



An
Bord
Pleanála

Inspector's Report

ABP-318475-23

Development	A ten year planning permission for a solar energy development with a total site area of 77 hectares and all associated site works.
Location	Lands at Baungephlure and Friarstown, Killerig, County Carlow.
Planning Authority	Carlow County Council
Planning Authority Reg. Ref.	2392
Applicant(s)	Neoen Renewables Ireland Limited
Type of Application	Permission
Planning Authority Decision	Grant with Conditions
Type of Appeal	Third Party
Appellant(s)	Fergal McGrath
Date of Site Inspection	28 th March 2024
Inspector	Liam Bowe

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Appendix 1 – Form 1: EIA Pre-Screening

1.0 Site Location and Description

- 1.1. The subject site comprises of a stated area of 77 ha. located at Baungephlure and Friarstown, Killerig, Co. Carlow. The lands are located to the southwest of Killerig Golf Club, approx. 3.5km to the northwest of Tullow and approx. 6km to the east of Carlow Town. The lands are bounded by the L6022 local road along the southeastern side and a narrow local road (L6113) also runs south through the lands at the western part of the subject site. Similarly, the Aghalona River also runs south through and adjacent to the lands at the western part of the subject site i.e., the river forms a significant portion of the western boundary of the subject site.
- 1.2. The lands are generally in tillage use. The layout of the site is irregular and divided into four development areas/ fields:
- Field 1, to the west of the L6113, is under tillage. These lands fall east towards the L6113.
 - Field 2, east of the L6113 and west of the Aghalona River. This field is use for tillage and falls east towards the Aghalona River.
 - Field 3, to the northwest of the L6022 and east of the Aghalona River. This field is currently in use for tillage.
 - Field 4, to the northwest of the L6022. This large field is currently in use for tillage.
- 1.3. Field boundaries are generally mature hedgerows, although there are a number of places along the boundaries where hedgerows are weak/ not present e.g., along the northern and southern boundaries of Field 1, along the northern boundary of Field 2, and at the southeastern corner of Field 4. There are parts with mature trees, particularly around the perimeter and bounding Killerig Golf Club. There is a house and farmyard located in the centre of the overall application site, but these are excluded from the current application site boundary.
- 1.4. Surrounding land uses include agriculture, both pasture and tillage. Killerig Golf Club is located immediately to the northeast of the application site. There are a number of residential properties adjoining the lands on the L6022 and L6113. One feature identified on the RMP, a holy well in Field 3, is excluded from the development area on-site.

2.0 Proposed Development

2.1. It is proposed to construct of a Solar PV development of 55MW, and all associated site works. The proposed solar farm, which will connect to the national grid on the lands includes:

- Photovoltaic panels on ground mounted steel frames,
- Associated electrical inverters and power stations,
- Electrical and communications cabling,
- Site entrances and on-site access tracks,
- Containerised battery energy storage facility,
- Temporary construction compound,
- Boundary security fencing and gates,
- Pole mounted security cameras, and
- All associated site development, landscaping and reinstatement works.

2.2. The application is accompanied by a Planning and Environmental Report, an Environmental Impact Assessment Screening Report, a Planning-Stage Construction & Environmental Management Plan, an Appropriate Assessment Screening Report, a Water Environment Assessment, a Landscape and Visual Impact Assessment, a Glint and Glare Assessment, an Archaeological, Architectural and Cultural Heritage Assessment, and maps and drawings.

2.3. A grid connection is not part of this application.

3.0 Planning Authority Decision

3.1. Further Information Request

3.1.1. Prior to making a decision on the planning application, the planning authority sought further information from the applicants on 20th July 2023, including details in respect of the following:

- An Electromagnetic Fields Assessment Report,
- A Biodiversity Enhancement Action/ Management Plan,

- A revised Site Layout Plan demonstrating separation distances of panels/ perimeter fencing/ inverters/ power stations/ energy storage facility/ security cameras from residential properties.
- A Fire Risk Assessment, and
- Comments on submissions received.

3.1.2. The applicant submitted a response to this further information request to the Planning Authority on 29th September 2023, which included an Electromagnetic Fields Assessment Report, a Biodiversity Enhancement Action/ Management Plan, a revised EclA, a revised Site Layout Plan, a Fire Risk Assessment, and comments on the submissions received by the planning authority.

3.2. **Decision**

3.2.1. Following receipt of further information, by order dated 25th October 2023 Carlow County Council issued notification of decision to Grant Permission for the proposed development subject to 28 no. conditions. The conditions include *inter alia* the following:

- Condition no.2: Permission to be carried out within 10 years.
- Condition no.3: Decommissioning after 35 years in accordance with an agreed Decommissioning and Restoration Plan.
- Condition no.8: Construction and Environmental Management Plan to be agreed with the planning authority.
- Condition no.9: Revised Biodiversity Action/ Management Plan to be agreed with the planning authority.
- Condition no.12: All identified mitigation measures to be implemented.
- Condition no.13: Noise and vibration limits.
- Condition no.14: Screening to address glint and glare.
- Condition no.19: Archaeological preservation and mitigation.
- Condition no.20: Traffic & Construction Management Plan to be agreed with the planning authority.

- Condition no.23: Use of “Best Practicable Means” to prevent/ minimise noise and dust emissions during construction and decommissioning.
- Condition no.28: Bond to be agreed with the planning authority.
- Condition no.29: Development Contribution of €638,000.00.

3.3. Planning Authority Reports

3.3.1. Planning Reports

There are two Planning Reports on file dated 19th July and 25th October 2023, respectively. The Planning Officer in the initial report stated that the consideration of any solar farm can be considered on its merits and that Development Plan policies appear to facilitate solar development with no cap on export capacity on all types of lands. It states that the lands are not part of any significant ecological or landscape designation and are not on any scenic routes, views or prospects. The report recommended that further information be requested for an Electromagnetic Fields Assessment Report, a Biodiversity Enhancement Action/ Management Plan, a revised Site Layout Plan demonstrating separation distances of panels/ perimeter fencing/ inverters/ power stations/ energy storage facility/ security cameras from residential properties, a Fire Risk Assessment, and comments on submissions received.

Appropriate Assessment Screening was carried out and concluded that there is no likely potential for significant effects to any Natura 2000 site.

A second Planner’s Report (dated 25th October 2023) refers to the further information submitted, which included and considered that, having regard to the additional information, permission should be granted subject to 28 no. conditions.

3.3.2. Other Technical Reports

Environment Section: The initial report from the SEE dated 29th June 2023 sought clarification on the methodology for traffic to cross the Aghalona River during the construction and maintenance phases. The initial report from the EE dated 4th July 2023 stated no objection from wastewater perspective and recommended conditions.

The second report from the SEE dated 4th October 2023 states that there is no objection to a grant of permission. Conditions recommended.

Tullow Municipal District: The AE has no objection. Conditions recommended.

Chief Fire Officer: The initial report dated 10th July 2023 sought further information requiring a comprehensive Fire Risk Assessment.

3.4. Prescribed Bodies

Department of Housing, Local Government & Heritage: No objection. Condition requiring archaeological mitigation recommended.

IFI: The report dated 11th October 2023 highlighted works carried out under a drainage plan that resulted in over-widening and deepening of some sections of the Aghalona River causing loss of salmon spawning and nursery habitat. Conditions recommended, including the requirement for Aghalona River to be included as part of a habitat restoration plan.

3.5. Third Party Observations

The planning authority received a number of submissions on the original application and following receipt of further information. The issues raised in these submissions are generally reflected in the issues raised in the third-party appeal received by the Board.

4.0 Planning History

4.1. Adjacent sites to the west/ northwest:

P.A. Ref. No.16/325: Permission granted for a solar farm on an area of 12.62 ha.

P.A. Ref. No.16/342: Permission granted for a solar farm on an area of c.27 ha.

P.A. Ref. No.19/46: Permission granted for a solar farm on an area of c.27 ha.

P.A. Ref. No.20/44: Permission granted for a 10 Year permission for development consisting of the construction of a Solar PV development on an area of 24.3 ha.

