the permission sought is appropriate should the Boards be minded to grant permission. The applicant sets out that the solar farm associated with this 220kV substation and grid connection application is expected to have an operational lifetime of up to 40 years should it be permitted. In the event that the solar farm is decommissioned at the end

of this period, the substation will remain in situ as a transmission asset on the national electricity network. Therefore, I consider decommissioning and reinstatement conditions for this application not necessary.

9.13.2. Legal Issues

A number of submissions have argued that the application was not subject to adequate consultation with locals and there were inadequate consultations with locals. During my site visit I noted that the notices were clearly visible on field boundaries and that from file information they were advertised appropriately. The applicant has set out in Section 5 of the Planning and Environmental Statement the range of community consultation that took place. While there is clearly disquiet among the local community about the extent and quality of the community consultation, there is no statutory obligation on the applicants to go beyond a direct notification. I therefore conclude that the application was made in accordance with all relevant regulations and should not be dismissed on this basis

9.13.3. Loss of Agricultural Land

A number of submissions have raised concerns in relation to the loss of prime agricultural land and that the proposed solar infrastructure contravenes the development plan. While I note that the current farming practice may cease, there is strong policy support for the diversification of farming practices. The landowners are entitled to diversify their incomes and work the land in the most resourceful way possible subject to relevant consents and licences. The displacement of food production, namely milk and beef in this case will be negligible in the overall national context. It is also noted that the associated solar farm is in effect temporary, and the lands could revert to others farming uses in the future if desired. In the absence of any prescriptive policy prohibiting substations and solar farms in rural areas, the report defers to the arguments set out above which considers the principle of a substation and solar farm on agricultural lands is acceptable subject to compliance with the proper planning and sustainable development of the area and compliance with the relevant plan. It is considered unlikely, that significant impacts would arise on agricultural uses.

9.13.4. Health and Safety

A number of submissions raised issues in relation to electromagnetic fields (EMF) from the substation and impacts on local telecoms. The applicant submitted an EMF/EMC Impact Assessment report. The report sets out that the EMF levels from the proposed development would be well below recommend levels. In addition, there will be no impact on telecom infrastructure. The applicant contacted the operators for pre-application consultations. There were no objections from the statutory consultees on this basis and the report concluded that there are no potential impacts.

It is also noted that the submissions have raised concerns in relation to the risk of fire either caused by the substation or associated solar farm. The applicant has set out in the Planning and Environmental statement that the correct design, construction and commissioning by suitably competent and experienced personnel, in accordance with cross disciplinary technical standards and best practice guidance will ensure the potential for fire is minimised. In addition, I note the facility will be monitored 24 hours a day remotely by the Applicant's operation system and will be subject to routine inspections. Taking the aforementioned into consideration, I do not consider the development pose a fire hazard and I am also satisfied that Eirgrid and the ESB employ strict technical standards and requirements to be adhered to, including those relating to fire prevention and fire safety features.

9.13.5. Wastewater

Having regard to the unmanned nature of the operational phase of the development I am satisfied that the wastewater holding tank is acceptable. These are commonly used in similar such sites and the tank is to be fitted with a high-level alarm connected to a manned control station and emptied periodically.

10.0 Appropriate Assessment

Introduction

10.1. The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB, sections 177U and 177V of the Planning and Development Act 2000, as amended), are considered fully in this section.

Screening for Appropriate Assessment - Test of likely significant effects

10.2. The proposed development is not directly connected with or necessary to the management of any European site and therefore it needs to be determined if the development is likely to have significant effects on a European site(s).

10.3. The proposed development is examined in relation to any possible interaction with European sites designated Special Conservation Areas (SAC) and Special Protection Areas (SPA) to assess whether it may give rise to significant effects on any European Site.

Description of Development

10.4. The proposed application is for a 220kV AIS tail-fed electricity substation and grid connection is to serve a proposed solar farm, known as Ballysallagh Solar Farm. The proposed grid connection will connect the proposed substation and the existing Knockraha 220kV substation. This grid connection will comprise 220kV underground electricity cables of c. 10.2km in length to be provided in an excavated trench including associated fibre cable and ducting.

10.5. The proposed development will serve a proposed solar farm, known as Ballysallagh Solar Farm. An application for Ballysallagh Solar Farm was submitted to Cork County Council in August 2024 and is currently under consideration by the council.

10.6. The application is accompanied by an AA Screening report and an NIS (Dec 2024) which describes the proposed development, the project area and the surrounding area. The Construction Environmental Management Plan (CEMP) and Construction Methodology Statement (CMS) are also key documents in terms of the implementation of mitigation measures. The Construction Methodology Statement has been prepared for the electrical infrastructure proposed and supplements the CEMP.

10.7. Notwithstanding the dual consent process the applicant makes it clear that the submitted AA Screening report and NIS considers the substation and grid connection development and the wider solar farm development for the purpose of completing a robust assessment of the entire project.

10.8. All Ecology and Appropriate Assessment related documents have been compiled by Ecology Ireland Wildlife Consultants Ltd and informed by desk study including reference material from the NPWS website and database and by field surveys.

European Sites

10.9. The development is not located within or closely adjacent to any Natura 2000 site and will not require or result in the land take of any lands within the designated sites.

10.10. Section 2 of the NIS sets out a brief description of the site and project. It notes that the substation site drains to tributaries of the Owennacurra river and along the grid route there are several minor watercourses. The Owennacurra river flows through Midleton and onwards to the Owennacurra Estuary which discharges into Cork Harbour at Ballinacurra. The Butlerstown River tributaries of which are crossed by the grid connection route, joins the Glashaboy which discharges into Cork Harbour at Dunkettle.

10.11. There closest designated sites are Great Island Channel SAC and Cork Harbour SPA both located 2.9km south of the grid connection route to Knockraha substation.

10.12. The watercourses that drain the application site and/or are traversed by the proposed grid route, all form part of the Lee, Cork Harbour and Youghal Bay catchment. Therefore, there are potential hydrological links with Great Island Channel SAC and Cork Harbour SPA.

10.13. The Blackwater River SAC is in a separate catchment to the proposed development. Given the separation distance (4.5km) and lack of hydrological pathway there is no likelihood of significant effects on Blackwater River SAC arising from the proposed development.

10.14. Surface water drainage proposals for the proposed substation compound have been designed to mimic the natural drainage patterns of the site and thereby are in accordance with the Best Management Practices (BMPs) of Sustainable Drainage Systems (SuDS).

10.15. A description of all baseline surveys is outlined within section 2.1.9 of the NIS. This included breeding bird surveys, mammal surveys (bat detector and trail camera deployment), detailed habitat and botanical walkovers and a dedicated aquatic ecology survey.

