



An
Coimisiún
Pleanála

Inspector's Report ACP-323427-25

Development	10 year planning permission for Solar PV energy development, battery energy storage system compound to include solar panels mounted on steel support structures and all associated works .A Natura Impact Statement (NIS) was submitted with the application.
Location	Lands including Straboe and Killerrig, Carlow, Co. Carlow.
Planning Authority	Carlow County Council
Planning Authority Reg. Ref.	2460196
Applicant(s)	Lightsource Renewable Energy Ltd
Type of Application	Permission
Planning Authority Decision	Refuse Permission
Type of Appeal	First Party
Appellant(s)	Lightsource Renewable Energy Ltd
Observer(s)	DAU Fiona Brennan

Ronan McGrath

Prescribed Bodies

DAU

Date of Site Inspection

30th December 2025

Inspector

Rónán O'Connor

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1.0 Site Location and Description

- 1.1. The application site consists of an area of approximately 132.28 hectares (circa 225 acres) located across the rural townlands of Straboe and Killerrig. The site comprises of a total of 31 no. fields (I refer the Commission to Figure 3 – ‘Straboe Solar Farm Field Numbers’ of the application drawing pack).
- 1.2. The site is positioned between Carlow Town, Rathvilly and Tullow. The nearest settlement to the proposed solar farm site is Palatine circa 3.7km to the west, with Carlow Town circa 4.5km to the west, and Rathvilly circa 4.3km to the northeast. The route of the M9 Motorway is circa 2.1km to the west of the site. The site is rural in character consisting of existing agricultural land, with clusters of one-off rural dwelling development situated fronting onto the R418, R726 and L2015. The site is currently used for arable farming and cattle grazing. The topography of the site varies rising in a west to eastern direction from circa 88m to 121m.
- 1.3. Duckett’s Grove, a Protected Structure, is located c750m to the north of Field No. 2, which lies to the west of the R418. This is also listed in the National Inventory of Ireland (NIAH), with a ‘National Rating’.

2.0 Proposed Development

- 2.1.1. It is proposed to construct a Solar PV development , and all associated site works. In summary, the proposed solar farm, includes:
 - Photovoltaic panels on ground mounted steel frames,
 - 58 no. inverters/transformers,
 - 29 no. switchgear substations, 3 no. auxiliary transformers,
 - 5 no. permanent storage containers,
 - 2 no. monitoring houses, 2 no, toilets,
 - 1 no. BESS Intake Substation, 42 no. EPD Battery Blocks, 7 no. BESS Twin Skid, 1 no. Backup Generator
 - Security fencing, CCTV, cabling, access track and hardstanding.
 - Also proposed are 2 no. temporary construction compounds.

- 2.1.2. The application seeks a 10-year permission and an operational life of 40 years for the facility.
- 2.1.3. A grid connection will be required to connect the proposed development to the National Grid. However this has not been included within the design of the proposed development. The provision of a 110kv electrical substation will form part of a separate Strategic Infrastructure Development (SID) application to An Coimisiún Pleanála.

Proposed Design and Layout

- 2.1.4. A detailed description of the proposal is set out in Section 4 of the applicant's Planning and Development Statement and is described in the applicant's other documentation as submitted at application stage. I have set out a summary of same below.

Solar Panels/Module Array and Racking System

- 2.1.5. The panels will be mounted onto metal frames arranged in rows running east to west and fixed to pile driven galvanised steel posts. The solar panels will face south and will be inclined at an angle of 25 degrees. The maximum above ground level height of the panels is 3.06m. The Commission will note that the maximum height is designed to accommodate the areas of flood risk as identified in the Flood Risk and Drainage Assessment¹, as submitted with the application.

Transformers/Inverters

- 2.1.6. The design includes 58 no. Inverters within self-contained weatherproof units, located off the access tracks. Each unit measures c. 4.5(L) x 5.5m(W)) = 24.8m² and will be built upon a concrete foundation.
- 2.1.7. Also proposed are 58 no. Inverters within self-contained weatherproof units, located off the access tracks. Each unit measures c. 8.2m(L) x 2.3m(W)) = 18.9m² and will be built upon a concrete foundation. The inverters will convert the Direct Current (DC) to Alternating Current (AC) and the transformers will uprate the voltage from a Low Voltage to a Medium or High Voltage as required by the electricity grid connection.

¹ Technical Appendix 4: Flood Risk Assessment and Drainage Impact Assessment and associated appendices

Battery Blocks (EPD Battery Blocks)/Backup Generator

- 2.1.8. Proposed within the design are 42 no. EPD Battery Blocks, and each measures c. 16.6m(L) x 3.8m(W)) = 63.1m² and will be located in Field No. 2. 1 no. backup generator is also proposed (c. 12.4m(L) x 2.7m(W)) and is also located within Field No. 2.

Switchgear Substations/Auxiliary Transformers

- 2.1.9. The design includes 29 no. Switchgear Substations located off the access tracks. Each unit measures c. 4.2m(L) x 2.6m(W)). 3 no. Auxiliary Transformers are proposed and are located within the BESS section. Each unit measures c. 3.8m(L) x 3.8m(W)).

Storage Container/Monitoring Houses

- 2.1.10. The design includes 5 no. Permanent Storage Containers. Each unit measures c. 12.4(L) x 2.6m(W)). Also proposed are 2 no. Monitoring Houses located within the BESS section. Each unit measures c. 3.9m(L) x 3.2m(W)).

Security Fencing

- 2.1.11. The proposal includes provision of secure fencing around the perimeter of the Application Site. The fencing is deer fencing with wooden posts at 3.5m centres. The fencing will be c. 2m high with mammal gates fitted at appropriate points to enable free access (250mm x 250mm) placed in areas along the length of the fence. The fence will measure 10,912.9m in length and will be erected at the start of the construction programme, remaining in place for the duration of the operation until decommissioning of the solar farm. Fencing is also proposed around the perimeter of the battery storage system onsite.

Cabling

- 2.1.12. Cable works will be required to run from the PV Module array and CCTV to the Inverter and Grid Substations. These cable runs will also contain communications cabling for the SCADA control and monitoring system. All on-site cabling will be located underground.

Access Track and Hardstanding

2.1.13. Additional and upgraded internal tracks will be constructed to allow access for the construction, operation, maintenance and decommissioning of the solar panels and associated infrastructure. Tracks will measure c. 3.5-4.5m wide and will involve an average of 300mm depth of soil removed. Local widening at turns for access reasons.

Temporary Construction Compounds

2.1.14. The design includes 2 no. temporary construction which will be required during the construction phase of the Proposed Development. These will be placed in Fields 3 and 28 as shown on the submitted planning drawings.

Ancillary Elements

2.1.15. Some small sections of hedgerow are required to be removed to accommodate access and movement across the site. However, all external hedgerows will be retained. The amount of internal hedgerow to be removed equates to c200m linear metres. There will be new hedgerow planting provided as part of the proposal and the filling in of gaps in existing vegetation will also take place (a total of 2,270m of native hedgerow planting).

Decommissioning

2.1.16. The site will be returned to its former state at the expiry of the development lifespan. All elements of the proposed development will be completely removed and either recycled or reused,

Drainage

2.1.17. As set out in the application documentation, for the general solar farm area, it is proposed to construct multiple infiltration drains / soakaways within the Application Site. The location of same have been chosen on the downward slope, near to the existing watercourses which runs along the Application Site and will capture any overland flow in the SuDS device, prior to releasing into the natural surface water system. Should the underlying soils infiltration capacity prove to be too low for infiltration drainage, the scheme will discharge into the nearest drain / watercourse.

2.1.18. For the battery storage and grid area, it is proposed that surface run-off will be collected and conveyed by the provision of an infiltration drain which leads to infiltration/detention pond. A notional freeboard level of 150mm shall be

incorporated into the detailed design for the 1 in 100-year storm event plus 20% climate change with the final design being submitted to the Council prior to the construction period. The discharge point will be into the existing site field drainage system to the east of the infiltration/detention pond.

2.1.19. The SuDS features will be implemented during the construction phase of the Proposed Development and will be planted with vegetation to protect against soil erosion. They will be maintained throughout the lifespan of the Proposed Development, generally in accordance with the recommendations in the appropriate guidance.

2.1.20. Other drainage measures include:

- Solar Panels: current grass cover is to be retained or reinstated adjacent to and under panels in order to maximise bio-retention;
- Access Tracks: access tracks are to be unpaved and constructed from local stone. Temporary swales or similar shall be utilised to collect runoff from access tracks with discharge to ground through percolation areas. Where swales are utilised, frequent checks of dams formed from gravels and other excavated material should be undertaken; and
- Inverter, transformers, etc: Filter strips will surround the concrete bases of the ancillary buildings to capture any runoff from the roofs. This will be discharged to a percolation area or into the sites drainage network where it is close enough. Should surface water accumulate around any of these locations then a simple soakaway can be constructed to allow water soak into the underlying subsoils.

2.2. Documentation Submitted

2.2.1. The application comprises the following:

- Application Forms
- Copy of Site Notice
- Newspaper Advertisement
- Land Owner Consent Letters
- Applicant consent letter to Agent

- Drawing Schedule
- Planning and Environmental Statement
- Natura Impact Statement (NIS)
- Environmental Impact Assessment (EIA) Screening
- Statement of Community Involvement (SCI)
- High-Level Electromagnetic Field Assessment
- Volume 1: Air Quality
- Fire Risk Management Plan
- Technical Appendix 2: Ecological Appraisal
- Design and Infrastructure Layout and Elevation Drawings
- Technical Appendix 1: Landscape and Visual Impact Assessment (and associated Figures 1.1 to 1.12).
- Technical Appendix 2: Ecological Appraisal and Appendix 2A – Figures; Appendix B: Site Photographs; Appendix C (Appendix 2C – Habitat of Bat Species in Ireland); Appendix 2D Biodiversity Management Plan
- Technical Appendix 3: Archaeology and Architectural Heritage Impact Assessment and Appendix 3A – Figures; Appendix 3C – Plates; Appendix 3D – Geophysical Survey
- Technical Appendix 4: Flood Risk Assessment and Drainage Impact Assessment; Appendices 4A – Figures; Appendix 4B – Hydrology Photos; Appendix 4C (Storm Network Calculations); Appendix 4D (Storm Network Calculations); Appendix 4E: Hydraulic Modelling Figures
- Technical Appendix 5: Construction Traffic Management Plan; Appendices 5A – Figures
- Technical Appendix 6: Noise Impact Assessment; Appendices 6A – Figures
- Technical Appendix 7: Glint and Glare Assessment; Appendices 7A – Figures; Appendices 7B; Appendices 7D: Visibility Assessment Evidence

- Technical Appendix 8: Outline Construction and Environmental Management Plan

Further Information

2.3. Following a request for Further Information, the applicant submitted the following updated reports/additional documents:

- Strobe Solar Farm & Battery Energy Storage System: Further Information Response Cover Letter/Report
- Updated Site Layout Plan
- Updated Landscape and Visual Impact Assessment (LVIA) (and associated Figures 1.3, Fig 1.13 to 1.29)
- Photomontages
- Archaeological Assessment
- Fire Risk Verification and Compliance Report
- Updated Outline Construction Management Plan

3.0 Planning Authority Decision

3.1. Decision

The planning authority decided to **REFUSE** permission on the 24th of July 2025 for **2 no. reasons** which are set out in full below.

- 1 Policies LA P1, LA P2, LA P3, LA P4, LA P6, and LA P11 of the Carlow County Development Plan 2022-2028 (CDP) seek to protect and maintain the overall integrity of the County's landscape by recognising its capacity to sustainably integrate and absorb appropriate development, by ensuring development does not have a disproportionate landscape or visual impacts. Solar energy policy in the CDP and County Renewable Energy Strategy applies a risk-based mapping approach to the suitability of locations for solar farms ranging from High (Maximum) Risk to Low (Minimum) Risk, by adding up the risk levels at certain distances from material assets, natural physical attributes and sensitive receptors. It has

not been demonstrated to the satisfaction of the Planning Authority that the nature and scale of the proposed development on a total area of circa 132.28 hectares, by itself and cumulatively with proposed and permitted solar farm developments, would not:

(a) result in disproportionate and adverse landscape and visual impacts on the predominantly rural and agricultural/farmland landscape.

(b) be out of scale with and unduly detract from and erode those characteristics which contribute to its landscape value, including predominantly rural and agricultural/farmland character, field pattern character, setting and visual aspect, including historic setting proximate to Ducketts Grove.

(c) if permitted, set an undesirable precedent for the incursion of solar farm development into this predominantly rural and agricultural/farmland landscape; and,

(d) if permitted, set an undesirable precedent for the incursion of solar farm development into lands identified as having a High (Maximum) Risk in the solar energy policy in the CDP and County Renewable Energy Strategy.

Accordingly, to permit the proposed development would materially contravene policies, objectives, and related provisions in the Carlow County Development Plan 2022-2028 including Policies LA P1, LA P2, LA P3, LA P4, LA P6, and LA P11, solar energy policy including the County Renewable Energy Strategy, and would therefore be contrary to the proper planning and sustainable development of the area.

- 2 Ducketts Grove is a Protected Structure (RPS Ref. CW073) and is listed in the National Inventory of Ireland (NIAH Ref. 10300305) with a 'National' rating due to its considerable architectural significance in an Irish context. Policy CH. P3 in the Carlow County Development Plan 2022-2028 (CDP) seeks to protect the contribution historic country houses such as Ducketts Grove make to the cultural and historical landscape of the County, including their historic setting, gardens and demesnes. The role of Duckett's Grove as an important tourism and recreation asset in the

County is also recognised and supported in the CDP under Policies HT. P1 to P4, and at a national level by Fáilte Ireland as a key component of their Ireland's Ancient East regional tourism brand.

Having regard to the scale and nature of the Solar PV Energy Development, including its proposed layout and design, it is considered that the applicant has not demonstrated to the satisfaction of the Planning Authority that the proposed development would not detract from the character, setting and historic landscape of Duckett's Grove and its national, regional and county level importance for architectural heritage and associated key role for tourism and recreation.

As such the proposed development does not accord with the policies as set out in the Carlow County Development Plan 2022-2028 namely policies CH. P3, CH.P5, HT. P1, HT. P2, HT. P3 and HT. P4 which relate to heritage and the protection of historic demesnes, due to its proximity to Duckett's Grove and would undermine and erode its historic setting in a predominantly rural and agricultural/farmland landscape. The proposed development would therefore be contrary to the provisions of the Carlow County Development Plan 2022-2028 and accordingly would be contrary to the proper planning and sustainable development of the area.

3.2. Planning Authority Reports

Planning Officer's First Report

- 3.2.1. The report of the Planning Officer considered the principle of the proposal to be acceptable. It is also stated with the Planner's Report that solar energy development on any type of agricultural land is not excluded. Concern was raised, however, in relation to the location of a portion of the site within an 'Available Areas with High Risk', with reference to the Solar Opportunity Area Map as set out in the Carlow Development Plan 2022-2028 (hereinafter referred to as the 'CDP'). (Figure 7.9 of the CDP refers).
- 3.2.2. The report of the Planning Officer notes that the site is located within the Central Lowlands Landscape Character Area (LCA) (Map 9.1 of the CDP refers). Within this character area, the site lies within the 'Farmed Lowlands' landscape character type

which has a 'Class 3 – Moderate' sensitivity designation (Table 9.1 of the CDP refers). It is stated that this LCA has the capacity to absorb most types of development subject to the implementation of appropriate mitigation measures. The Planning Officer also identifies that there are 3 no. scenic views which are of relevance (No. 19, 20 and 21 identified in table 9.3 of the CDP), all of which are in the context of the setting of Duckett's Grove, a Protected Structure, located some 750m from the site at its nearest point. The Planning Officer notes that no scenic routes are noted in the County Development Plan within a 5km distance of the site (Table 9.4 refers).

- 3.2.3. As part of the assessment of the application as submitted, the Planning Officer makes reference to the Landscape and Visual Impact Assessment Report (LVIA). It was the Planning Officer's view that the discussion of most significance concerned the views north and east of Ducketts Grove, a Protected Structure, which is also listed in the National Inventory of Ireland (NIAH), with a 'National Rating'. It was considered that the applicant was required to provide additional viewpoints in the vicinity of Viewpoints P5 and P6, with reference to the LVIA. It was also suggested that the applicant should consider omitting fields 1, 2 and 3 from the proposed development (I refer the Commission to Figure 3 – Straboe Solar Farm Field Numbers). In relation to the lands to the east of the R418, it is acknowledged that these lands are generally well screened, although it was the Planner's view that additional viewpoints from higher ground outside the 2km radius should be provided.
- 3.2.4. The Further Information request sought additional information on the potential impact on the wider historic landscape and setting of Duckett's Grove, as well as public road approach routes for tourists and visitors. Additional information was also sought in relation to cumulative impacts.
- 3.2.5. The following 7 point request for further information was recommended:
- 1 Additional viewpoints including from long range views; specific consideration to the historic setting of Duckett's Grove; autumn and winter viewpoints; revised Landscape and Visual Impact Assessment.
 - 2 Revised plans and particulars to take account of the character and setting of 12 no. Protected Structures within a 2km radius of the site.

- 3 Revised Landscape and Visual Impact Assessment which provides a more comprehensive examination of the cumulative effect of the proposed development in combination with permitted solar farm developments in the area.
- 4 Response to submission from the DAU in relation to potential archaeological impacts.
- 5 Response to report of the Council's Fire Authority.
- 6 Response to the submission of An Taisce.
- 7 Response to Third Party Submissions.

3.2.6. A request for Further Information was made on 4th September 2024 (as detailed in Section 2 of this Report). This Further Information (FI) was submitted on 7th June 2025.

Planning Officer's Second Report

3.2.7. In assessing the Further Information submission, the Planning Officer was of the view that the applicant had not satisfactorily addressed two of the concerns raised in the FI request, in relation to the impact on the heritage/landscape associated with Ducketts Grove (as set out under Item 1 of the FI request), and the cumulative impact of the development in conjunction with permitted solar developments nearby (Item 3 of the FI request). It is also set out in the Planning Officer's report that it was not demonstrated that the development would not have an adverse impact on the landscape generally, or the surrounding landscape in the vicinity of Duckett's Grove. It is further stated that the FI response did not include a number of viewpoints referred to in the applicant's documentation (FI VP 13-19) and that the LVIA does not include or provide an assessment or analysis of the cumulative impacts of solar farms permitted in the area and the Planning Officer states the overall landscape is approaching a 'tipping point' in terms of solar developments.

3.2.8. The Planning Officer recommended a refusal of permission, and their remaining concerns are reflected in the Planning Authority's reason for refusal.

3.3. Other Technical Reports on initial application

Senior Engineer – Environment – dated 18th July 2023² – Recommends 25 no. conditions which cover the following issues:

- Ground under the proposed solar panels shall be maintained as grassland and remain permeable, so that there is no net increase in the discharge rate or runoff volume from the site.
- surface water and sediment control;
- access tracks of permeable gravel;
- stormwater management;

Municipal District Engineer Report received on 13/08/2024

No objection to the proposed development subject to conditions. However, concern was raised in relation to the indicative route of the ESB connection from the development to the ESB network and that it will be assumed without substantive detail being provided. 6 no. conditions recommended in relation to roads issues.

Environment Report received on 21/08/2024

The report is accompanied by an EIA Screening Determination and AA Conclusion Statement. The report concludes there is no likelihood of significant effects on a European site and that there is no real likelihood of significant effects on the environment. Conditions recommended in event of a grant of permission.

Fire Officer

Report received on 03/09/2024. Require the following to be incorporated fire detection / alarm systems, battery management, fire suppression, containment of fire run off, distances between battery storage containers, and pre-incident planning. Prior to commencement a risk assessment to be undertaken.

² This appears to be a typo email is dated 18th July 2024.

3.4. Other Technical Reports on response to further information

Area Engineer – Report received 10/06/20205 – None of the FI items were pertinent to the Municipal District Engineer.

Environment Section - Senior Engineer's Report received on 12th June 2025. The report recommends a grant of permission subject to conditions

Environment Report – 21st August 2025 4 conditions proposed which can be summarised as 1) noise monitoring at construction stage 2) Resource and Waste Management Plan 3) Construction and operation mitigation measures shall be implemented in accordance with submitted reports; 4) construction works to comply with parameters relating to water pollution, noise, dust, parking, site management and hours and days of working.

3.5. Conditions

The following conditions have been proposed by various internal sections of Carlow County Council.

Environment Section - Senior Engineer Report received on 12th June– 15 conditions proposed which cover the following issues:

- Ground under the proposed solar panels shall be maintained as grassland and remain permeable, so that there is no net increase in the discharge rate or runoff volume from the site.
- Surface water and sediment control;
- Access tracks of permeable gravel;
- Stormwater management;

Environment – 24th June 2025 – 5 conditions proposed which can be summarised as 1) noise monitoring at construction stage 2) Resource and Waste Management Plan 3) Revised Outline Construction Management Plan 4) Construction and operation mitigation measures shall be implemented in accordance with submitted reports; 5) construction works to comply with parameters relating to water pollution, noise, dust, parking, site management and hours and days of working.

Environment Report – 21st August 2025 - 4 conditions similar to the above.

Municipal District Engineer

Report received on 13/08/2024 - 6 conditions recommended related to transport issues.

Fire Officer - Report received on 03/09/2024. Require the following to be incorporated fire detection / alarm systems, battery management, fire suppression, containment of fire run off, distances between battery storage containers, and pre-incident planning. Prior to commencement a risk assessment to be undertaken.

3.6. **Prescribed Bodies**

Submissions on initial application

Development Applications Unit (DAU)

Submission received on 16/08/2024 which requests that Further Information be requested.

- Deferral of comprehensive archaeological works to a post-consent stage is not acceptable.
- Recommended that an updated Archaeological Impact Assessment, to include a programme of targeted archaeological test excavation be requested as further information.

Transport Infrastructure Ireland (TII)

Submission received on 06/08/2024. It is requested that the planning authority has regard to the "provisions of official policy for proposals impacting national roads, to the DoECLG Spatial Planning and National Roads Guidelines for Planning Authorities and relevant TII publications and proposals impacting the existing light rail network, to TII's "Code of engineering practice for works on, near, or adjacent the Luas light rail system".

An Taisce

Submission received on 14/08/2024.

- Subject site is near the Aghalona river which has been designated as moderate water quality status under the Water Framework Directive (WFD) and is at risk of not achieving good quality status by 2027.

- Adjacent to the Slaney River which has also been designated moderate water quality status and is similarly at risk of not achieving good status by 2027.
- Proposal requires assessment against Article 4 of the WFD
- Construction phase impacts arising from the proposed development,
- Sufficient setback distance between the site boundary and the rivers to mitigate impacts.
- Inland Fisheries Ireland's (IFI) guidance on buffer zones in the urban environment for protecting watercourses advises a 20-metre buffer zone width for smaller river channels (<10m)".
- Some sections of the subject proposal appear to traverse thin stretches of alluvium sediment which is indicative of a wetland area according to a Wetlands Survey Ireland map
- Advise that the suitability of this thin stretch of land for solar panel placement is verified by the Council

3.6.1. **Other Prescribed Bodies**

Submissions were invited but not received from Uisce Éireann, Irish Aviation Authority, Inland Fisheries Ireland, Heritage Council, Kildare County Council and Office of Public Works.

Submissions in response to Further Information

DAU – Submission received on 18/07/2025 expresses no objection to the proposed development subject conditions.

3.7. **Third Party Observations**

3.7.1. Nine no. third party submissions were received. A detailed summary of same is set out in the Planner's Report. I have included a short summary of the issues raised below.

- Impacts on natural heritage and archaeology
- Impact on cultural heritage (archaeology, architectural heritage – Duckett's Grove)

- Impact on landscape and rural character/impact on views
- Impact on water quality and water resources
- Impact on biodiversity
- Carlow County Council (CCC) has exceeded its minimum target of 130MW of renewable electricity
- Brownfield lands should be favoured over greenfield sites for development of solar PV projects/Prime agricultural lands should be preserved for food production.
- Provision of rooftop renewable energy should be utilised instead/Solar energy targets to 2030 can be met by rooftop provision alone.
- Inadequate consultation
- Impact on residential amenity
- Impact on property values.
- Health Impacts
- Fire Risk
- Potential disturbances due noise, light, and pollution.
- Traffic Impacts at construction stage
- Lack of detail in relation to restoration
- Project splitting
- Impacts on Natura 2000 sites.

After Further Information

3.7.2. None received following receipt of further information response.

4.0 Planning History

4.1.1. A detailed planning history is set out in the Planners Report. Those of most relevance to this application is set out below.

On site

4.1.2. There are no recent permissions of particular relevance to this application.

Solar Farm Developments nearby

4.1.3. The Planner’s report has detailed other solar developments nearby. I have also referred to the Commission’s Internal GIS database to include any more recent relevant applications or permissions. For ease of reference, I have tabulated same below:

Table 1 – Solar Farm Developments

PA Ref	ACP (ABP) Ref	Development/Location	PA Decision	ACP Decision
24/60295	ACP-323496-25	A ten-year planning permission for a renewable energy development comprising the construction of a c. 63MW solar farm of 118.9ha and associated works in the Townlands of Rathrush, Emlicon and Bendinstown, Co Carlo	Refuse 31/07/2025	Grant 07/01/2026
2460043	322347-25	A 10 Year Planning Permission for a solar farm with a total area of circa 192 hectares. In the townlands of Ballybar Upper Ballyloo Ballyryan , Garryhundon and Linkardstown , County Carlow.	Refuse 25/03/2025	Grant 05/09/2025
23/60297:	n/a	Permission granted for a 10-year permission for development consisting	Grant 22/08/2024	n/a

		of the construction of a Solar PV development on an area of circa 91.2 ha at Grangeford Old and Friarstown, Co. Carlow.		
23/92	ABP 318475-23	A 10-year permission for development consisting of the construction of a Solar PV development on an area of circa 77 ha at Baungephlure and Friarstown, Killerig, Co. Carlow.	Grant 25/10/2023	Grant 04/06/2024
23/60177	n/a	Modify a previously granted permission (22/272) from 10MW to 20MW on an area of 22.45 ha at Copenagh, Tullow, Co. Carlow	Grant 06/10/2023	n/a
22/149:	n/a	A solar and storage park on an area of approximately 68.8 ha (part of site permitted under 19/46) at Ardnehue, and Friarstown, Co. Carlow. This	Grant 18/04/2023	n/a

		subsumes previous permissions 21/38 and 19/46.		
21/38:	n/a	A 10-year permission for development consisting of the construction of a Solar PV development on an area of 17.7 ha at Ardnehue, and Friarstown, Co. Carlow.	Grant 02/03/2022	n/a
21/23:	ABP 309987-21	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 circa 65.6 ha (part of site permitted under 16/325) at Grangeford Old and Friarstown, Co. Carlow.	Refuse 25/03/2021	Grant 26/10/2021
20/44	n/a	A 10-year permission for development consisting of the construction of a Solar PV development on an area of 24.3 ha at	Grant 31/03/2021	n/a

		Johnstown, Bennekerry, Co. Carlow.		
19/46	n/a	A solar farm on an area of circa 27 ha at Friarstown, Killerig, Co. Carlow.	Grant 06/03/2020	n/a
16/342:	n/a	A solar farm on an area of circa 27 ha at Ardnehue, Bennekerry, Carlow	Grant 16/03/2017	n/a
16/325	n/a	A solar farm on an area of 12.62 ha at Friarstown, Tullow, Co Carlow. Granted Permission expired prior to commencement. (See above subsequent application 21/23).	Grant 04/12/2017.	n/a

5.0 Policy Context

5.1. European Policy

2030 Climate and Energy Framework (October 2014)

The European Council endorsed EU-wide binding targets for 2021 to 2030 of 1) at least 40% less greenhouse gas emissions by 2030, compared to 1990 and 2) at least 27% renewable energy consumption in 2030.