ABP-309987-21 (P.A. Ref. No.21/23): Permission granted for a 10 Year permission for development consisting of the construction of a Solar PV development comprising photovoltaic panels laid out in arrays over a total development site area of c.65.6 ha. (Part of site permitted under P.A. Ref. No.16/325)

P.A. Ref. No.22/149: Permission granted for a solar and storage park on an area of approximately 68.8 hectares. (Part of site permitted under P.A. Ref. No.19/46)

5.0 Policy Context

5.1. National Policy

5.1.1. Climate Action Plan 2023

Ireland is committed to achieving a 51% reduction in GHG emissions by 2030 and reaching net-zero emissions no later than 2050. Section 5.2 identifies the requirement for in the region of 22GW of renewable generation capacity by 2030. Section 5.3 Sector Abatement Ambition, notes that the proposed pathway includes a massive and rapid build-out of renewable generation capacity (wind and solar power generation technologies).

Key targets for electricity in Chapter 12 include up to 5GW of solar by 2025 and 8GW by 2030. Transformational policies, measures and actions, and societal change are required to meet the electricity sector's carbon budget programme and sectoral emissions ceilings. During the second carbon budget, Ireland's enormous potential for offshore wind will start to be realised. In the meantime, a major acceleration and increase in onshore wind turbines and transformation of land use from other activities such as agriculture to solar PV will be required.

A new drive for solar energy with ambitious targets will have impacts for land-use and allow farmers and communities to participate in the energy transition, through diversification of income to self-supply, and sell their own power to the grid.

12.1.4 Measures to meet the Challenge, include Accelerating Renewable Electricity Generation:

- Accelerate the delivery of onshore wind, offshore wind, and solar through a competitive framework to reach 80% of electricity demand by 2030.
- Target up to 5GW of solar by 2025 and 8 GW solar by 2030.
- In line with the emerging EU frameworks, ensure that renewable energy generation projects, and associated infrastructure, will be considered to be in the overriding public interest.

- All relevant public bodies to carry out their functions to support the achievement of the 80% renewable electricity target.

5.1.2. **Climate Action and Low Carbon Development (Amendment) Act 2021**

The Act commits Ireland to the objective of becoming a carbon-neutral economy by 2050, reducing emissions by 51% by the end of the decade. Section 17 amends the principle act such that Section 15(1) requires:

“(1) A relevant body shall, in so far as practicable, perform its functions in a manner consistent with—

- a) the most recent approved climate action plan,
- b) the most recent approved national long term climate action strategy,
- c) the most recent approved national adaptation framework and approved sectoral adaptation plans,
- d) the furtherance of the national climate objective, and (e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.

“Relevant body” means a prescribed body or a public body.

5.1.3. **National Planning Framework 2018**

The National Planning Framework is the spatial plan for the state up to 2040 and includes:

National Strategic Outcome 8 – this recognises the need to harness both on-shore and off-shore potential from energy sources including solar.

The following points are noted:

Green Energy Deliver 40% of our electricity needs from renewable sources by 2020 with a strategic aim to increase renewable deployment in line with EU targets and national policy objectives out to 2030 and beyond. It is expected that this increase in renewable deployment will lead to a greater diversity of renewable technologies in the mix.

National Policy Objective 55 – Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050.

5.1.4. National Development Plan 2021-2030

The NDP sets out investment priorities underpinning the implementation of the NPF. Chapter 13 deals with NSO 8 Transition to a Climate-Neutral and Climate Resilient Society. Sectoral Strategies – Energy. Public capital investment choices must contribute to a 51% reduction in greenhouse gas emissions by 2030 and lay the pathway to achieve net-zero greenhouse gas emissions by 2050. This will require grid-scale renewable electricity generation and storage.

5.1.5. National Energy Security Framework (April 2022)

The Framework addresses Ireland's energy security needs in the context of the war in Ukraine. It coordinates energy security work across the electricity, gas and oil sectors. The Framework takes account of the need to decarbonise society and the economy, and of targets set out in the Climate Action Plan to reduce emissions.

Theme 3 - Reducing our Dependency on Imported Fossil Fuels, focusses on three areas of work:

7.1 Reducing demand for fossil fuels.

7.2 Replacing fossil fuels with renewables, including solar energy.

7.3 Diversifying fossil fuel supplies.

Under 7.2, the statement notes that prioritising renewables is in line with the requirements of the recast Renewable Energy Directive and the EC REPowerEU action statement. The Commission has called on Member States to ensure that renewable energy generation projects are considered to be in the overriding public interest, and the interest of public safety, and the Government supports this request.

Responses include no. 25: Align all elements of the planning system to fully support accelerated renewable energy development.

5.1.6. National Energy & Climate Action Plan 2021-2030

Under the dimension Decarbonisation - Renewable energy, key objectives include:

- Achieve a 34% share of renewable energy in energy consumption by 2030.

- Increase electricity generated from renewable sources to 70%.
- Up to 1.5 GW of grid scale solar energy.

Policies and measures include increased renewable electricity generated to 70%. Under dimension Energy Security, the key objective is maintaining security of our energy system in the most cost-effective manner. This includes efforts to increase indigenous renewable sources in the energy mix (wind, solar and bioenergy).

5.1.7. Architectural Heritage Protection Guidelines for Planning Authorities

Note: Duckett's Grove, though a ruin, is one of the most interesting and significant gothic-revival houses in the country and is a protected structure (CW73). Included below are some relevant provisions in the Guidelines.

The guidelines define demesne as that part of the historic estate associated with a country house which was reserved for the personal use and enjoyment of the owner.

It is stated in Section 13.1 that the notion of curtilage is not defined by legislation, but for the purposes of the guidelines it can be taken to be the parcel of land immediately associated with that structure and which is (or was) in use for the purposes of the structure.

Section 13.2, in determining the Attendant Grounds of a Protected Structure, notes that the attendant grounds are lands outside the curtilage of the structure but associated therewith and are intrinsic to its function, setting and/or appreciation. In many cases, the attendant grounds will incorporate a designed landscape deliberately laid out to complement the design of the building or to assist in its function. The attendant grounds of a country house could include the entire demesne, or pleasure grounds, and any structures or features within it such as follies, plantations, earthworks, lakes and the like. Section 3.4.2 notes that the contribution of setting to the character of the architectural heritage should not be underestimated. The location of a structure may have been designed to relate to a particular landscape feature. The attendant grounds around a country house were often moulded into a coherent landscaped entity in accordance with current aesthetic and economic ideas. Section 13.7 notes that developments proposed for demesnes should respect the established planting pattern where this is part of the designed landscape.

5.2. Regional and Local Policy

5.2.1. The Regional Spatial and Economic Strategy for the Southern Region

RPO 95 - it is an objective to support implementation of the National Renewable Energy Action Plan (NREAP), and the Offshore Renewable Energy Plan and the implementation of mitigation measures outlined in their respective SEA and AA and leverage the Region as a leader and innovator in sustainable renewable energy generation.

RPO 96 - support the sustainable development, maintenance and upgrading of electricity and gas network grid infrastructure to integrate renewable energy sources and ensure our national and regional energy system remains safe, secure and ready to meet increased demand as the regional economy grows.

RPO 100 - support the integration of indigenous renewable energy production and grid injection.

RPO 219 - it is an objective to support the sustainable reinforcement and provision of new energy infrastructure by infrastructure providers (subject to appropriate environmental assessment and the planning process) to ensure the energy needs of future population and economic expansion within designated growth areas and across the Region can be delivered in a sustainable and timely manner and that capacity is available at local and regional scale to meet future needs.

RPO 221 - Local Authority City and County Development Plans shall support the sustainable development of renewable energy generation and demand centres such as data centres which can be serviced with a renewable energy source (subject to appropriate environmental assessment and the planning process) to spatially suitable locations to ensure efficient use of the existing transmission network.

5.2.2. Carlow County Development Plan 2022-2028

Section 7.7.2 Carlow County Renewable Energy Strategy 2021 (RES)

Climate Action – Overarching Policy:

CA. P2: Support the transition of the County to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050, by way of reducing greenhouse gases, increasing renewable energy, and improving energy efficiency.

Section 7.10.1 Renewable Energy

RE. P1: Encourage and facilitate the production of energy from renewable sources, such as from wind, solar, bioenergy, hydroelectricity, and geothermal, subject to compliance with proper planning and environmental considerations.

RE. P2: Support the co-location of renewable energy technologies on a case-by-case basis subject to compliance with planning and environmental criteria.

Renewable Energy Objective:

RE. O1: Seek to achieve a minimum of 130MW of renewable electricity in the County by 2030, by enabling renewable energy developments, and through micro-generation including rooftop solar, wind, hydro-electric and bioenergy combined heat and power (CHP).

Section 7.10.3.2 Solar Energy

SE. P2: Favourably consider the development of solar farms on agricultural lands which allow for farm diversification and multipurpose land use.