10.16. No Annex I habitats listed under the EU Habitats Directive are present within the study site. No botanical species protected under the Flora (Protection) Order 2022, listed in

Annex II or IV of the EU Habitats Directive (92/43/EEC), or Red listed in Ireland were recorded. The dominant habitats present are of low ecological value.

10.17. Detailed site surveys recorded a fairly typical farmland bird community at the site. The only SCI species of the Cork Harbour SPA recorded during the field surveys at the site was Grey Heron, *Ardea cinerea*. Only four of the SCI species of the Cork Harbour SPA have been recorded historically within the 2km Grid Squares which overlap with the application boundary.

10.18. However, there is potential that SCI species and other wetland bird species could utilise lands within the site for foraging purposes, on an occasional basis. In addition, the earthworks and movement of plant associated with the construction may attract certain SCI species (e.g. Gulls) into the site as they seek feeding opportunities. Cork Harbour is an internationally important wetland site, regularly supporting in excess of 20,000 wintering waterfowl.

10.19. Otters, Lutra lutra, is not a Qualifying Interest (QI) of Great Island Channel SAC and no evidence of the presence of Otters, Lutra lutra was recorded either on the trail cameras or as part of the site walkovers. In addition, no evidence of a holt or regular feeding or resting site was noted in close proximity to the development site.

10.20. There was no breeding or resting place of any protected non volant mammal species located within the proposed application site. An active Badger, Meles meles, sett was recorded in the wider area but several hundred metres from the SID application boundary.

10.21. The results of the passive bat detector deployments from the wider solar farm area confirmed six species to be present with the vast majority of registrations accounted for by Common, Pipistrellus pipistrellus and Soprano Pipistrelle, Pipistrellus pygmaeus.

10.22. Dedicated aquatic ecology surveys carried out on the local watercourses confirmed that there was evidence of local watercourses suffering siltation and eutrophication pressures associated with adjoining agricultural use. Nevertheless, with the exception of 2 no sites, all survey sites supported high conservation value aquatic species, including Atlantic salmon, Salmo salar, brown trout, Salmo trutta, lamprey (Lampetra sp.), European eel, Anguilla anguilla and/or otter.

10.23. Non-native invasive plant species were recorded growing in the roadside margins, hedgerows and adjacent gardens during baseline surveys for the proposed grid connection routes included Rhododendron, Montbretia (Crocosmia x crocosmiiflora), Cherry Laurel, Japanese Knotweed, Winter Heliotrope (Petasites pyrenaicus), Butterfly Bush and Gunnera (Gunnera sp.). The locations of all non-native invasive species recorded in the vicinity of the grid connection route are shown in Figure 3.2.

10.24. Section 4 set out the AA Screening and the methodology used to establish any European Sites upon which there is a potential for a likely significant effect to occur either individually or in combination with other plans and projects as a result of the proposed works.

10.25. Great Island Channel SAC is designated for the protection of habitats and does not contain any fauna that could suffer disturbance/displacement effects as a result of the construction of the proposed development.

10.26. Cork Harbour SPA is designated for the protection of numerous species of birds. No direct effects on this SPA were identified given the separation distance (>8km from the substation boundary and c. 2.9km from the closest part of the underground grid cable connection).

10.27. Indirect habitat loss or deterioration of Great Island Channel SAC and Cork Harbour SPA designated sites could occur from the effects of run-off or discharge into the aquatic environment through impacts such as increased siltation, nutrient release and/or contamination given the hydrological links with the above-named designated sites.

10.28. Therefore, potential for run-off of contaminants from the site during construction may impact upon the quality or extent of the qualifying habitats of Great Island Channel SAC in the absence of suitable environmental controls. Similarly, such a pollution event could have a potentially negative impact on the feeding resource of birds in Cork Harbour SPA.

10.29. In addition, taking a precautionary view, potential disturbance/displacement impacts on SCI bird species of Cork Harbour SPA particularly during the construction phase as a result of the movement of plant and personnel were identified and required appropriate mitigation.

10.30. The scientific assessment to inform AA is presented in section 5 of the NIS and in the documentation submitted to the Board as part of the application. The conservation objectives of the various qualifying interest features and special conservation interest species are listed. Impact pathways are identified and the assessment of likely significant effects which could give rise to adverse effects on site integrity is presented in Section 5.1. Table 5.2 presents an 'Integrity of Site Checklist' for the 2 no Natura 2000 sites within the zone of the influence of the project.

10.31. Mitigation measures are presented within section 5.2 of the NIS and are also detailed in full in the Construction Environmental Management Plan (CEMP) and Construction Methodology Statement (CMS). An assessment of potential in-combination effects is presented in Section 4.2.8 of the NIS.

10.32. The NIS together with supplemental information conclude that it has been objectively concluded that the proposed development will not adversely affect the integrity of Natura 2000 sites, and there is no reasonable scientific doubt in relation to this conclusion.

Adequacy of information submitted by the applicant.

10.33. Having reviewed the NIS and supplemental information that accompanies the application, I am satisfied that there is adequate information to undertake Screening and Appropriate Assessment of the proposed development. I am satisfied that all possible European Sites that could in anyway be affected have been considered by the Applicant.

10.34. I am satisfied that all ecological survey work and reporting has been undertaken and prepared by a competent expert in line with best practice and scientific methods. Information on the competencies and professional memberships of the Ecologist are provided in the NIS. I am also satisfied that all potential impact mechanisms have been considered and appropriately assessed within the NIS document.

Screening for Appropriate Assessment

10.35. The first test of Article 6(3) is to establish if the proposed development could result in likely significant effects to a European site, in which case the development is 'screened in' for further detailed assessment - Appropriate Assessment (stage 2).

10.36. The screening assessment undertaken on behalf of the applicant referred to within the NIS document submitted concluded that the potential for significant effects could not be ruled out for **2 no. European Sites** in view of the conservation objectives of those sites and thus the proposed development must proceed to (stage 2) Appropriate Assessment, and an NIS prepared to inform this stage.

10.37. Potential impacts and effects considered are presented in Table 1 below.

Table 1. Summary of European Sites for which the likelihood of significant effects cannot be ruled out (Applicant).