Regulation (EU) 2018/842

Ireland's binding greenhouse gas emission reduction target for 2030 in relation to 2005 levels is 30%, to comply with Paris Agreement commitments.

European Green Deal 2020

It aims to make Europe climate neutral by 2050, by doubling the share of renewable energy in the energy mix by 2030, compared to 2020, to reach at least 40%.

REPowerEU Plan 2022 & Directive EU 2018/2001 (REDII) (amended 18.05.2022)

The REPowerEU Plan amended the RED II Directive, to require that 42.5% of energy is from renewable sources by 2030.

Council Regulation (EU) 2022/2577 (22nd December 2022)

This binding Regulation works together with the RED Directives. Article 3 introduced a rebuttable presumption that renewable energy projects are of overriding public interest, for the purposes of the relevant competing environmental legislation, being the Habitats Directive, Birds Directive and the Water Framework Directive.

Paragraph 8 states that 'It is possible for Member States to consider applying this presumption in their relevant national legislation on landscaping'.

Regulation 2024/223 (22 December 2023 amending Regulation (EU) 2022/2577)

Paragraph 14 states that 'Article 3(2) of Regulation (EU) 2022/2577 requires priority to be given to projects that are recognised as being of overriding public interest ...where those projects introduce additional compensation requirements for species protection. ... The first sentence of Article 3(2) of Regulation (EU) 2022/2577 has the potential, ..., to further accelerate renewable energy projects since it requires Member States to promote those renewable energy projects by giving them priority when dealing with different conflicting interests beyond environmental matters in the context of Member States' planning and the permit-granting process'.

RED III (European Renewable Energy Directive (EU/2023/2413))

RED III sets a binding renewable energy target that by 2030, at least 42.5% of energy will come from renewable sources, but aims for 45%, significantly raising the previous 32% target in RED II and the EU's 2030 Climate and Energy Framework.

5.2. National Policy

Project Ireland 2040 - National Planning Framework, 2018 (updated April 2025)

National Strategic Outcomes (NSO) No 8 'Transition to a Carbon Neutral and Climate Resilient Society', states Ireland will have a more renewables-focused energy generation system harnessing energy sources such as solar and refers to greenhouse gas emissions reduction targets in the Climate Action and Low Carbon Development (Amendment) Act and the Climate Action Plan 2024. It also states that the accelerated delivery of additional renewable electricity generation is therefore essential for Ireland to meet its climate targets, reduce its greenhouse gas emissions, and improve its energy security by reducing reliance on imported fossil fuels and diversifying its electricity supply. Overall, it is a green energy objective to deliver 80% of our electricity needs from renewable sources by 2030.

Chapter 9 'Climate Transition and Our Environment' and states that the Framework can support the response to climate change through a variety of measures including through the accelerated roll out of on-shore wind energy and solar development. Under the heading of 'Renewable Electricity' the 'Government has set ambitious targets to achieve 8 GW of solar by 2030'

'Rural Areas and Energy Production' states that 'Development of renewable energy generation can include co-location with agricultural activities that supports both a reduction in carbon emissions and land use diversification options for farmers'.

National Policy Objective 70 (formerly NPO 55) seeks to 'promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a climate neutral economy by 2050'.

'Regional Renewable Electricity Capacity Allocations' for the southern region notes that 138MW of solar had been energised in 2023 with an additional capacity allocation of 3,302MW out to 2020. These targets form part of NPO 74 and are required to be planned for through the Regional Spatial and Economic Strategy.

Landscape

The following National Policy Objective are relevant to the appeal:

- National Policy Objective 23 - Protect and promote the sense of place and culture and the quality, character and distinctiveness of the Irish rural landscape ...
- National Policy Objective 30 - Facilitate the development of the rural economy, in a manner consistent with the national climate objective, through supporting a sustainable and economically efficient agricultural and food sector, together with forestry, fishing and aquaculture, energy and extractive industries, the bio-economy and diversification into alternative on-farm and off-farm activities, while at the same time noting the importance of maintaining and protecting biodiversity and the natural landscape and built heritage which are vital to rural tourism.

National Development Plan 2021-2030

Includes a Strategic Investment Priority for Renewable Energy that states, 'Regular Renewable Electricity Support Scheme (RESS) auctions will deliver competitive levels of onshore wind and solar electricity generation which indicatively could be up to 2.5 GW of grid-scale solar and up to 8 GW of onshore wind by 2030'.

National Development Plan Review 2025

It notes €500 million has been allocated to the Department of Climate, Energy and the Environment to fund projects and programmes that will support climate mitigation and renewable energy development.

Climate Action and Low Carbon Development 2015 (as amended)

The Act provides for the approval of plans by the Government in relation to climate change for the purpose of pursuing the transition to a low carbon, climate resilient and environmentally sustainable economy. It introduced five-year carbon budgets starting in 2021. The first two budgets commit Ireland to reducing emissions by 51% over a 12 year period to the 31st of December 2030. It also established sectoral emissions ceilings compared to 1990 levels, and a net zero target for 2050.

Section 15 (1) (as amended) provides that:

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

- The most recent approved a) climate action plan, b) national long term climate action strategy, c) 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.

Climate Action Plan 2024 (CAP 2024)

Sector emission ceilings approved by Government in July 2022 requires a 75% reduction in electricity emissions by 2030, based on 2018 levels. Central to achieving this goal is an increase in the share of renewable electricity to 80%, largely from solar and wind. Key 'Electricity' targets include delivery of up to 5 GW of Solar by 2025 and 8 GW by 2030. Large-scale deployment of renewables will be critical to decarbonising the power sector, and enabling electrification of other technologies.

Climate Action Plan 2025 (CAP 2025)

CAP 2025 refines and updates measures and actions required from 2024 and is to be read in conjunction with CAP 2024. Chapter 11 addresses Electricity and states that the 22% reduction in emissions from 2021 to 2023 in the electricity sector is due to an increase in the share of renewable electricity generation. 7% of electricity generated in 2023 came from renewable sources other than wind, such as solar, hydro, and biomass. National electricity generation targets remain the delivery of to 5 GW of Solar by 2025 and 8 GW by 2030. These targets are seen as minimums.

Ireland's Long-term Strategy on Greenhouse Gas Emissions Reduction (Climate Action Strategy - 2024)

It states that 'To achieve the Emission Reduction Measures and Milestones to 2050, the core measures necessary to deliver a net zero emissions electricity sector by 2050 is to deliver significantly higher renewable power capacity mostly through onshore wind, offshore wind, and solar PV. To achieve the required increase in renewable electricity capacity, installation rates of wind and solar power will need to significantly accelerate'. Accelerating the deployment of wind and solar power will align with Ireland's EU commitments and support the RePowerEU Plan.

Second National Adaptation Framework (NAF) June 2024

An incremental approach to climate adaptation will be necessary and sectoral adaptation plans are required for 'Electricity and Gas Networks', and 'Planning and Built Environment'. Electricity is identified as critical infrastructure. Ireland will need to implement adaptation measures by using energy sources and technologies that produce minimal environmental pollution and greenhouse gas emissions, thereby promoting a more sustainable and eco-friendly energy supply.

Electricity and Gas Networks Climate Change Sectoral Adaptation Plan 2025 (EGN SAP 2025)

This is the second Sectoral Climate Change Adaptation Plan for the Electricity and Gas Networks Sector, as required under the provisions set out in the Climate Action and Low Carbon Development Act 2015 and the National Adaptation Framework.

Of note is Section 2.1 'Electricity Generation' wherein it is stated significant expansion in the installed Utility Scale solar generation capacity in the last 5 years to 934 Megawatts underscores the increasing role of solar power in Ireland's renewable energy landscape, highlighting its potential to contribute substantially to the nation's energy mix and sustainability goals

Sectoral Emissions (2022)

Sectoral Emission Ceilings were provided for in the Climate Action and Low Carbon Development (Amendment) Act 2021 and the ceiling for the Electricity and Gas Network, requires a 75% reduction in GHG emissions between 2018 and 2030.

National Climate Objective

The national climate objective is to achieve transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050.

Energy Security in Ireland to 2030, Energy Security Package (November 2023)

Confirms Ireland's future energy will be secured by moving from an oil, peat, coal and gas-based energy system to an electricity-led system maximising renewable energy potential. It noted 1 GW of solar energy was due to be connected by the end of 2023 and that 'a rapid programme of solar delivery is underway which is having a real impact on supply security and meeting electricity demand...'. It expects solar energy will reach 8 GW by 2030. Under the heading of 'what are we already doing?' it states that greater alignment between local plans and renewable energy targets to

support investment in and delivery of onshore wind and solar renewable energy is critical.

National Energy & Climate Plan 2021-2030 (NCEP) (July 2024)

The objectives for decarbonisation from renewable energy include 1) achieving a 34% share of renewable energy in energy consumption by 2030; 2) increase electricity generated from renewable sources to 70%; and 3) Up to 1.5 GW of grid scale solar energy. This will be achieved through policies including streamline consenting and connection arrangements.

Programme for Government 2025 (Securing Ireland's Future)

Under the heading of 'Leading a Revolution in Renewable Energy' 'the Government is committed to achieving 80% of Ireland's electricity generation from renewable sources by 2030' and will 'intensify the transition to lower-cost renewables in electricity generation, and transition away from expensive imported fossil fuels'. Under 'Accelerating Renewables' the Government will 'Deliver 8GW solar 2030'.

Ireland's Greenhouse Gas Emissions Projections 2024-2055 (EPA May 2025)

- Ireland is not on track to meet the 51 per cent greenhouse gas emissions reduction target in 2030 compared to 2018. Projected only 9-23% lower by 2030.
- Renewable energy generation at the end of the decade is projected to range from 60 to 68 per cent of electricity generation.

Ireland's 4th National Biodiversity Action Plan (NBAP) 2023-2030

Includes five strategic objectives aimed at addressing existing challenges and new and emerging issues associated with biodiversity loss. Section 59B(1) of the Wildlife (Amendment) Act 2000 (as amended) requires the Commission, to have regard to the objectives and targets of the NBAP in the performance of its functions, to the extent that they may affect or relate to the functions of the Commission

5.3. Regional Policy Context

Regional Spatial and Economic Strategy (RSES) for the Southern Region

Chapter 5 'Environment includes the following Regional Policy Objectives:

- RPO 87 – Low Carbon Energy Future – It is an objective to...increase the use of renewable energy sources across the key sectors of electricity supply...
- RPO 95 – Sustainable Renewable Energy Generation – ... to leverage the Region as a leader and innovator in sustainable renewable energy generation.
- RPO 96 – Integrating Renewable Energy Sources – ... ensure our national and regional energy system remains safe, secure and ready to meet increased demand as the regional economy grows.
- RPO 100 – Indigenous Renewable Energy Production and Grid Injection – It is an objective to support the integration of indigenous renewable energy production...

Section 8.2 includes the following Regional Policy Objectives:

- RPO 219 – ‘New Energy Infrastructure’ – 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 – ‘Renewable Energy Generation and Transmission Network’ – a) Local Authority City and County Development Plans shall support the sustainable development of renewable energy generation... c) The RSES supports the Southern Region as a Carbon Neutral Energy Region.

5.4. **Local Policy Context Carlow County Development Plan 2022-2028**

The relevant Development Plan is the Carlow County Development Plan 2022-2028 which came into effect from 4th July 2022.

Chapter 7: Climate Action and Energy

It is a ‘Renewable Energy’ policy of the council to:

- **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.

It is a 'Renewable Energy' objective of the Council to:

- **RE. O1** Seek to achieve a minimum of 130MW of renewable electricity in the County by 2030, by enabling renewable energy developments.

Section 7.10.3.2 'Solar Energy' states that there are currently no national guidelines in place to guide the location or scale of solar farms. Constraints may arise in relation to landscape impacts, protection of natural heritage or archaeology, or in relation to protecting the high value agricultural land suitable for tillage.

It also states that:

- The County RES (Renewable Energy Strategy) maps the potential availability of solar resources. The mapping exercise was carried out applying a risk-based approach to suitability for solar farms. The risk level is defined by adding up the risk levels at certain distances from material assets, sensitive receptors, European Sites and from natural physical attributes (such as groundwater vulnerability, geological heritage sites, soil drainage, landslide, and flooding susceptibility). The summed risk levels are displayed on a scale ranging from High (maximum risk) to Low (minimum risk). However, the presence of a risk category in and of itself does not support nor preclude solar development; it is a tool which flags areas of having a higher or lower concentration/distance from various sensitive receptors.

Figure 7.9: 'Solar Opportunity Areas'

It is a 'Solar' policy of the council to:

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

It is a 'Solar' objective of the council to:

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

Chapter 9: Landscape and Green Infrastructure

The site is entirely located in the 'Central Lowlands' Landscape Character Areas (Map 9.1). and is entirely located in 'Farmed Lowlands' Landscape Types (Map 9.2. .

Chapter 9.5 ‘County Landscape Sensitivity and Capacity’ sets out the types of visual impact that can arise and matters that influence it, under topography, vegetation and development. It states there will be a presumption against developments located on elevated and visually exposed sites.

Chapter 9.6 - Landscape sensitivity works on a scale of 1, 2-3, 4 and 5, with only urban settlements having the lowest level of sensitivity. Solar is not a land use type in the ‘Land Use Capacity Matrix’, but the central lowlands would have moderate capacity for wind farming, extractive industry, forestry plantation, rural housing and urban development expansion, and a low capacity for industrial development.

Table 9.3 of Chapter 9.7 ‘Views, Prospects and Scenic Routes’ sets out a Schedule of Views and Prospects. The following 3 no. views are of relevance (and are cited in the Planner’s Report).

No	Description	Location
19	View southeast, of heritage site	Duckett’s Grove
20	Vista northeast, of spreading central plain and forest in distance	Duckett’s Grove
21	View on approach from west, of heritage site	Duckett’s Grove

Table 9.4 of Chapter 9.7 contains a Schedule of Scenic Routes. No routes are cited by the PA as being of relevance and none are located within 5km of the site.

Map 9.4 sets out the locations of these views and prospects.

It also states that the identification of these views, prospects and scenic routes provides a tool for making development decisions and acknowledges that in certain circumstances some development may be necessary, and in such cases appropriate location, siting and design criteria should strictly apply.

Chapter 9.8 sets out the following ‘Landscape’ policies that are referenced in the refusal reason: It is the policy to:

- **LA. P1** Protect and maintain the overall integrity of the County’s landscape, by recognising its capacity to sustainably integrate and absorb appropriate development, and by ensuring that development protects, retains and, where necessary, enhances the appearance and character of the landscape, and does not unduly damage or detract from those features which contribute to its value,

character, distinctiveness and sensitivity e.g. landform, habitats, scenic quality, settlement pattern, historic heritage, amenity, land use and tranquillity

- **LA. P2** Ensure that development will not have a disproportionate landscape or visual impact in sensitive upland areas of the County (due to siting, layout, design or excessive scale, height and bulk) and will not significantly interfere with or detract from scenic upland vistas, when viewed from the surrounding environment, including nearby areas, scenic views and routes, and from settlements
- **LA. P3** Adopt a presumption against developments which are located on elevated or visually exposed sites or areas with open exposed vistas, and where the landscape cannot accommodate such development with appropriate mitigation.
- **LA. P4** Ensure that developments on steep slopes or ridges will not be conspicuous or have disproportionate landscape or visual impacts when viewed from the surrounding environment, including from nearby areas, scenic views and routes, and from settlements.
- **LA. P6** Require all developments, having regard to their landscape setting, to be appropriate in siting, layout, design and scale, in order to ensure any potential adverse or landscape and visual impacts are minimised and/or removed where necessary, and that natural site features and characteristics are retained and maintained.
- **LA. P11** Protect and preserve the established appearance and aesthetic attributes of views and prospects that contribute to the inherent quality of the County's landscape, including views, prospects and scenic routes listed in Tables 9.3 and 9.4, and particularly views to and from mountains, hills, river valleys and river corridors, and views of historical or cultural value (including buildings and townscapes) and views of natural beauty.

Chapter 9.8 also contains the following objectives:

- **LA. O1** Ensure that the management and assessment of development throughout the County takes account of the recommendations and assigned Landscape Character Areas, Landscape Types, and Landscape Sensitivity, and the Schedule of Views, Prospects and Scenic Routes, as contained in this Plan,...

- **LA O2** Ensure landscape/visual impact assessment will be a key consideration in the assessment of development proposals within the County.

Policy **GI P6** of Chapter 9.11 'Green Infrastructure Strategy' states that it is a policy to require proposals for large scale developments such as ...solar farms, ..to submit a green infrastructure plan as an integral part of a planning application.

Chapter 10 - Natural and Built Heritage

Section 10.16 - Country Houses, Demesnes & Gardens

CH. P1:

Encourage the protection, conservation, promotion and enhancement of Country Houses, Demesnes and Gardens in the County and support public awareness, enjoyment of and access to these sites where appropriate and in cooperation with owners and other interested parties, including Government Departments and state agencies.

CH. P3:

Discourage development that would lead to a loss of, or cause damage to, the character, the principal components of, or the setting of Country Houses, Demesnes and Gardens.

Also:

Policies AH P1, AH P3, AH P4 and AH P5 – As relates to the protection of archaeology

Section 10.14 in relation to Protected Structures

Policies PS P1, PS P2, PS P6 as relates to Protected Structures and views towards same.

Chapter 12

Chapter 12.12 'Green Energy Projects' in Chapter 14: Rural Development states that 'Rural areas have the potential to be harnessed for renewable energy projects including wind, hydro and solar energy. While the Council is generally supportive of renewable energy projects considerations to inform acceptability of proposals include landscape sensitivities, residential amenities, scenic views or prospects, public rights

of way, wildlife, habitats, special areas of conservation, protected structures, bird migration paths, potential for pollution impacts etc.

It includes the following agriculture policy:

- **AG. P3** Encourage the development of environmentally sustainable agricultural practices, to ensure that development does not impinge on the visual amenity of the countryside and that watercourses, wildlife habitats and areas of ecological importance are protected from the threat of pollution.

16.12.4 - Solar Energy in Chapter 16 'Development Management Standards' includes sixteen criteria under which a planning application will be considered, being:

- 1) Any future Section 28 Ministerial Guidance.
- 2) Site suitability;
- 3) Any environmental sensitivities in the landscape;
- 4) Landscape Character Areas;
- 5) Visual impact, zones of influence including cumulative visual impact/zones of influence of existing / permitted solar farms and associated infrastructure such as road access
- 6) Glint and Glare impacts on roads, dwellings, national monuments, protected structures and other sensitive receptors;
- 7) The need to protect residential amenities of adjoining properties;
- 8) Archaeological Impact Assessment and Heritage Impact Assessment;
- 9) Ecological Impact Assessment.
- 10) Landscaping plans to appropriately integrate the development into the landscape
- 11) Security requirements such as CCTV, security lights, fencing etc;
- 12) Impacts from lighting;
- 13) Construction impacts;
- 14) Impacts on drainage patterns and water tables
- 15) Suitability of and access to the electricity grid;
- 16) Decommissioning Statement.

Appendix VI - Renewable Energy Strategy

Section 6.2 addresses 'Solar Energy' and 6.2.6 states that 'Constraints may arise in relation to landscape impacts, protection of natural heritage or archaeology, or in relation to protecting the high value agricultural land suitable for tillage. Proximity to housing is another factor, although solar farms have limited external impacts beyond the site boundary'. It also noted that, mapping of potential solar resources availability was carried out and states that 'when environmental and geographical constraints are removed, there is still 755 km² of land potentially available for solar farm development'.

The different risk factors for solar farm development are:

- High Risk: natural constraint with high sensitivity or adjacent to sensitive receptor / material asset etc
- Medium Risk: natural constraint with medium sensitivity or given distance from sensitive receptor etc
- Low Risk: natural constraint with low sensitivity or further distance from sensitive receptor etc.
- No Identified Risk: natural constraint with no identified risk or far from any sensitive receptor etc.

Appendix VII– Carlow County Landscape Character Assessment and Schedule of Protected Views

It provides details of the characteristics of the Landscape Character Areas including the 'Central Lowlands'. With the exception of the Blackstairs Mountains, the variations in landscape type are subtle rather than distinctive and the loss of hedgerows to define field boundaries in the past represents a decline in landscape condition. Views are generally open and expansive except where restricted by buildings, plantations or ridge and farmed ridges can delimit views.

Recommendations include maintaining the well-developed pattern of fields, hedgerows, trees and shelterbelts, to encourage the use of native and indigenous planting in new developments to integrate buildings into the surrounding landscape and that new developments should not be sited in prominent locations such as ridges and areas with open exposed vistas.

Under 'Landscape Capacity and Sensitivity in the Landscape Character Areas', The Central Lowlands are 'deemed to be moderately sensitive to development'.

This area is deemed moderately sensitive to development. It has the capacity to absorb most types of development subject to the implementation of appropriate mitigation measures. The application site is located within the farmed lowland landscape type and has a landscape sensitivity of 2-3.

Additionally, there are 3 no. protected views nearby (Ref No's: 19, 20 and 21) of Duckett's Grove, Heritage Site and of spreading central plain and forest in distance.

Appendix VIII - Record of Protected Structures

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

5.5. Section 28 Guidelines

- Architectural Heritage Protection: Guidelines for Planning Authorities (2011)
- The Planning System and Flood Risk Management – Guidelines for Planning Authorities, 2009

5.6. Other Guidance and Policy Documents

- The Long-Term Strategy on Greenhouse Gas Emissions Reductions, 2023
- Best Practice Planning Guidance Report for Large Scale Solar Energy Development in Ireland (Irish Solar Energy Association), 2023
- National Energy Security Framework, 2022
- Guidelines on the information to be contained in Environmental Impact Assessment Reports (EIAR), 2022
- The Policy Statement on Security of Electricity Supply, 2021
- Landscape Institute and the Institute of Environmental Management and Assessment (IEMA) publication entitled Guidelines for Landscape and Visual Impact Assessment, 2013 (GLVIA3)

5.7. Natural Heritage Designations

- 5.7.1. The Slaney River Valley SAC (000781) is located c5m to the south of the southernmost portion of the site (on the opposite side of the R126 road) at its closest point.
- 5.7.2. The River Barrow and River Nore SAC (Site code 002162) is located approximately 5.8km as the crow flies to the north-west of the northernmost point of the site at its closest point.

6.0 EIA Screening

Having regard to: -

- The nature and scale of the proposed development, while not itself a class specified in Part 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended, includes a limited extent of field boundary removal (c200 linear metres), thereby coming within Class 1 (a) of Part 2 of Schedule 5 of the regulations and below the threshold set out in the class,
- The location of the proposed development, in a rural area, which is designated as a 'Solar Opportunity Area' in the Carlow County Development Plan 2022-2028, the nature of the existing site and the pattern of existing and permitted development in the surrounding area;
- The location of the development outside of any sensitive location specified in Article 109(4)(a)(v) of the Planning and Development Regulations 2001, as amended;
- The guidance set out in the 'Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-Threshold Development', issued by the Department of the Environment, Heritage and Local Government (2003);
- The criteria set out in Schedule 7 and 7A of the Planning and Development Regulations 2001, as amended, and;
- The features and measures proposed by the applicant intended to avoid or prevent adverse effects on the environment, including measures identified in the submitted Natura Impact Statement and Flood Risk Assessment,

the Commission considers that the proposed development would not be likely to have significant effects on the environment and that the preparation and submission of an Environmental Impact Assessment Report is not, therefore, required.

7.0 AA Screening

7.1. Screening Determination

- 7.1.1. In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of the information considered in this AA screening, I

conclude that it is not possible to exclude that the proposed development alone [or in combination with other plans and projects] will give rise to significant effects on Slaney River Valley SAC (000781) and River Barrow and River Nore SAC (002162) in view of the sites conservation objectives. Appropriate Assessment is required.

7.1.2. This determination is based on:

- The nature and scale of the proposed development/works.
- The hydrological/ecological connections to the Slaney River Valley SAC (000781) and the ecological connections River Barrow and River Nore SAC (002162) and the potential for significant effects on QI habitats and QI species, by way of loss of *ex-situ* commuting/foraging habitat and disturbance (as relates to otter), and by way of pollution and deterioration of water quality.

7.2. **Appropriate Assessment Conclusion: Integrity Test**

7.2.1. In screening the need for Appropriate Assessment, it was determined that the proposed development could result in significant effects on Slaney River Valley SAC (000781) and River Barrow and River Nore SAC (002162) in view of the conservation objectives of the sites and that Appropriate Assessment under the provisions of S177U was required.

7.2.2. Following an examination, analysis and evaluation of the NIS, all associated material submitted including further information and submissions/observations, I consider that adverse effects on site integrity of the Slaney River Valley SAC (000781) and River Barrow and River Nore SAC (002162) can be excluded in view of the conservation objectives of these sites and that no reasonable scientific doubt remains as to the absence of such effects.