Solar Energy Objective:

SE. O1: Increase the penetration of solar energy developments at appropriate locations subject to compliance with proper planning and environmental considerations.

Appendix VI: Renewable Energy Strategy

Figure 6.6 Solar Opportunity Areas: The subject site falls within an area identified as available for solar development with no risk/ low risk.

Appendix VII: Landscape Character Assessment

The subject site is located in an area designated as 'Central Lowlands'.

Appendix VIII: Record of Protected Structures

CW73 (NIAH ref. no.10300305) Duckett's Grove: ruin of a gothic-revival house.

5.3. Guidelines

- 5.3.1. No national guidelines have been issued to date. The following are of relevance:

Planning and Development Guidance Recommendations for Utility Scale Solar Photovoltaic Schemes in Ireland (October 2016 report prepared by Future Analytics for the Sustainable Energy Authority Ireland / SEAI).

Planning guidance for the development of large-scale ground mounted solar PV systems (British Research Establishment / BRE – 2016).

5.4. Natural Heritage Designations

- 5.4.1. The appeal site is not located within any designated European sites. The closest Natura 2000 sites are the River Slaney Valley SAC (site code: 000781) and the River Barrow and River Nore SAC (site code: 002162), which are located approximately c.800m to the east and c.8.8km to the west, respectively.

5.5. EIA Screening

- 5.5.1. Solar energy development is not listed as a class of development for the purposes of EIA under Part 2 of Schedule 5, within the Planning and Development Regulations, 2001 (as amended). In this regard, a requirement for preliminary examination or EIA would not arise.
- 5.5.2. The proposed solar energy development will require a connection to the national grid. While this appeal relates to a decision under S.34 of the Act, an application for such grid connection would fall under the Strategic Infrastructure provisions of the act requiring a separate application under S.182. Such underground grid connection would not constitute a class of development under Schedule 5 and would not require preliminary examination or EIA.
- 5.5.3. Under Part 2 of Schedule 5 Class 10: Infrastructure projects (dd) “all private roads which would exceed 2000 metres in length”. I note that the proposed development does not include such private roads and therefore does not fall under Class 10. A requirement for fire access roads has been considered above, however, notwithstanding any such requirement I note that the Board has previously determined that such access tracks in respect of solar developments do not fall to be considered under Class 10 (ABP-301028-18, ABP-302681-18, PL17.248146).

5.5.4. Rural restructuring of farmland requiring screening under the Environmental Impact Assessment (Agriculture) Regulations, 2011, by the Department of Agriculture, Food and the Marine. In this regard I note the more recent amending regulation S.I. 383 of 2023 Planning and Development (Amendment) (No. 2) Regulations 2023, which amends Class 1 of Part 2 of Schedule 5, by inserting the following:

(a) Projects for the restructuring of rural land holdings, undertaken as part of a wider proposed development, and not as an agricultural activity that must comply with the European Communities (Environmental Impact Assessment)(Agriculture) Regulations 2011, where the length of field boundary to be removed is above 4 kilometres, 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.

5.5.5. I note that these thresholds reflect those set out in Schedule 1, Part B of the 2011 EIA (Agriculture) Regulations. Furthermore, Part A of Schedule 1 of the 2011 regulations sets out the following thresholds for screening for EIA:

Restructuring of rural land holdings	Screening Required
Length of field boundary to be removed	Above 500m
Re-contouring (within farm-holding)	Above 2 hectares
Area of lands to be restructured by removal of field boundaries	Above 5 hectares

5.5.6. These screening thresholds may be a useful guide in considering the reinserted Class 1(a) above. The Environmental Impact Assessment (Agriculture) Regulations Guide for Farmers describes restructuring of rural land holdings as involving changing the layout of the farm. I note that the 2023 amending regulations do not identify solar development as a class of development to be subject to EIA / EIA Screening.

5.5.7. Circular EUIPR 01/2023 notes that it is the elements of field boundary removal or recontouring of a field which amount to restructuring of a rural land holding which would need to be screened for EIA. The proposed development involves the removal of a limited extent of hedgerow, primarily at the proposed entrances to the

development site, comprising approximately 310m. This is significantly below the threshold of 4km for EIA reinserted by the 2023 amending regulations and is also considerably 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 or change in the layout of the lands. I have concluded above that significant effects on biodiversity are not likely as a result of such works.

- 5.5.8. Having regard to the purpose and to the nature and extent of the works in the subject case, I would conclude that such non-agricultural development, would not constitute rural restructuring and, therefore, would not be considered sub-threshold development requiring preliminary screening or EIA.
- 5.5.9. The application is accompanied by a Planning & Environmental Report. Appendix 1 of that report comprises an EIA Screening Report; however, the application does not provide Schedule 7A information or refer thereto. I refer to Form no. 1 appended to this report and conclude that preliminary screening or EIA is not required.

6.0 The Appeal

6.1. Grounds of Appeal

- 6.1.1. The grounds of appeal are submitted by Fergal McGrath, Killerig, Co. Carlow. The main points made can be summarised as follows:
- Contends that the stated solar energy minimum target of 130MW by 2030 in the Carlow County Development Plan has been exceeded with planning approvals for 355MW in place.
 - Concerned that the pre-dominant use of land is changing from food production to electricity production with the consequent loss of high-value agricultural land.
 - Cites the untapped potential of the available 'roof-top' areas in the county.
 - Queries the duration of the permission issued allowing 10 years to complete the development and 35 years operational life.

- Raises the idea of multiple uses of space/ land through the integration of agriculture and solar uses.
- Concerned about the impact on archaeology and contends that the solar farm is within the curtilage of Duckett's Grove country house, a protected structure.
- Raises the issue of cumulative impacts from multiple sub-threshold developments under the EIA Directive.
- Refers to the European Protein Strategy and concerned about the loss of grain production on these lands.
- Includes a list of planning permissions granted by Carlow for solar PV and wind energy developments.

6.2. Applicant Response

6.2.1. The main issues raised in the First Party response to the grounds of appeal can be summarised as follows:

- States that the proposed development site will remain in use for agricultural purposes i.e., the grazing of small livestock such as sheep.
- States that the site will be returned to tillage use following the decommissioning of the proposed development.
- Outlines how the proposed development complies with Development Plan policy, particularly Policy SE P2 and Objective SE O1.
- Contends that the use of 'high value' agricultural land, for solar PV development is not a material consideration per Section 16.12.4 of the Development Plan.
- States that objective RE O1 seeks to achieve a minimum of 130MW of renewable energy generation and notes that the planning authority has not specified a maximum limit/ target.
- States that it is assumed that the proposed development will be decommissioned following the 35-year operational phase and that this will be carried out in accordance with a Decommissioning Management Plan.

- Confirms that alternative sites/ areas were considered under a range of criteria for the proposed development.
- States that the proximity of the proposed development site to the existing electricity network and availability of existing electrical infrastructure was a key consideration and that geographic proximity between the location of energy production and the location of energy consumption is not a key consideration in Ireland due to the extensive electrical transmission network.
- Highlights that the CFO of Carlow County Council has no objections to the proposed development and that the proposed development will be subject to a fire safety certificate.
- States that the proposed development was specifically located outside of the footprint of the holy well (CW008-109) on the site.
- States that the proposed development will not be visible from Duckett's Grove country house due to the distance (c.2.5km) and the presence of intervening terrain and vegetation.

6.3. Planning Authority Response

6.3.1. The main issues raised in the Planning Authority's response to the grounds of appeal can be summarised as follows:

- States that RE O1 of the Development Plan sets out the objective to achieve a minimum of 130MW of renewable electricity in the County by 2030.
- Notes that there is no Section 28 Guidance on Solar Energy and the siting of same on productive agricultural lands.
- Highlights that some of the permissions for renewable energy listed by the appellant have been superseded, but also reiterates that there is no policy restricting renewable energy generation in the County.