Potential impacts and zone of influence of effects	**European sites within Zone of Influence**
Habitat loss and Fragmentation No European sites are at risk of direct habitat loss impacts.	**No,** There are no European sites at risk of habitat loss impacts associated with the Proposed Development.
Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts: Habitats and species downstream of the proposed works site.	**Yes,** There are European sites at risk of hydrological effects associated with the proposed works site: a) Great Island Channel SAC b) Cork Harbour SPA
Habitat degradation as a result of hydrogeological impacts: Groundwater-dependant habitats, and the species those habitats support, in the local area that lie downgradient of the proposed works site.	**No,** There are no European sites at risk of hydrogeological effects associated with the proposed works site.
Habitat degradation as a result of introducing/spreading non-native invasive species: Habitat areas within, adjacent to and potentially downstream of the proposed works site.	**Yes,** Non-native invasive plant species were recorded growing in the roadside margins, hedgerows and adjacent gardens during baseline

	surveys for the proposed grid connection routes.
Air quality impacts Potentially up to 200m from the Proposed Scheme boundary:	**No** There are no European sites at risk of air quality effects associated with the Proposed Development.
Disturbance and displacement impacts: Potentially up to several hundred metres from the Proposed Scheme, dependent upon the predicted levels of noise, vibration and visual disturbance associated with the proposed scheme, taking into account the sensitivity of the qualifying interest species to disturbance effects	**Yes** The Cork Harbour SPA is located 2.9km from the proposed works site. Having regard to the highly mobile nature of some of the SCI species associated with the SPA there is potential for disturbance to occur arising from noise and/or visual cues from the construction works.

Screening Determination (recommendation)

10.38. Having regard to the information presented in the AA Screening Report, NIS, submissions, the nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, the source pathway receptor principle and sensitivities of the ecological receptors, I concur with the applicant's screening determination that there is potential for significant effects on the

i. Great Island Channel SAC,

ii. Cork Harbour SPA.

10.39. Given the hydrological connections and the potential relationship with all European sites within the zone of influence, and their conservation objectives, it is reasonable to conclude that there is a potential for impacts to arise in relation to habitat degradation and disturbance.

10.40. As screening is considered at pre-assessment stage, further analysis is required to determine the significance of such impacts and if appropriate, where any potential impacts are identified on the qualifying interests associated with Natura 2000 sites, to

apply any mitigation measures to exclude adverse effects. Therefore, the Great Island Channel SAC and Cork Harbour SPA are brought forward for inclusion in the Stage 2 AA.

Appropriate Assessment (recommendation)

10.41. The following is an objective assessment of the implications of the proposal on the relevant conservation objectives of the European sites based on the scientific information provided by the applicant and taking into account expert opinion and submissions on nature conservation. It is based on an examination of all relevant documentation and submissions, analysis and evaluation of potential impacts, findings conclusions. A final determination will be made by the Board.

10.42. All aspects of the project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects on site integrity are examined and evaluated for effectiveness. I have relied on the following guidance:

1. DoEHLG (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, National Parks and Wildlife Service. Dublin
2. EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC
3. EC (2021) Assessment of plans and projects in relation to Natura 2000 sites. Methodological guidance on Article 6(3) and 6(4) of the Habitats Directive 92/43/EC.

Relevant European sites:

10.43. In the absence of mitigation or further detailed analysis, the potential for significant effects could not be excluded for:

- Great Island Channel SAC,
- Cork Harbour SPA.

10.44. A description of the sites and their Conservation Objectives and Qualifying Interests/Special Conservation Interests, including relevant attributes and targets for these sites, are set out in the NIS in Appendix A.

10.45. I have also examined the Natura 2000 data forms as relevant and the conservation objectives supporting documents for these sites, available through the NPWS website (www.npws.ie). During this examination and assessment, I noted that there is an additional species of bird listed as a qualifying interest in Schedule 3 of SI 391/2021 – European Union Conservation of Wild Birds (Cork Harbour Special Protection Area 004030) Regulations 2021. This is Mallard (*Anas platyrhynchos*).

10.46. I am satisfied that the potential significant effects from the proposed development are the same for this bird as for the other waterbirds listed as qualifying interests. I consider that the conservation objective for the Mallard would be 'to maintain its the favourable conservation condition.' I am also satisfied that once the mitigation measures detailed below are implemented no significant effect will accrue to the Mallard population and distribution.

10.47. I provide a summary in Tables 2 and 3 of this report as part of my assessment for the Board. I am satisfied that in-combination effects have also been considered and adequately assessed in the NIS.

10.48. Tables 2 and 3 below summarise the information considered for the Appropriate Assessment and site integrity test. I have taken this information from that provided by the applicant within the NIS. I expand on certain issues further in my report.

Table 2: AA summary matrix for Great Island Channel SAC

Great Island Channel SAC (001058) **Detailed Conservation Objectives available: ConservationObjectives (npws.ie)**			
Summary of Appropriate Assessment			
Special Conservation Interest (SCI)	**Conservation Objectives** **Targets and attributes (summary- inserted)**	**Potential adverse effects**	**Mitigation measures**
Mudflats and sandflats not covered by seawater at low tide [1140]	To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in Great Island Channel SAC: The permanent habitat area is stable or increasing, Conserve the following community types in a natural condition: Mixed sediment to	There is the potential for indirect effects on water quality/habitat quality resulting from pollution to surface waters during the construction phase. This could affect the availability of prey species and impact the restoration and/or	Detailed Preventative Measures to avoid impact on water quality during construction works are outlined within section 5.2

	sandy mud with polychaetes and oligochaetes community complex.	maintenance of the condition of habitats within the site.	and include but are not limited to: Implementation of measures in CEMP and CMS, provision of buffers and exclusions zones, erection of silt fences, cut-off drains, silt traps and stilling ponds, tool talks, emergency response plan and measures to reduce dust emissions
Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	To restore the favourable conservation condition of Atlantic salt meadows (Glauco-Puccinellietalia maritimae. Habitat, structure – increasing, maintaining, no decline, etc, as above		

Overall conclusion: Integrity test

The applicant determined that following the implementation of mitigation, the construction of the proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for the Great Island Channel SAC. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of surface water during the construction phase. No increase in existing runoff rates will occur and appropriate treatment will ensure runoff quality. Impacts arising from dust will be mitigated through the regular cleaning of roads, water misting on site and the covering of material in transit that has potential to generate dust.

Based on the information submitted, surveys carried out and analysis provided, I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the Great Island Channel SAC.

Table 3: AA summary matrix for Cork Harbour SPA

Cork Harbour SPA (004030) **Detailed Conservation Objectives available: ConservationObjectives (npws.ie)**			
Summary of Appropriate Assessment			
Special Conservation Interest (SCI)	**Conservation Objectives** **Targets and attributes (summary- inserted)**	**Potential adverse effects**	**Mitigation measures**
Little Grebe (Tachybaptus ruficollis) [A004] Great Crested Grebe (Podiceps cristatus) [A005] Cormorant (Phalacrocorax carbo) [A017] Grey Heron (Ardea cinerea) [A028] Shelduck (Tadorna tadorna) [A048] Wigeon (Anas penelope) [A050] Teal (Anas crecca) [A052] Pintail (Anas acuta) [A054] Shoveler (Anas clypeata) [A056] Red-breasted Merganser (Mergus serrator) [A069] Oystercatcher (Haematopus ostralegus) [A130] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Lapwing (Vanellus vanellus) [A142]	To maintain the favourable conservation condition in relation to population and distribution – Long term population stable or increasing, no significant decrease in the range, timing or intensity of use of areas.	There is the potential for indirect effects on water quality which could affect the availability of prey species. Direct effects arising from disturbance may also occur in relation to SCI species.	Detailed Preventative Measures to avoid impact on water quality during construction works are outlined within section 5.2 and include but are not limited to: Implementation of measures in CEMP and CMS, provision of buffers and exclusions zones, erection of silt fences, cut-off drains, silt traps and stilling ponds, tool talks, emergency response plan, measures to reduce dust emissions and avoidance of disturbance through timing of works to avoid periods of wet weather.