7.2.3. My conclusion is based on the following:

- A detailed assessment of construction, operational and decommissioning impacts.
- The effectiveness of the mitigation measures proposed.
- The inclusion of planning conditions to ensure the application of these measures.

- The proposed development will not affect the attainment of conservation objectives for the Slaney River Valley SAC (007781) nor for the River Barrow and River Nore SAC (002162).

8.0 WFD Screening

- 8.1. I conclude that on the basis of objective information, that the proposed development will not result in a risk of deterioration on any waterbody (rivers, lakes, groundwaters, transitional or coastal), either qualitatively or quantitatively, or on a temporary or permanent basis, or otherwise jeopardise any waterbody in reaching its WFD objectives. Therefore, it can be excluded from further assessment.
- 8.2. See Appendix 5 at the rear of this report for further information.

9.0 The Appeal

9.1. Grounds of Appeal

- 9.1.1. 1 no. first-party appeal against the PA's decision to refuse permission was received on 19th August 2025. The grounds of appeal are summarised below.

General

- Both of the refusal reasons are not supported by the evidence submitted, PA misapplied relevant policy, and failed to take account of established planning precedent and national renewable energy policies
- Will be no significant adverse effects on landscape character, visual amenity, or the setting of Duckett's Grove.
- CDP supports development on fact expressly supports solar energy development on agricultural land.
- Fails to give due weight to national and EU climate obligations.

Reason for Refusal 1

- References Policies LA P1, LA P2, LA P3, LA P4, LA P6, and LA P11}, as well as the County Renewable Energy Strategy. It asserts that the Proposed Development would result in disproportionate and adverse landscape and visual

impacts, particularly in relation to the scale of the Proposed Development, its cumulative context, and its proximity to sensitive heritage assets such as Duckett's Grove.

- Application including the FI submitted provided a comprehensive and evidence-based assessment that fully addressed all relevant landscape and visual policy considerations.
- Several policies quoted are not applicable to the site or have been addressed.
- In relation to landscape, the LVIA and RFI submission concluded that only 4 no. out of 19 no. view points would result in Minor Adverse effects.
- Overall slight effects reducing to slight not significant as the planting matures.
- Policy LA P2 is not applicable as it relates to upland areas – the site is a maximum of 123 above sea level- site is defined as ‘Central Lowlands’ and ‘Farmed Lowlands’ in the CDP.
- LA P3 is not applicable as it relates to visually exposed areas, site is neither elevated or visually exposed.
- LVIA confirms that views beyond 500m are extremely limited.
- LA P4 is not applicable as it relates to areas on steep slopes or ridges – no areas of the site could reasonably be classified as steep slopes.
- LA P6 (relating to siting and design) has been responded to – proposal retains the established field structure
- Development will not be seen in its entirety from any one location/visibility restricted to partial views
- LA P11 (as relates to views) - visibility of the Proposed Development from designated scenic routes is either absent or so limited as to be of Very Low magnitude and Not Significant in effect.
- No part of the Proposed Development will be visible from the identified protected views and scenic routes within 5km
- Planner did not take into account all of the submitted viewpoints submitted as part of the FI response – it is stated within the Planner’s report that these were

not submitted. This is incorrect. (relevant viewpoints are FI VP13, FI VP14, FI VP15, FI VP16, FI VP18 and FI VP19)

- Submission included a full suite of updated viewpoint imagery and photomontages covering all requested viewpoints, as evidenced in the FI Landscape Plans
- PA assessment relied upon an incomplete or inaccurate review of the FI documentation.
- The documents demonstrated that these materials demonstrate there will be no visibility from within the core experience of Duckett's Grove (VPs 13-15), only partial and filtered views of peripheral fields occur from more distant locations (VP19) and minimal intervisibility with other solar farms (only slight glimpse from VP 12).
- The County Renewable Energy Strategy's risk-based approach for solar opportunity does not prohibit development in 'High Risk' zones but requires contextual assessment. This has been provided.
- There is no evidence that Carlow has reached a 'tipping point' in terms of solar development, as asserted in the Planner's Report.
- Solar Opportunity Map in Figure 7.9 of the Carlow County Development Plan clearly identifies the site as being predominantly within a "Low Risk" area for solar development, with the western fields entirely falling within this designation.
- The principle of development at this location is acceptable.
- The areas with 'high risk' make up 45.1% of the area of the county and 'no risk' and 'low risk' are 13.8% and 11.4% respectively. This details the challenge to find sites for solar developments that are compliant with the County Development Plan.
- In relation to cumulative effects, Table 1.15 of the LVIA confirms that with the exception of application 22368 (a wind turbine proposal), all other cumulative projects are located over 1km from the site (Appendix B refers).

- Only cumulative effect is in relation to 22368 - operational stage is predicted to result in a Minor Adverse effect due to the intensification of electrical infrastructure within close proximity.
- 16.12.4 of the Carlow County Development Plan sets out a comprehensive list of criteria against which solar energy proposals will be assessed/policy does not identify the use of agricultural / farmland landscape as a criterion or material consideration in the assessment of solar PV development/any reliance on the agricultural quality of the subject lands as a ground for refusal is without policy support and is therefore not a valid planning consideration under the adopted County Development Plan 2022-2028.
- Carlow County Development Plan 2022-2028 also sets a clear objective (RE 01) to achieve a minimum of 130 MW of renewable electricity capacity by 2030. This is a baseline target, not a cap, and policy is expressly supportive of additional renewable generation where environmental and planning considerations are addressed
- Policy SE. P2 (Chapter 7) directly encourages such developments within agricultural land and settings.
- In relation to precedent, there are a recent permissions where solar farms were granted notwithstanding their location in whole or in part within area designated as 'high risk' under the Carlow CDP (PA refers 23/92 and 22/118 refers)
- A detailed breakdown of the site confirms that 70.6% of the development area lies within Low-Risk lands, 16% falls within lands identified as No Risk, and a further 2.7% is within Medium Risk lands. Only 10.7% of the overall site is located within areas designated as High Risk. This distribution demonstrates that the overwhelming majority of the development is situated within lands that are either low or no risk, with just a small proportion extending into high risk lands.

Reason for Refusal 2

- The second reason for refusal cites perceived impacts on the setting of the Council's owned and managed heritage asset of Duckett's Grove, a Protected Structure (RPS Ref. CW073), under Policies CH.P3, CH.P5, HT.P1, HT.P2, HT.P3 and HT.P4 of the Carlow County Development Plan 2022-2028.

- Development has been specifically designed to avoid any impact on the historic setting or character of the Council owned Duckett's Grove.
- No Heritage Appraisal or Conservation Statement available for Duckett's Grove or its demesne that would define or assess the setting beyond the curtilage of the Protected Structure.
- Carlow County Development Plan 2022-20281 does not include a mapped setting, buffer zone, or protected view corridor that identifies the proposed development site as contributing to the special interest of the Protected Structure.
- Setting must be considered in relation to the character and special interest of the protected structure itself, as per Section 10(2)(f) of the PDA 2000 (as amended) It does not automatically extend to surrounding farmland or the broader rural landscape without justification.
- Record of Protected Structures (RPS) entry for Duckett's Grove (Ref. CW073) does not include any mapped curtilage or indication that the proposed site forms part of the structure's essential setting.
- AAHIA has concluded that the proposed development would result in no direct impact and only low or negligible indirect impacts on the setting or special interest of Duckett's Grove.
- Conclusion is grounded in visual screening, topographic separation, and a lack of designed or experiential connection between the development area and the Protected Structure. These findings were reviewed by the National Monuments Service, which raised no objection and did not request further clarification regarding setting impacts.
- An early feasibility layout of the solar farm included areas potentially within the historic demesne landscape. However, following a review of historic maps, estate boundaries, and expert heritage advice, the layout was significantly revised to avoid any intrusion into these areas (Fig 1 of appeal statement refers).
- The historic setting of Duckett's Grove was never intended to visually incorporate or respond to the wider rural landscape/was created as a self-contained, inward-facing estate, designed for domestic seclusion rather than outward exposure.

- Conclusion of the AAHIA is further substantiated by the visual assessments, including the Landscape and Visual Impact Assessment (LVIA) and accompanying photomontages. A total of 19 viewpoints were assessed, including six additional heritage-sensitive locations submitted at Further Information stage (FI VP13-FI VP15, FI VP16, FI VP18, and FI VP19).
- There is no intervisibility between the proposed development and the core structures or key experiential spaces of Duckett's Grove.
- Duckett's Grove is listed in the draft National Inventory of Historic Gardens and Designed Landscapes (HGDL), and this status was fully acknowledged and assessed within the submitted AAHIA/The AAHIA applied evaluative criteria consistent with the guidance set out in the Cork County Council (2006) publication, Guidance Notes for the Appraisal of Historic Gardens, Demesnes, Estates and their Settings.
- The AAHIA concluded that the proposed development lies entirely outside the HGDL boundary and would have no effect on the curated views, architectural coherence, or interpretive experience of the estate.
- Planner's Report contains no evidence of consultation with a prescribed body such as the Department of Housing, Local Government and Heritage, or with an internal Architectural Conservation Officer or Fáilte Ireland. It appears that the Planning Authority's concerns regarding setting and character originate solely from internal interpretation, without the benefit of a dedicated heritage expert's review or input.
- As per commentary above, certain viewpoints (specifically FI VP13, FI VP14, and FI VP15) were not taken into account by the Planner.
- Policy HT P1 is not considered relevant – focuses on undertaking stakeholder collaboration for the promotion of heritage tourism.
- Fáilte Ireland's, Ireland's Ancient East Regional Tourism Development Strategy 2023-2027 contains no mention of Duckett's Grove.
- Citing HT.P1 as a refusal basis lacks specific spatial, experiential, or policy-based support.

- HT.P4 is referenced in the refusal reason but its relevance to the proposed development is not substantiated/ HT.P4 supports national tourism branding initiatives like Ireland's Ancient East but contains no prohibitions or development criteria relevant to Solar Farm Developments.

Relevant Policy Context

- REPower EU
- Renewable Energy Directive (RED III)
- The Climate Action and Low Carbon Development Act 2015 and the Climate Action Plan 2024

Material Contravention

- Proposed Development is consistent with and does not materially contravene the Carlow County Development Plan 2022-2028, and Carlow County Council erred in concluding the proposed development would materially contravene the County Development
- Should the Commission consider the proposed development materially contravenes the Carlow County Development Plan that it is appropriate for the Commission to exercise its discretion under section 37(2) of the Planning and Development Act and grant permission given the strategic national, and European, importance of the proposed development.

9.2. **Planning Authority Response**

9.2.1. Carlow County Council submitted a response to the appeal on 16th September 2025.

This is summarised below:

- The Planning Authority has no comments to make.
- Directed to details set out in the Planning Reports, including internal department reports, and submissions from Prescribed Bodies.

9.3. **Prescribed Bodies**

DAU

9.3.1. An observation from the DAU was submitted on the 12th September 2025. This is summarised below:

- All mitigation measures in the NIS must be adhered to.
- Recommendations made in respect of
 - tree/shrub species (must be of Irish origin)
 - Pre-construction bat surveys/Measures to be employed should bats be found
 - Bird protection include surveys in relation to Lapwing
 - Spread of invasive species
 - Protection of Orchids

9.4. **Observations**

9.4.1. 3 No. observations were received on the appeal from Ronan McGrath, Fergal McGrath and Fiona Brennan. The issues raised are set out below.

Ronan McGrath

- Incompatible with policies and objectives of the Carlow County Development Plan 2022-2028
- Material Contravention of renewable energy and landscape policies
- Site is located within lands as having a High (Maximum) Risk for solar energy development.
- Disproportionate and adverse landscape and visual impact
- Out of scale and detract from the area's landscape value, including its field pattern character, rural setting and visual impact
- Erode setting of Duckett's Grove, a nationally significant heritage site.
- Undesirable precedent
- Contravenes Policies LA P1, LA P2, LA P3, LA P4, LA P6 and LA P11
- Contravene Heritage and Tourism Policies including CH P3, CH P5, HT P1, HT P2, HT P3 and HT P4.

- Refers to the original submission made at application stage – with reference to same, the issues raised therein are (i) Impacts on Duckett’s Grove (ii) the use of prime agricultural land and (iii) the need for a Green Infrastructure Plan as per Section 9.11 of the Carlow Development Plan.

Fiona Brennan

- Carlow CC have approved three times their 2030 renewable energy target
- Use of rooftop solar would reduce environmental impact
- Impact on landscape/impacts on views
- Impact on food security
- Visual impact/impact on landscape
- Impact on Duckett’s Grove
- Public health risk of lithium-ion batteries
- Land restoration and cost of same
- Removal of topsoil for battery storage substation/cabling/concrete to support battery containers
- Restoration clause is essential
- Land will not be viable for agricultural use again
- Impact on Archaeology

Encl: Archaeological Inventory of County Carlow (1993); A Guide to County Carlow; An Introduction to the Architectural Heritage of County Carlow.

Fergal McGrath

- Impact on Duckett’s Grove (a Protected Structure)
- Listed in the NIAH (Ref 10300305) with a ‘National’ rating
- Important tourism asset/supported under policies HT P1 to P4
- Proposal development does not comply with the relevant policies of the CDP
- Undermine the historic setting of Duckett’s Grove
- Impact on landscape

- Visual Impact
- Would set an undesirable precedent
- Lands identified as High (Maximum) Risk in the CDP
- Materially contravene policies in the CDP including LA P1, LA P2, LA P3, LA P4, LA P6 and LA P11.
- Impact on archaeology – possible archaeological features existing as per submitted Study
- Carlow already exceeding 3 times the minimum renewable energy target
- High value agricultural land should be protected
- Proposal is excessive given the scale of the village
- No Noise Impact Assessment has been carried out
- Lack of public engagement/only one meeting carried out
- Impact of lithium-ion batteries/Section 132 of the PDA requires details of water supply/firefighting
- A Fire Risk Management Plan is required.
- No information on proposed method of connection to the electricity grid
- An Emergency Response Plan is required.
- Impact on the Aghalona River – Toxic chemical runoff from cleaning panels/chemical leaching from the panels
- Need for a National Policy on solar farms

Encl: Presentation slides

9.5. Further Responses

9.5.1. None

10.0 Assessment

10.1.1. Having carried a site visit and having regard to the relevant policies pertaining to the subject site, the nature of existing uses on and in the vicinity of the site, the nature and scale of the proposed development and the nature of existing and permitted developments in the immediate vicinity of the site, I consider that the main issues pertaining to the proposed development can be assessed under the following headings:

- Principle of Development – Local, European, National & Regional Policy
- Refusal Reason No. 1 – Landscape Policy
- Refusal Reason No. 2 – Impact on Duckett’s Grove
- Material Contravention - Section 37(2) of the Planning and Development Act
- Other issues
 - Archaeology
 - Biodiversity
 - Public Health Risk/Fire Risk
 - Noise Impact Assessment
 - Food Security/Use of Agricultural Lands
 - Use of Rooftop Solar
 - Cabling/Removal of Topsoil/Increase in Hardstanding
 - Restoration
 - Green Infrastructure Plan
 - Proposed Conditions

10.1.2. The Commission will note that EIA Screening, Appropriate Assessment Screening/Appropriate Assessment and a Water Framework Directive Screening are presented in separated sections of this report. There is reference to similar issues across all three assessments and therefore all four assessments should be read together.

10.2. Principle of Development – Local, European, National & Regional Policy

10.2.1. Prior to considering the specifics of this particular application, and in order to provide the relevant policy context for the Commission's consideration, I have set out a discussion of the relevant European, National, Regional and Local Policy below, as relates to renewable energy projects such as this one.

Compliance with European, National, Regional and Local Policy

10.2.2. I have set out details of relevant policy in Section 5 above and I refer the Commission to same. I am of the view that the proposal would help to achieve greenhouse emission reductions as set out in the relevant policy provisions above and will increase the proportion of energy derived from renewable energy and thus would help to achieve targets related to same, as well as helping to achieve energy security. As such the proposed development of a solar farm is in compliance with European, National and Regional Policy.

10.2.3. In relation to local policy, 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.

10.2.4. 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.

10.2.5. I note that a number of third-party observations have stated 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 note that 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.

10.2.6. Pertinent to the issue of the principle of development is a consideration of whether, at a high level, the site is considered appropriate for the development of a solar farm having regard to the provisions of the CDP. The relevant mapping here is contained in Figure 7.9 of the CDP which is a map entitled “Solar Opportunity Areas’. This same mapping is contained in Appendix VI ‘Renewable Energy Strategy’ of the CDP (Figure 6.6 of same refers). This partitions the county into various designations as follows:

- Available Areas with No Risk Identified
- Available Areas with Low Risk
- Available Areas with Medium Risk
- Available Areas with High Risk
- Excluded Areas

10.2.7. As set out in the Renewable Energy Strategy, the risk level is defined by adding up the risk levels at certain distances from material assets, sensitive receptors, European Sites and from natural physical attributes (such as groundwater vulnerability, geological heritage sites, soil drainage, landslide and flooding susceptibility).

10.2.8. In order to determine where the proposed development site lies in relation to this mapping, I have relied on the detailed breakdown as contained in the appellant’s grounds of appeal, wherein it is stated that the breakdown is as follows:

- 16% falls within lands identified as ‘Available Areas with No Risk Identified’
- 70.6% of the development area lies within ‘Available Areas with Low Risk’
- 2.7% is within ‘Available Areas with Medium Risk’
- 10.7% of the overall site is located within areas designated as ‘Available Areas with High Risk’.

10.2.9. These figures have not been disputed by the Planning Authority. The breakdown has not been questioned explicitly by observers on the appeal, although I would note that a number of observers have stated that the site falls within lands designated 'high-risk'. No party has stated that the site falls within an area that is designated 'Excluded Areas'. As such, I am satisfied that the figures as cited by the applicant can be relied upon, in the absence of any contrary evidence on file.

10.2.10. Given the above, I am satisfied that the entire landholding has been designated as being suitable for the development of solar farms, albeit with different levels of environmental sensitivities and weightings placed on the 4 no. designations (which I have discussed in greater detail in Section 10.3 below). Therefore, I am satisfied that there is no issue in principle with the development of a solar farm on the site, having regard to the provisions of the CDP.

Conclusion

10.2.11. On the basis of the information on the planning file and a review of local, European, national and regional policy, I am satisfied that the development of the proposed solar farm of the scale and manner proposed, is consistent with Ireland's European, national and regional commitments and binding obligation as regards the reduction of greenhouse gas emissions and the provision of energy from renewable sources.

10.2.12. While I am satisfied that the principle of the proposed development is consistent with the designation of the site as an 'available area' for solar development in the development plan, and the many strategic level policy documents outlines above, the proposals must also be assessed in more detail against other policies and objectives of the Carlow County Development Plan, and I have done so in the remaining sections of this report.

10.3. Refusal Reason No. 1 – Landscape and Visual

10.3.1. The first reason for refusal is an extensive reason which refers to, *inter alia*, impact on landscape and visual impacts. It is also stated therein that the proposed development would materially contravene policies, objectives, and related provisions in the Carlow County Development Plan 2022-2028 including Policies LA P1, LA P2,

LA P3, LA P4, LA P6, and LA P11 (as relates to Landscape) as well as other solar energy policy, including the County Renewable Energy Strategy.

- 10.3.2. A key document in relation to this issue is the Landscape and Visual Impact Assessment (LVIA) (and the subsequent update to same submitted as part of the FI request). This document has been produced with regard to best practice guidance, as set out in Section 1.16 of same, and is authored by Neo Environmental. The report defines a core study area of 5km radius for the assessment. Within same, it is confirmed that the site is located entirely within the Central Lowlands Area (Landscape Character Area – Fig 1.1 of the LVIA refers and Farmland Lowlands LCT (Landscape Character Type).
- 10.3.3. Potential impacts of the proposed development are considered at both construction stage and at operational phase. At construction stage, it noted that the main impacts will be experienced in the vicinity of the site, and it is concluded that there will be no significant visual effects resulting from same. At operational phase, 10 no. viewpoints were considered (Viewpoints 1 to 10, as included in Figures 1.4 to 1.8 of the LVIA), and as plotted on Figure 1.3 of the LVIA. In relation to same, there is limited visibility of some elements of the proposed development from Viewpoints (VP) 1 and 2. Photomontages of the proposed development were produced for these viewpoints (Figure 1.9 and 1.10 of the LVIA). There is no visibility towards the proposed development from the remaining viewpoints VPs 3 to 10. In terms of landscape effects, it is concluded within the LVIA that the resultant effect of the proposed development on the landscape character would be slight adverse, with effects on the wider landscape being negligible. In terms of visual effects, it is concluded there is very limited visibility towards the site, and the magnitude of visual change for views up to 250m from the site is considered 'medium-low' and 'very low/negligible', with the resulting significance being 'slight'. This will reduce to 'slight-not significant' as planting fills out. Specifically in relation to VPs 1 and 2, it is concluded that no significant adverse effects will result. It is also concluded there is no impact on any protected views and from scenic routes, as there are no views of the proposed development from same.
- 10.3.4. Following a request for further information, an Updated Landscape and Visual Impact Assessment (Appendix 1A), and additional viewpoints were provided to the PA (Viewpoints 11-19), as well as additional photomontages. These additional

documents responded, in the main, to the PA's concerns in relation to the potential impact on Duckett's Grove (a Protected Structure) and the wider context of same (see detailed discussion of same in Section 10.4 below). In addition to those viewpoints referred to above, there is partial visibility of the proposed development from the following viewpoints:

- Viewpoint 5 (Southeast from Local Road L50301), Viewpoint 6 (View southeast from L50301); Viewpoint 12 (View south from the L6003); Viewpoint 17 (View south from the L6112) and Viewpoint 19 (View south from country lane near Moorestown).

10.3.5. Additional photomontages were provided showing the proposed development from these viewpoints. The updated LVIA concludes that no significant visual effects result from the proposed development, with effects only being of negligible magnitude at worst. It is also concluded that the proposed development would not adversely affect Duckett's Grove or its historic setting (see detailed assessment in Section 10.4 below).

10.3.6. In relation to the conclusions of the LVIA, and the updated LVIA, I concur with same, for the reasoning as set out below (I have considered specifically the impact on the setting of Duckett's Grove in Section 10.4 below). Notwithstanding, the relative elevation of the eastern portion of the site (see discussion of same below), the overall application site is very well screened from the surrounding public roads, with visibility towards partial elements of the proposed development being very limited, and from only a limited number of surrounding viewpoints. To my mind, this supports the conclusion of no significant adverse visual impacts and no significant effect on the landscape character, resulting from the proposed development. In addition, I would note that there does not appear to be any viewpoints, referred to by the applicant, that have not been submitted with the Further Information request, and I can confirm to the Commission that Viewpoints 13 to 19 are, in fact, on file, notwithstanding comments within the Planner's Report relating to same.

10.3.7. I would note that the PA's first reason for refusal also refers to other issues, aside from landscape and visual impacts, although are interrelated to same. I have considered same in assessment below.

Solar Opportunity Areas

- 10.3.8. As noted above, reason for refusal No. 1 comprises a number of distinct issues (I refer the Commission to Section 3.1 for the full text of the reason for refusal). One such issue relates to the site's location with reference to those 'Solar Opportunity Areas as set out in Fig 7.39 of the CDP, and Fig 6.6 of the Renewable Energy Strategy. The reason for refusal refers to the proposed development as *'setting an Undesirable Precedent in areas having a High (maximum risk)'*.
- 10.3.9. In response to this element of the refusal, I would note that the wording in the Development Plan is not *'lands identified as having a high (maximum) risk'*, as referred to in the reason for refusal, but rather the CDP, and Fig 7.9 of same, refers to *'Available Areas with High Risk'*.
- 10.3.10. With reference to the breakdown I have set out above in Section 10.2, I note that 10.7% of the overall site is located within an area designated as *'Available Areas with High Risk'*. As set out in the Development Plan, risk level is defined by adding up the risk levels at certain distances from material assets, sensitive receptors, European Sites and from natural physical attributes (such as groundwater vulnerability, geological heritage sites, soil drainage, landslide, and flooding susceptibility). The summed risk levels are displayed on a scale ranging from High (maximum risk) to Low (minimum risk). However, the presence of a risk category, in and of itself, does not support nor preclude solar development; it is a tool which flags areas of having a higher or lower concentration/distance from various sensitive receptors. In this instance, the lands that are designated 'high-risk in this instance would appear to be a portion of those lands that lie to the east of the R418 road (and not those lands closest to Duckett's Grove) which appear to be designated 'low risk'.
- 10.3.11. In relation to proximity to sensitive receptors, apart from Duckett's Grove (which lies within a 'low risk' lands), the PA have not set out any concerns in relation to any other sensitive receptor (such as residential dwellings, water courses, European sites etc) in the reason for refusal. I would note that the lands to the east of the R418 Road are somewhat closer to the Slaney River Valley SAC, although impacts on same are not cited in the reason for refusal (I have considered impacts on same in Section 7 and Appendices 3 and 4 of this report).
- 10.3.12. As such, I am satisfied that there is no fundamental objection, in principle, to the location of the proposed development partially within a low risk, medium risk or

high risk area, subject to other considerations as set out in the relevant sections of this report.

10.3.13. In terms of precedent, the applicant has stated that there are a recent permissions where solar farms were granted notwithstanding their location, in whole or in part, within area designated as 'Available with High Risk' under the Carlow CDP (PA references 23/92³ and 22/118 refers⁴). With reference to PA Reg Ref 23/92, this was granted by the PA on 20th October 2023. The applicant has set out that 50% of this site lies within 'Available Areas with High Risk', with a further 25% within 'Excluded Areas.' While not set out in the applicant's grounds of appeal, I note that this was subsequently granted by the Board on appeal, following a third-party appeal against the PA's decision. In relation to P.A. Reg. Ref. 22/118, the applicant has set out that the entirety of the site is within 'Available Areas with High Risk'. I note that this was granted by the PA on 8th March 2023. There was no appeal subsequent to same.

10.3.14. In relation to the above applications, I would accept that there is precedent for a grant of permission for solar developments within '*Available Areas with High Risk*' and I do not concur with the view, as expressed in the reason for refusal, that the proposed development would set an undesirable precedent for same, given that this precedent already exists. Notwithstanding, I note that each application is considered on its own merits and this report constitutes such an assessment.