7.0 Assessment

Having examined the application details and all other documentation on file, including all of the further responses to the appeal, having inspected the site, and having regard to relevant local, regional and national policy and guidance, I consider that the main issues to be considered are under the following headings:

- Principle of Development
- Loss of Agricultural Land
- Archaeology/ Cultural Heritage
- Landscape & Visual Impacts
- Duration of Permission
- Other Issues
- Appropriate Assessment

7.1. Principle of Development

- 7.1.1. Renewable energy development is supported in principle at national, regional and local policy levels, with collective support across government sectors for a move to a low carbon future and an acknowledgement of the need to encourage the use of renewable resources to reduce greenhouse gas emissions and to meet renewable energy targets set at a European Level. It is also an action of the NPF under National Policy Objective no. 55 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'.
- 7.1.2. The Carlow County Development Plan 2022-2028 is supportive of renewable energy in general, and solar power and acknowledges the geographical advantages of the area in this respect. Policy **RE. P1** states that Carlow County Council will seek to encourage and facilitate the production of energy from renewable sources, such as from wind, solar, bioenergy, hydroelectricity, and geothermal, subject to compliance with proper planning and environmental considerations.

- 7.1.3. Similarly, and specifically for solar energy, policy **SE. P2** states that Carlow County Council will favourably consider the development of solar farms on agricultural lands which allow for farm diversification and multipurpose land use. It is also an objective (**SE. O1**) in the Development Plan to increase the penetration of solar energy developments at appropriate locations subject to compliance with proper planning and environmental considerations.
- 7.1.4. I note the contention of the Appellant that the stated solar energy minimum target of 130MW by 2030 in the Carlow County Development Plan has been exceeded with planning approvals for 355MW in place. However, I agree with both the First Party and, particularly with, the planning authority when they state that Renewable Energy Objective **RE. O1** of the Development Plan sets out the objective to achieve a minimum of 130MW of renewable electricity in the County by 2030. Therefore, the planning authority has not specified a maximum limit/ target for renewable energy and proposals for additional renewable energy, such as proposed under this appeal, can be considered.
- 7.1.5. The proposed development is therefore supported by national, regional, and local policies in terms of renewable energy. Accordingly, I consider the proposal to be acceptable in principle and that it would contribute to the diversity of sources of energy supply and hence the security of energy supply. The acceptability of the proposal is contingent on other issues addressed below.

7.2. **Loss of Agricultural Land**

- 7.2.1. The subject lands are in agricultural (tillage) use. The policies within the Development Plan do not identify a preference for the reuse of previously developed land such as brownfield land, contaminated land or industrial land and non-productive agricultural land, in preference to productive land. Policy **SE. P2** is clear in this regard and states that favourable consideration will be given to the development of solar farms on agricultural lands which allow for farm diversification and multipurpose land use. Therefore, the siting of solar energy development on any type of agricultural land is not excluded.
- 7.2.2. The Appellant is concerned that the pre-dominant use of land in the area is changing from food production to electricity production and this is resulting in the consequent

loss of high-value agricultural land. He contends that this does not conform with the European Protein Strategy and is concerned about the loss of grain production on these lands. He also raises the idea and possibility of multiple uses of space/ land through the integration of agriculture and solar uses.

- 7.2.3. The First Party rationale for selection of this site as outlined in their appeal response is stated to include high-level environmental and technical factors to identify broad areas that may be capable of accommodating solar energy development, followed by a desktop environmental appraisal to identify potentially suitable lands. Landowners were then engaged with and, once agreement was reached, further site-specific evaluations were carried out and alternative site layouts were developed. With regard to the use of productive agricultural lands for solar energy development, the First Party states that there will be no material reduction in the quantum of agricultural lands, as they will continue to be available for use for grazing and the lands can return to arable use following decommissioning. I note that there is no national land use policy in Ireland which prescribes the preservation or protection of agricultural lands and to which this development would be contrary, nor is there any national guidance specifically in relation to the location of solar energy development.
- 7.2.4. Furthermore, the Climate Action Plan 2023 notes the challenges facing the country to meet its climate and emissions targets and identifies such renewable energy projects as being in the overriding public interest. The plan notes that an ambitious target of up to 5GW of solar by 2025 will require a transformation from agricultural land use to other uses such as solar PV. This would not suggest that development of the nature proposed on agricultural lands is unacceptable in principle.
- 7.2.5. I acknowledge that operational use for grazing would be low intensity relative to existing agricultural uses and that such grazing use is commonplace and a viable use in these types of developments. Notwithstanding its spatial extent, the development works themselves are relatively non-intrusive and are generally reversible, such that the lands could be returned to agricultural use. Having regard to the foregoing, I do not consider that the proposed development would be unacceptable solely on grounds of the loss of productive agricultural lands.

7.3. Archaeology/ Cultural Heritage

7.3.1. The Appellant is concerned about the impact on archaeology and contends that the solar farm is within the curtilage of Duckett's Grove house, a protected structure, and would have an adverse impact on its setting.

7.3.2. The First Party submitted an Archaeological, Architectural and Cultural Heritage Assessment with the planning application, and this notes the presence of a monument within the application site:

Ritual Site – holy well CW008-019, located centrally in Field 3.

The First Party states that the proposed development was specifically located outside of the footprint of the holy well (CW008-109) on the site.

7.3.3. There are also other features in the surrounding area. The development is stated to avoid all known monuments, and a 20m buffer zone is demonstrated around the RMP site within which no infrastructure will be placed, and no construction activity will be undertaken. I note the submission of the Department of Housing, Local Government & Heritage (Development Applications Unit) that highlights the scale, extent and location of the proposed development site and states that it is possible that previously unrecorded archaeological remains may be disturbed during the course of groundworks. It recommends that monitoring of ground disturbance and soil removal will mitigate potential impacts on previously unknown features, which they suggest may be conditioned. In my opinion an appropriate condition can adequately address this issue.

7.3.4. In their response to the appeal, the First Party states that the proposed development will not be visible from Duckett's Grove house due to the distance (c.2.5km) and the presence of intervening terrain and vegetation. I refer the Board to the Landscape & Visual Impact Assessment submitted by the First Party with the planning application. Within this, a photomontage (VP1) demonstrates the view from adjacent to Duckett's Grove house pre and post development. On the day of my site inspection, I visited Duckett's Grove house and I can confirm to the Board that I was unable to view the development site from VP1 or from other locations on the grounds of the protected structure primarily, as the First Party stated, due to distance and the presence of intervening terrain and vegetation.

- 7.3.5. I also note the contention of the Appellant regarding the possible impact on the curtilage of Duckett's Grove houses as a protected structure. As mentioned above, the proposed development site is located c.2.5km to the south of Duckett's Grove house and well removed from this protected structure. The development will introduce a new use onto the lands but there will be no direct impact on the house or modification to the layout of the lands, where existing trees and hedgerows are generally to be retained. In this regard, I am satisfied that the proposed development would have no adverse on 'the parcel of land immediately associated with that structure, and which is (or was) in use for the purposes of the structure' i.e., the curtilage.
- 7.3.6. Having reviewed the documentation and following my observations on the day of my site inspection, I am satisfied that significant effects on the cultural heritage of the area are not considered likely. The proposed development would therefore be considered acceptable in this regard.

7.4. Landscape & Visual Impacts

- 7.4.1. I refer to the Planning & Environmental Report and the associated Landscape & Visual Impact Assessment (LVIA) with Photomontages submitted with the planning application together with the response to the appeal. The Landscape Character Assessment (LCA) in the Development Plan characterises the appeal site as 'Central Lowlands', and within an area of 'Farmed Lowland'. The 'central lowlands' character area is deemed to be moderately sensitive to development. It has capacity to absorb most types of development subject to the implementation of appropriate mitigation measures. In principle therefore, the proposed development is acceptable under the development plan landscape policy subject to local sensitivities.
- 7.4.2. The proposed development site is extensive, comprising c.77 ha., and varying in character. The subdivision of the development lands into a number of separate parcels/ fields reduces the apparent scale of development, such that the overall development would not be viewed from any one location in its entirety. The development will generally retain existing features, including hedgerows and mature treeline features, which will contribute to screening the development and would accord with the recommendation in the LCA for this area 'to maintain the existing

grain of the landscape with its well-developed pattern of fields, hedgerows, trees and shelterbelts'.¹

- 7.4.3. The sloping nature of the lands provides some exposure to the west and, consequently, the proposed development will be more prominent in local views along the L6113 local road. Such localised impacts arising are limited, however, and not considered to have significant negative effects on the amenity of the area. The First Party proposes to remove, and reinstate, c.310m of roadside boundary along both the L6113 and the L6022 locals in order to provide appropriate sightlines at 3 no. new entrances. Such existing boundary vegetation is not of high quality, however, and subject to the proposed reinstatement planting it is considered that the short to medium-term effects of the development would be acceptable.
- 7.4.4. The methodology outlined in the LVIA examined the effects of the development on the general visual amenity through the selection and assessment of representative viewpoints. The solar farm is well screened with the LVIA concluding that the “significance of effect following the implementation of the proposed mitigation planting and landscaping (i.e., residual effects) is assessed as ranging from slight to imperceptible.”
- 7.4.5. On the day of my site inspection, I observed that parts of the main body (Field 3 and 4) of the proposed development site were visible intermittently along the L6113 i.e., from VP3, VP5 and VP6. The residual impact from these views is classed as being in the range of imperceptible to slight in the LVIA. Similarly, VP7 adjacent to the southeast boundary of the subject site will have an imperceptible residual impact once the reinstated boundary becomes established and VP8 has a slight residual impact from 500-750m south of the subject site.² I am satisfied that there a very limited degree of likely visual impact generated as a result of the proposed development. The main reason for this low degree of impact is the combination of terrain and vegetation screening around the site. Overall, I am satisfied that the proposed solar farm would not give rise to any significant residual visual impacts. Instead, it is well screened or otherwise well assimilated within the prevailing landscape pattern.