Dunlin (Calidris alpina) [A149] Black-tailed Godwit (Limosa limosa) [A156] Bar-tailed Godwit (Limosa lapponica) [A157] Curlew (Numenius arquata) [A160] Redshank (Tringa totanus) [A162] Greenshank (Tringa nebularia) [A164] Black-headed Gull (Chroicocephalus ridibundus) [A179] Common Gull (Larus canus) [A182] Lesser Black-backed Gull (Larus fuscus) [A183] Common Tern (Sterna hirundo) [A193] Wetland and Waterbirds [A999]			

Overall conclusion: Integrity test

The applicant determined that following the implementation of mitigation, the construction of the proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for Cork Harbour SPA. No wetland habitat loss will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of surface waters during the construction phase. No increase in existing runoff rates will occur and appropriate treatment will ensure runoff quality. Impacts arising from dust emissions will be mitigated through the regular cleaning of roads, water misting on site and covering of material in transit that has potential to generate dust.

Disturbance to any wintering SCI species will be mitigated by the timing of soil stripping and site access works outside of periods of wet weather and having appropriate surface water run off controls in place ahead such works taking place.

Based on the information submitted, surveys carried out and analysis provided, I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the Cork Harbour SPA.

Potential for Adverse effects

10.49. As outlined above the potential for adverse effects relates to the changes to water quality resulting from pollution and silt laden water runoff and the deposition of dust during the construction phase entering watercourses and other surface water features which are hydrologically connected to the European sites and taking a precautionary view disturbance to SCI species during construction works.

10.50. I will examine the foregoing impacts here-under, the Board should note that the designated sites will be considered and grouped under each relevant heading in order to prevent repetition. Potential impacts to water quality relate to both sites listed above.

10.51. The Board should note that the works site does not meets directly with a European site boundary (See Figure 3.1 in NIS).

Habitat loss and fragmentation

Habitat degradation/effects on QI/SCI species as a result of hydrological impacts

10.52. The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants (into receiving waters). The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge.

10.53. The proposed works site is hydrologically connected to the Cork Harbour SPA and Great Island Channel SAC. The substation area drains to tributaries of the Owennacurra River which flows southwards through Midleton and into the Cork Harbour SPA and Great Island Channel SAC.

10.54. In addition, the grid connection route is crossed by tributaries of the Butlerstown River which joins the Glashaboy River and discharges into Cork Harbour at Dunkettle, which

is part of the Cork Harbour SPA. The Great Island Channel SAC is also hydrologically connected via Cork Harbour.

10.55. It is stated by the applicant that construction activities associated with the proposed works site may result in excess sediment/surface water runoff entering tributaries of the Owennacurra River and Butlerstown River resulting in the degradation of sensitive habitats present within the aforementioned sites. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of these sites.

In Combination Effects

10.56. In combination effects are examined within section 4.2.8 of the NIS submitted. The proposed works were considered in combination with all plans and/or projects with the potential to impact upon the European sites outlined above.

10.57. The most likely project which could act in combination with the proposed development is the Ballysallagh Solar Farm. The Ballysallagh Solar Farm which is currently being assessed by Cork County Council will be served by the proposed substation and grid connection to Knockraha substation. Notwithstanding the dual consent process, the NIS submitted as part of this application has considered both the solar farm development and the substation and grid connection development for the purposes of completing a robust assessment of the entire project. The mitigation, landscaping and biodiversity enhancement strategies have been aligned so that any risk of negative in-combination effects are effectively minimised.

10.58. Twelve projects were identified within the vicinity of the proposed works in the assessment of cumulative impacts and are listed in Table 4-1 of the NIS. These consisted mainly of permitted solar farm developments in the wider receiving environment, some of which are under construction at the present time and one of which was recently withdrawn (Planning ref 23/5893). No connection that could result in additional or cumulative impacts were identified.

10.59. Most of the other planning permissions in the local area are associated with relatively minor works such as modifications to residential or farm buildings and construction of one-off houses. I have also reviewed the Planning Register in relation to the proposed development since the lodgement of the application and am satisfied that there are no

new applications which would materially impact the proposed scheme in terms of cumulative impacts.

10.60. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the proposed development to avoid significant impacts and that alone the proposed development will not adversely affect the integrity of any European sites, I am satisfied that the above projects and plans will not act in combination with the proposed development to have an adverse effect on the integrity of any European sites.

10.61. The in-combination assessment within Section 4.2.8 of the NIS has concluded that there is no potential for the proposed development to contribute to any cumulative adverse effects on any European site when considered in-combination with other plans and projects.

10.62. Mitigation measures detailed in Section 5.2 of the NIS will ensure that no adverse effects on European sites integrity will arise from the implementation of the proposed development.

10.63. The implementation of, and adherence to, the policies and objectives of the relevant plans including the Cork County Development Plan 2022-2028 will ensure the protection of European sites across all identified potential impact pathways and will include the requirement for any future project to undergo Screening for Appropriate Assessment and/or Appropriate Assessment, as appropriate.

10.64. As the proposed development will not affect the integrity of European sites within the Zone of Influence of the proposed scheme, and given the protection afforded to European sites under the overarching land use plans, I am satisfied that there will be no adverse effects on the integrity of any European sites to arise as a consequence of the proposed development acting in-combination with any other plans or projects.

10.65. Overall, I am satisfied that the NIS and supplementary information provided as part of the application has examined the potential for all impact mechanisms in terms of the conservation objectives of the Cork Harbour SPA and Great Island Channel SAC. The potential for adverse effects can be effectively ameliorated by both design-based and applied mitigation measures related to surface water quality and disturbance.

Mitigation Measures and Monitoring

10.66. A summary of mitigation measures is presented below. This list is not exhaustive, and I refer the Board to the NIS and the Construction Environmental Management Plan and the Construction Methodology Statement for full details of the extensive list of mitigation measures proposed.

Control measures to avoid impact on water quality during the construction phase.