Precedent for the incursion of solar farm development into this predominantly rural and agricultural/farmland landscape

10.3.15. I have considered impacts on landscape above and I refer the Commission to same. In relation to setting a precedent for incursion into the rural, agricultural landscape, I would note that there is no provision within the Carlow Development Plan that would exclude such areas for solar farm development, although Section 7.10.3.2 sets out that constraints may arise in relation to protecting high value agricultural land suitable for tillage. There is no specific provision, policy or objective ruling out such areas for solar farm development, however. Of note is that Solar

³ Lands at Baungephlure and Friarstown, Killerig, Co. Carlow - Solar energy development with a total site area of 77 – Granted by the PA 20th October 2023. Subject to a Third Party Appeal Appeal Ref 318475-23 Granted by ABP 4th June 2024.

⁴ Kilcarrig, Bagnelstown, Co. Carlow - Solar farm on an area of approximately 14.16 hectare

Policy SE P2 will *'favourably consider the development of solar farms on agricultural land which allow for farm diversification and multipurpose land use'*. As such, such development on agricultural land is actively encouraged by Development Plan policy, and I am satisfied that the proposed development would not set a precedent for development of such solar farms within such rural landscapes, and same have been granted elsewhere and the CDP is supported of the development of solar farms within same, subject to other considerations.

Cumulative Impacts

10.3.16. I note the Planning Authority's refusal makes reference to cumulative impacts with proposed and permitted developments. I note that the Planner's Report does not specify the specific permitted or proposed development (or developments) that would act in a cumulative manner with the development as proposed (i.e. in relation to visual impacts or impacts on landscape for example). Notwithstanding, I accept that there is potential for such solar developments to result in cumulative impacts, should said developments be seen in the same context, or within the same field of view.

10.3.17. I note that that the LVIA and the revised LVIA, includes an assessment of potential cumulative effects, and Table 1.15 of the LVIA sets out other solar farms, wind farms or telecommunications masts that have been permitted or proposed within a 5km radius of the site. The nearest such development is a proposed replacement wind turbine located 750m to the southeast of the site (PA Ref 22368). The nearest solar farm is located approximately 1.6km to the southeast of the site (PA Ref 1946) for a development on an area of approximately 27 Ha (at Friarstown, Killerig, Co. Carlow, as detailed in Table 1 of Section 4 above). The LVIA concludes that only a 'minor adverse effect' would result from the cumulative effects of the proposed wind turbine noted above. Mitigation in the form of screening planting is proposed to reduce the effects of same. It is noted that the combined views with the other solar farms as detailed in Table 1 are unlikely. The revised LVIA, submitted at FI stage, contains additional viewpoints as noted above, and the commentary within same considers the likely cumulative impacts of the proposed development. Again, no likely cumulative impacts are highlighted. I am satisfied that the LVIA, and the LVIA, has assessed potential cumulative impacts appropriately, and I concur with the conclusions therein.

10.3.18. I do note that there are number of more recent solar farm approvals, that are not listed in Table 1.15 (PA Ref 260295/ACP Ref 323496-25 & PA Ref 2460043/ACP Ref 322347-25) but which I have referred to in Table 1 of this report (Section 4 Planning History), and which I have identified by way of the Commission's internal GIS system. The closest such approved solar farm that I have identified is located on lands within Rathrush, Emlicon and Bendinstown, Ballon Co. Carlow (PA Ref 2460295 and ACP Ref 323496-25, as described in Table 1 above) which some 8.4km from the site and as such any cumulative effects can be reasonably ruled out.

10.3.19. As such, having regard to the above considerations, and having regard to the separation distances between the proposed site, and those consented and proposed project listed in Table 1.15 of the LVIA, and having regard to the lack of intervisibility between any consented or proposed solar farm or other development of relevance, I am satisfied that no cumulative impacts will results as a result of this proposed development.

Policies referenced in Reason for Refusal No. 1

10.3.20. The Planning Authority was of the view that the proposed development 'materially contravened' materially contravene policies, objectives, and related provisions in the Carlow County Development Plan 2022-2028 including Policies LA P1, LA P2, LA P3, LA P4, LA P6, and LA P11, solar energy policy including the County Renewable Energy Strategy. I have considered compliance, or otherwise, with said policies and provisions below, with reference to the assessment above, and I have considered the issue of 'Material Contravention' as a standalone issue in Section 10.5 of this report.

Policy LA P1

10.3.21. In relation Policy LA P1, I would refer the Commission to Section 5.1 of this report for the full wording of same. In essence, the policy refers to the protection of Carlow's landscape. I have considered impacts on landscape above, I am satisfied that no significant adverse impacts on same results from this proposed development, and I am satisfied that the proposal is in compliance with same.

Policy LA P2

10.3.22. In relation to Policy LA P 2, this policy refers to 'sensitive upland' areas of the county, and impacts on scenic upland vistas. In relation to same, the appellant is of the view that no part of the site could be considered an 'upland' area, noting that the maximum height of the site is 123m OD. In relation to same, and with reference to the Commission's Internal GIS mapping (a copy of which I have placed on file for the Commission's perusal), I note that the portion of the site to the west of the R418 is on relatively low-lying land, with contours between 90m OD and 100m OD. However, those portions of the site to the east of the R418 are more elevated, with contours indicating heights of between c110m OD and 120m OD. North-east of the site, the elevation is seen to rise towards Ballyhacket Upper (some 1.8km to the northeast of the site and is at an elevation of c130m OD) and towards Ricketstown North (some 3.7km north-east of the site and is at an elevation of c140m OD). Lands to the south generally fall in elevation towards the approach to the River Slaney. This would indicate that the eastern portion of the site could be considered relatively elevated, in comparison with those lands to the west of the R418, at least, although lands to the north-east of the site are more elevated again.

10.3.23. Notwithstanding the relative elevation of the site, and as per the discussion above, the nature of the site is such that it is not particularly visible from the surrounding road network, given the significant screening provided by existing vegetation and the setback of much of the site from surrounding road. There is some visibility however, as discussed further in Section 10.4 below (in relation to potential impacts on Protected Views). Furthermore, the PA have not stated that the site is 'sensitive upland area' nor indeed have the PA stated that the site is an 'upland area'. Indeed, the site in its entirety is located within the 'Central Lowlands' Landscape Character Area.

10.3.24. I would note that Policy LA P2 also refers to potential impacts on 'scenic upland vistas'. It could be argued that the proposed development could impact on surrounding scenic upland vistas, that is, views to and from such upland vistas. In this regard, I note that the PA requested Further Information on long range views, which included views from more elevated topography/higher ground to the north and east. With reference to Figure 1.3 of the Updated LVIA, FI VP 12 (View South from the L6003 near Kinneagh) and FI VP 16 (View south from the L6003 near Ballycullane Lower) represent longer range views from the north, with VP 10/FI VP

10 (view southwest along the R6003 Road), representing a longer range view from the east/north-east (895 m distance).

- 10.3.25. In relation to the VP 10, there is no visibility towards the proposed development from this location.
- 10.3.26. VP 12 represents elevated views along the L6003 (from distance of 1.3km, with an elevation of 117.5m). The LVIA sets out that there are views of Fields 16 and 23 from this location although, it is set out that the proposed development would not be perceived in its entirety, and would appear as four parcels, which are small in the context of the broader Central Lowland LCA, and deemed proportionate within this landscape setting. It is concluded that operational effects would be 'minor adverse'. A photomontage from this viewpoint is included in Figure 1.27 of the Updated LVIA.
- 10.3.27. In relation to VP 16, this represents elevated views along the L6003 near Ballycullane Upper, north of the proposed development (located a distance of 1.5km away with an elevation of 114.5m). The proposed development will not be visible to road users from this point due to the layer of vegetation, with operational effects deemed 'negligible'.
- 10.3.28. In relation to the above, I am satisfied that sufficient longer distance views from the north and east of the site have been provided, with those from the north representing more elevated views towards the site. It is unlikely, in my opinion, that extensive views towards the site could be gained from other public roads to the north-east of the site, from those higher elevations noted above, for example from Ricketstown North (the closest road to which is the L2000 Local Road) noting that the distance from the site to this road is c3.7km from the site. The PA have not cited any particular sensitive elevated views that would be adversely affected by the proposed development.
- 10.3.29. Overall, then I am satisfied that the proposed does not contravene Policy LA P 2 (see also discussion in relation to Material Contravention in Section 10.4 below).
- Policy LA P3
- 10.3.30. This policy is to adopt a presumption against developments which are located on elevated or visually exposed sites or areas with open exposed vistas, and where the landscape cannot accommodate such development with appropriate mitigation.

10.3.31. As per the discussion above, the eastern portion of the site is elevated relative to lands to the west and south in particular. However, it is not visually exposed nor does it have open exposed vistas, with reference to the discussion above. Again, with reference to the discussion above, I am satisfied that the landscape can accommodate the development as proposed, with no significant adverse landscape effects or visual effects. As such I am satisfied that the proposed development will not contravene Policy LA P3 (see also discussion on Material Contravention below).

Policy LA P4

10.3.32. Policy LA P4 seeks to '*Ensure that developments on steep slopes or ridges will not be conspicuous or have disproportionate landscape or visual impacts when viewed from the surrounding environment, including from nearby areas, scenic views and routes, and from settlements*'. While I have discussed the elevation of the site above, I would not be of the view that the site would be reasonably deemed to be on a steep slope or on a ridge, and the documentation on file, and my observations towards the site from the public road, would support same. The Landscape Character Assessment (LCA) refers to the Central Lowlands as a gentle topography with farmed lowlands and farmed ridges. The only references to 'steep' in the LCA are in relation to where the River Barrow valley ascends steeply towards to Castlecomer Plateau and to steep slopes ascending to mountainous landscape in the Leinster/ Blackstairs Landscape Character Area.

10.3.33. Even if one were to determine that the site was steeply sloping, noting the discussion above, I am satisfied that no significant landscape or visual impacts result, when viewed from nearby areas and from scenic views and routes, and I am satisfied that it is unlikely that the proposed development would be highly visible from any nearby settlement (the nearest such settlements being Palatine, c3.7km to the west, Carlow Town c4.5km to the west and Rathvilly c4.3km to the northeast). As such I am satisfied that the proposed development will not contravene Policy LA P4 (see also discussion on Material Contravention below).

Policy LA P6

10.3.34. This policy states the following:

Require all developments, having regard to their landscape setting, to be appropriate in siting, layout, design and scale, in order to ensure any potential adverse or

landscape and visual impacts are minimised and/or removed where necessary, and that natural site features and characteristics are retained and maintained.

10.3.35. Having regard to the discussion above, I am satisfied that no significant landscape or visual impacts will result from the proposed development, and where minor adverse impacts have been identified, mitigation in the way of additional planting is proposed, which will serve to reduce the impact of same. No cut and fill is proposed, and as such the development will not change the topography of the site, and the vast majority of hedgerow and field patterns being retained (there is c200m of hedgerow removal to facilitate visibility at access points and to facilitate the construction of access roads) resulting in natural site features and characteristics being retained. Therefore, I am satisfied the proposed development would not contravene Policy LA P6.

Policy LA P11

10.3.36. LA P11 seeks to 'Protect and preserve the established appearance and aesthetic attributes of views and prospects that contribute to the inherent quality of the County's landscape, including views, prospects and scenic routes listed in Tables 9.3 and 9.4 , and particularly views to and from mountains, hills, river valleys and river corridors, and views of historical or cultural value (including buildings and townscapes) and views of natural beauty'.

10.3.37. Table 9.3 of Chapter 9.7 'Views, Prospects and Scenic Routes' sets out a Schedule of Views and Prospects. The locations of same are plotted on Map 9.4. The following 3 no. views are of relevance (and are cited in the Planner's Report).

No	Description	Location
19	View southeast, of heritage site	Duckett's Grove
20	Vista northeast, of spreading central plain and forest in distance	Duckett's Grove
21	View on approach from west, of heritage site	Duckett's Grove

10.3.38. Table 9.4 of Chapter 9.7 contains a Schedule of Scenic Routes. No routes are cited by the PA as being of relevance and none are located within 5km of the site.

10.3.39. In relation to View 19, this refers to 'View southeast, of heritage site', I am of the view that this is somewhat unclear as to the exact point from which this view is

gained from. From the L50301 Local Road there are views gained toward Duckett's Grove as one looks south-west (when approaching from a north-east direction). When one approaches Duckett's Grove from the south-west along the L50301 views towards Duckett's Grove are gained facing north-east or east. There does not appear to be view, gained from the public road at least, facing south-east towards the heritage site, that would tally with the approximate location on Map 9.4 of the CDP.

- 10.3.40. Notwithstanding, I would note that this view is placed to the north-east of views 20 and 21, with reference to Map 9.4, and may well be equivalent to those views gained towards Duckett's Grove as one approaches from the north-east (although views towards Duckett's Grove are south-west). I note that such views are gained as one approaches Duckett's Grove from the north-east along the L50301 Local Road. I note that there is no equivalent view provided with either the LVIA or the revised LVIA, with the closest such view being Viewpoint 5 of the Revised LVIA, which faces south towards the site from the junction of an unnamed laneway and the L50301.⁵ There is partial visibility towards Field 10 from this view, but the view is not in the context of Duckett's Grove.
- 10.3.41. I am of the view that it is unlikely that the proposed development would be seen in the context of Duckett's Grove, when approaching from the north-east, as the revised LVIA demonstrates that only the elevated Field 10 is partially visible from this road (as discussed in detail below), and this field is not seen in the same setting as Duckett's Grove.
- 10.3.42. As such I am satisfied that it is very unlikely that the proposed development would impact on Protected View 19, notwithstanding the lack of clarity in relation to the exact location of same.
- 10.3.43. In relation to View 21 'View on approach from west, of heritage site' I note that there are extensive views of Ducketts Grove as one approaches same from the west/south-west along the L50301. I note that FI Viewpoint 6 of the updated LIVA (Figure 1.15 of same refers), indicates a view that shows Ducketts Grove in this context. Within this view, it is indicated that Field 10 of the proposed development

⁵ I note the mapped location of same is incorrect with reference to Figure 1.15 of the Revised LVIA, as it is marked as a location to the south-west of Duckett's Grove but the actual view is as described above.

will be partially visible through the existing vegetation, when seen in the context of Duckett's Grove, as one approaches from the south-west. The written commentary of the LVIA notes that Field 10 will be visible during the winter months, with some views being transient and filtered, and are likely to go unnoticed. These views will become increasingly filtered as the vegetation matures on the site. At construction stage, it is concluded that the effects of proposed development will be minor adverse and at operational stage, effects would be 'negligible'.

10.3.44. In relation to same, I would concur with this conclusion, and, in my opinion, the view of note that is protected is that afforded towards Duckett's Grove when approaching from the south-west along the L50301. As shown in VP 6, in order to gain even transient views of Field 10, one must look further to the south-east, and I am of the view that these transient glimpsed views will not impact on the Protected View in any material manner. I note also that as one approaches Duckett's Grove from the south-west along this local road, the proposed development is no longer visible in the context of Duckett's Grove, as VP 11 illustrates (Fig 1.18 of the revised LVIA).

10.3.45. In relation to View 20, with reference to Map 9.4 of the CDP, this is located further south-west of View 21, and is described as 'Vista northeast, of spreading central plain and forest in distance'. As such, it is likely that this is referring to views that face north-east of this point, whereas I note that the proposed development is located south-west of this point. As such, it is very unlikely that the proposed development would impact on this view.

10.3.46. Having regard to the above, I consider that the views and prospects that are referred to in the Planner's Report would not be materially affected, and therefore, I am satisfied the proposed development would not materially contravene Policy LA P11.

Solar energy policy including the County Renewable Energy Strategy

10.3.47. The Planning Authority does not specifically cite the relevant policy in question, nor it is stated which element or provision of the County Renewable Energy is contravened. Notwithstanding, in relation to Solar development, the most pertinent policies are as set out in Section 10.2 of this report 'Principle of Development' (i.e. SE P2 and SE 01) and I have concluded therein that the proposal

is in compliance with same, with reference to the overall assessment of other relevant aspects of the proposal.

10.3.48. In relation to the compliance, or otherwise, with the County Renewable Energy Strategy, the most relevant aspect of this Strategy, as relates to solar farms, is the discussion in relation to 'Solar Opportunity Areas', and I have considered same in detail above, and have concluded that the site is one in which Solar Development is appropriate, with reference to the overall assessment of the scheme. As such I am of the view that the proposed development does not contravene solar energy policy as set out in the CDP, nor does it contravene the County Renewable Energy Strategy, as included in Appendix VI of the CDP.

Conclusion

10.3.49. In conclusion therefore, and with reference to the assessment above, and noting the very limited visibility towards the site from surrounding viewpoints, I am satisfied that the proposed development would not have any significant impacts on landscape character nor would any significant visual impacts result from same. Furthermore, I am satisfied that the proposed development would not have any impact on any Protected Views as defined within the CDP, and that no significant cumulative visual or landscape impact would result.

10.4. Reason for Refusal No. 2 - Impact on Duckett Grove (Protected Structure)

10.4.1. The second reason for refusal refers to Duckett's Grove, which is a Protected Structure (RPS Ref CW073) and is listed in the National Inventory of Ireland (NIAH Ref. 10300305) with a 'National' rating due to its considerable architectural significance in an Irish context. The reason for refusal refers to the scale and nature of the proposed development, including its proposed layout and design, and it is set that the applicant has not demonstrated that same would not detract from the character, setting and historic landscape of Duckett's Grove.

10.4.2. The application was accompanied by an Archaeology & Architectural Heritage Impact Assessment (AAHIA - Dated 15/3/2024). This sets out that Duckett's Grove is located c0.75km northwest of Field 1 of the Proposed Development. This is a Protected Structure (RPS No CW 073) and is listed on the NIAH. The AAHIA sets out that the house was originally constructed in c1745 and is situated amid a

substantial demesne of Parkland, and that, over time, the majority of land use of the demesne has changed from parkland to agricultural, as well as several residential houses built to the north of the demesne. Mapping is included to support same (I refer the Commission to Figure 3.3 and 3.4 of the AAHIA). It is noted within the AAHIA that the oval area of walled garden to the east survive as a formal garden. Reference is also made to the NIAH listing of Duckett's Gove, and it is noted that the historic building, along with its somewhat reduced demesne, is an important heritage asset which is considered to be particularly sensitive to visual impacts from the surrounding landscape.

- 10.4.3. In terms of views and intervisibility with the Proposed Development, it is set out that same will be screened by hedgerows and treelines to the southeast. It is further set out that there are two to four hedgerows or treelines between the garden area of Duckett's Grove site, and the western part of the proposed development with both areas sharing a similar elevation. The AAHIA concludes that the potential for indirect effects were concluded to be low to be negligible. No mitigation specifically in relation to reducing impacts on Duckett's Grove are set out.
- 10.4.4. In terms of the impact on the wider historic landscape associated with Duckett's Grove, the evidence the applicant has presented, in relation to the changing nature of the historic demesne of Ducketts Grove, and the change of land use to agricultural farmland, to my mind indicates that, the wider historic landscape associated with Ducketts Grove has already been altered substantially over time, and the application site would not appear to have any visual association with Ducketts Grove in the present day. The applicant sets out in the grounds of appeal that an early feasibility layout of the solar farm included areas potentially within the historic demesne landscape. However, following a review of historic maps, estate boundaries, and expert heritage advice, the layout was significantly revised to avoid any intrusion into these areas (Fig 1 of the appeal statement refers). The applicant has further contended that the historic setting of Duckett's Grove was never intended to visually incorporate or respond to the wider rural landscape and was created as a self-contained, inward-facing estate, designed for domestic seclusion rather than outward exposure, and that here is no intervisibility between the proposed development and the core structures or key experiential spaces of Duckett's Grove.

- 10.4.5. I would note also that, as highlighted in the applicant's appeal submission, the Record of Protected Structures (RPS) entry for Duckett's Grove (Ref. CW073) does not include any mapped curtilage or indication that the proposed site forms part of the structure's essential setting. In this regard, the curtilage of Duckett's Grove does not appear to be defined in any mapping, nor are the attendant grounds.
- 10.4.6. I refer to the Architectural Heritage Protection Guidelines for Planning Authorities (2011) (hereinafter referred to as "the Guidelines"). The Guidelines consider how a development can impact on the curtilage and attendant grounds of a Protected Structure (Chapter 13 refers). By definition, a protected structure includes the land lying within the curtilage of the protected structure and other structures within that curtilage and their interiors. The Guidelines set out that, while the definition of curtilage is not defined by legislation, *'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'*. To my mind, it is very unlikely that any of the proposed development site could be reasonably be considered to be immediately associated with Duckett's Grove, noting the context of the site and the evidence as present by the applicant as discussed above. As such, I am satisfied that the proposed development would not fall within the curtilage of same, and no parties have expressed an opposing opinion.
- 10.4.7. In relation to the extent of the 'attendant grounds', the Guidelines note that these are *'lands outside the curtilage of the structure but which are associated with the structure and are intrinsic to its function, setting and/or appreciation'*. It is also set out that a Planning Authority has the power to protect all features of importance within the attendant grounds of a Protected Structure, but such features must be specified in the Record of Protected Structures (RPS). I would note that no such features have been identified in the RPS. In relation to country houses, the Guidelines set out that 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. As such, it may well be the case that the southern fields (i.e. Fields 1, 2 and 3) may once have formed part of the historic demesne of Duckett's Grove, but as set out in the applicant's documentation, this demesne has been considerably reduced over time, with land use changed to agricultural use and lands being divided to facilitate same. It is my view, and noting the evidence that has

been provided by the applicant, by way of analysis and historic mapping, that the application site, in particular those fields (Fields 1, 2 and 3) to the south of Duckett's Grove, could not be reasonably considered to be intrinsic to the function and setting of the Duckett's Grove, in the present day context at least, and as such could not reasonably be considered to constitute attendant grounds of the Protected Structure. I would note also that the Planning Authority has not expressed the view that any part of the application site falls within the attendant grounds of Duckett's Grove, and the primary concern as expressed in the second reason for refusal, is the impact on the wider setting of Duckett's Grove, and the historical landscape associated with same. As discussed above, and as set out in the applicant's documentation, the wider demesne of Duckett's Grove has been considerably altered over a long period of time, with the lands in question here now being in agricultural use, with no evidence on file of any surviving features or other structures that would be associated with Duckett's Grove.

- 10.4.8. As noted above, an LVIA was submitted at application stage, and an updated LVIA, was submitted at FI stage. These documents demonstrate that there is very limited intervisibility between the proposed development and Duckett's Grove.
- 10.4.9. The LVIA and the Updated LVIA set out a number of viewpoints that are of relevance when considering impacts on the setting of Duckett's Grove. Viewpoints 5 and 6 of the originally submitted LVIA (Figure 1.6 of same) are views from the L50301 local road to the south-west of Duckett's Grove. These are views facing south-east towards the proposed development, and it is of note that the proposal is not visible from these locations. Following the PA's request, the applicant provided additional viewpoints in the vicinity of Duckett's Grove namely VP6 (Figure 1.15), VP 11 (Figure 1.18), VP 13, VP 14 (Figure 1.19) and VP 15 (Figure 1.20). The proposed development is not visible within the same setting, or context, of Duckett's Grove in any of these views save for VP 6 which is from the L50301 Local Road. Viewpoint 6 of the updated LIVA (Figure 1.15 of same refers), indicates a view that shows Ducketts Grove in this context. Within this view, it is indicated that Field 10 of the development will be partially visible through the existing vegetation. I have considered this view above in Section 10.3, and I am satisfied that, at operational stage, effects on this view would be 'negligible'.

10.4.10. As such I am satisfied, given the evidence submitted on the file, that the development of the proposed solar farm on this site, would not impact on a landscape that still has a visual association with Ducketts Grove, nor would it impact on the setting of Duckett's Grove in any material manner, as one approaches same from the south-west or north-east along the L50301 Local Road, nor would it impact on the setting of same from any other viewpoints. I note that neither the PA, nor Third Parties, nor any Prescribed Bodies, have put forward, or made reference to, any contrary evidence, in the form of mapping or other documentation, that would refute the evidence put forward by the applicant, nor has a particular viewpoint been referred to by the Planning Authority that is of greatest concern. I would note that the Planner's Report states that certain viewpoints are missing from the application documentation (FI VP13, FI VP14, FI VP15, FI VP16, FI VP18 and FI VP19), which is not the case, and these viewpoints are on file, having being submitted with the Further Information submission.

10.4.11. I note also that the DAU have not expressed concern in relation to the impact on Duckett's Grove either in its submissions at application stage, or in their submission at appeal stage. Neither did An Taisce raise any concerns in relation to the potential impact on the setting of Duckett's Grove in its submission at application stage.

10.4.12. In my opinion, the baseline environment at present is one where Duckett's Grove is viewed within a setting of a rural agricultural environment, and given the very limited intervisibility between proposed development and Duckett's Grove, this baseline environment will not be materially altered and therefore the setting of Duckett's Grove will not be materially impacted upon. I am satisfied that it has been demonstrated that the impact on the setting of Duckett's House will be as described in the LVIA, the revised LVIA and the Archaeology & Architectural Heritage Impact Assessment, i.e. not significant. This is supported by the Photomontages included with the LVIA, and revised LVIA, which demonstrate that at those limited number of viewpoints where there is intervisibility, the views towards same are very restricted and will become more so as the proposed planting increases in maturity.

Other Policies Referred to in Reason for Refusal No. 2

10.4.13. I note the second reason for refusal refers to the following policies and I note the Planning Authority was of the view the development did not ‘accord with same’ (it is not stated within the reason for refusal that the proposal ‘materially contravened’ same).

- CH. P3, CH.P5, HT. P1, HT. P2, HT. P3 and HT. P4

10.4.14. Policy CH P3 states as follows:

Discourage development that would lead to a loss of, or cause damage to, the character, the principal components of, or the setting of Country Houses, Demesnes and Gardens.

10.4.15. I have considered the impact on the setting, and historical demesne of Duckett’s Grove above, and having regard to same, I am satisfied that the proposed development does not contravene Policy CH P3 of the Carlow Development Plan.

10.4.16. CH P5: states:

Consider the “Guidance Notes for the Appraisal of Historic Gardens, Demesnes, Estates and their Settings” published by Cork County Council 2006⁶, in the appraisal and description of the impacts of development proposals in County Carlow within or in close proximity to country houses and demesnes on historic designed landscapes, demesnes and gardens.