¹ P.23, Landscape Character Assessment, Appendix VII, Carlow County Development Plan 2022-2028.

² VP2 was inaccessible as the R726 was closed on the day of my site inspection.

- 7.4.6. With regard to the proposed cumulative impact, it is evident that there is low potential for cumulative visibility between the site and those permitted at Grangeford Old, Friarstown and Ardenhue. It has also been demonstrated using both the photomontages and a cumulative ZTV map that intervisibility of the proposed development in conjunction with other permitted and proposed solar farms to the west and northwest is likely to be very limited and of a distant and obscured nature that prevents significant cumulative impacts from occurring.
- 7.4.7. The proposed development will result in a change to the character of the area however, I do not regard the effects of such change as significantly negative or consider that it would be unacceptable in principle at this location. While it is an attractive, mature rural landscape, this area is not designated as a scenic landscape in the County Development Plan or for tourism related development. This is a landscape designated as 'central lowland' which I consider can accommodate the proposed solar energy development as a compatible use, and this change must be seen in the context of the energy and climate issues facing the country.

7.5. Duration of Permission

- 7.5.1. The application has sought a 10-year life of permission. Such duration would be consistent with previous decisions of the Board in respect of such infrastructure developments and is considered reasonable having regard to the scale of development and requirements in respect of grid connection.
- 7.5.2. I note overall national policy in support of the expansion of solar energy generation. The application indicates that the development will have an operational life of 35-years and was accompanied by a decommissioning plan. Carlow County Council have imposed a bond condition to secure satisfactory reinstatement of the site, in an amount to be agreed. I am satisfied that both the duration of the permission issued allowing 10 years to complete the development and 35 years operational life appropriate for this type of development.

7.6. Other Issues

Glint & Glare

7.6.1. The Glint & Glare Assessment (G&GA) confirms that there will not be any significant reflectance effects on residential and road receptors within 1km of the proposed development and that cumulative impacts are not anticipated.

- Residential Receptors – The G&GA concluded that out of the 37 residential receptors assessed, it is actually likely that only 5 no. dwellings (H04, H05, H06, H07 and H21) have the potential to experience any reflectance prior to mitigation. Post-mitigation, only 2 no. dwellings (H04 and H07) show the potential for residual impacts. Such effects would be in the range of Very Low to Medium magnitude.
- Road Receptors – 89 road points were assessed along the surrounding road network, and it was determined that 20 of these had potential for to be materially affected by glint and glare. Following mitigation, 9 of the road receptor points (R21 to R26 and R28 to R30 – all on the L6113 local road) have the potential to incur residual glint and glare effects i.e., 48 minutes per day over 188 days of the year. It should be noted that the only possible impacts along this road are to vehicles travelling in a northerly direction and the development site will be outside of the driver's central field of view. Therefore, I agree with the assessment that glint and glare effects on road users as a result of the proposed development is unlikely to be significant.

7.6.2. There are no obvious inconsistencies in relation to landscape mitigation in the proposed application with regard to the screening of glint and glare effects from surrounding receptors as the vast majority of this is provided by existing vegetation. The proposed mitigation will ensure that there will be no significant effects of glint and glare for residential and road receptors.

Water

7.6.3. It is proposed to plant and maintain a grassy field cover beneath the panels and in between the panel row of the proposed solar farm development. Sizeable separation distances have been incorporated between the solar array panels to avoid blanket

coverage of this site. The proposed solar farm development does not include any gravel or paved sections beneath the panels.

- 7.6.4. With regard to the construction phase, the Planning-Stage Construction and Environmental Management Plan states that to minimise the impact of the soil structure within the solar farm site screw-pile foundations will be used to minimise the impact on soil and water. On completion of the works, the pasture will be restored and prepared for seeding to encourage grass growth, restoration of the soil structure and natural creation of meadow grass. The processes will be supplemented in full by a suite of agreed measures to prevent silt laden runoff as well as standard good practice site management procedures including routine wheel washing.
- 7.6.5. The Planning-Stage Construction and Environmental Management Plan states that an operations and maintenance plan will be put in place once the construction phase is complete. It is submitted that this will include routine inspections and monitoring and the implementation of a habitat management plan. The drainage regime on the site will be subject to regular inspection and cleaning/ clearing as necessary.
- 7.6.6. Surface water will continue to be accommodated by the existing original drainage and infiltration pattern on the site via the network of perimeter drains. Subject to appropriate design specifications, the installation of solar PV arrays will not give rise to increased surface water runoff in an agricultural setting. It is not anticipated that the development will adversely affect the existing or proposed drainage regime and will not be affected from any flooding issues.
- 7.6.7. In common with most development projects, there is a risk that works may give rise to contamination or the release of silt/ sediment to watercourses. In this regard, the Planning & Environmental Report identifies mitigation measures, including standard construction measures to address potential impacts on water quality. In addition, the application proposes that a 10m buffer zone/ separation from Aghalona River/ watercourses will be maintained during works. Having regard to the relatively low intensity nature of construction activity, limited excavation requirements and standard construction mitigation measures, I consider the potential for impacts on water quality would be satisfactorily mitigated and no significant effects are considered likely.

Roads and Traffic

- 7.6.8. The First Party outlines in the Planning & Environmental Report the levels of traffic that will be generated in the both the construction and operational phases. The site is served primarily by 2 no. local roads (L6022 and L6113), which can be accessed from the R418, the R725 and the R726 regional roads. The road network is of reasonable quality and during my visit to the site and surrounding area, I observed relatively low volumes of traffic on both the local and regional roads.
- 7.6.9. The First Party estimates that construction traffic activity will be for a period of approx. 12-15 months. It is estimated that up to 1,475 no. two-way HGV movements will be required during this period. This equates to an average of 6 no. HGV movements per day, which is not regarded as a significant volume of HGV traffic. During the operation phase, the proposed development would be predominantly operated and monitored remotely with occasional visits for maintenance purposes using LGVs/ 4x4s.
- 7.6.10. I have reviewed the First Party's estimates of construction traffic, particularly in relation to panel deliveries and the requirements for imported aggregates and conclude 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 traffic management plan being agreed with the local authority. Operational traffic volumes will be very low/ minimal and will not impact on the surrounding road network.

Biodiversity

- 7.6.11. Appendix III of the Planning & Environmental Report submitted by the First Party with the planning application contains an Ecological Impact Assessment (EclA) of the proposed development. I also refer the Board to the Biodiversity Enhancement Action/ Management Plan submitted by the applicant to the planning authority as part of the RFI. It is stated in the EclA that a habitats survey was carried out in February '23 with indications of mammal and bird activity noted.
- 7.6.12. No evidence of otter *Lutra lutra* was found in the accessible areas near the Aghalona River and the nature of the stream indicates that there would be low otter prey

availability. Although no dedicated amphibian survey was carried out it was noted that the slow-flowing nature of the stream could support smooth newt *Lissotritan vulgaris*. Some birds were recorded during the site walkover, including a sky lark *Alauda arvensis* (amber list) that was passing over the subject site. Given the limited nature of mammal and bird activity on the subject site, I agree with the assessment within the EclA where it is considered that there will be no significant negative effects on habitats, or fauna (otters, bats, amphibians and birds) as a result of the proposed development.