- A buffer of 10m from the closest drain and 10 - 20m from closest watercourse to be established and clearly marked out prior to construction.
- Temporary installation of silt fences, cut-off drains, silt traps and stilling ponds to prevent any material or substances which could cause pollution from entering groundwater, surface water or watercourses.
- Silt fences to be erected within the work area for the cable route.
- Should ground water be encountered during excavations, water will be pumped from the excavation and discharged to settling systems to maximise removal of suspended solids prior to discharge.
- Stockpiling of soil during construction, will not take place within 10m of water bodies and will be restricted to less than 2m in height.
- Earthworks will not take place during periods of high heavy rainfall.
- Good construction practices will be implemented at the site.
- Any concrete pouring will be carried out in dry weather.
- Washout of concrete trucks shall be strictly confined to designated, impermeable wash out areas, remote from watercourses.
- Storage/refuelling will be located in and carried out in the proposed site compound.
- Fuel and oil store to be appropriately lined and bunded.
- Spill Kits will be available on site.
- Suitable wheel washing facilities complete within silt traps to be provided.
- Maintenance of construction plant machinery and equipment.
- The transport of excavated material which has potential to generate dust will be covered.
- Reduced speed limits on site to reduce dust generation.

- Any areas including trucks that have potential to give rise to dust to be regularly watered.
- A road sweeper will operate during soil stripping and excavation stage.
- Updated invasive species survey and management plan to be carried out prior to commencement of construction.
- Ecological Clerk of Works to be appointed to ensure mitigation strategy is correctly implemented.

Measures to reduce disturbance to SCI species during the construction phase.

- Soil stripping and construction of site access tracks to be carried out outside of periods of wet weather.
- Ahead of soil stripping and construction of the site access tracks surface water runoff controls to be in place. These include buffer zones with waterbodies, temporary installation of silt fences, cut-off drains, silt traps and stilling ponds to prevent any material or substances which could cause pollution from entering groundwater, surface water or watercourses.

10.67. I consider that all measures proposed are implementable and will be effective in their stated aims. Furthermore, I recommend, should the Board be minded to grant permission that an Ecologist is employed to ensure that measures are implemented as prescribed.

Appropriate Assessment Conclusion: Integrity Test

10.68. In screening the need for Appropriate Assessment, it was determined that the proposed development for a 220kV substation and grid connection had the potential to result in significant effects on Cork Harbour SPA and Great Island Channel SAC and that Appropriate Assessment was required in view of the conservation objectives of those sites.

10.69. Following a detailed examination and evaluation of the NIS and all associated material submitted with the application as relevant to the Appropriate Assessment process and taking into account submissions of third parties, I am satisfied that based on the design of the proposed development, combined with the proposed mitigation measures,

adverse effects on the integrity of Cork Harbour SPA and Great Island Channel SAC can be excluded with confidence in view of the conservation objectives of those sites.

My conclusion is based on the following:

- A detailed assessment of all aspects of the proposed development that could result in significant effects or adverse effects on European Sites within a zone of influence of the development site.
- Consideration of the conservation objectives and conservation status of qualifying interest species and habitats.
- A full assessment of risks to special conservation interest bird species and qualifying interest habitats and species.
- Complete and precise survey data and analysis of wintering birds. The proposed development site has been scientifically verified as not being of significance to or an area favoured by SCI bird species at any stage of the wintering or summer seasons.
- Application of mitigation measures designed to avoid adverse effects on site integrity and likely effectiveness of same.

10.70. The proposed development would not undermine the favourable conservation condition of any qualifying interest feature or delay the attainment of favourable conservation condition for any species or habitat qualifying interest for these European sites.

11.0 Recommendation

Having regard to the foregoing, I recommend that permission for the proposed development be granted, subject to conditions, for the following reasons and considerations as outlined in the Draft Order below.

Reasons and Considerations

The Board performed its functions in relation to the making of its decision, in a manner consistent with Section 15(1) of the Climate Action and Low Carbon Act 2015, as amended by Section 17 of the Climate Action and Low Carbon Development (Amendment) Act 2021, (consistent with the most recent approved, climate action plan, national long term climate action strategy, national adaptation framework and approved sectoral adaptation plans, the furtherance of the national climate objective, and the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State);

And in coming to its decision, the Board had regard to the following:

(a) European, national, regional and local planning, energy, climate and other policy of relevance, including in particular the following:

European Policy/Legislation including**:**

Directive 2014/52/EU amending Directive 2011/92/EU (Environmental Impact Assessment Directive);

Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directive);

Directive 2000/60/EC (Water Framework Directive)

National Policy and Guidance including**:**

Project Ireland 2040 - National Planning Framework (2018);

National Planning Framework – First Revision, April 2025;

National Development Plan (2021-2030);

The objectives and targets of the National Biodiversity Action Plan 2023-2030;

Long-term Strategy on Greenhouse Gas Emissions Reduction (2024);

Policy Statement on Security of Electricity Supply (November 2021);

National Energy Security Framework (April 2022);

National Energy and Climate Action Plan (2021-2030);

Regional and Local Planning Policy, including in particular:

Regional Spatial and Economic Strategy for the Southern Region;

Cork County Development Plan 2022-2028;

(b) The location, nature, scale and layout of the proposed development.

(c) The range of mitigation measures set out in the Natura Impact Statement.

(d) The submissions received in relation to the application by all parties.

(e) The Inspector's report and recommendation.

Appropriate Assessment:

The Board agreed with and adopted the screening assessment and conclusion carried out in the Inspector's report that the Cork Harbour SPA (Site code: 004030) and Great Island Channel SAC (Site code: 001058) are the only European Sites in respect of which the proposed development has the potential to have a significant effect.

The Board considered the Natura Impact Statement and associated documentation submitted with the application for approval, the mitigation measures contained therein, the submissions and observations on file, and the Inspector's assessment. The Board completed an appropriate assessment of the implications of the proposed development for the affected European Sites, namely the Cork Harbour SPA (Site code: 004030) and Great Island Channel SAC (Site code: 001058), in view of the site's conservation objectives. The Board considered that the information before it was adequate to allow the carrying out of an appropriate assessment. In completing the appropriate assessment, the Board considered, in particular, the following:

i. the likely direct and indirect impacts arising from the proposed development both individually or in combination with other plans or projects,

ii. the mitigation measures which are included as part of the current proposal, and

iii. the conservation objectives for the European Sites.

In completing the appropriate assessment, the Board accepted and adopted the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the integrity of the aforementioned European Sites, having regard to the site's conservation objectives.

In overall conclusion, the Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Sites, in view of the site's conservation objectives.

Proper Planning and Sustainable Development

It is considered that subject to compliance with the conditions set out below the proposed development would accord with European, national, regional and local planning and related policy, would not have an unacceptable impact on the landscape, biodiversity or on the cultural or archaeological heritage, would not seriously injure the visual or residential amenities of the area or of property in the vicinity, and it would be acceptable in terms of traffic safety and convenience. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

CONDITIONS

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, 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 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.

   Reason: In the interest of clarity

2. The period during which the development hereby permitted may be carried out shall be 10 years from the date of this order.