10.4.17. In relation same, I have reviewed said document. This is a publicly available document (I have placed a copy on file for the Commission’s perusal). I note that the main purpose of this document is to ‘*facilitate the preparation of appraisals of historic gardens and designed landscapes, in the context of any development proposal that might impact on their heritage value, and to foster a better understanding of designed landscapes*’. In relation to same, I note that the appellant has stated that the AAHIA applied evaluative criteria consistent with this guidance document, and I am satisfied that this is the case. As such I am not of the view that the proposed development would contravene CH P5.

⁶ https://www.corkcoco.ie/sites/default/files/2022-10/guidance_notes_for_the_appraisal_of_historic_gardens_demesnes_estates_and_their_settings.pdf

HT P2: Protect and conserve the natural and built heritage of the County upon which the tourism industry is based, including landscapes, designated sites, habitats and species, water quality, archaeology and historic buildings and structures.

10.4.18. Given the discussion above, in relation to Duckett's Grove, and noting the discussion below in relation to archaeology and biodiversity, I am satisfied that the proposed development does not contravene Policy HT P2.

HT P1: Work with key stakeholders, including Carlow Tourism, Fáilte Ireland, the OPW, the Arts Council, the Heritage Council, and key stakeholders, businesses, and local communities, to support the sustainable development and promotion of heritage tourism in the County.

HT P3: Promote Carlow's castles, historic houses and gardens as tourist attractions in conjunction with Fáilte Ireland, the OPW and relevant stakeholders, and to facilitate sustainable proposals to enhance their visitor experience through the provision of improved access, signage, and associated infrastructure, as appropriate and as resources allow.

HT P4: Support appropriate conservation and restoration works to castles, historic houses, and gardens in the County, in order to safeguard the future of these heritage assets and in recognition of their significant role for Carlow tourism.

10.4.19. I am of the view that the above policies, while relating to the conservation, restoration and promotion of Duckett's Grove as a Tourism attraction, are not directly applicable to the application in question, and am of the view that, notwithstanding the view of the PA, the development does not contravene same.

Other Relevant Policies (Protected Structures)

10.4.20. While not referred to in the Planner's Reports nor within the reason for refusal, I note that there a number of other relevant policies within the CDP, namely Policies PS P1, PS P2 and PS P6 which relate to Protected Structures and views towards same. Having regard to the detailed discussion above, I am satisfied that the proposed development does not materially impact the Protected Structure itself, nor does it materially impact on the curtilage, attendant grounds nor the setting of same, and there are no material impacts on views towards same (see also discussion in Section 10.3 above, in relation to Protected Views). As such, I am satisfied that the

proposed development does not contravene any policies within the CDP, as relates to Protected Structures.

Conclusion

10.4.21. In conclusion, and having regard to the assessment above, I am satisfied that the proposed development will have any material impact on setting of Duckett's Grove, nor on the wider historic landscape associated with same, noting, in particular, the very limited intervisibility between the proposed development and Duckett's Grove, as described in detail above. I am satisfied, therefore, that the proposal is in compliance with relevant policies of the CDP as relates to Protected Structures, Country Houses and Historic Landscapes, and is also in line with guidance as set out in Architectural Heritage Protection: Guidelines for Planning Authorities (2011).

10.5. **Material Contravention**

10.5.1. I note that, where a planning authority has decided to refuse permission because a proposed development materially contravenes the development plan, Section 37(2) of the Planning and Development Act 2000, (as amended), empowers the Commission to grant permission even if a proposed development contravenes materially the development plan.

10.5.2. In this regard, I note that the Planning Authority was of the view that the proposal materially contravened Policies LA P1, LA P2, LA P3, LA P4, LA P6, and LA P11 (as relates to Landscape) as well as other solar energy policy, including the County Renewable Energy Strategy. I have set out in detail in Section 10.3 above my assessment of same and I have concluded therein that the proposal does not contravene said policies and provisions.

10.5.3. However, Section 37(2) states that the Commission may only grant permission, where it considers that one of the following circumstances of Section 37 (2) (b) apply. They are:

- i the proposed development is of strategic or national importance,
- ii there are conflicting objectives in the development plan or the objectives are not clearly stated, insofar as the proposed development is concerned, or

iii permission for the proposed development should be granted having regard to regional spatial and economic strategy for the area, guidelines under section 28, policy directives under section 29, the statutory obligations of any local authority in the area, and any relevant policy of the Government, the Minister or any Minister of the Government, or

iv permission for the proposed development should be granted having regard to the pattern of development, and permissions granted, in the area since the making of the development plan.

10.5.4. I will now examine each of the 4 categories by reference to the information on the appeal file including the planning officer's reports, the grounds of appeal and third party observations.

i Strategic or national importance

10.5.5. I refer to Commission to Section 10.2 above 'Principle of Development – Local, European, National & Regional Policy', It is set out therein that Ireland has binding targets it is required to achieve in respect of the delivery of renewable energy, which includes large scale solar developments. At a national level, a targeted delivery of 8GW of solar has been set for 2030, and is included in the Climate Action Plan's 2024 and 2025, and this target has been reaffirmed in the Programme for Government (2025), while Ireland also has a binding renewable energy target of 42.5% from the Renewable Energy Directive (RED III), and the first two carbon budgets prepared in accordance with the Climate Action and Low Carbon Development Act 2015 (as amended), commits Ireland to reducing emission by 51% over 12 years to the end of 2030.

10.5.6. I am satisfied that the proposed development is of a scale (a total site area of 132.28 ha) that it can be deemed to be on national importance, as its delivery and energisation would make a significant contribution to the achievement of the binding national targets for renewable energy and reduction in carbon emissions. Therefore, I consider that the proposed development would satisfy the requirements of Section 37(2)(i) of the Planning and Development Act 2000 (as amended).

ii Conflicting or unclear objectives

10.5.7. No parties have set out that there are conflicting or unclear objectives within the plan, and I am satisfied that objectives that are of relevance to this proposed development, including those objectives that relate to solar farms, landscape, protected views and cultural heritage are clear, and therefore I am of the view that there are no conflicting or unclear objectives in the development plan that are of relevance to this particular development.

iii permission for the proposed development should be granted having regard to regional spatial and economic strategy for the area, guidelines under section 28, policy directives under section 29, the statutory obligations of any local authority in the area, and any relevant policy of the Government, the Minister or any Minister of the Government

10.5.8. In this regard I am of the view that the RSES is relevant in this instance, and I refer the Commission to Section 5 where I have summarised relevant sections of same. In particular I would highlight the following:

RSES recognises the pronounced need to decarbonise the southern region, and specifically in respect of electricity 'to achieve national and EU targets will require investment in measures to develop alternative renewable energies with greater interconnection to energy resources',

RPO 100 is 'to support the integration of indigenous renewable energy production and grid injection'.

10.5.9. Regional Policy Objectives (RPO's) 87, 95, 96 and 100 which seek to increase the use of renewable energy sources across the key sectors of electricity supply, to leverage the Region as a leader and innovator in sustainable renewable energy generation, to integrate renewable energy sources into the grid. In addition the RSES supports the Southern Region as a Carbon Neutral Energy Region, and the proposed development would contribute to the achievement of that goal.

10.5.10. I also refer the Commission to paragraphs 9.2.3 to 9.2.9 which addressed relevant national policy and in that respect I am also satisfied that permission for the proposed development should be granted having regard to relevant policy of the Government.

- iv. **permission for the proposed development should be granted having regard to the pattern of development, and permissions granted, in the area since the making of the development plan.**

10.5.11. I have referred to a number of precedents in Section 10.3 above, namely those where the Planning Authority has granted development for solar farms in areas that are entirely, or partly within, those areas that are designated as 'Available Areas with High Risk', with reference to Fig. 7.9 Solar Opportunity Areas (PA Ref 23/92 & ABP Ref 318475-23 and PA Ref 22/118 refer). The current Development Plan came into effect from 4th July 2022. Both said precedents were granted by the PA (and ABP on appeal with reference to 318475-23) after this date. Furthermore, there are other solar farms permitted in the surrounding area as detailed in Table 1 in Section 4 above, a number of which were grant since the making of the current Development Plan. As such, I am satisfied that similar developments have been granted permission in the wider area since the making of the current Development Plan. As such the pattern of development, is one where the Planning Authority, or the Commission, has previously deemed other such solar farm developments appropriate for the county, subject to a detailed assessment of the merits of each individual development.

Conclusion

10.5.12. Having regard to the considerations above, should the Commission be minded to grant permission for the proposed development, I am satisfied that the Commission is not precluded from granting permission by virtue of the provisions of Section 37(2)(b) i, iii and iv of the Planning and Development Act 2000 (as amended).

10.6. Other Issues

10.6.1. This section addresses other issues that have been raised in third party observations, and by Prescribed Bodies, who have made observations on the appeal (DAU), which are outside of the scope of the planning authority's refusal reasons.

10.7. Archaeology

- 10.7.1. I note that an observer has raised concerns in relation to impacts on archaeology and it is stated that possible archaeological features existing as per the submitted Study.
- 10.7.2. In relation to this issue, I note that the PA had raised some initial concerns in relation to archaeology, following initial comments on the application from the DAU. Further Information was requested in relation to same, and following the submission of FI by the applicant, and subsequent to a further submission from the DAU, the PA was satisfied that this issue was adequately addressed by the applicant and did not form part of the refusal.
- 10.7.3. In relation to the applicant's submissions in relation to archaeology, an Archaeology & Architectural Heritage Impact Assessment (dated 15/03/2024), prepared by Neo Environment, was submitted with the application documentation. This notes that the application site was considered to have a moderate potential for sub-surface Early Medieval/Medieval remains, and moderate to low potential for sub-surface Prehistoric remains, noting the results of the geophysical survey (as included in the Appendix D of the report). The original report recommended an archaeological programme of works be implemented prior to the construction stage, including field evaluation such as trial trenching. A further report (Archaeological Assessment, March 2025), prepared by IAC Archaeology, was submitted at FI stage. This report was prepared subsequent to archaeological testing carried out in February/March 2024, with a total of 83 trenches excavated across the site. 20 discrete locations of archaeological potential were identified, with including a possible prehistoric cremation pit, burnt mound activity, various enclosures and pit cluster and isolated pits recorded. Several artefacts were also recorded. Preservation of archaeology *in situ* was recommended in the report, with recommendations made in relation to the use of alternative cable throughs, or systems of suspended cables within areas of archaeological potential, the use of ground mounted ballasts for solar arrays, buffer zones from particular archaeological features, the use of floating road, as well as the relocation of the proposed inverter stations and 110kV substation. Other recommendations including motoring of topsoil stripping.
- 10.7.4. I would note that the recommended measures were considered appropriate by the DAU, who recommended conditions in relation to the same, and the PA did not raise any subsequent concern in relation to same. While archaeological features have

been identified, as pointed out by the observer, the report has included measures to reduce impacts on same, by preserving same in situ, and by the other measures as set out above.

10.7.5. In relation to the proposed relocation of a small number of inverter stations, I note the Archaeological Report submitted at FI stage notes that within areas 'AA2d' and 'AA8' it proposed that the infrastructure be moved and that the areas be preserved in situ and solar panels instead of the infrastructure be constructed at that location. The Commission will note that areas AA2D and AA8 relate to relatively small areas within the overall site (I refer the Commission to p41 'Overall Plan' of the FI Archaeological Report, which indicates the extent of these areas). As such, I am satisfied that should the inverters be relocated, and solar panels placed at these locations, there would no material impacts resulting from same, and I am satisfied that said mitigation measure can be included within a suitably worded condition, as I have recommended below.

10.7.6. In relation to the relocation of the 110kV substation, this is not proposed under this current application, and this element and the grid connection will form part of a Strategic Infrastructure Development (SID) to be submitted to the Commission at a later date. The indicative location of same is shown on the proposed drawings. As such, any potential impacts on archaeology relating to same can be assessed as part of the SID application.

10.7.7. Given the above discussion, I am satisfied that there will be not significant adverse effects on archaeology as a result of the proposed development, subject to conditions.

10.8. **Biodiversity**

10.8.1. The submission from the DAU at appeal stage raises issues that were not raised by the DAU at application stage, nor were these issues raised as a concern by the Planning Authority. The issues raised at appeal stage include recommendations made in respect of tree/shrub species, pre-construction surveys for protected species, including badgers, pre-construction bat surveys, measures to be employed should bats be found including lighting measures, bird protection include surveys in relation to Lapwing, spread of invasive species and the protection of Orchids. I will consider each of these issue in turn below.

Tree/shrub species

10.8.2. I note that Appendix 2D of the Ecological Appraisal sets out details of a Biodiversity Management Plan. This set out details of planting of species rich hedgerows and development of wildflower grasslands. I note that no planting of tree species is proposed. In relation to hedgerow, it is noted that the Currently the hedgerows on site are a mixture of species-rich and species-poor features and the management plan will enhance the existing hedgerow boundary by infilling gaps and planting a new species-rich hedgerow. A total of 2,270m of native hedgerow planting is proposed. The species mix proposed is set out in Table 7.3. These includes several native species. I am of the view that the mix of species can be ensured by way of condition.

Pre-construction surveys for protected species, including badgers

10.8.3. In relation to badgers, the Ecological Assessment (EcIA) submitted at application stage, notes that definitive signs of badger were noted during the field survey. It is further noted that, while these setts are disused, it is an indicator that badger have been actively using the site and may use the site in future. It is also noted that the habitats, arable crop and improved grassland, comprise suitable habitat for badger. In relation to other protected species, i.e. those protected under the Wildlife Act and/or the Habitats Directive, I note that the species scoping survey identified potential for Otter, Irish Hare and various bat species (discussed below). No sighting or field signs of otter were found, with most habitats within the Application Site being sub-optimal for Otter. However, the drainage ditches and watercourses within the ESA may provide suitable habitat for Otters. Immature eels (TN12) were found in a stream in the northern boundary of the site which are an ideal food indicator for foraging Otter. No records of other protected mammals were recorded.

10.8.4. In relation to potential impacts, in the absence of mitigation, it is noted that disturbance from the construction phase is likely to have an impact on otter. However, any impacts on not considered to be significant. Notwithstanding mitigation measures are proposed in relation to same, as set out below, in the event that Otters are identified prior to construction commencing.. It is also noted that effects for badger are considered likely, as a result of disturbance during the construction phases. Mitigation measures of relevance to protected species are set out below:

Badgers/ Otters

- Pre-construction survey
- Mammal gates
- All excavations to be securely covered or closed off/measures to prevent trapping (badgers)

10.8.5. It is concluded with the EclA, that no significant effects on badgers or otters will result from the proposed development. It is further concluded that the introduction of species rich habitat will result in a long-term net benefit for badger. I am satisfied that the mitigation measures as out in the EclA can be ensured by way of condition.

Pre-construction Bat Surveys

10.8.6. I note that the submission from the DAU does not raise any particular concerns in relation to the potential impact on bats, but rather reiterates the measures that are proposed by the applicant in relation to bats. I note that the Ecological Appraisal sets out information in relation to bats. It is set out within same that the treelines on the site represented potential for roosting bats, with the hedgerow on site representing potential for foraging bats. A bat suitability index is set out in Table 2.10 with the data search highlighting four species of bats and the suitability index of these species being relatively high in terms of suitability for bats. No sightings or field signs of bats were observed within the survey area. The report also notes that several derelict buildings on site may be suitable for bats.

10.8.7. Section 2.150 to 2.152 of the report sets out that the majority of the application site is comprised of improved grassland and wet grassland, with such grassland offering sub-optimal foraging habitat for bat species due to the limited number of prey species present. It is also set out that drainage ditches, hedgerows and treelines provide suitable habitat for foraging and commuting bats. A 5m buffer around hedgerows, tree buffers (dependent on tree height) and 2/5m buffers from all field drains has been included as part of the design of the proposed development. Section 2.167 of the report notes that no removal of trees is proposed. However, it is further set out that in the event that a mature tree may require trimming or felling, the tree should be surveyed for potential bat roosts before any work commences. In addition,

it is stated that should the derelict buildings on site require removal, same should be surveyed for bats prior to removal.

10.8.8. As stated in the Landscape and Ecology Management Plan, Figure 1.11a - 242m² of vegetation will be removed. Although not anticipated, if a mature tree ultimately requires removal, it will need to be surveyed for Potential Roost Features (PRF) prior to removal, in line with Bat Conservation Trust guidelines. Further surveys will be required should this PRF check determine the tree to be of medium or high bat roosting potential. Soft felling techniques will be used if low potential exists to ensure that no cavities are cut through, and branches or trunk pieces with cavities are lowered carefully to the ground and left with the access hole upward facing overnight to allow any bats to leave. The installation of bat boxes, new hedgerow planting and infilling existing hedgerows will increase the diversity of flora species within the Application Site, fauna diversity will also increase, including prey for foraging bat species. It is therefore concluded within the EclA that the Proposed Development will have a positive significant effect for bats post-construction. I am satisfied that potential impacts on bats have been considered satisfactorily within the EclA, and the mitigation measures therein will be sufficient to ensure that there are no significant residual effects on bats. These mitigation measures, as out in the EclA, can be ensured by way of condition. I would further note that the submission from the DAU does not raise any issues, or suggest any mitigation measures, that are not already considered within the EclA itself.

Bird protection including surveys in relation to Lapwing

10.8.9. The EclA notes that the mixed broadleaved woodland on site has potential for nesting birds, as does the scrub, treelines and other habitats on site. Specifically in relation to Lapwing the species scoping survey identified the potential for same to be present within the application site. It is noted that during the survey, common passerine and corvid species utilising the site, with buzzards and barn owl observed during the April 2023 survey, with 2 no. buzzards seen in the September 2023 survey. The EclA does not note any sightings or indicators of lapwing utilising the site. I note the EclA concludes that there will be no significant impacts on bird species. Notwithstanding, it is stated that where works are to commence during breeding season, bird surveys will be undertaken, with measures to prevent disturbance of nesting birds during construction. It is stated also that the introduction

of species rich habitat and bird boxes will result in a long-term net benefit for bird species.

Invasive Species

- 10.8.10. No invasive species were recorded during the habitat survey. As such I am satisfied that any risk from same can be rule out and no additional measures in relation to same are warranted.

Orchid

- 10.8.11. No species of same was identified during the habitat survey. As such I am satisfied that no measures in relation to the protection of same are warranted in this instance. I would note also that wild orchids are protected under the Wildlife Acts.

Public Health Risk/Fire Risk (Lithium Ion Batteries)

- 10.8.12. An observer has raised the issue of public health risk of lithium-ion batteries resulting from a potential fire. Another observer has stated that Section 132 of the PDA requires details of water supply/firefighting and that a Fire Risk Management Plan is required. It is also stated that an Emergency Response Plan is required.
- 10.8.13. In relation to same, I note that a 'Fire Risk Management Plan' has been submitted with the application, which presents an assessment of fire risks associated with the proposed solar farm and the Battery Energy Storage System. I note also that a 'Verification and Compliance Report' was submitted at FI stage, in response to issues raised in the report of the Fire Officer.
- 10.8.14. The Fire Risk Management Plan considers the main fire risks associated with each component of the energy storage system, and measures to reduce same. These components include the battery enclosures, the inverters/PCS and the transformer units. Section 4 of the report sets out the main ways in which a fire can occur, with the main potential hazard being thermal runaway resulting in fire, although the report notes that there is low potential for fire to occur from the various elements. In relation to access for firefighting, it is noted that tracks of sufficient width are provided within the proposed development site, to gain access to this elements with a fire risk (i.e. the battery containers, invertors and transformer/PCS units).
- 10.8.15. Detailed mitigation measures in relation to reducing fire risk is set out in Section 4.16 to 4.27 of the report, and measures relating to the battery storage

system, the location of the proposed development, the battery containers, fire detection and suppression, transportation and additional measures are set out.

10.8.16. It is summary within this report that Lithium-ion batteries are used safely and securely in countries and on sites across the world. There are currently 2.4GW/2.6GWh of operational energy storage across 161 sites in the United Kingdom (Dec 2022) and that properly designed lithium-ion batteries can and are operated safely on a daily basis. However, notwithstanding, a risk of fire remains, and the report has set out mitigation measures that aim to reduce same. Such measures can be ensured by way of condition.

10.8.17. It is also set that a site-specific Emergency Plan will be produced in consultation with the local fire service and will outline procedures in the unlikely event of a fire. Therefore, I am satisfied than an Emergency Response Plan will be in place during the operational phase, as such a plan can be ensured by way of Condition.

10.8.18. The Verification and Compliance Report sets out that the proposed Battery Energy Storage System will comply with the relevant guidelines and regulations, and concludes that the potential impacts of fire will be of a sufficiently low risk, and appropriately mitigated. The measures set out in same can also be ensured by way of condition.

Noise Impact Assessment

10.8.19. I note than an observer has stated that no Noise Impact Assessment (NIA) has been carried out. In relation to same I note that a Noise Impact Assessment was submitted with the application (Technical Appendix 6). This has been prepared having regard to best practice guidance, as set out in Section 6.9 of same. It is set out that the main noise sources are the heating, ventilation and air conditioning (HVAC) units associated with the battery systems and other electrical units proposed. The NIA assessed potential noise impacts of the proposed development on 39 no. noise sensitive receptors and 2 no. residential areas within a study area of 500m around the proposed development boundary. Table 6 of same indicates that predicted noise levels will be well below the typical baseline noise level for such rural areas [35 (LA90) dB], and at the various receptors the predicated nose levels are

between 17.6db and 30.2db at the 39 assessed receptors. It is concluded within the NIA that impacts on receptors would not be significant (i.e. low/negligible).

10.8.20. In relation to the conclusions as set out in the NIA, I note that the PA's internal reports did not raise any concerns in relation same, and I am satisfied that any residual noise impacts on surrounding noise sensitive receptors would be as described in the NIA, i.e. low or negligible.

Food Security/Use of Agricultural Lands

10.8.21. The subject lands are in agricultural 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.

10.8.22. I note that there is no national land use policy in Ireland which prescribes the preservation or protection of agricultural lands, in the interest of food security, and to which this development would be contrary, nor is there any national guidance specifically in relation to the location of solar energy development (this is also highlighted by an observer). Notwithstanding, the Climate Action Plan 2025 sets an ambitious target of 5 GW of Solar by 2025 and 8 GW by 2030 and which 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. I would note also that 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.

Use of Rooftop Solar

10.8.23. An observer on the appeal has stated that the use of rooftop solar would be sufficient to achieve renewable energy target, as relates to solar. In relation to same, I acknowledge that the use of rooftop solar does indeed have a role to play to

achieving targets for solar, and in reducing carbon emissions, however this is not necessarily at the expense of solar farm developments, which can deliver solar energy at scale, and are an integral part of renewable energy strategy, at a European, National Regional and Local Level.

Cabling/Removal of Topsoil/Increase in Hardstanding

10.8.24. An observer has raised concerns in relation to the removal of topsoil to facilitate cabling and an increase in hardstanding as a result of the proposed development. In relation to same, I note that the installation of cabling within trenches, and the backfilling of same, such as that proposed here, is a standard feature of such solar farm developments, and any environmental impacts related to same can be mitigated by way of a Construction and Environmental Management Plan. In relation to the increase in the amount of hardstanding on the site, I note that will be areas of hard standing relating the electrical inverter/transformer stations and spare parts containers. However, as set out in the Flood Risk and Drainage Impact Assessment, the total impermeable area will be 6,307 sq. m. or 0.48% of the overall site area and will not have any material impact on drainage from the site (as concluded within the Flood Risk and Drainage Impact Assessment).

Restoration

10.8.25. Observers on the appeal have raised concerns that the lands will not be viable again for agriculture after restoration. It is stated also that a restoration clause is essential. In relation to the proposed restoration, it is proposed to restore the land it is former state, and there is no evidence to suggest that this is not possible, although it will likely take place over a number of years. The restoration of the site can be ensured by way of condition.

Green Infrastructure Plan

10.8.26. An observer on the appeal has referred to the original submission that was made at application stage, and within same it is stated that a Green Infrastructure Plan is required as per Section 9.11 of the Carlow Development Plan. I note that the Section 9.11 of the CDP refers to Green Infrastructure. Therein, Policy GI P6 states that proposals for large scale development, including but not limited to solar farms, are required to submit a green infrastructure plan as part of a planning application. In relation to same, I note that the applicant has not submitted a standalone plan

entitled 'Green Infrastructure Plan'. However, the application documents include 'a Landscape and Ecology Management Plan' as part of the Landscape and Visual Impact Assessment (Figures 11a, 11b, 11c, 11d and 11e of same). These plans set out in detail the proposed 'green infrastructure' for the application site and includes detail of hedgerow planting, grassland seeding and wildflower meadow seeding. Figure 1.12 of the LVIA sets out a 'Restoration Plan' which details the 'green infrastructure' to be put in place at the restoration phase. The green infrastructure proposals are detailed also within the Biodiversity Management Plan (submitted as Appendix 2D of the Ecological Appraisal). I am satisfied that the aforementioned documents would constitute a green infrastructure plan, notwithstanding that they do not comprise of a single document entitled 'Green Infrastructure Plan'. I note that the Planning Officer nor any internal reports raised concern in relation to the lack of such a standalone plan, and as such I am satisfied that the Planning Authority were not of the view the proposal was not in compliance with Policy GI P6 of the CDP. I am also satisfied that the proposal does not contravene Policy GI P6 of the CDP, for the reasons aforementioned.

Proposed Conditions

10.8.27. As set out in Section 3.5 above, a number of conditions have been proposed by various internal sections of Carlow County Council. I am satisfied that the conditions as recommended below cover each of the issues raised by these internal reports, notwithstanding that the final recommended conditions may be in a slightly different format to that recommended by the council.

11.0 Recommendation

I recommend that planning permission should be granted, based on the reasons and considerations as set out below and subject to the attached conditions.