7.6.13. Cutting back/ removal of hedgerow and a limited number of trees will be required at the new and upgraded entrances from the L6022 and L6113 to provide adequate sightlines. Hedgerow removal affects parts that are c.310m in total and the application includes proposals for replacement planting and reinforcement of existing retained hedgerows around the site. I do not consider that the impacts of the development would be unacceptable in this regard. There is some evidence from studies in the UK in particular, that solar farms can increase the diversity of plant species growing at a site, relative to arable lands or pasture, and so encourage pollinating insects. In this regard, implementation of the applicant's Biodiversity Enhancement Action/Management Plan could make a positive contribution for breeding and wintering birds.

7.6.14. There is no strong basis or authoritative evidence to conclude that the proposed solar farm development would have significant negative effects on wildlife or breeding and farmland birds occurring in the area, either direct or indirect impacts such as displacement, particularly where the lands are actively farmed. I accept that some disturbance is likely to arise during construction, however, the period of construction activity is relatively limited and will move relatively quickly between areas on the site and there will remain extensive alternative habitats available in the immediate vicinity.

7.6.15. Identified mitigation measures include the following:

- Appropriate measures to avoid pollution of the local watercourses,
- Avoidance of construction works where possible during the bird breeding season,

- Replacement of lost habitat with habitat of equivalent value for local fauna, and
- Mammal friendly fencing to prevent obstruction to local mammals.

7.6.16. A further measure highlighted/ sought by IFI in their submission to the planning authority involves redress to works carried out under a drainage plan that resulted in over-widening and deepening of some sections of the Aghalona River causing loss of salmon spawning and nursery habitat. The IFI recommends that any condition recommended for biodiversity enhancement includes the requirement for habitat restoration to Aghalona River. Subject to such measures, I am satisfied that significant negative effects on biodiversity will be avoided by the proposed development.

7.7. Screening for Appropriate Assessment

Compliance with Article 6(3) of the Habitats Directive

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

Background on the Application

- 7.7.2. In addition to the Ecological Impact Assessment the application was accompanied by a Stage 1 Appropriate Assessment Screening Report. The Screening Report was prepared by Blackstaff Ecology in April 2023. The applicant's Stage 1 AA Screening Report was prepared in line with current best practice guidance and provides a description of the proposed development and identifies European Sites within a possible zone of influence of the development. In conjunction with this, I have reviewed both the Planning & Environmental Report and the Planning-Stage Construction and Environmental Management Plan. These are discussed in section 7.6 of this report and identify standard construction mitigation measures to address potential impacts on water quality.
- 7.7.3. The First Party states in the Stage 1 AA Screening Report that the site is not located within or directly adjacent to any designated Natura 2000 site and there are no proposals for works to any European Site. There are a total of 2 no. Natura 2000

sites (the Slaney River Valley SAC and the River Barrow & River Nore SAC) within 15km of the proposed development site and, consequently, the First Party assesses possible impacts on the site-specific conservation objectives of these as a result of the proposed development.

- 7.7.4. The applicants AA Screening Report concluded that there are no effects (direct, indirect or cumulative) arising from the proposed development which would have the potential to significantly affect any Natura 2000 site and, therefore, concludes that the proposed development will not have a significant effect on the conservation objectives or integrity of any Natura 2000 site.
- 7.7.5. Having reviewed the documents, submissions and consultations with the NPWS, I am satisfied that the information allows for a complete examination and identification of any potential significant effects of the development, alone, or in combination with other plans and projects on European sites.

Screening for Appropriate Assessment- Test of likely significant effects

- 7.7.6. The project is not directly connected with or necessary to the management of a European Site and therefore it needs to be determined if the development is likely to have significant effects on a European site(s).
- 7.7.7. 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. The closest designated site is the Slaney River Valley SAC which is located c.800m from the proposed development. The River Barrow & River Nore SAC is located c.8.8km to the west of the proposed development and has a hydrological link to the subject site.

Brief description of the development

- 7.7.8. The site description and proposed development are set out in the foregoing reports and also Section 1.0 and 2.0 above. In summary, the development comprises:
- A solar array comprising ground mounted banks of solar panels affixed to steel mounting frames,
 - Electrical inverters and transformer units,

- Site entrances and on-site access tracks,
- Battery energy storage facility,
- Temporary construction compound, Boundary security fencing and gates,
- Pole-mounted security cameras, and
- All associated site development, landscaping and reinstatement works.

7.7.9. The development site is described in pages under the heading Field Survey in the EclA.³ It is described as occupying an improved agricultural field and three arable fields, all comprising of FW2 Depositing/ lowland rivers, FW4 Drainage ditches, GA1 Improved grassland, BC1 Arable crops, WL1 Hedgerows, WL2 Treelines and WS1 Scrub.

7.7.10. Taking account of the characteristics of the proposed development in terms of its location and the scale of works, the following issues are considered for examination in terms of implications for likely significant effects on European sites:

- Construction related - uncontrolled surface water/ silt/ construction related pollution.

Submissions and Observations

7.7.11. As stated earlier in Section 3.4 of this report, IFI highlighted works carried out under a drainage plan that resulted in over-widening and deepening of some sections of the Aghalona River causing loss of salmon spawning and nursery habitat. Conditions recommended, including the requirement for Aghalona River to be included as part of a habitat restoration plan.

European Sites

7.7.12. A summary of European Sites that occur within a possible zone of influence of the proposed development is presented in the table below. Where a possible connection between the development and a European site has been identified, these sites are examined in more detail.

³ Annex 3 of the Planning & Environmental Report submitted to the planning authority on 30th May 2023.

Table 1: Summary Table of European Sites Within the Zone of Influence of the Proposed Development

European Site	List of Qualifying Interests (QI)/Special Conservation Interests (SCI)	Distance from Proposed Development	Connections (source, pathway, receptor)
Lower River Suir SAC (site code: 000731)	<p>The conservation objectives for the SAC relate to the maintenance of a favourable conservation condition of condition of the following Annex I habitats and Annex II Species, as defined by specific attributes and targets:</p> <p>Atlantic salt meadows</p> <p>Mediterranean salt meadows</p> <p>Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation</p> <p>Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels</p> <p>Old sessile oak woods with Ilex and Blechnum in the British Isles</p> <p>Alluvial forests with Alnus glutinosa and Fraxinus excelsior</p> <p>Taxus baccata woods of the British Isles</p> <p>Freshwater Pearl Mussel</p> <p>White-clawed Crayfish</p> <p>Sea Lamprey</p> <p>Brook Lamprey</p>	c.800m to the west	Not hydraulically connected.

	River Lamprey Twaite Shad Salmon Otter		
River Barrow & River Nore SAC (site code: 002162)	The conservation objectives for the SAC relate to the maintenance of a favourable conservation condition of condition of the following Annex I habitats and Annex II Species, as defined by specific attributes and targets: Desmoulin's whorl snail Freshwater pearl mussel White-clawed crayfish Sea lamprey Brook lamprey River lamprey Twaite shad Atlantic salmon (only in fresh water) Estuaries Mudflats and sandflats not covered by seawater at low tide Salicornia and other annuals colonizing mud and sand Atlantic salt meadows Otter Mediterranean salt meadows Killarney fern Nore freshwater pearl mussel Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	c.8.8km to the west	Hydrological

	<p>European dry heaths Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels</p> <p>Petrifying springs with tufa formation</p> <p>Old sessile oak woods with Ilex and Blechnum in the British Isles</p> <p>Alluvial forests with Alnus glutinosa and Fraxinus excelsior</p>		
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Identification of likely effects

- 7.7.13. Slaney River Valley SAC (site code 000781) is located c.800m to the east of the subject site and not hydraulically connected thereto and having regard to the qualifying interests of the protected site there is no potential for impact.
- 7.7.14. The River Barrow and River Nore SAC (site code 002162) is located c.8.8km to the west and 18km downstream from the subject site; having regard to the distance to the SAC the minimal potential inputs to the drainage system will be undetectable in the SAC waters.
- 7.7.15. In conclusion, all of the proposed works take place outside the SACs and therefore there are no direct effects on the integrity of these European Sites. Taking together with an examination of the Appropriate Assessment Stage 1 Screening Report, the NPWS website, aerial and satellite imagery, the scale of the proposed development and likely effects, separating distances and functional relationship between the proposed works and the European Sites, their conservation objectives and my assessment of the subject site and the surrounding area, the potential impacts to the following 2 no European sites:
- 1) River Barrow and River Nore SAC, and
 - 2) Slaney River Valley,

are excluded from further consideration and are therefore screened out. There are no hydrological impacts, and the distance is sufficient for no impacts due to works.