Reason: Having regard to the nature of the proposed development, the Board considered it reasonable and appropriate to specify a period of the permission in excess of five years.

3. The mitigation measures contained in the submitted Natura Impact Statement shall be implemented in full.

   Reason: To protect the integrity of European Sites.

4. All of the environmental, construction, ecological related mitigation measures, as set out in the Ecological Impact Assessment, Construction and Environmental Management Plan, Electrical Infrastructure - Construction Methodology, 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 to comply with the conditions of this Order.

   Reason: In the interests of clarity and of the protection of the environment during the construction and operational phases of the development.

5. Prior to commencement of development, a detailed Construction Environmental Management Plan (CEMP) and Construction Methodology for the construction phase shall be submitted to and agreed in writing with the planning authority, generally in accordance with the Outline CEMP and Construction Methodology submitted with the application. The CEMP and Construction Methodology shall incorporate the following:

   (a) a detailed plan for the construction phase incorporating, inter alia, construction programme, supervisory measures, noise, dust and surface water management measures including appointment of a site noise liaison officer, transport and disposal of construction waste.

   (b) a comprehensive programme for the implementation of all monitoring commitments made in the application and supporting documentation during the construction period;

(c) an Invasive Species Eradication and Management Strategy for the site, to include monitoring post completion of works;

(d) an emergency response plan;

(e) proposals in relation to public information and communication. A record of daily checks that the works are being undertaken in accordance with the Construction Environmental Management Plan and Construction Methodology shall be kept for inspection by the planning authority.

Reason: In the interest of environmental protection and orderly development.

6. Prior to the commencement of development, the developer shall comply with the transportation requirements of the planning authority for such works and services as appropriate. Such requirements shall require provision of a detailed Traffic Management Plan and shall include the following details:

(a) Consultation with Transport Infrastructure Ireland (TII) and all private and public companies and road authorities;

(b) Details of haulage routes, control measures for abnormally sized vehicles and an Abnormal Load Assessment;

(c) A road condition survey of roads and bridges along the haul route to be carried out at the developer's expense and to the satisfaction of the planning authority;

(d) Detailed arrangements for construction damage to be made good by the developer to the satisfaction of the planning authority;

(e) Detailed arrangements for temporary traffic management/controls and protocols to keep residents informed,

(f) Construction Route Signage,

(g) Road Opening Licences that will be required,

Reason: In the interest of traffic and pedestrian safety.

7. (1) All mitigation measures in relation to archaeology and cultural heritage as set out in the Archaeological Impact Assessment (Rubicon Heritage Services Ltd; date October 2024) shall be implemented in full, except as may otherwise be required in order to comply with the conditions of this Order.

(2) The developer shall engage a suitably qualified archaeologist (licensed under the National Monuments Acts) to carry out a pre-development Archaeological Geophysical Survey and a pre-development Archaeological Test Excavation at the location for the sub-station and to submit an archaeological impact assessment report for the written agreement of the planning authority, following consultation with the Department, in advance of any site preparation works or groundworks, including site investigation works/topsoil stripping/site clearance and/or construction works.

(a) The Archaeological Geophysical Survey must be carried out under licence from NMS and in accordance with an approved method statement. Having completed the work, the archaeologist shall submit a written report to the Department and the Planning Authority describing the results of the Archaeological Geophysical Survey.

(b) The archaeologist shall liaise with the Department to establish–based on the results the Archaeological Geophysical Survey–the appropriate scope of the Archaeological Test Excavation to adequately characterise the character and extent of any potential sub-surface archaeological material within the development site.

(c) The report on the Archaeological Test Excavation shall include an archaeological impact statement and mitigation strategy. Where archaeological material is shown to be present, avoidance, preservation in-situ, preservation by record (archaeological excavation) and/or monitoring may be required.

(d) Any further archaeological mitigation requirements specified by the planning authority, following consultation with the Department, shall be complied with by the developer.

(e) No site preparation and/or construction works shall be carried out on site until the archaeologist's report has been submitted to and approval to proceed is agreed in writing with the planning authority.

(3) The Construction Environment Management Plan (CEMP) shall include the location of any and all archaeological or cultural heritage constraints relevant to the proposed development as set out in Archaeological Impact Assessment by Rubicon Heritage Services Ltd (dated October 2024) and by any subsequent archaeological investigations associated with the project. 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.

(4) The planning authority and the Department shall be furnished with a final archaeological report describing the results of all archaeological monitoring and 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

Reason: To ensure the continued preservation (either in situ or by record) of places, caves, sites, features and other objects of archaeological interest.

8. Prior to the commencement of development, the developer shall engage a suitably qualified archaeologist (licensed under the National Monuments Acts) to carry out an Underwater Archaeological Impact Assessment (UAIA) report which shall include the following:

(1) A desktop assessment that addresses the underwater cultural heritage of the proposed development area. The assessment shall include a full inventory, mapping and survey (photographic, descriptive, photogrammetric, as appropriate) of underwater cultural heritage features

and structures identified by fieldwork, cartographic analysis, historical research and prior archaeological investigations.

(2) A licenced dive/wade assessment, accompanied by a hand-held metal detection survey, centred on (but not confined to) the area(s) where in-stream works are proposed within or immediately proximal to the proposed development area, including the proposed locations of enabling works, coffer dams and machinery movements that may affect the watercourses. The dive/wade assessment and metal detection survey shall be undertaken by a suitably licenced and experienced underwater archaeologist. All identified underwater cultural heritage shall be surveyed (photographic, descriptive, photogrammetric) in detail as part of the assessment. A Dive/Survey licence (Section 3 1987 National Monuments Act) and Detection Device consent (Section 2 1987 National Monuments Act) will be required for the dive/wade survey and metal detection, respectively. Licenses should be applied for to this Department and should be accompanied by a detailed method statement. All archaeological wading/diving should comply with the Health and Safety Authority's Safety, Health and Welfare at Work (Diving) Regulations 2018/2019.

(3) Having completed the above-described works, the archaeologist shall submit a final written report to the Department describing the results of the UAIA. The report shall include a comprehensive Archaeological Impact Statement (AIS) that comments on the degree to which the extent, location and levels of all proposed works (including ground disturbances, foundations, service trenches and other sub-surface works including Site Investigation works) required for the development will impact upon any underwater cultural heritage, archaeological materials, objects and/or areas of archaeological potential that have been identified. The AIS shall describe the potential impact(s) of all proposed in-stream development, access and ingress routes to the river channels, and shall also assess any proposed additional potential secondary/indirect impacts such as scouring resulting from changes in hydrology. The AIS should be illustrated with appropriate plans, sections and photographs that clearly describe any adverse effect(s)

of the development on the underwater cultural heritage and proposals for their mitigation. Mitigation may include recommendations for redesign to allow for full or partial preservation in situ, the institution of archaeological exclusion zones, further wade/dive surveys, test-excavations, excavations ('preservation by record') and/or monitoring, as deemed appropriate. This Department will advise with regard to these matters. No construction works shall commence until after the UAIA has been submitted and reviewed. All recommendations will require the agreement of the Department.