12.0 Reasons and Considerations

12.1. The Commission 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 relevant provisions of the

Climate Action Plan 2024 and Climate Action Plan 2025 and the Long-term Strategy on Greenhouse Gas Emissions Reductions 2024, the National Adaptation Framework; Planning for a Climate Resilient Ireland June 2024 and the relevant sectoral adaptation plans in particular the Electricity and Gas Networks Climate Change Sectoral Adaptation Plan (2025) and in furtherance of the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State), and otherwise had regard to:

- (a) The nature, scale and extent of the proposed development
- (b) the National Biodiversity Action Plan 2023-2030
- (c) National policy with regard to the development of alternative and indigenous energy sources and the minimisation of emissions from greenhouse gases, including Project Ireland 2040 National Planning Framework – First Revision (2025), the National Development Plan 2021-2030, the National Development Plan Review 2025 and the National Energy & Climate Action Plan 2021-2030
- (d) the policies set out in the Regional Spatial and Economic Strategy of the Southern Regional Assembly,
- (e) the policies of the planning authority contained within the Carlow County Development Plan, 2022-2028,
- (f) the character of the landscape in the area of the site and in the wider area of the site,
- (g) the pattern of the existing and permitted development in the area,
- (h) The distance between the solar farm and surrounding dwellings and other sensitive receptors from the proposed development,
- (i) The Natura Impact Statement,
- (j) Measures proposed for the construction, operation and decommissioning of the development,
- (k) The documentation submitted with the application and the appeal and the submissions and observations made in connection with the planning application,

- (l) The report of the Inspector.

Appropriate Assessment Stage 1

The Commission completed an Appropriate Assessment screening exercise in relation to the potential effects of the proposed development on European Sites, taking into account the nature, scale and location of the proposed development, the Appropriate Assessment Screening Report submitted with the application and the Planning Inspector's report and submissions on file. The Commission agreed with the screening assessment and conclusion carried out in the Inspector's Report that the Slaney River Valley SAC (007781) and River Barrow and River Nore SAC (002162) are the only European Site in respect of which the proposed development has the potential to have a significant effect in view of the Conservation Objectives for these sites and that Stage 2 Appropriate Assessment is, therefore, required.

Appropriate Assessment Stage 2

The Commission considered the Natura Impact Statement and associated documentation submitted with the application, the mitigation measures contained therein, the submissions and observations on file, and the Inspector's assessment. The Commission completed an Appropriate Assessment of the implications of the proposed development for the European Site for which potential to have a significant effect had been identified, in view of the site's conservation objectives. The Commission considered that the information before it was adequate to allow the carrying out of an Appropriate Assessment. In completing the Appropriate Assessment, the Commission 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 Commission 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 aforementioned European

Sites, having regard to the site's Conservation Objectives. In overall conclusion, the Commission was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the Slaney River Valley SAC (007781) or River Barrow and River Nore SAC (002162), in view of the sites' Conservation Objectives.

EIA Screening Determination

Having regard to –

- (a) The nature and scale of the proposed development, while not itself a class specified in Part 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended, includes a limited extent of field boundary removal (c200 linear metres), thereby coming within Class 1 (a) of Part 2 of Schedule 5 of the regulations and below the threshold set out in the class,
- (b) The location of the proposed development, in a rural area, which is designated as a 'Solar Opportunity Area' in the Carlow County Development Plan 2022-2028, the nature of the existing site and the pattern of existing and permitted development in the surrounding area;
- (c) The location of the development outside of any sensitive location specified in Article 109(4)(a)(v) of the Planning and Development Regulations 2001, as amended;
- (d) The guidance set out in the 'Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-Threshold Development', issued by the Department of the Environment, Heritage and Local Government (2003);
- (e) The criteria set out in Schedule 7 and 7A of the Planning and Development Regulations 2001, as amended, and;
- (f) The features and measures proposed by the applicant intended to avoid or prevent adverse effects on the environment, including measures identified in the submitted Natura Impact Statement and Flood Risk Assessment,

the Commission considers that the proposed development would not be likely to have significant effects on the environment and that the preparation and submission of an Environmental Impact Assessment Report is not, therefore, required

Proper Planning and Sustainable Development

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 heritage, would not seriously injure the visual and residential amenities of the area including designated views and prospects and scenic routes, would be acceptable in terms of public health, traffic safety, would not have undue impacts on surrounding land uses, would not have an unacceptable impact on ecology or on any European Site, 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.

13.0 Conditions

1.	<p>The development shall be carried out and completed in accordance with the plans and particulars lodged with the planning application, as amended by the further plans and particulars received by the planning authority on the 7th June 2025, 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 the commencement of development and the proposed development shall be carried out and completed in accordance with the agreed particulars.</p> <p>Reason: In the interest or 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 Commission considers it appropriate to specify a period of validity of this permission in excess of five years.</p>
3.	<p>(a) The permission shall be for a period of 40 years from the date of the commissioning of the solar arrays. The solar array and related ancillary structures shall then be decommissioned and removed unless, prior to the end</p>

	<p>of the period, planning permission shall have been granted for their continuance for a further period.</p> <p>(b) Prior to commencement of development, a Decommissioning Statement, including a detailed restoration plan and a timescale for its implementation, providing for the removal of the solar arrays, including all foundations, anchors, concrete shoes, inverter/transformer stations, control building, CCTV cameras, fencing and site access to a specific timescale, shall be submitted to, and agreed in writing with, the planning authority. The Decommissioning Statement shall be updated, submitted to and agreed with the planning authority prior to the commencement of decommissioning.</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/concrete shoes, 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 relevant planning authority to review the operation of the solar farm in the light of the circumstances then prevailing.</p>
4.	<p>The mitigation measures contained in the submitted Natura Impact Statement (NIS) shall be implemented in full.</p> <p>Reason: To protect the integrity of European Sites.</p>
5.	<p>All of the environmental, construction and ecological mitigation measures, as set out in the Ecological Appraisal (including the Biodiversity Management Plan), the Glint and Glare Assessment, Landscape and Visual Impact Assessment, the Construction Traffic Management Plan, the Outline Construction and Environmental Management Plan and the Flood Risk and Drainage Impact Assessment, the Archaeology and Architectural Heritage Impact Assessment, and the Air Quality Assessment, that were submitted with the application and in the updated Landscape and Visual Impact Assessment, the updated Construction and Environmental Management Plan, the updated Archaeological Assessment submitted by way of further information, and other</p>

	<p>plans and particulars submitted with the application, shall be implemented in full by the developer in conjunction with the timelines set out therein, except as may otherwise be required in order to comply with the conditions of this Order.</p> <p>Reason: In the interests of clarity and of the protection of the environment during the construction and operational phases of the development.</p>
6.	<p>(a) The construction of the development shall be managed in accordance with a finalised Construction and Environmental Management Plan, to include a Construction Traffic 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"> i) location of the site and materials compound(s); ii) location of areas for construction site offices and staff facilities; iii) details of site security fencing and hoardings; iv) details of on-site car parking facilities for site workers during the course of construction; v) details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site; vi) measures to obviate queuing of construction traffic on the adjoining road network; vii) measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network; viii) details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels; ix) 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;

	<ul style="list-style-type: none"> x) off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil; xi) details of on-site re-fuelling arrangements, including use of drip trays; xii) details of how it is proposed to manage excavated soil; xiii) means to ensure that surface water run-off is controlled such that no deleterious levels of silt or other pollutants enter local surface water drains or watercourses. xiv) the community liaison details including how the developer intends to engage with relevant parties and notify the local community in advance of the delivery of oversized loads and/or HGV deliveries. <p>The finalised Construction and Environmental Management Plan shall also take account of the mitigation measures outlined within the NIS. A record of daily checks that the works are being undertaken in accordance with the Construction and Environmental Management Plan shall be kept for inspection by the planning authority.</p> <p>The finalised Construction Environmental Management Plan (CEMP) shall include the location of any and all archaeological constraints relevant to the proposed development, as set out in the Archaeological Assessment report (IAC Ltd; March 2025). The CEMP shall clearly describe all identified likely archaeological impacts, both direct and indirect, and present all mitigation measures to be employed to protect the archaeological environment during all phases of site preparation, construction activity and decommissioning.</p> <p>Reason: In the interest of clarity and the protection of the environment during the construction and operational phases of the development and to ensure the protection of archaeology.</p>
7.	<ul style="list-style-type: none"> (i) Details of the materials, colours and textures of all the external finishes of the proposed development shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

	<p>(ii) The electricity control unit, inverters, and fencing shall be dark green in colour or other dark colours, details of which shall be agreed with the planning authority, prior to commencement of development.</p> <p>Reason: In the interest of visual amenity.</p>
8.	<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 interest of clarity.</p>
9.	<p>Prior to commencement of development, the developer shall submit details to the planning authority confirming the anticipated megawatt capacity and annual electricity generation of the solar farm.</p> <p>Reason: In the interest of clarity.</p>
10.	<p>a) Existing field boundaries, including trees and hedgerow, shall be maintained and supplemented in accordance with the details submitted, except where removal is proposed to facilitate access tracks and sightlines.</p> <p>b) Infill hedgerow planting shall comprise of native species. All proposed landscaping and planting shall take place in the first planting season following commencement of development and in accordance with the details proposed. The landscaping and screening shall be maintained at regular intervals. Any trees or hedgerow that are removed, die or become seriously damaged or diseased within five years from planting shall be replaced within the next planting season by trees or hedging of similar size and species, unless otherwise agreed in writing with the planning authority.</p> <p>c) Additional screening and/or planting shall be provided so as to ensure that there is no glint impact on adjoining dwellings as a result of the development, as per the mitigation measures as set out in the Glint and Glare Assessment. Upon commissioning of the development, and for a period of two years following first operation, the developer/operator shall provide detailed glint surveys on an annual basis to the planning</p>

	<p>authority in order to confirm that no such glint impact has taken place, and shall provide such further mitigation measures, as the planning authority may specify in writing, to ensure that this is achieved.</p> <p>Reason: in the interest of the visual amenities of the area.</p>
11.	<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) Each fencing panel shall be erected such that for a minimum of 300 millimetres of its length, its bottom edge is no less than 150 millimetres from ground level.</p> <p>d) The solar panels shall have driven or screw pile foundations only, unless otherwise authorised by a separate grant of planning permission; and</p> <p>e) Cables within the site shall be located underground.</p> <p>f) No cables/services are permitted to run through or in the carriageway over a bridge/culvert structure and these should be directionally drilled under the river/watercourse away from the structure.</p> <p>Reason: In the interest of clarity, visual and residential amenity, to allow wildlife to continue to have access to and through the site, to minimise impacts on drainage patterns and surface water quality, and in the interest of long-term viability of agricultural land.</p>
12.	<p>Water supply and drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works and services.</p> <p>Reason: in the interest of environmental protection.</p>
13.	<p>a) All road surfaces, culverts, 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.</p> <p>b) Prior to the commencement of construction, a road condition survey shall be taken along the full extent of the construction haul route to</p>

	<p>provide a basis for future reinstatement works. Details in this regard shall be submitted to, and agreed in writing with, the planning authority prior to the commencement of development.</p> <p>c) Prior to the commencement of construction, final details of the proposed haul route for the construction phase are to be agreed in writing with the Planning, unless otherwise in agreed in writing.</p> <p>d) Where any of the proposed entrances to the site are widened to facilitate access/egress by HGV's adequate drainage measures must be installed.</p> <p>Reason: In order to ensure a satisfactory standard of development.</p>
14.	<p>a) Details of the construction and operational access arrangements shall be submitted to, and agreed in writing with, the planning authority prior to the commencement of development including the nature of the surface finishes at and near the connections of site access tracks to public roads.</p> <p>b) Any gates shall open inwards only and shall be located a minimum of 10m from the roadside edge. Access gates at access points 1 and 2 to be a minimum of 15m from the road edge to allow a HGV to pull in if gate is not open.</p> <p>Reason: in the interest of traffic safety.</p>
15.	<p>a) Prior to the commencement of construction, the Applicant shall comply with the requirements of the planning authority for drainage arrangements, including the attenuation and disposal of surface water. Such works and services and shall otherwise comply with submitted Flood Risk and Drainage Impact Assessment.</p> <p>b) A Drainage Management Plan shall be developed for the construction and the operational phases of the development and include details of the proposed access routes and drains, which shall be submitted to the planning authority for approval prior to commencement of development.</p> <p>Reason: In the interests of environmental protection and flood prevention.</p>

16.	<p>During the operational phase of the proposed development the noise level shall not exceed</p> <p>(a) 55 dB(A) rated sound level between the hours of 0700 to 2300, and</p> <p>(b) 45 dB(A) 15 min and 60 dB LAfmax, 15 min at all other times, (corrected for a tonal or impulsive component) as measured at the nearest noise sensitive location. Procedures for the purpose of determining compliance with this limit shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.</p> <p>Reason: To protect the residential amenities of property in the vicinity of the site.</p>
17.	<p>Prior to the commencement of construction, the Applicant shall:</p> <p>a) Agree a programme of noise monitoring to confirm that construction works, particularly pile driving, are within specified limits.</p> <p>b) Agree a plan for noise monitoring test locations suitable for the variable work locations.</p> <p>Reason: In the interests of the amenities of the area and of environmental sustainability, to maintain effective control of this development and in the interest of the proper planning and sustainable development of the area.</p>
18.	<p>a) Access for fire brigade vehicles shall comply with the requirements of the Chief Fire Officer.</p> <p>b) Water supplies for firefighting purposes shall comply with the requirements of the Chief Fire Officer.</p> <p>c) All mitigation measures/recommendations as set out in the 'Fire Risk Management Plan' submitted at application stage, and as set out in the 'Verification and Compliance Report' submitted at Further Information Stage, shall be implemented in full.</p> <p>Reason: In the interests of public safety.</p>

19.	<p>Prior to commencement of development, the developer shall satisfy the requirements of Uisce Éireann in relation to their requirements for working in the vicinity of Uisce Éireann assets.</p> <p>Reason: in the interest of protecting the public water infrastructure at this location</p>
20.	<p>All mitigation measures in relation to archaeology as set out in the Archaeological Assessment report (IAC Ltd; March 2025) submitted as Further Information shall be implemented in full, except as may otherwise be required in order to comply with the below conditions relating to protection of the archaeological heritage. In this regard, the developer shall retain/engage a suitably qualified Archaeologist (licensed as required under the National Monuments Act) to:</p> <p>a. Consult with the Planning Authority and the National Monuments Service of the Department of Housing with regard to the specifications to be utilised for construction of ‘floating’ access roads where required in areas of identified sub-surface archaeology (as specified in Section 4.2 of the Archaeological Assessment report);</p> <p>b. Advise on, supervise and monitor the construction and maintenance of non-invasive ‘floating’ access roads where such are required;</p> <p>c. Advise on, supervise and monitor the installation of above-ground, non-invasive concrete ballast solutions for solar panels and above-ground cable troughs or suspended cable solutions for cable arrays in areas where specific sub-surface archaeological remains have been identified. Such works shall be restricted to being carried out in suitable weather conditions as specified in the Archaeological Assessment report (Section 4.2);</p> <p>d. Advise on, supervise and monitor the installation of appropriate works exclusion zone/s utilising appropriate fencing (heras type or similar) at specific areas of sub-surface archaeology as set out in the Archaeological Assessment report (Section 4.2). No movement or storage of plant, machinery, equipment and sundries shall be permitted within the works exclusion zone/s for the duration of construction and decommissioning related activities.</p>

- e. Advise on suitable alternative locations for inverter stations, as specified in the Archaeological Assessment report;
- f. Carry out Archaeological Monitoring of all groundworks required for construction of the development. The use of appropriate machinery to ensure the preservation and recording of any surviving archaeological remains shall be necessary. No ground disturbance shall take place in the absence of the Archaeologist without his/her express consent.
- g. Archaeological Monitoring shall be informed and supplemented by licensed metal detection survey.
- h. Should archaeological remains be identified during the course of archaeological monitoring, all works shall be suspended in the area of archaeological interest. pending a decision of the Planning Authority, in consultation with the National Monuments Service of the Department, regarding appropriate mitigation (preservation in situ/excavation).
- i. The developer shall facilitate the Archaeologist in recording any remains identified. Any further archaeological mitigation requirements specified by the Planning Authority, following consultation with the National Monuments Service of the Department, shall be complied with by the developer.

Following the completion of all archaeological work on site and any necessary post-excavation specialist analysis, the Planning Authority and the National Monuments Service of the Department shall be furnished with a final archaeological report describing the results of the monitoring and any subsequent required archaeological investigative work/excavation required. All resulting and associated archaeological costs shall be borne by the developer.

All site personnel shall be apprised of the locations and sensitivities of the sub-surface archaeological features identified within the development site. This shall be done through the appropriate dissemination of the CEMP and Archaeological Assessment report and through pre-commencement and regular on-site toolbox talks.

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

21.	<p>Prior to the commencement of development, the developer or any agent acting on its behalf, shall prepare a Resource Waste Management Plan (RWMP) as set out in the EPA's Best Practice Guidelines for the Preparation of Resource and Waste Management Plans for Construction and Demolition Projects (2021) including demonstration of proposals to adhere to best practice and protocols. The RWMP shall include specific proposals as to how the RWMP will be measured and monitored for effectiveness; these details shall be placed on the file and retained as part of the public record. The RWMP must be submitted to the planning authority for written agreement prior to the commencement of development. All records (including for waste and all resources) pursuant to the agreed RWMP shall be made available for inspection at the site office at all times.</p> <p>Reason: In the interest of proper planning and sustainable development.</p>
22.	<p>Site development and building works shall be carried out only between the hours of 0800 to 1900 Mondays to Fridays, inclusive, between 0800 to 1400 hours on Saturdays and not at all on Sundays or public holidays. Deviation from these times shall only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.</p> <p>Reason: in order to safeguard the residential amenities of property in the vicinity.</p>
23.	<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 Coimisiún Pleanála for determination.</p> <p>Reason: To ensure satisfactory reinstatement of the site.</p>
24.	<p>The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area</p>

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.

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.

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.

Ronan O'Connor
Senior Planning Inspector

28th January 2026

Appendix 1 - Form 1 - EIA Pre-Screening

Case Reference	ACP-323427-25
Proposed Development Summary	10 year planning permission on a site of c132.28ha for Solar PV energy development battery energy storage system compound to include solar panels mounted on steel support structures and all associated works.
Development Address	Lands including Straboe and Killerrig, Carlow, Co. Carlow
<p>1. Does the proposed development come within the definition of a 'project' for the purposes of EIA?</p> <p>(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)</p>	<input checked="" type="checkbox"/> Yes, it is a 'Project'. Proceed to Q2.
	<input type="checkbox"/> No, No further action required.
<p>2. Is the proposed development of a CLASS specified in Part 1, Schedule 5 of the Planning and Development Regulations 2001 (as amended)?</p>	
<input type="checkbox"/> Yes, it is a Class specified in Part 1. EIA is mandatory. No Screening required. EIAR to be requested. Discuss with ADP.	
<input checked="" type="checkbox"/> No, it is not a Class specified in Part 1. Proceed to Q3	

<p>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?</p>	
<p><input type="checkbox"/> 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.</p> <p>No Screening required.</p>	
<p><input type="checkbox"/> Yes, the proposed development is of a Class and meets/exceeds the threshold.</p> <p>EIA is Mandatory. No Screening Required</p>	<p>State the Class and state the relevant threshold</p>
<p><input checked="" type="checkbox"/> Yes, the proposed development is of a Class but is sub-threshold.</p> <p>Preliminary examination required. (Form 2)</p> <p>OR</p> <p>If Schedule 7A information submitted proceed to Q4. (Form 3 Required)</p>	<p>Solar</p> <p>The 2020 High Court Judgement in Sweetman -v- An Bord Pleanála and others [2019 No. 33 J.R.] confirmed that the development of a solar farm is not a specified class of development in Part 1 or Part 2 of Schedule 5 of the Regulations.</p> <p>The following classes and section are considered be potentially applicable to the proposed development:</p> <ul style="list-style-type: none"> • Class 1. (a) Projects for the restructuring of rural land holdings • Class 10 of Part 2 of Schedule 5: Infrastructure Projects: (dd) All private roads which would exceed 2000m in length. <p>Class 1 of Part 2 of Schedule 5 refers to:</p> <p>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,</p>

	<p>or where the area of lands to be restructured by removal of field boundaries is above 50 hectares</p> <p><u>Comment</u></p> <p>The 4km, 5ha and 50ha thresholds referred to above are the same the thresholds set out in Schedule 1, Part B of the 2011 EIA (Agriculture) Regulations referring to consent applications. In addition Part A of Schedule 1 of the 2011 Regulations sets out the following thresholds for screening for EIA – 4km (length of field boundary to be removed), 5ha (re-contouring within farm-holding) and 50ha (area of lands to be restructured by the removal of field boundaries).</p> <p>The proposed development would include the removal of 185.9m of hedgerow to facilitate visibility at the access point and 14.1m to facilitate new access tracks (200m in total), which is significantly below the 4km threshold and does not relate to the enlargement of fields</p> <p>The panels are to be laid on the existing surface and re-contouring is not proposed as a part of the development.</p> <p>Therefore, while the proposed development is of a Class listed in Part 2, on the basis that it involves the removal of field boundary hedgerow it is considered sub-threshold for mandatory EIA for development. on the basis that it involves the removal of 200m of field boundary hedgerow.</p> <p>Class 10 of Part 2 of Schedule 5: Infrastructure Projects: (dd) All private roads which would exceed 2000m in length.</p> <p>The proposed development includes the laying of stone access tracks to provide access for construction and maintenance purposes during the operational life of the solar farm.</p> <p>It is not considered that the private internal access tracks constitute a private road. In this regard, I note that the Commission has previously determined that these are tracks and not roads in respect of solar farm developments and do not fall under this Class.</p>
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	Although the site area extends to 132.28 ha, the development itself only involves the removal of a minor amount of boundary hedging and does not involve any notable restructuring. Therefore, the development does not involve any restructuring through the removal of field boundaries above 50 hectares
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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 <input checked="" type="checkbox"/>	Screening Determination required (Complete Form 3)
No <input type="checkbox"/>	Pre-screening determination conclusion remains as above (Q1 to Q3)

Inspector: _____ Date: _____

Appendix 2 - Form 3 - EIA Screening Determination

A. CASE DETAILS		
An Bord Pleanála Case Reference	ACP-323427-25	
Development Summary	10 year planning permission for Solar PV energy development, battery energy storage system compound to include solar panels mounted on steel support structures and all associated works.	
	Yes / No / N/A	Comment (if relevant)
1. Was a Screening Determination carried out by the PA?	Yes	The Environment Section of Carlow County Council completed a sub threshold screening assessment and determines that a screening determination was required, as schedule 7A information had been submitted by the applicant. In its screening determination, it was determined that any EIR was not required.
2. Has Schedule 7A information been submitted?	Yes	An EIA Screening Report prepared by Neo Environmental with Schedule 7A information accompanied the application.
3. Has an AA screening report or NIS been submitted?	Yes	A NIS, prepared by Neo Environmental has been submitted and includes a Stage 1 AA Screening and a Stage II Natura Impact Statement.
4. Is a IED/ IPC or Waste Licence (or review of licence) required from the EPA?	No	

<p>If YES has the EPA commented on the need for an EIAR?</p>		
<p>5. Have any other relevant assessments of the effects on the environment which have a significant bearing on the project been carried out pursuant to other relevant Directives – for example SEA</p>	<p>Yes</p>	<p>Other assessments included in the application are:</p> <ul style="list-style-type: none"> • Habitats Directive (92/43/EEC) and Birds Directive (79/409/EEC) – see Ecological Appraisal, AA Screening Report and NIS. • Floods Directive (2007/60/EC) – See Site Specific Flood Risk and Drainage Impact Assessment. • Water Framework Directive (2000/60/EC) – See Ecological Impact Assessment, AA Screening / NIS. <p>Furthermore, the proposed development has been assessed and designed for:</p> <ul style="list-style-type: none"> • Mitigation of impacts experienced during the construction phase (Construction Environmental Management Plan). • Glint and Glare (Glint and Glare Assessment) • Visual impact, land restoration, planting and biodiversity (Landscape and Visual Impact Assessment (LVIA) with accompanying photomontages and landscape masterplan drawings). • Noise impacts (Noise Impact Assessment Report). • Archaeological Impact (Archaeological Impact Assessment)

B. EXAMINATION	Yes/ No/ Uncertain	<p>Briefly describe the nature and extent and Mitigation Measures (where relevant)</p> <p>(having regard to the probability, magnitude (including population size affected), complexity, duration, frequency, intensity, and reversibility of impact)</p> <p>Mitigation measures –Where relevant specify features or measures proposed by the applicant to avoid or prevent a significant effect.</p>	<p>Is this likely to result in significant effects on the environment?</p> <p>Yes/ No/ Uncertain</p>
This screening examination should be read with, and in light of, the rest of the Inspector’s Report attached herewith			
1. Characteristics of proposed development (including demolition, construction, operation, or decommissioning)			
<p>1.1 Is the project significantly different in character or scale to the existing surrounding or environment?</p>	Yes	<p>The existing surrounding environment consists of agricultural lands.</p> <p>The field networks are bound by mixed hedgerows and mature trees on all sides which provides a good framework of well-established and mostly dense vegetative screening around the site boundary.</p>	No

		<p>It is envisaged that the proposal will result in the loss of c200 linear meters of hedgerow to accommodate visibility at access points and to accommodate access tracks. The volume of hedgerow to be removed is considered not significant given the remaining linear features present in the surrounding environment</p> <p>As such I do not consider that the proposed development would be considered to be significantly different in character or scale to existing and surrounding pattern of development.</p>	
<p>1.2 Will construction, operation, decommissioning or demolition works cause physical changes to the locality (topography, land use, waterbodies)?</p>	<p>Yes</p>	<p>The removal of hedgerows is generally confined to the proposed site access points with some more limited removal to facilitate the access tracks (c200m of hedgerow is to be removed in total).</p> <p>I note that a Biodiversity Management Plan has been prepared for the site. Within same it is stated that it is proposed to gap-fill the surrounding hedgerow where required across the site and along its boundaries, with habitat being created on the site including a wildflower meadow.</p>	<p>No</p>