In-combination Effects

7.7.16. As with the solar development, the grid route cables are not located within or adjacent to any designated sites and there are no hydrological links between the grid route and any Natura 200 site. The grid route will not cross any watercourses and is not located in close proximity to any watercourses so ex-situ impacts on Otter from the SACs as a result of the grid connection are not anticipated in relation to the grid route. Similarly, the other permitted solar energy developments to the west and northwest of the subject site are located within the catchment for the River Barrow but in the case of each of these projects a finding of no likely significant effects was either determined or appropriate mitigation measures were imposed to ensure the avoidance of any significant effects.

7.7.17. A summary of the outcomes of the screening process is provided in the screening matrix below:

Table 2: AA Screening summary matrix

Summary Screening Matrix				
European Site (link to conservation objectives www.npws.ie)	Distance to proposed development/ Source, pathway receptor	Possible effect alone	In combination effects	Screening conclusions:
Lower River Suir SAC (site code: 000731)	c.800m. Outside of water catchment area and no other ecological or hydrological connections.	No possibility of effects due to the distance from and lack of connections to the habitat for which this site is designated.	No effect	Screened out for need for AA
River Barrow & River Nore SAC (site code: 002162)	c.8.8km. This site is outside of the zone of influence of the development due to the distance to the specific habitat type for which	No possibility of effects due to the distance from this site is designated.	No effect	Screened out for need for AA

	the site is designated.			
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Mitigation measures

7.7.18. No measures designed or intended to avoid or reduce any harmful effects of the project on a European Site have been relied upon in this screening exercise.

AA Screening Conclusion

7.7.19. The proposed development was considered in light of the requirements of Section 177U of the Planning and Development Act 2000 as amended. Having carried out Screening for Appropriate Assessment, it has been concluded that the proposed development individually or in combination with other plans or projects would not be likely to have a significant effect on River Barrow and River Nore SAC or any other European site, in view of the said sites' conservation objectives, and Appropriate Assessment (and submission of a NIS) is not therefore required. This determination is based on the following:

- The information on file, which is considered adequate to undertake a screening determination.
- The nature and scale of the proposed development.
- The separation of the proposed development from European sites and the nature and extent of intervening land uses.
- The lack of meaningful ecological connections to European sites with regard to the Source-Pathway-Receptor model.

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

8.0 Recommendation

Having regard to the foregoing it is recommended that permission be granted for the proposed development.

9.0 Reasons and Considerations

Having regard to:

- a) The nature, scale and extent of the proposed development,
- b) The national targets for renewable energy contribution to the overall national grid,
- c) The national, regional and local policy support for developing renewable energy, in particular:
 - i. Climate Action Plan 2023
 - ii. Climate Action and Low Carbon Development (Amendment) Act 2021
 - iii. Project Ireland 2040 National Planning Framework (2018)
 - iv. National Development Plan 2021-2030
 - v. National Energy Security Framework (April 2022)
 - vi. National Energy & Climate Action Plan 2021-2030
 - vii. Southern Regional Spatial & Economic Strategy,
 - viii. Carlow County Development Plan 2022-2028,
- d) Measures proposed for the construction, operation and decommissioning of the development,
- e) The submissions on the file, and
- f) The documentation submitted with the application and the appeal,

it is considered that, subject to compliance with the conditions set out below, the proposed development would not have an unacceptable impact on the character of the landscape or on cultural or archaeological heritage, would not seriously injure the visual and residential amenities of the area, would be acceptable in terms of public health, traffic safety and convenience, would not have undue impacts on surrounding land uses, would not have an unacceptable impact on ecology or on any European Site, would not lead to an increased risk of flooding within the site or adjoining lands, and would make a positive contribution to Ireland's requirements for renewable energy in accordance with national regional and local policy.

The proposed development would therefore be in accordance with the proper planning and sustainable development of the area.

Appropriate Assessment Screening

The Board noted that the proposed development is not directly connected with or necessary to the management of a European Site. In completing the screening for Appropriate Assessment, the Board accepted and adopted the screening assessment and conclusion in the Inspector's report in respect of the identification of the European sites which could potentially be affected, and the identification and assessment of potential significant effects of the proposed development, either individually or in combination with other plans or projects, on these European sites in view of the site's Conservation Objectives. The Board was satisfied that the proposed development, either individually or in combination with other plans or projects, would not be likely to have a significant effect on the River Barrow and River Nore SAC or any other European site, and an Appropriate Assessment and submission of a Natura Impact Statement is not therefore required.

10.0 Conditions

1.	<p>The development shall be carried out and completed in accordance with the plans and particulars lodged with the application submitted to the planning authority on the 30th day of May 2023 and the further plans and particulars submitted on the 29th day of November 2023, 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.</p> <p>Reason: In the interest of clarity.</p>
2.	<p>The period during which the development hereby permitted may be carried out shall be 10 years from the date of this order.</p>

	<p>Reason: Having regard to the nature of the development, the Board considers it appropriate to specify a period of validity of this permission in excess of five years.</p>
3.	<p>All of the environmental, construction, ecological and heritage-related mitigation measures, as set out in the Planning & Environmental Report and its associated appendices, Biodiversity Enhancement Action/ Management Plan and the Construction and Environmental Management Plan, and other particulars submitted with the application, shall be implemented in full by the developer, except as may otherwise be required in order to comply with the conditions of this Order.</p> <p>Reason: In the interests of clarity and of the protection of the environment during the construction and operational phases of the development.</p>
4.	<p>(a) The permission shall be for a period of 35 years from the date of the commissioning of the solar array. The solar array and related ancillary structures shall then be removed, and the site reinstated unless, prior to the end of the period, planning permission shall have been granted for their retention for a further period.</p> <p>(b) The development shall be decommissioned in accordance with the Decommissioning Plan to be submitted for the written agreement of the planning authority, prior to commencement of development.</p> <p>(c) On full or partial decommissioning of the solar farm, or if the solar farm ceases operation for a period of more than one year, the solar arrays, including foundations/anchors, and all associated equipment, shall be dismantled and removed permanently from the site. The site shall be restored in accordance with this plan and all decommissioned structures shall be removed within three months of decommissioning.</p> <p>Reason: To enable the planning authority to review the operation of the solar farm having regard to the circumstances then prevailing, and in the interest of orderly development.</p>

5.	<p>This permission shall not be construed as any form of consent or agreement to a connection to the national grid or to the routing or nature of any such connection.</p> <p>Reason: In the interests of clarity</p>
6.	<p>(a) No artificial lighting shall be installed or operated on site unless authorised by a prior grant of planning permission.</p> <p>(b) CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property or the road.</p> <p>(c) Cables within the site shall be located underground.</p> <p>(d) The power stations, transformers/ inverters and BESS containers shall be dark green in colour.</p> <p>Reason: In the interests of clarity and of visual and residential amenity.</p>
7.	<p>The developer shall facilitate the archaeological appraisal of the site and shall provide for the preservation, recording and protection of archaeological materials or features which may exist within the site. In this regard:</p> <p>(a) The developer shall employ a suitably-qualified archaeologist prior to the commencement of development, to assess and monitor all excavations carried out on site which shall be subject to licence from Dept of Housing, Local Government and Heritage.</p> <p>(b) The developer shall notify the planning authority in writing at least four weeks prior to the commencement of any site operation relating to the proposed development.</p> <p>(c) The archaeologist shall monitor the removal of all damaged piles or large rocks to facilitate piling.</p> <p>(d) Should archaeological material be found, the archaeologist may have the work stopped, pending a decision on how to proceed. The developer should be prepared to be advised by the Department of Housing, Local Government and Heritage with regard to any necessary</p>

	<p>mitigation actions and should facilitate the archaeologist in recording any material found.</p> <p>(e) The developer shall submit a report to the planning authority and the Dept. of Housing, Local Government and Heritage, containing the results of the archaeological monitoring.</p> <p>In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.</p> <p>Reason: In order to conserve the archaeological heritage of the area and to secure the preservation in-situ or by record and protection of any archaeological remains that may exist within the site.</p>
8.	<p>The site shall be landscaped in accordance with the details submitted with the application on 30th May 2023, as revised by further information submitted on 29th November 2023.</p> <p>All planting shall be adequately protected from damage until established. Any plants which die, are removed, or become seriously damaged or diseased, within a period of five years from the completion of the development shall be replaced within the next planting season with others of similar size and species, unless otherwise agreed in writing with the planning authority.</p> <p>Reason: In the interest of visual amenity and to allow the early establishment of screen planting.</p>
9.	<p>Within 12 months of the commencement of operations at the development, an operational glint and glare assessment shall be carried out and submitted for the written agreement of the planning authority to confirm compliance with the conclusions of the assessment contained in the Planning & Environmental Report. Where necessary, additional mitigation measures shall be undertaken to achieve compliance in this regard, to be agreed in writing with the planning authority.</p> <p>Reason: To mitigation any potential post-construction impacts on adjacent lands, property and public road network.</p>