Reason: To ensure the continued preservation (either in situ or by record) of underwater cultural heritage features and other objects of archaeological interest.

9. Noise levels from the substation shall not exceed 55 dB(A) rated sound level (corrected sound level for any tonal or impulsive component) at dwellings between 0800 hours and 2200 hours on any day and shall not exceed 45dB(A) at any other time. Procedures for the purpose of determining compliance with this limit shall be submitted to and agreed with the planning authority prior to commencement of development.

   Reason: To protect the amenities of property in the vicinity.

10. 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 practise.

    Reason: To protect the environmental and natural heritage of the area.

11. 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 or public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.

    Reason: In order to safeguard the amenities of property in the vicinity.

12. 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.

Reason: In order to protect the road network

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.

Donogh O' Donoghue
Planning Inspector
30th May 2025

Appendix 1

List of Public Submissions

- L6989 Residents Association c/o Noelle Murphy
- Miriam and Alan Forde
- Leamlara Preservation Group
- Geraldine Cashman
- Paul Kennedy
- Aine and Kevin Murphy
- Maggie Stack and Francis Maunsell
- Paul Murphy
- James McCarthy
- Patricia McCarthy
- Julie McCarthy
- Cathal Cashman
- Michael Moore
- Brian and Claire O Leary
- Dan and Joan Murphy
- Michael Connolly
- Breda and Michael O Sullivan
- Therese and Shane O Donnell
- Nicholas and Ceara O Sullivan
- John Bresnihan
- Bertie Cuffe
- Noel and Julieanne O Riordan
- Knockraha Environmental Group
- Oisin O' Muircheartaigh
- Daniel and Yvonne O Brien
- Orla O' Muircheartaigh
- Alan Broderick
- Mary Creedon
- Jacinta Ni Chathallain
- Timothy O Brien

- Anthony and Margaret Clifford
- Tanya Conway
- Patricia O Brien
- Denis O Brien
- Nellie Connolly
- Cllr Peter O Donoghue & Cllr William O Leary
- Paul and Mary O Brien
- Clare and Eamonn Daly
- Liam Nyham
- Aileen Howick & Aidan Barry
- John Fitzpatrick
- Tom Keegan
- JJ & G Barry
- Annita O Sullivan
- Califf Delaney
- Alexandra Savage
- Con Connolly
- Maurice & Tara Fitzgerald
- Con and Irene O Mahony
- Elaine and Cian Scannell
- Kevin Cronin
- Teresa Carey
- James Connolly
- Ian Lucey and Una Fitzgerald
- Catherine Pratt
- Mary Hurley
- Suzanne Dooley
- James Kennedy
- Sarah Speight
- John Dooley
- Norma Murphy
- Ciara Lawlor
- Fintan Lawlor

- Eimear Lawlor
- Gerard & Noreen Clifford
- Liam O Mahony
- Chris Levingstone
- Elizabeth Ahern
- Dolores Walsh
- John Paul O Brien
- Noreen Murphy
- Patrick Joseph Gibney
- Claire and Nigel Carroll
- Gerald Walsh
- Killian Phelan
- Declan & Maria Whelan
- Elizabeth Kingston
- Colm & Michelle McGrath
- Niamh Lawlor
- Tony Mulcahy
- Jennifer O Mahony
- Christine O Mahony
- Noel O Mahony
- Mairead O Connell
- Michelle Penrose
- Joan Cronin and Frank O Neill
- Sinead and Matthew Martin
- Eleanor Attridge
- Mary Chandler
- Gretta Connolly
- John O Shea
- Bernadette Keniry
- Una Kingston
- Mary Barry
- Paul McMahon
- Jim Symons

- Aidan Power
- Mary Barry
- Leamlara Culture, Heritage and Biodiversity Group
- Jerry and Aisling Singleton
- Ciara Power
- Diarmuid Clifford
- Michael O shea
- Aoibh Fitzpatrick
- Patrick O Shea
- Sarah Fitzpatrick
- John Arnold
- Jay Leahy
- Piaras Fitzpatrick
- Diarmuid Fitzpatrick
- Esther O Shea
- Amy & John Guiney
- Denis O Hanlon
- Barry and Aoife O Brien
- Ellen Connolly
- Denis Murphy
- Jean Connolly
- Diana Johnson
- Seamus Aherne
- Mary Duffy
- Paul O Brien
- Liam and Anne Flavin
- Caroline O Brien
- Tanja Khosrawi, Bryan O Brien & others
- Thomas O Brien
- Linda Murphy
- Stephen Hunt
- Anita and Donal McCarthy
- Liam Hutchinson

- Dawn Beecroft
- Henry O Brien
- Sean O Mahony
- Jennifer Carey
- John Heaphy
- Harriett O’ Brien
- John Murphy
- Eleanor Carey
- Brian Duggan
- Vincent Hollestelle

Appendix 2 Form 1 - EIA Pre-Screening

Case Reference	**ABP-321518-24**
Proposed Development Summary	Proposed 220kV Substation and Grid Connection
Development Address	Aghaduff, Ballinbrittig, Ballynabrannagh West, Ballynagaul, Ballynaglogh, Ballynanelagh, Ballynaskeha, Ballysallagh, Ballyvatta, Glengarriff More, Kileena and Pigeonhill, County Cork.
	In all cases check box /or leave blank
1. Does the proposed development come within the definition of a 'project' for the purposes of EIA? (For the purposes of the Directive, "Project" means: - The execution of construction works or of other installations or schemes, - Other interventions in the natural surroundings and landscape including those involving the extraction of mineral resources)	☒ Yes, it is a 'Project'. Proceed to Q2.
	☐ No, No further action required.
2. Is the proposed development of a CLASS specified in Part 1, Schedule 5 of the Planning and Development Regulations 2001 (as amended)?	
☐ Yes, it is a Class specified in Part 1. **EIA is mandatory. No Screening required. EIAR to be requested. Discuss with ADP.**	
☒ No, it is not a Class specified in Part 1. Proceed to Q3	
3. Is the proposed development of a CLASS specified in Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) OR a prescribed type of proposed road development under Article 8 of Roads Regulations 1994, AND does it meet/exceed the thresholds?	
☐ No, the development is not of a Class Specified in Part 2, Schedule 5 or a prescribed type of proposed road	

development under Article 8 of the Roads Regulations, 1994. **No Screening required.**	
☐ Yes, the proposed development is of a Class and meets/exceeds the threshold. **EIA is Mandatory. No Screening Required**	
☒ Yes, the proposed development is of a Class but is sub-threshold. **Preliminary examination required. (Form 2)** OR If Schedule 7A information submitted proceed to Q4. (Form 3 Required)	Schedule 5 Part 2 1(a) - Restructuring of rural landholdings Projects for the restructuring of rural land holdings, where the length of field boundary to be removed is above 4km, or where re-contouring is above 5 hectares, or where the area of lands to be restructured by removal of field boundaries is above 50 hectares The proposed development involves: • Removal of 15m of hedgerow for the proposed development and an additional 55m when the associated proposed solar farm is considered. • No re-contouring or restructing to take place