<p>1.3 Will construction or operation of the project use natural resources such as land, soil, water, materials/minerals or energy, especially resources which are non-renewable or in short supply?</p>	<p>Yes</p>	<p>The project will use standard construction methods, materials and equipment, and the process will be managed through the implementation of a CEMP (Construction and Environmental Management Plan). The loss of natural resources (hedgerow) is not regarded as significant in nature.</p>	<p>No</p>
<p>1.4 Will the project involve the use, storage, transport, handling or production of substance which would be harmful to human health or the environment?</p>	<p>Yes</p>	<p>Hedgerow removal activities will require the use of potentially harmful materials, such as fuels and other such substances to power necessary machinery. Use of such materials would be typical for construction sites. Any impacts would be local and temporary in nature and the implementation of the standard construction practice measures outlined in the submitted Construction and Environmental Management Plan would satisfactorily mitigate potential impacts. No operational impacts in this regard are anticipated.</p>	<p>No</p>
<p>1.5 Will the project produce solid waste, release pollutants or any hazardous / toxic / noxious substances?</p>	<p>Yes</p>	<p>Hedgerow removal activities will require the use of potentially harmful materials, such as fuels and other similar substances for necessary machinery and may give rise to waste for disposal. The use of these materials would be typical for construction sites. Noise and dust emissions during these activities are likely. Such impacts would be local and temporary in nature, and with the implementation of the standard measures</p>	<p>No</p>

		outlined in the Construction and Environmental Management Plan, the project would satisfactorily mitigate the potential impacts.	
1.6 Will the project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?	Yes	<p>The project involves removal of hedgerow at a number of locations within the site. To facilitate same, standard construction methods, materials and equipment are to be used, and the process would be managed through the implementation of the CEMP. Surface water will be attenuated during construction and appropriate mitigation measures included.</p> <p>Accordingly, as risks of contamination to ground or water bodies are mitigated and managed, I do not consider this aspect of the project would be likely to result in a significant effect on the environment.</p>	No
1.7 Will the project cause noise and vibration or release of light, heat, energy or electromagnetic radiation?	Yes	There is potential for hedgerow removal activity to give rise to noise and vibration emissions. The works would be short term in duration, and impacts arising would be temporary, localised, and be managed through implementation of the CEMP, which would comply with the recognised best practice standards typically adopted for such projects in Ireland.	No

<p>1.8 Will there be any risks to human health, for example due to water contamination or air pollution?</p>	<p>Yes</p>	<p>Hedgerow removal activity would be temporary and localised in nature and the application of standard measures within the Construction Environmental Management Plan would satisfactorily address potential risks on human health.</p> <p>During constriction any material or substance which could cause pollution, including fuels or silty water will be prevented from entering groundwater, surface water drains or watercourses by the measures set out in the CEMP. No significant operational impacts are anticipated.</p>	<p>No</p>
<p>1.9 Will there be any risk of major accidents that could affect human health or the environment?</p>	<p>No</p>	<p>No significant risk is predicted having regard to the nature and scale of the development.</p>	<p>No</p>
<p>1.10 Will the project affect the social environment (population, employment)</p>	<p>No</p>	<p>I do not consider the removal of hedgerow will likely result in a significant effect on the social environment of the area.</p>	<p>No</p>
<p>1.11 Is the project part of a wider large scale change that could result in cumulative effects on the environment?</p>	<p>Yes</p>	<p>The entire site is identified in the Carlow County Development Plan 2022-2028 as being an area suitable for the development of solar farms, subject to consideration of planning and environmental factors. A number of other</p>	<p>No</p>

		<p>solar farm developments have been permitted within in the wider area in recent years (as set out in Section 4 'Planning History'). The greatest potential for cumulative effects would be landscape effects but, I am satisfied that sufficient separation exists between the different solar farm clusters in the area, as well as intervening topography and vegetation, to means that significant cumulative impacts would not occur (see discussion of same in Section 10.3 of this report).</p>	
2. Location of proposed development			
<p>2.1 Is the proposed development located on, in, adjoining or have the potential to impact on any of the following:</p> <ul style="list-style-type: none"> - European site (SAC/ SPA/ pSAC/ pSPA) - NHA/ pNHA - Designated Nature Reserve - Designated refuge for flora or fauna - Place, site or feature of ecological interest, the preservation/conservation/ protection of which is an objective of a development plan/ LAP/ draft plan or variation of a plan 	Yes	<p>The project is not located on or in any designated or proposed NHA, or any other listed area of ecological interest or protection.</p> <p>With regard to European Sites, the site is located adjacent to the Slaney River Valley SAC, (000781) is located c5m to the south of the southernmost portion of the site (on the opposite side of the R126 road) at its closest point. The River Barrow and River Nore SAC (Site code 002162) is located approximately 5.8km as the crow flies to the north-west of the northernmost point of the site at its closest point. I have considered potential</p>	No

		<p>impacts on European Sites in Appendix 4 and I have concluded therein that consider that adverse effects on site integrity of the Slaney River Valley SAC (000781) and River Barrow and River Nore SAC (002162) can be excluded in view of the conservation objectives of these sites and that no reasonable scientific doubt remains as to the absence of such effects.</p> <p>In conclusion, I do not consider the project will likely result in a significant effect on the environment in terms of ecological designations or biodiversity.</p>	
<p>2.2 Could any protected, important or sensitive species of flora or fauna which use areas on or around the site, for example: for breeding, nesting, foraging, resting, over-wintering, or migration, be affected by the project?</p>	<p>Yes</p>	<p>No rare or protected floral species were recorded.</p> <p>The Ecological Appraisal states that disused badger setts were identified on site as well as suitable habitat for otter. Habitat with bat roosting and foraging potential is identified. The removal of hedgerow could impact on same. Mitigation measures are set out with the Ecological Appraisal to ensure no significant impacts on same.</p> <p>In addition, the EcIA notes that the mixed broadleaved woodland on site has potential for nesting birds, as does the scrub, treelines</p>	<p>No</p>

		<p>and other habitats on site. The removal of hedgerow has the potential to impact bird species,</p> <p>Mitigation measures as set out in the Biodiversity Enhancement Plan that would include planting of new (2,270 m of infill planting) and enhancement of existing hedgerows, have been included to create additional habitat for on completion of the development.</p> <p>With mitigation, and enhancement, as set out in the EclA, as well as the restrictions on the time of year in which hedgerow removal can occur, I am satisfied that no significant effects on any species are likely to arise.</p>	
<p>2.3 Are there any other features of landscape, historic, archaeological, or cultural importance that could be affected?</p>	<p>Yes</p>	<p>The second refusal reason issued by the planning authority referred primarily to impacts on the setting of Duckett's Grove (A Protected Structure) and the impact on the wider historical landscape surrounding same. The hedgerow removal works are unlikely to have any significant impact on same, as set out in Section 10.4 of this report, there is very limited visibility towards the proposed development site when viewed in the</p>	<p>No</p>

		<p>same context or setting as Duckett's Grove.</p> <p>In relation to archaeology, and having regard to the detailed consideration of same in Section 10.6 of this report, I am satisfied that while hedgerow removal may involve root removal, and therefore may involve groundworks, I am satisfied that same will have no significant impact on archaeology, noting the mitigation measures as set Archaeological Assessment (March 2025) which includes Archaeological monitoring of ground works.</p> <p>As such, I do not consider the hedgerow removal will likely result in a significant negative effect on the environment in terms of archaeology and cultural heritage.</p>	
<p>2.4 Are there any areas on/around the location which contain important, high quality or scarce resources which could be affected by the project, for example: forestry, agriculture, water/coastal, fisheries, minerals?</p>	<p>No</p>	<p>The nature of the works proposed are such that there would be no foreseeable impact on any areas of high quality or scarce resources.</p> <p>There are no significant or important such resources in proximity to the site which could be negatively affected by the project.</p>	<p>No</p>

<p>2.5 Are there any water resources including surface waters, for example: rivers, lakes/ponds, coastal or groundwaters which could be affected by the project, particularly in terms of their volume and flood risk?</p>	<p>Yes</p>	<p>A number of water courses run adjacent to the site with drainage ditches within. As noted above, some areas of the site have been identified as being potentially liable to flooding. However, the removal of hedgerow is not expected to give rise to increased surface water runoff (volumes or rates). As such, no significant impact on water courses, nor any significantly increased flood risk, will result from same.</p>	<p>No</p>
<p>2.6 Is the location susceptible to subsidence, landslides or erosion?</p>	<p>No</p>	<p>There is no evidence identified of these risks.</p>	<p>No</p>
<p>2.7 Are there any key transport routes(e.g. National primary Roads) on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected by the project?</p>	<p>No</p>	<p>The M9 motorway runs approximately 2.2km to the west of the westernmost portion of the site (Field 1). While the motorway would potentially form part of the haulage route for vehicles servicing the site, including those involved in hedgerow removal, this part of the motorway network is not normally susceptible to congestion.</p>	<p>No</p>
<p>2.8 Are there existing sensitive land uses or community facilities (such as hospitals, schools etc) which could be affected by the project?</p>	<p>No</p>	<p>No such uses in the immediate area which could be affected by the project.</p>	<p>No</p>

3. Any other factors that should be considered which could lead to environmental impacts

3.1 Cumulative Effects: Could this project together with existing and/or approved development result in cumulative effects during the construction/ operation phase?

Yes

The proposed development is part of a wider solar farm development which of itself is not a class for the purposes of the EIA Directive, but which is considered in the context of any resulting potential cumulative effects, including visual/landscape, water and biodiversity which are addressed separately in the Planning Assessment within this report.

Significant environmental effects from a cumulation of the proposed hedgerow removal with other existing development is unlikely based on a review of the relevant technical reports, the project design decisions and the proposed mitigation measures which effectively reduces the potential for cumulative effects.

No existing or permitted developments have been identified in the immediate vicinity that would give rise to significant cumulative environmental effects with the subject project. It is also noted that there are no other developments under construction in proximity to the site.

Therefore, in summary and as outlined in the assessment it is not considered that any significant

No

		cumulative effects in combination with the subject project would arise.	
3.2 Transboundary Effects: Is the project likely to lead to transboundary effects?	No	No transboundary effects arise.	No
3.3 Are there any other relevant considerations?	No		No
C. CONCLUSION			
No real likelihood of significant effects on the environment.	<input checked="" type="checkbox"/>	EIAR Not Required	
Real likelihood of significant effects on the environment.	<input type="checkbox"/>	EIAR Required	
D. MAIN REASONS AND CONSIDERATIONS			
Having regard to: -			
<p>a) The nature and scale of the proposed development, while not itself a class specified in Part 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended, includes a limited extent of field boundary removal (c200 linear metres), thereby coming within Class 1 (a) of Part 2 of Schedule 5 of the regulations and below the threshold set out in the class,</p> <p>b) The location of the proposed development, in a rural area, which is designated as a ‘Solar Opportunity Area’ in the Carlow County Development Plan 2022-2028, the nature of the existing site and the pattern of existing and permitted development in the surrounding area;</p>			

- c) The location of the development outside of any sensitive location specified in Article 109(4)(a)(v) of the Planning and Development Regulations 2001, as amended;
- d) The guidance set out in the 'Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-Threshold Development', issued by the Department of the Environment, Heritage and Local Government (2003);
- e) The criteria set out in Schedule 7 and 7A of the Planning and Development Regulations 2001, as amended, and;
- f) The features and measures proposed by the applicant intended to avoid or prevent adverse effects on the environment, including measures identified in the submitted Natura Impact Statement, Flood Risk Assessment and the Outline Construction and Environmental Management Plan (CEMP)

the Commission considers that the proposed development would not be likely to have significant effects on the environment and that the preparation and submission of an Environmental Impact Assessment Report is not, therefore, required

Inspector _____

Date _____

Approved (DP/ADP) _____

Date _____

Appendix 3 - Screening For Appropriate Assessment -Test for Likely significant effects

Step 1: Description of the project and local site characteristics

<p>Brief description of project</p>	<p>10 year planning permission for Solar PV energy development, battery energy storage system compound to include solar panels mounted on steel support structures and all associated works.</p> <p>Refer to Section 2.0 of the Inspector's report for a detailed description of the proposed project</p> <p>The construction phase is estimated to be 12 months and the operational life of the solar farm 40 years.</p>
<p>Brief description of development site characteristics and potential impact mechanisms</p>	<p>The Application Site is located in a rural setting. c.6.29km east from Carlow town. The area of the Proposed Development lies at an elevation of approximately 88 – 121m AOD and covers a total area of c. 132.28 hectares.</p> <p>The site comprises of 31 agricultural fields in total (I refer the Commission to Figure 3 – Straboe Solar Farm Field Numbers). The site is currently used for arable farming and cattle grazing. The fields are bound by a mixture of mature trees, hedgerows and post-and-wire fencing. Access to the Proposed Development will be from two existing access points. One off the R726, south southeast of the Application Site and off the R418, west of the Application Site.</p> <p>The surrounding area of the application site is predominately agricultural land used for cattle grazing and arable farming. The surrounding area is rural with one off detached dwellings and farms located along local roads. Duckett's Grove is located c. c750m northwest of the site and The River Slaney SAC runs c.0.01km south southeast of the site.</p> <p>A detailed description of the proposed development is included in Section 2.0 of Inspector Report and detailed specifications of the proposal are provided in the NIS, the</p>

Planning Statement and other planning documents and reports provided by the applicant.

In particular, the main features of the project are set out in detail in the application documentation including Sections 3, 4 and 5 of the Planning Statement.

In summary, the development will consist of a module array and racking system (solar panels), 58 no. inverters/transformers, 29 no. switchgear substations, 3 no. auxiliary transformers, 5 no. permanent storage containers, 2 no. monitoring houses, 2 no. toilets, 1 no. BESS Intake Substation, 42 no. EPD Battery Blocks, 7 no. BESS Twin Skid, 1 no. Backup Generator as well as security fencing, CCTV, cabling, access track and hardstanding. Also proposed are 2 no. temporary construction compounds.

It is proposed that the site is decommissioned once the operational lifespan has been reached, with the site returned to its former state, and all elements of the development will be completely removed.

The site is ecologically and hydrologically connected to the Slaney River Valley SAC which is located in close proximity to the site, adjacent to the southeast boundary of the Application Site, on the opposite side of the R726 Road. The Aghalona Stream and Knockshannagh stream runs along the northern boundary of the eastern area which are connected to the Slaney River Valley SAC. The Aghalona Stream flows along the northern boundary of the site and intersects the most western fields. This provides the hydrological connection. Ecological connections are via the otter, as described below. The River Barrow and the River Nore SAC are ecologically connected to the application site as a result of the potential for otter to utilise the site, as detailed below, notwithstanding that this site is located some 6km from the site.

The next closest Natura 2000 site was the Holdenstown Bog SAC (001757) and no hydrological or ecological connections were identified. No other hydrological or ecological connections were identified with any other Natura 2000 site.

Other Potential Impact Mechanisms

Impacts on Bird Habitats/Impacts on migratory paths

The nearest SPA to the site is the Wicklow Mountains SPA is some 22km from the site and as such I am satisfied that any impacts on bird species associated with this SPA can be ruled out in this instance.

Spread of Invasive Species

No invasive species were recorded within the site and as such I am satisfied that any impacts on any Natura 2000 site associated with the spread of invasive species can be ruled out at this stage.

Waste Water Impacts

While not discussed in the AA Screening Report, I would note that the application documentation sets out that there will be a compostable toilet on site, which will be utilised by a small number of people at operational stage. Given the nature and scale of same, I am satisfied that it is unlikely that there would be likely significant impact on the Slane River Valley SAC, or on any other SAC, as a result of waste water generated by this development.

Other European Sites

The AA Screening report 'screens-in' the Slaney River Valley SAC and the River Barrow and River Nore SAC only. In relation to other European Sites, no likely significant impact on same is envisaged. Having regard to the considerations above, I concur that Slaney River Valley SAC and the River Barrow and River Nore SAC are the only Natura site where potential significant effects could occur and I am satisfied that other Natura 2000 sites can be 'Screened-Out' from further assessment.

Screening report

Yes - (Neo Environmental)

Natura Impact Statement

Yes - (Neo Environmental)

Relevant submissions	<p>The submission from the DAU states that all mitigation measures as set out in the NIS should be implemented.</p> <p>An observer submission has stated that the impact on the Aghalona River must be considered with the potential for toxic chemical runoff from cleaning panels and as a result of chemical leaching from the panels.</p> <p>The submission from An Taisce, at application stage, refers to potential impacts on water quality.</p>
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Step 2. Identification of relevant European sites using the Source-pathway-receptor model

The applicants AA Screening Report considered all European sites within 15 km of the site. The three site are listed below.

European Site (code)	Qualifying interests Link to conservation objectives (NPWS, date)	Distance from proposed development (km)	Ecological connections	Consider further in screening Y/N
Slaney River Valley SAC (000781)	<ul style="list-style-type: none"> • Estuaries • Mudflats and sandflats not covered by seawater at low tide • Atlantic salt meadows • Mediterranean salt meadows • Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation • Old sessile oak woods with Ilex and Blechnum in the British Isles • Alluvial forests with Alnus glutinosa and Fraxinus excelsior • Freshwater Pearl Mussel • Sea, Brook and River Lamprey 	0.01km	Ecological and Hydrological Connectivity	Yes

	<ul style="list-style-type: none"> • Twait Shad • Salmon • Otter • Harbour Seal <p>https://www.npws.ie/protected-sites/sac/000781 21st October 2011</p>			
River Barrow and River Nore SAC (002162)	<ul style="list-style-type: none"> • Desmoulin's Whorl Snail • Freshwater Pearl Mussel • White-clawed Crayfish • Twait Shad • Sea River Lamprey • Brook River Lamprey • River Lamprey • Salmon • Estuaries • Mudflats and sandflats not covered by seawater at low tide • Reefs • Salicornia and other annuals colonising mud and sand • Atlantic salt meadows • Otter • Mediterranean salt meadows • Killarney Fern • Water courses of plain to montane levels with the Ranunculus fluitans and Callitriche-Batrachion vegetation 	c6km	Ecological Connectivity	Yes

	<ul style="list-style-type: none"> • European dry heaths • Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels • Petrifying springs with tufa formation • Old sessile oak woods with Ilex and Blechnum in the British Isles • Alluvial forests with Alnus glutinosa and Fraxinus excelsior <p>https://www.npws.ie/protected-sites/sac/002162</p>			
Holdenstown Bog SAC (001757)	Transition mires and quaking bogs	7.54km Northeast	None	No

Step 3. Describe the likely effects of the project (if any, alone or in combination) on European Sites

There is a hydrological connection from the application site to the River Slaney SAC, as the SAC lies directly adjacent to the southeast boundary. Streams and drainage ditches within the site also discharge into the River Slaney SAC. The Aghalona Stream and Knockshannagh Stream run along the northern boundary of the eastern portion of the proposed development site which subsequently connects to the Slaney River Valley SAC.

The application site also has an ecological connection with the Slaney River Valley SAC. Otter are found within the Slaney River Valley SAC and are a species for which the site is designated. Given the habitats that are present within the Application Site which are favourable to this species, it is considered that this species could be present.

The site also has an ecological connection with the River Barrow and River Nore SAC, which is limited to the otter, given the species is highly mobile and can traverse across land between suitable habitats.

I would note that the Stage 1 AA Screening Report has cited said hydrological and ecological connections but has not set out the potential impacts in relation to same within the Stage 1 Screening Report, rather an 'Assessment of Impacts' is set out in Stage 2. Notwithstanding, I am

of the view that the potential impacts are as described in the 'Assessment of Impacts', and are as follows:

- Contamination of ground and/or surface waters at construction/operational/decommissioning stage
- Disturbance of species/ex-situ loss of foraging and commuting habitat

Water

I am of the view that, in the absence of mitigation, there is potential for construction phase surface waters containing sediments, pollutants and/or cementitious materials to enter the Slaney River Valley SAC (000781) during the construction works, applying the precautionary principle, via surface water runoff to the Slaney River, or via surface water runoff to the watercourses that run alongside and run through the site as set out above, or via direct sediment and pollutant deposition to same. Other impacts related to surface water run off could result at operational stage, due to additional surface water drainage, by virtue of additional hard standing, and the potential use of chemical detergents in order to maintain the panels, as well as other potential sources of pollutants via the other plant and fixed structures on site. There is also potential impacts at decommissioning phase which would be similar to those at construction phase.

Disturbance of Species/Loss of Habitat

Given the habitats that are present within the application site which are favourable to otter, a QI of the Slaney River Valley SAC, it is considered that this species could be present, and therefore there is potential for loss of a small amount of commuting/foraging habitat and potential for disturbance of otter at construction stage (due to works), at operational stage (due to maintenance of the site and at decommissioning stage (with impacts similar to construction stage).

The site also has an ecological connection with the River Barrow and River Nore SAC which is limited to the otter, given the species is highly mobile and can traverse across land between suitable habitats. This SAC is some 6km from the site.

AA Screening matrix

Table 1

Site name Qualifying interests	Possibility of significant effects (alone) in view of the conservation objectives of the site*	
	Impacts	Effects
Slaney River Valley SAC (000781) (See QI's listed in step 2)	<u>Water Quality</u>	Potential damage to habitats associated with inadvertent spillages of hydrocarbons and/or other

	<p>At construction phases potential for surface waters containing sediments, pollutants and/or cementitious materials to enter the SAC during the excavation and construction works.</p> <p>Accidental discharges to ground could impact on the underlying bedrock aquifer and laterally within the aquifer to the Slaney River Valley SCA.</p> <p>Impact on water quality could potentially impact qualifying species and habitats.</p> <p><u>Ex-situ Loss of Habitat (Otter)</u></p> <p>Potential loss of commuting/foraging habitat for otter.</p> <p><u>Disturbance (Otter)</u></p> <p>Increase noise levels at construction, operational and decommissioning stages could result in a disturbance of otter.</p>	<p>chemicals during construction phase;</p> <p>Undermine conservation objectives related to water quality.</p> <p>Impacts on qualifying habitats and species</p> <p>Ex Situ Loss of otter commuting/foraging habitat/disturbance of otter</p>
<p>River Barrow and River Nore SAC (002162)</p> <p>(See QI's listed in step 2)</p>	<p><u>Ex-situ Loss of Habitat (Otter)</u></p> <p>Potential loss of commuting/foraging habitat for otter.</p> <p><u>Disturbance (Otter)</u></p> <p>Increase noise levels at construction, operational and decommissioning stages could result in a disturbance of otter.</p>	<p>Ex Situ Loss of otter commuting/foraging habitat/disturbance of otter</p>
	<p>Likelihood of significant effects from proposed development (alone): Yes</p>	
	<p>If No, is there likelihood of significant effects occurring in combination with other plans or projects?</p>	

	<p>Possibility of significant effects (alone) in view of the conservation objectives of the site*</p> <p>Possibility of significant effects cannot be ruled out without further analysis and assessment</p>
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Step 4 Conclude if the proposed development could result in likely significant effects on a European site

Based on the information provided in the AA screening report, site visit, review of the conservation objectives and supporting documents, I consider that in the absence of mitigation measures it is not possible to exclude the possibility that the proposed development alone would result in significant effects on the Slaney River Valley SAC(000781) and the River Barrow and River Nore SAC (002162) from effects associated with the proposed solar farm development including direct potential and indirect damage to QI habitats and QI species by way of loss of ex-situ commuting/foraging habitat (as relates to otter), and by of pollution and deterioration of water quality. An appropriate assessment is required on the basis of the possible effects of the project 'alone'. Further assessment in-combination with other plans and projects is not required at screening stage.

Screening Determination

Significant effects cannot be excluded

In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of the information considered in this AA screening, I conclude that it is not possible to exclude that the proposed development alone [or in combination with other plans and projects] will give rise to significant effects on River Barrow and River Nore SAC (002162) in view of the sites conservation objectives. Appropriate Assessment is required.

This determination is based on:

- The nature and scale of the proposed development/works.
- The hydrological/ecological connections to the Slaney River Valley SAC (000781) and the ecological connections River Barrow and River Nore SAC (002162) and the potential for significant effects on QI habitats and QI species, by way of loss of ex-situ commuting/foraging habitat and disturbance (as relates to otter), and by way of pollution and deterioration of water quality.

Appendix 4 - Standard AA Template and AA Determination

Appropriate Assessment

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

Taking account of the preceding screening determination, the following is an appropriate assessment of the implications of the following proposed development:

10 year planning permission for Solar PV energy development, battery energy storage system compound to include solar panels mounted on steel support structures and all associated works in view of the relevant conservation objectives of the Slaney River Valley SAC and the Barrow and River Nore SAC, based on scientific information provided by the applicant.

The information relied upon includes the following:

- Natura Impact Statement prepared by Neo Environmental
- Technical Appendix 2: Ecological Appraisal (and Appendices including Biodiversity Management Plan prepared by Neo Environmental
- Technical Appendix 4: Flood Risk Assessment (and Appendices) prepared by Neo Environmental
- Technical Appendix 8: Outline Construction Environmental Management Plan

I am satisfied that the information provided is adequate to allow for Appropriate Assessment. I am satisfied that all aspects of the project which could result in significant effects are considered and assessed in the NIS and mitigation measures designed to avoid or reduce any adverse effects on site integrity are included and assessed for effectiveness.

Submissions/observations

The Department of Housing, Heritage and Local Government-DAU state that mitigation measures in the NIS should be implemented in full.

Planning Authority

The Environment section of Carlow County Council assessed both the Stage 1 Screening Report and the NIS and objectively concluded that the proposed development will not adversely affect the integrity of a Natura 2000 sites, and there is no reasonable scientific doubt in relation to this conclusion.

Public Observations

An observer submission has stated that the impact on the Aghalona River must be considered the potential for toxic chemical runoff from cleaning panels and as a result of chemical leaching from the panels.

Slaney River Valley SAC (000781)

Summary of Key issues that could give rise to adverse effects (from screening stage):

- (i) Water quality degradation (and subsequent effects on QI habitats and species)**
- (ii) Disturbance of mobile species (otter)**
- (iii) Ex-situ loss of commuting habitat (otter)**

The Stage 2: NIS sets out a detailed description of the Slaney River Valley SAC. The NIS sets out the various species and habitats associated with the SAC, and highlights potential impacts on same, in the absence of mitigation. It is noted that not all of the habitats and species within the SAC may be potentially impacted by the proposed development. Specifically, it set out in the NIS that Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* and alkaline fens are both qualifying features of the Slaney River Valley SAC. It is stated that these habitats are not found within the Application site boundary. It is then stated that there will be no loss or contamination of any of the qualifying habitats of the SAC from the Proposed Development. However, there is no further discussion in relation to other qualifying habitats of the SAC within the NIS, and no additional reasoning as to why potential impacts on same have been ruled out. Notwithstanding, I am of the view that those mitigation measures in place relating to potential impacts on *species* within the SAC (as discussed below) would also prevent potential impacts on any *habitats* within the SAC, and therefore I am satisfied that the NIS is not fundamentally undermined in this regard.