10.	<p>The construction of the development shall be managed in accordance with a Construction and Environmental Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including:</p> <ul style="list-style-type: none"> (a) Location of areas for construction site offices and staff facilities, (b) Details of site security fencing and hoardings, (c) Details of on-site car parking facilities for site workers during the course of construction, (d) Measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network, (e) Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels, (f) Containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained. Such bunds shall be roofed to exclude rainwater, (g) Off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil, (h) Means to ensure that surface water run-off is controlled such that no silt or other pollutants enter local surface water sewers or drains, (i) Measures for the short-term storage and removal/ disposal of excavated material to minimise potential pollution including drainage from topsoil areas to be directed to a settlement area where necessary, and (j) Construction hours shall not extend beyond 0800 hours Monday to Friday and 0800 hours to 1400 hours on Saturdays. No construction work shall take place on Sundays. <p>A record of daily checks that the works are being undertaken in accordance with the Construction Management Plan shall be kept for inspection by the planning authority.</p>
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	Reason: In the interest of amenities, public health, and safety.
11.	<p>All works shall be carried out in accordance with “Guidelines On Protection of Fisheries During Construction Works In And Adjacent To Waters”, Inland Fisheries Ireland (2016).</p> <p>Prior to commencement of development, the developer shall agree in writing with Inland Fisheries Ireland and the planning authority, details of measures to be carried out at the Aghalona River as part of the Biodiversity Enhancement Action/ Management Plan.</p> <p>Any cable crossings of watercourses shall be subject to an agreed method statement with Inland Fisheries Ireland.</p> <p>Reason: To protect the quality of surface waters.</p>
12.	<p>Prior to the commencement of any other development works on site, sightlines at the upgraded and proposed new entrances on the L6113 and L6022 shall be provided in accordance with TII Geometric Design of Junctions DN-GEO-03060 Standards June 2017.</p> <p>Reason: In the interest of traffic safety</p>
13.	<p>Prior to the commencement of development, a finalised construction traffic management plan shall be submitted to and agreed in writing with the planning authority, which plan shall include:</p> <ul style="list-style-type: none"> a) Details of the timing and routing of construction traffic to and from the construction site and works areas, and associated directional signage, and in particular proposals to manage the delivery of abnormal loads including the routing and scheduling of such movements. b) Measures to obviate queuing of construction traffic on the adjoining road network. c) Measures for the safe movement of construction traffic traversing the L6113 local road between Field 1 and Field 2. <p>Reason: In the interests of traffic safety and convenience.</p>

14.	<p>a) Construction activity shall be managed in accordance with a construction noise and vibration management plan, which shall be developed after consultation with stakeholders and the local community and agreed in writing with Carlow County Council prior to the commencement of development. This plan should be subject to periodic review and shall specify the construction practice, including measures for the suppression and mitigation of on-site noise and vibration.</p> <p>b) The plan shall be developed having regard to, and all construction activity shall be undertaken in accordance with, best practise guidelines, including BS 5228-1:2009+A1:2014, parts 1 & 2.</p> <p>c) The mitigation measures described in the Planning & Environmental Report shall be implemented in full.</p> <p>d) Prior to the commencement of development, a plan for the phased development of the site shall be submitted to and agreed in writing with the planning authority which shall seek to maximise separation from site boundaries at commencement of works and move progressively across the site.</p> <p>Reason: In order to protect the amenities of the area</p>
15.	<p>a) The construction noise and vibration management plan shall include a comprehensive monitoring programme with monthly reporting to Carlow County Council, or at other such intervals as may be required by the planning authority.</p> <p>b) Noise monitoring locations shall be agreed in writing prior to commencement of development.</p> <p>c) Monitoring of the construction phase shall be carried out by a suitably qualified competent person to ensure that all environmental noise and vibration mitigation measures are satisfactorily implemented.</p> <p>Reason: In order to protect the amenities of the area.</p>

16.	<p>a) Operational noise monitoring shall be undertaken in accordance with a scheme to be submitted to and agreed in writing with the Planning Authority.</p> <p>b) Within 12 months of the commissioning of the proposed development, the results of operational noise monitoring shall be submitted to the planning authority to confirm compliance with the conclusions of Section 4.8 of the Planning & Environmental Report in this regard. Where necessary to achieve compliance in this regard, additional mitigation measures shall be undertaken, to be agreed in writing with the planning authority.</p> <p>c) At no time shall the noise generated on site result in an increase in noise level of more than 10 dB(A) above background levels at the boundary of the site. d) All sound measurement shall be carried out in accordance with ISO Recommendation 1996:2007: Acoustics - Description and Measurement of Environmental Noise.</p> <p>Reason: To protect the amenities of property in the vicinity of the site.</p>
17.	<p>During the construction phase, the developer shall adhere to the 'Guidelines for the Treatment of Badgers prior to the Construction of National Road Schemes', published by the National Roads Authority in 2006. In particular, there shall be no blasting or pile driving within 150 metres of an active badger sett during the breeding season (December to June) or construction works within 50 metres of such an active sett during the breeding season.</p> <p>Reason: In the interest of wildlife protection.</p>
18.	<p>a) The developer shall enter into connection agreement(s) with Irish Water in respect of any water connection, prior to commencement of development.</p> <p>b) Drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works and services. Such arrangements shall include</p>

	<p>the use of swale features designed in accordance with the CIRIA SuDS Manual C753 (2015).</p> <p>Reason: In the interest of public health.</p>
19.	<p>All road surfaces, culverts, watercourses, verges, and public lands shall be protected during construction and, in the case of any damage occurring, shall be reinstated to the satisfaction of the planning authority at the developer's expense. Prior to commencement of development, a road condition survey shall be carried out to provide a basis for reinstatement works. Details in this regard shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.</p> <p>Reason: In order to ensure a satisfactory standard of development.</p>
20.	<p>Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site on cessation of the project coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.</p> <p>Reason: To ensure satisfactory reinstatement of the site.</p>
21.	<p>Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or other security to secure the provision and satisfactory reinstatement of public roads that may be damaged by construction transport, coupled with an agreement empowering the local authority to apply such security or part thereof to the satisfactory completion of any part of the development. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.</p>

	Reason: To ensure the reinstatement of public roads that may be damaged by construction traffic.
22.	<p>The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.</p> <p>Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.</p>

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.

Liam Bowe
Senior Planning Inspector

22nd April 2024

Appendix 1 - Form 1

EIA Pre-Screening

[EIAR not submitted]

An Bord Pleanála Case Reference	ABP-318475-23			
Proposed Development Summary	10-year planning permission for the construction of solar PV development on a c.77 ha site.			
Development Address	Lands at Baungephlure and Friarstown, Killerig, County Carlow.			
1. Does the proposed development come within the definition of a 'project' for the purposes of EIA? (that is involving construction works, demolition, or interventions in the natural surroundings)		Yes	√	
		No		
2. Is the proposed development of a class specified in Part 1 or Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) and does it equal or exceed any relevant quantity, area or limit where specified for that class?				
Yes			EIA Mandatory EIAR required	
No	√		Proceed to Q.3	
3. Is the proposed development of a class specified in Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) but does not equal or exceed a relevant quantity, area or other limit specified [sub-threshold development]?				
		Threshold	Comment (if relevant)	Conclusion
No	√	Solar energy development is not listed as a class of development for the purposes of EIA under Part 2 of Schedule 5, within the Planning and Development Regulations, 2001 (as amended). Any associated grid connection application under S.182 would not		No EIAR or Preliminary Examination required

		constitute a class of development under Schedule 5. Having regard to the purpose, nature and to the limited extent of the works, such non-agricultural development would not constitute rural restructuring under Class 1 of Part 2 of Schedule 5.		
Yes		N/A		Proceed to Q.4

4. Has Schedule 7A information been submitted?		
No	N/A	Preliminary Examination required
Yes	N/A	Screening Determination required

Inspector: _____ Date: 22nd April 2024