4. Has Schedule 7A information been submitted AND is the development a Class of Development for the purposes of the EIA Directive (as identified in Q3)?	
Yes ☐	
No ☒	**Pre-screening determination conclusion remains as above (Q1 to Q3)**

Inspector: _____ Date: _____

Appendix 3 Form 2 - EIA Preliminary Examination

Case Reference	**ABP-321518-24**
Proposed Development Summary	Proposed 220kV Substation and Grid Connection
Development Address	Aghaduff, Ballinbrittig, Ballynabrannagh West, Ballynagaul, Ballynaglogh, Ballynanelagh, Ballynaskeha, Ballysallagh, Ballyvatta, Glengarriff More, Kileena and Pigeonhill, County Cork.
This preliminary examination should be read with, and in the light of, the rest of the Inspector's Report attached herewith.	
Characteristics of proposed development (In particular, the size, design, cumulation with existing/ proposed development, nature of demolition works, use of natural resources, production of waste, pollution and nuisance, risk of accidents/disasters and to human health).	The site area of the substation compound is approximately 1.3 hectares within an agricultural field. The associated grid connection extends circa 10.2km southwest from the proposed substation to the existing Knockraha 220kV substation within the public road providing for a wider red-line boundary area of 11.7 hectares. The adjacent Ballysallagh Solar Farm submitted to Cork County Council has a site area of circa 179 ha. The proposed substation and adjoining solar farm comprise a series of agricultural field enclosed by hedgerows and used generally for pasture framing. The surrounding area is primarily agricultural and dominated by an undulating rural landscape. Although the proposed development and associated solar farm development will extend across a wide area, the extent of hedgerow boundary removal is minimal and not exceptional in the context of this rural area. The proposed development will involve the removal of 15m of hedgerow and 6 no trees to facilitate the construction access. This is to be fully reinstated post construction. In total circa 55m of hedgerow is to be removed as part of both the substation/grid connection application and the solar

	farm application. This will be offset by the planting of 2621 linear meter of new hedgerow and the reinforcement of existing hedgerows as part of the wider solar farm development. The Planning and Environmental statement sets out that an estimated 5,155m3 of soil will need to be removed to form a level substation compound. Soil cut for the creation of the substation compound will be reused on site for the formation of berms/landscaping and surplus soil will be disposed of offsite by mean of an Article 27 declaration. Similarly necessary fill material expected to be 5413m3 will be transported onto the site. The removal of soil to create a level substation compound does not equate to recontouring. It must also be noted that the site is relatively flat. In addition, the solar farm development does not involve any significant excavation that would constitute recontouring. There will be limited waste generated during the construction phase and this will be segregated, stored and disposed of appropriately. Best practice measures will be put in place. Surface water drainage proposals will mimic the natural drainage patterns on site and thereby are in accordance with best practices of SuDS. Construction and operation of the proposed development and (decommissioning of adjacent solar farm) will not result in any significant emissions to the environment. During the decommissioning phase, the substation and grid connection will remain in situ as an ESB Networks / EirGrid asset.

Location of development (The environmental sensitivity of geographical areas likely to be affected by the development in particular existing and approved land use, abundance/capacity of natural resources, absorption capacity of natural environment e.g. wetland, coastal zones, nature reserves, European sites, densely populated areas, landscapes, sites of historic, cultural or archaeological significance).	The proposed development is not located on, in or adjoining any ecologically sensitive site or location. Adherence to best practice construction and pollution prevention measures will avoid any wider impacts. The proposed development is hydrologically connected via numerous watercourses to both the Great Island Channel SAC (001058) and Cork Harbour SPA (004030), both located 2.9km south of the proposed grid connection route. There is also potential ornithological connectivity with Cork Harbour SPA (004030). Following an Appropriate Assessment, it has been concluded that the proposed development, individually or in combination with other plans or projects, would not adversely affect the integrity of any of these European sites, in view of their Conservation Objectives. The Landscape and Visual Impact Assessment sets out that the proposed substation/grid connection application and the associated solar farm will not give rise to any significant residual landscape and visual effects.
Types and characteristics of potential impacts (Likely significant effects on environmental parameters, magnitude and spatial extent, nature of impact, transboundary, intensity and complexity, duration, cumulative effects and opportunities for mitigation).	The Ecological Impact Assessment has determined that the short-term disturbance attributable to the proposed development will not be significant on ecological features if best practice and recommended mitigation are implemented. Additional traffic, noise and dust from temporary construction works will be effectively managed, having regard to the nature of the project and measures proposed in the Construction and Environmental Management Plan and Electrical

	Infrastructure-Construction Methodology. On completion of works, noise and dust levels will return to background levels. There are no National Monuments sites, Protected Structures, ACAs or sites from the NIAH register within the study area. There are no RMP's located within the substation site and the proposed grid route is primarily confined to public roads An Archaeological, Architectural and Cultural Heritage Impact Assessment adequately addresses issues in this regard. The extent of hedgerow removal is not significant and generally amounts to that required for the proposed access arrangements onto the public road and the internal access tracks. The extent of hedgerows removal is minor (with an overall loss of 55m) and is significantly below the threshold of 4km for EIA reinserted by the 2023 amending regulations and is also below the screening threshold set out in the 2011 (Agricultural) Regulations. Such removal is associated with access requirements and does not result in the amalgamation or enlargement of existing fields. Significant effects on biodiversity are not likely as a result of such works. The development does not involve any significant excavation or the recontouring of the lands by, for example, the levelling off of hills or by the infilling of hollows (by removing or shifting earth or rocks), or other use or drainage works. Although the proposed substation will be sited on areas of hardstanding which will require some localised levelling and foundation works, such works are not significant in

	nature and would not constitute recontouring of the lands. The overall development does not involve any restructuring through the removal of field boundaries above 50 hectares. Although both developments extend to a total of circa 179 Ha, the development itself only involves the removal of a minor amount of hedgerow and does not involve any notable restructuring.

Conclusion	
Likelihood of Significant Effects	**Conclusion in respect of EIA**
There is no real likelihood of significant effects on the environment.	**EIA is not required.**
There is significant and realistic doubt regarding the likelihood of significant effects on the environment.	
There is a real likelihood of significant effects on the environment.	.

Inspector: _____ Date: _____