I would note that there is contradictory information within Section 1.70 of the NIS, wherein it is stated that the site is not hydrologically connected to the Slaney River Valley SAC. I am assuming that this is a drafting error, as there is ample evidence elsewhere in the NIS, and the other application documentation that the site is, in fact, hydrologically connected to the SAC, for the reasons as described above. I would note a further error in Section 1.71 wherein it is stated that the majority of the site is located within the Slaney River Valley SAC. This is not the case, as the site lies adjacent to, and not within, the Slaney River Valley SAC, and again I am assuming it is a drafting error. However, I am satisfied that same does not undermine the NIS, or the conclusions therein as the site context is accurately described elsewhere in the NIS, and other application documents.

I have considered potential impacts on qualifying habitats and species associated with the Slaney River Valley SAC in Table 2 below, with reference to information within the NIS, and as available on the NPWS website⁷.

River Barrow and River Nore SAC (002162)

Summary of Key issues that could give rise to adverse effects (from screening stage):

- (i) Disturbance of mobile species (otter)**
- (ii) Ex-situ loss of commuting habitat (otter)**

Section 1.76 to 1.80 sets out a detailed description of the River Barrow and River Nore SAC (002162). This SAC is located approximately 6km from the application site. It is noted within the NIS that otter is a highly mobile species and can hold territories from 2km to 40km.

As noted at Stage 1 Screening the only potential ecological connection to same is by way of the Otter, and that this SAC is not hydrologically connected to the proposed development site. Potential impacts on otter are related to ex-situ loss of commuting habitat and disturbance.

In order to populate the table below, I have made reference to the NIS and the NPWS website⁸.

Table 2

Qualifying Interest features likely to be affected	Conservation Objectives	Potential adverse effects	Mitigation measures (summary)
Slaney River Valley SAC (000781)			
Freshwater Pearl Mussel <i>Margaritifera margaritifera</i>	The status of the freshwater pearl mussel (<i>Margaritifera margaritifera</i>) as a qualifying Annex II	Potential overland flow of construction stage silt/pollutants from the	Measures as described below including

⁷ <https://www.npws.ie/>

⁸ https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000781.pdf & https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002162.pdf

	species for the Slaney River Valley SAC is currently under review. The outcome of this review will determine whether a site-specific conservation objective is set for this species.	watercourses adjacent to the site can result in indirect habitat loss or deterioration as well as reduction in density of qualifying aquatic species.	<ul style="list-style-type: none"> • Pollution Prevention Measures • Buffer Zones • Pre-construction Surveys (Otter)
Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles (91A0)	Restore favourable conservation condition. No decline in habitat distribution.		
Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) (91E0)	Restore favourable conservation condition. No decline in habitat distribution.		
Sea River Lamprey <i>Petromyzon marinus</i> (1095)	Restore favourable conservation condition. No decline in extent and distribution of spawning beds. Artificial barriers can block or cause difficulties to upstream migration, thereby limiting species to lower stretches and restricting access to spawning areas. Target is greater than 75% of main stem length of rivers accessible from estuary.	As above	

<p>Brook Lamprey <i>Lampetra planeri</i> (1096)</p>	<p>Restore favourable conservation condition.</p> <p>Artificial barriers can block or cause difficulties to upstream migration, thereby limiting species to lower stretches and restricting access to spawning areas.</p> <p>Targets are access to all watercourses down to first order stream and no decline in extent and distribution of spawning beds.</p>	<p>As above</p>	
<p>River Lamprey <i>Lampetra fluviatilis</i> (1099)</p>	<p>Restore favourable conservation condition.</p> <p>Artificial barriers can block River Lampreys' upstream migration, thereby limiting species to lower stretches and restricting access to spawning areas.</p> <p>Targets are no decline in extent and distribution of spawning beds and greater than 75% of main stem and major tributaries down to second order accessible from estuary.</p>	<p>As above</p>	
<p>Atlantic Salmon <i>Salmo salar</i> (only in fresh water) (1106)</p>	<p>Restore favourable conservation condition.</p>	<p>As above</p>	

	<p>Artificial barriers can block salmon's upstream migration, thereby limiting species to lower stretches and restricting access to spawning areas</p> <p>No decline in number and distribution of spawning redds due to anthropogenic causes</p>		
<p>Otter <i>Lutra Lutra</i> (1355)</p>	<p>Restore favourable conservation condition.</p> <p>Target is no significant decline in distribution of extent of terrestrial, marine and freshwater habitat or couching sites, holts and fish biomass.</p>	<p>As above AND</p> <p>Ex-situ loss of foraging/commuting habitat</p> <p>Disturbance</p>	
<p>Twaite Shad <i>Alosa fallax</i></p>	<p>Restore favourable conservation condition.</p> <p>In some catchments, artificial barriers block twaite shads' upstream migration, thereby limiting species to lower stretches and restricting access to spawning areas.</p> <p>Target is greater than 75% of main stem length of rivers accessible from estuary</p>	<p>Potential overland flow of construction stage silt/pollutants from the watercourses adjacent to the site can result in indirect habitat loss or deterioration as well as reduction in density of qualifying aquatic species.</p>	<p>Measures as described below including</p> <ul style="list-style-type: none"> • Pollution Prevention Measures • Buffer Zones

Estuaries (1130)	<p>Maintain favourable Conservation Condition.</p> <p>Target is the permanent habitat area is stable or increasing, subject to natural processes</p>	<p>Significant impacts unlikely noting location of habitat which is at least 60 km downstream from the site</p>	n/a
Mudflats and sandflats not covered by seawater at low tide (1140)	<p>Maintain favourable Conservation Condition.</p> <p>Target is the permanent habitat area is stable or increasing, subject to natural processes</p>	As above.	n/a
Harbour Seal <i>Phoca vitulina</i> (1365)	<p>Maintain favourable Conservation Condition</p> <p>Target is species range within the site should not be restricted by artificial barriers to site use</p>	As above.	n/a
Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation	<p>Maintain favourable Conservation Condition</p> <p>The full distribution of this habitat and its sub-types in this site is currently unknown. Target is no decline, subject to natural processes.</p>	<p>Potential overland flow of construction stage silt/pollutants from the watercourses adjacent to the site can result in indirect habitat loss or deterioration as well as reduction in density of qualifying aquatic species.</p>	<p>Measures as described below including</p> <ul style="list-style-type: none"> • Pollution Prevention Measures • Buffer Zones

Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation	Maintain favourable Conservation Condition Target is typical species of the relevant habitat sub-type reach favourable status.	Potential overland flow of construction stage silt/pollutants from the watercourses adjacent to the site can result in indirect habitat loss or deterioration as well as reduction in density of qualifying aquatic species.	Measures as described below including <ul style="list-style-type: none"> • Pollution Prevention Measures • Buffer Zones
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River Barrow and River Nore SAC (002162)

Qualifying Interest features likely to be affected	Conservation Objectives	Potential adverse effects	Mitigation measures (summary)
<p>Targets and attributes (summary)</p>	<p>Targets and attributes (summary)</p>		<p>NIS Sections as referred to below</p>
<p>Otter <i>Lutra Lutra</i> (1355)</p>	<p>Restore favourable conservation condition.</p> <p>Target is no significant decline in distribution of extent of terrestrial, marine and freshwater habitat or couching sites, holts and fish biomass.</p>	<p>Ex-situ Loss of commuting habitat Disturbance</p>	<p>Measures as described below including</p> <ul style="list-style-type: none"> • Buffer Zones • Pre-construction surveys

The above table is based on the documentation and information provided on the file, as well as information provided on the NPWS Website. While the NIS has not set out in detail the relevant attributes and targets of the Qualifying Interests, there is sufficient detail that can be gained from the sources noted in order to carry out an Appropriate Assessment of the proposed development. Of particular note in this instance, I note the target of no significant decline in distribution of extent of terrestrial, marine and freshwater habitat or couching sites, holts and fish biomass in respect of Otter.

Assessment of issues that could give rise to adverse effects view of conservation objectives

With respect to each of the matters addressed below I note that neither the Department of Housing, Local Government and Heritage nor Carlow County Council has raised any concerns in respect of issues that could give rise to adverse effects on the European site in view of its conservation objectives.

(i) Water quality degradation

There is potential for overland flow of construction stage silt/pollutants from the watercourses crossing the site to enter into the Slaney River Vally SAC and result in indirect habitat loss or deterioration as well as reduction in density of qualifying aquatic species.

This also has the potential to undermine the respective SSCO attribute and target in relation to QI aquatic species cited above, and QI habitats which may be impacted by a decline in water quality.

In particular, these impacts could have a significant impact on Otter populations from degradation of drainage ditches which may support commuting Otter. This has the potential to undermine the respective SSCO attribute and target in relation to the decline of couching sites and holts, fish biomass available and/or distribution.

(ii) Loss of Otter foraging and/or commuting Habitat/Disturbance

For the reasons previously cited, the proposed development could result in a direct loss of otter foraging/commuting habitat in the absence of mitigation and could result in disturbance to same.

While no otter activity was observed within or directly adjacent to the application site, during survey work suitable habitat was identified within the site. The construction, operational and decommissioning phases of the proposed development has the potential to cause disturbance to Otters occurring through the movement of vehicles (noise) and site workers.

As such the proposed development, the potential to undermine the respective SSCO attribute and targets in relation to distribution and terrestrial and freshwater habitat or couching sites, holts and fish biomass, for both the Slaney River Vally SAC and for the River Barrow and River Nore SAC.

Mitigation measures and conditions

Section 1.99 of the NIS sets out Design, Best Practice and Mitigation Measures (the supporting text refers to these as 'mitigation measures'). I am of the view that the proposed buffer zones, and those measures designed to prevent surface water contamination at construction, operational and decommissioning stage could be construed to constitute

'mitigation measures' designed to reduce impacts on the Slaney River Valley SAC, noting the proximity of the SAC to the application site. However, notwithstanding, I am satisfied that these measures can be considered as mitigation measures for the purposes of Stage 2 Appropriate Assessment.

Such Measures include:

Pollution Prevention

- 5m buffer from wet field drains/2m buffer from dry field drains in order to prevent pollution from the aquatic environment.
- Best practice pollution measures implemented prior to and throughout the construction phase to prevent contaminants entering the aquatic environment.
- Relevant guidance will be adhered to prior to and throughout the construction phase to prevent contaminants entering the aquatic environment including Control of Water Pollution from Construction Sites (C532), Control of Water Pollution from Linear Construction Projects: Technical Guidance (C648) and Environmental Good Practice on Site (C692)

Section 1.02 of the NIS sets out detailed water pollution prevent measures to be adhered to at Construction Stage including but not limited to appropriate storage of fuels and other potential pollutants. It is also set out that a Drainage Management Plan will be adhered to at construction phase (Section 1.111 refers). Emergency Spill or Pollution Response measures are set out in Section 1.113 to 1.116 of the NIS.

At both construction and operational stage, reference is made to the Flood Risk and Drainage Impact Assessment, wherein details of SuDS measures are set out, in the form of soakaway channels. Measures relating to surface water management, at Construction and Operational Stages are set out in the NIS. Other measures in relation to the prevention of surface water pollution are set out within 1.128 to 1.130 of the NIS (in relation to clean water diversion), Sections 1.132 to 1.134 (in relation to Silt Control).

At decommissioning stage, the NIS notes that the pollution prevention measures, as set out in the NIS (and as set out in the CEMP) will also be implemented at decommissioning stage, with all relevant staff being made aware of same, at both construction and decommissioning stages.

I am satisfied that the proposed mitigation measures are adequate to ensure that water quality is not degraded as a result of the proposed development.

Otter

- Mammal gates within the security fencing in order to overcome loss of commuting/foraging habitat for otter.
- All excavations to be securely covered or a suitable means of escape provided at the end of each working day in order to overcome accidental trapping within excavations.
- Pre-commencement survey to overcome potential disturbance.⁹

In addition to the above, I note that the NIS states that otters are primarily nocturnal and are therefore much more likely to be active during times when construction, operational and decommissioning noise and activity levels at the site are low. As such I am satisfied that the limitations on site development and building work hours (which can be ensured by way of condition), in conjunction with the proposed pre-construction otter survey, will ensure disturbance to otter will be minimised.

As such, and specifically in relation to otter, I am satisfied that the proposed mitigation measures are adequate and will be effective in ensuring that the attributes required to restore the favourable conservation condition for otter will not be adversely affected and that the proposed development will not prevent the attainment of the conservation objective to restore/maintain favourable conservation condition. Mitigation measures are captured in planning conditions of the Inspector's Report.

In-combination effects

I am satisfied that in-combination effects have been assessed adequately in the NIS. The NIS considered in combination effects (cumulative effects) in Section 1.135 to 1.166 of the NIS. In particular the NIS set out in Table 1.11, other developments within 5km of the proposed development, and 8 no. consented solar farms are identified. A description of same is set out and, for each project, it is noted that no significant effects on any Natura Sites would result from same.

Having regard to the above, I am satisfied that the applicant has demonstrated satisfactorily that no significant residual effects will remain post the application of mitigation measures and there is therefore no potential for in-combination effects.

Findings and conclusions

⁹ I note that pre-commencement surveys in relation to badgers and birds are also cited as mitigation measures within the NIS. These are not relevant within the Stage 2 Appropriate Assessment being carried out here, noting in particular that potential impacts on any SPAs have been ruled out at Stage1, and noting badger is not a QI of the Slaney River Valley SAC, nor of the River Barrow and River Nore SAC, the 2 no. Natura sites under considered here.

The applicant determined that following the implementation of mitigation measures the construction and operation of the proposed development alone, or in combination with other plans or projects, will not adversely affect the integrity of the Slaney River Valley SAC and the River Barrow and River Nore SAC.

Based on the information provided, and submissions made, I am satisfied that adverse effects arising from aspects of the proposed development can be excluded for the both the Slaney River Vally SAC and for the River Barrow and River Nore SAC as considered in the NIS. I am satisfied that the mitigation measures proposed to prevent adverse effects have been assessed as effective and can be implemented and conditioned if permission is granted.

Reasonable scientific doubt

I am satisfied that no reasonable scientific doubt remains as to the absence of adverse effects.

Site Integrity

The proposed development will not affect the attainment of the Conservation objectives of the Slaney River Vally SAC and for the River Barrow and River Nore SAC. Adverse effects on site integrity can be excluded and no reasonable scientific doubt remains as to the absence of such effects.

Appropriate Assessment Conclusion: Integrity Test

In screening the need for Appropriate Assessment, it was determined that the proposed development could result in significant effects on the Slaney River Vally SAC (007781) and the River Barrow and River Nore SAC (002162), in view of the conservation objectives of the sites, and that Appropriate Assessment under the provisions of S177U was required.

Following an examination, analysis and evaluation of the NIS, all associated material submitted including further information and submissions/observations, I consider that adverse effects on site integrity of the Slaney River Vally SAC (007781) and the River Barrow and River Nore SAC (002162) can be excluded in view of the conservation objectives of these sites and that no reasonable scientific doubt remains as to the absence of such effects.

My conclusion is based on the following:

- A detailed assessment of construction, operational and decommissioning impacts.
- The effectiveness of the mitigation measures proposed.
- The inclusion of planning conditions to ensure the application of these measures.
- The proposed development will not affect the attainment of conservation objectives for the Slaney River Valley SAC (007781) nor for the River Barrow and River Nore SAC (002162).

Appendix 5 - WFD Impact Assessment Stage 1: Screening

Step 1: Nature of the Project, the Site and Locality

An Bord Pleanála ref. no.	ABP-323427-25	Townland, address	Lands including Straboe and Killerrig, Carlow, Co. Carlow
Description of project	<p>10 year planning permission on a site of c132.28ha for Solar PV energy development battery energy storage system compound to include solar panels mounted on steel support structures and all associated works.</p> <p>The application includes an AA Screening Report, Natura Impact Statement, an Ecological Appraisal, a Flood Risk and Drainage Impact Assessment, and an Outline Construction Environmental Management Plan. These reports contain references to matters relating to the Water Framework Directive Screening Assessment.</p>		
Brief site description, relevant to WFD Screening,	<p>The proposed solar farm has a stated site area of c.132.2ha and the solar panels themselves will be located within a total of 31 no. separate field parcels</p>		

Of particular relevance to WFD Screening, is the description of the site's topography, hydrology, hydrogeology as set out in the Flood Risk and Drainage Impact Assessment, and I have summarised same below.

The site River Slaney is located x m from the southernmost boundary of the site (the Slaney River Valley SAC boundary itself is 5m from the site, adjacent to the southeast boundary of the Application Site, on the opposite side of the R726 Road. The Aghalona Stream and Knockshannagh stream runs along the northern boundary of the eastern area which are connected to the Slaney River Valley SAC. The Aghalona Stream flows along the northern boundary of the site and intersects the most western fields.

Generally, the Application Site slopes downwards to the north and west with exception to sections of Fields 9, 11 – 16 and 24 – 31 where there are slopes down to the east and south towards the nearest drain/watercourse. The high point of 123.49m AOD is located on the northern boundary of Field 15, whilst the low point of 85.68m AOD is located in the northern corner of Field 1.

The proposed Application Site and the surrounding area lies within Hydrometric Area No.12 Slaney and Wexford Harbour and No.14, Barrow (Water Framework Directive) Catchment Area. The Application Site lies within the Slaney sub catchment 'SC_020' and Barrow sub

catchment 'SC_090'. The Application Site lies within the Slaney_090, Slaney_100 and Aghalona_010 river sub basins.

The Aghalona Stream's source is located approximately 1.7km north of Field 23 and runs in a southwest direction and flows along the northern boundaries of Field 23, 2 and 1. Continuing in a southwest direction, the Aghalona Stream converges with the River Burren approximately 5.4km southwest of the Application Site and eventually joins the River Barrow approximately 9.4km west of the Application Site. The Straboe Watercourse begins on the southern boundary of Field 9 and runs in a western direction to converge with the Aghalona Stream on the northern boundary of Field 2. The Knockshannagh Stream runs in a western direction along the northern boundary of Field 23 and converges with the Aghalona Stream on the same boundary. An unnamed watercourse starts on the southern boundary of Field 12 and flows in a southeast direction before converging with the River Slaney approximately 0.9km southeast of the Application Site. The Downings Watercourse source is approximately 0.4km north of Field 29 and flows in a southeast direction before converging with the River Slaney approximately 0.6km southeast of the Application Site (Figure 4.1: Appendix 4A shows the watercourses in relation the Application Site). Field drains bound most of the fields within the application site itself.

In terms of underlying hydrogeology, and as set out in the FRA, the site lies above the New Ross Groundwater Body (GWB) and Ballyglass GWB. The underlying bedrock aquifer relating to the New Ross Groundwater Body (GWB) at the Application Site is considered by GSI to be

	<p>poorly productive. The underlying bedrock aquifer relating to the Ballyglass GWB at the Application Site is considered by GSI to be poorly productive. The groundwater vulnerability across the Application Site is predominantly considered to be 'High' and 'Moderate', with areas of Field 10, 17 and 18 classed as 'Extreme' and 'Karst'.</p>
<p>Proposed surface water details</p>	<p>The installation of solar panels in the agricultural fields is not expected to give rise to any material increased surface water runoff (volumes or rates), which will be facilitated by the maintenance of grass underneath the panels.</p> <p>Access tracks are to be constructed using permeable materials, from which surface water will infiltrate naturally to the ground. These elements of the scheme are design to preserves peak water runoff rates at natural levels. There will be areas of hard standing relating the electrical inverter/transformer stations and spare parts containers. However, the total impermeable area will be 6,307 sq. m. or 0.48% of the overall site area and will not have any material impact on drainage from the site (as concluded within the Flood Risk and Drainage Impact Assessment).</p> <p>The Senior Engineer's Report in the Planning Department proposed a condition that the ground under the proposed solar panels shall be maintained as grassland and remain permeable so that there is no net increase in the discharge rate or runoff volume from the site. The report also proposed conditions regarding surface water and sediment control, access</p>

	tracks of permeable gravel and stormwater from cabins or sealed bunds to pass through a suitability designed and located and maintained oil interceptor prior to discharge. Environment proposed conditions regarding to <i>inter alia</i> the prevention of water pollution.
Proposed water supply source & available capacity	N/A
Proposed wastewater treatment system & available capacity, other issues	N/A
Others?	N/A

Step 2: Identification of relevant water bodies and Step 3: S-P-R connection

Identified water body	Distance to (m)	Water body name(s) (code)	WFD Status	Risk of not achieving WFD Objective e.g.at risk, review, not at risk	Identified pressures on that water body¹⁰	Pathway linkage to water feature (e.g. surface run-off,

¹⁰ <https://catchments.ie/wp-content/files/catchmentassessments/12%20Slaney%20&%20Wexford%20Harbour%20Catchment%20Summary%20WFD%20Cycle%203.pdf>

						drainage, groundwater)
River Waterbodies						
River Waterbody	0m	SLANEY_090 IE_SE_12S02120 0	Moderate (Monitoring)	At Risk	Ag	Surface water runoff, drainage
River Waterbody		SLANEY_100 IE_SE_12S02140 0	Poor (Monitoring)	At Risk	Ag, UWW	Surface water runoff, drainage
River Waterbody	0m	AGHALONA_010 IE_SE_14A02010 0	Moderate (Monitoring)	At risk	Ag	Surface water runoff, drainage
Groundwater Bodies						
Groundwater waterbody	Underlying site	Ballyglass (IE_SE_G_011)	Good	Not at risk	No pressures	Well drained sub soil conditions

Groundwater waterbody	Underlying site	New Ross (IE_SE_G_152)	Good	Not at risk	No pressures	Well drained sub soil conditions	
Step 4: Detailed description of any component of the development or activity that may cause a risk of not achieving the WFD Objectives having regard to the S-P-R linkage.							
CONSTRUCTION PHASE							
No.	Component	Water body receptor (EPA Code)	Pathway (existing and new)	Potential for impact/ what is the possible impact	Screening Stage Mitigation Measure*	Residual Risk (yes/no)	Determination** to proceed to Stage 2. Is there a risk to the water environment ? (if 'screened' in or 'uncertain' proceed to Stage 2.
1.	Surface	SLANEY_090	Waterbodies/Ditches close to and within the site/Downstream pathway	Runoff, siltation, pH (concrete), hydrocarbon	Mitigation measures as set out in the NIS, the Flood and Drainage Impact	No. During the construction phase, works will be	Screened out

				<p>spillages and leaks.</p> <p>Potential risk of contaminants which enter the groundwater to flow laterally towards the receiving water supplies.</p> <p>Could lead to potential negative effects in terms of the hydrological and hydrogeological flow regime and water quality.</p>	<p>Assessment and as set out in the Outline Construction and Environmental Impact Plan (CEMP). These include, but, are not limited to:</p> <p>5m buffer from wet field drains/2m buffer from dry field drains in order to prevent pollution from the aquatic environment.</p> <p>Best practice pollution measures</p>	<p>undertaken in accordance with the mitigation measures as set out in the documents referred to.</p>	
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					<p>implemented prior to and throughout the construction phase to prevent contaminants entering the aquatic environment.</p> <p>Relevant guidance will be adhered to prior to and throughout the construction phase to prevent contaminants entering the aquatic environment.</p>		
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					Appropriate storage of fuels and other potential pollutants. Adherence to a Drainage Management Plan.		
2.	Surface	SLANEY_100	As above.	As above.	As above	As above.	Screened out
3.	Surface	AGHALONA_010	As above.	As above.	As above	As above.	Screened out

4.	Ground	Ballyglass	Underlying the site.	Introduction of contaminants to sub-surface flow paths, which could lead to potential negative effects in terms of the hydrological and hydrogeological flow regime and, therefore, effect water quality.	None	As above	Screened out
5	Ground	New Ross	Underlying the site.	As above	As above	As above	Screened out
OPERATIONAL PHASE							
1.	Surface	SLANEY_090	Waterbodies/Ditches close to and within	Surface water runoff from roads and the	Surface water will be managed in accordance with	No. The risks associated	Screened out

			<p>the site/Downstream pathway</p>	<p>impermeable areas may contain potentially contaminating compounds (petroleum hydrocarbons, metals, and suspended sediments) which could enter the watercourse.</p>	<p>SuDS and the nature-based solutions to treat and attenuate water before infiltration to ground or discharging offsite.</p> <p>Discharge will also be maintained at greenfield / baseline rates, and the proposed development will not increase the risk of flooding elsewhere in the catchment.</p>	<p>with the operational phase are not expected to be significant and infiltration rates will be maintained with the proposed development in place, and there will be no net increase in surface water runoff</p>	
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						leaving the site.	
	Surface	SLANEY_100	As above	As above	As above	As above	Screened out
	Surface	AGHALONA_010	As above	As above	As above	As above	Screened out
	Ground	Ballyglass	Underlying the site.	Surface water runoff from roads and the impermeable areas may contain potentially contaminating compounds (petroleum hydrocarbons, metals, and suspended	As above	As above	Screened out

				sediments) which could enter the underlying groundwater.			
	Ground	New Ross	Underlying the site.	Surface water runoff from roads and the impermeable areas may contain potentially contaminating compounds (petroleum hydrocarbons, metals, and suspended sediments)	As above	As above	Screened out

				which could enter the underlying groundwater.			
DECOMMISSIONING PHASE							
1.	Surface	SLANEY_090	Waterbodies/Ditches close to and within the site/Downstream pathway	Runoff, siltation, pH (concrete), hydrocarbon spillages and leaks. Potential risk of contaminants which enter the groundwater to flow laterally towards the receiving water supplies.	Standard decommissioning practices and mitigation.	No. During the decommissioning phase, it is expected that works will be undertaken in accordance with a decommissioning	No. Screened out. Standard decommissioning practices will minimise the risk of pollution and impact upon receiving waterbodies.

				<p>Could lead to potential negative effects in terms of the hydrological and hydrogeological flow regime and water quality.</p> <p>After decommissioning, the land will be reinstated to its original agricultural use.</p>		<p>oning plan.</p> <p>The solar arrays will be removed upon decommissioning of the solar farm and taken offsite for disposal at a licenced waste facility.</p> <p>The project can be fully reversed upon decommissioning.</p>	
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2	Surface	SLANEY_100	As above	As above	As above	As above	As above
3	Surface	AGHALONA_01 0	As above	As above	As above	As above	As above
4	Ground	Ballyglass	Underlying site	As above	As above	As above	As above
5	Ground	New Ross	Underlying site	As above	As above	As above	As above