

Inspector's Report ACP-322347-25

Development A 10 Year Planning Permission for a

solar farm with a total area of circa

192 hectares. The operational lifespan of the solar farm will be 40 years. A Natura Impact Statement (NIS) has

been prepared.

Location In the townlands of Ballybar Upper

Ballyloo, Ballyryan, Garryhundon and

Linkardstown, County Carlow.

Planning Authority Carlow County Council

Planning Authority Reg. Ref. 2460043

Applicant(s) Ballyloo Solar Farms Limited

Type of Application Permission

Planning Authority Decision Refuse Permission

Type of Appeal First Party

Appellant(s) Ballyloo Solar Farms Ltd

Observer(s) Lukasz and Susan Osinski

Jim Cole

Brian Cole

Fergus and Aileen Cole

Eric Cole

Date of Site Inspection

10th July 2025

Inspector

Joe Bonner

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1.0 Site Location and Description

- 1.1. The site is made up of 4 separate irregularly shaped parcels of land, each consisting of a number of fields, spread out over the five townlands. The area is generally characterised by wide open agricultural fields marked by trees and hedgerow boundaries and are used for grazing and for crops. From its northernmost point the site extents in a south and south eastern direction over a distance of c3.4km. The elevation of the site ranges from c50mOD (in Parcel 1) to 165mOD (in Parcel 3).
- 1.2. Parcel 1 (32.62ha) is the northernmost part of the site and starts c85m to the south of the M9 motorway, mid-way between exits 5 and 6, is c3.6km south of the southern edge of Carlow town and is c0.81km to the east of the rail line connecting Waterford to Dublin via Carlow. Parcel 1 is c2.35km east of the River Barrow at its closest point. It is located in the townland of Ballybar Upper and has a maximum width of c690m east to west and c960m north to south. The ground levels are higher than the level of the M9 to the north/northwest. It has c500m of road frontage onto the western side of the L-3051 and is served by an existing agricultural entrance, with good sightlines in both direction. The nearest house to parcel 1 is located c120m to the east of its northernmost boundary, and is part of a group of 4 houses located in close proximity to the M9 motorway. A part single and part two storey house faces northwest towards the site at a distance of c170m from the proposed new eastern boundary in the middle of an existing field. The roadside boundary consists of a mix of individual trees and mixed hedging. The immediate area is relatively flat and slopes downhill from north to south.
- 1.3. The northern boundaries of Parcel 2 (83.52ha) lie c600m south of Parcel 1, between which c20 private house are located, with several houses located as close as 20m from the northern boundary. Parcel 2 is located in the townlands of Garryhundon and Ballyloo and has a maximum depth of c1.3km north to south, while it extends c1.4km west to east, where it would be accessed from the L3052 via an existing agricultural / farmyard entrance. The site boundary is set back from the L3052, to the north and south of the proposed access, with the nearest element of the proposed development c36m from the roadside boundary. The boundary to the north of the entrance consists of mature high hedging and several trees, while a large farmyard and sheds that accommodate pigs is located between the site and the L3052. The

- boundary to the south of the entrance is more open and is set back c175m from the roadside edge. Most of the site is relatively flat but gradually rises from west to east before rising quickly from the southeastern boundary towards the L-3052.
- 1.4. Parcel 3 (64.23ha) is located in the townlands of Ballyloo and Ballyryan. The entrance of Parcel 3 would be located directly opposite Parcel 2 on the L3052 and is an existing agricultural entrance. An underground cable would be laid across the road at this point to electrically connect the two parcels of land. Parcel 3 is long, irregularly shaped and narrow and would extend north to south for a distance of c1.96km, with the widest part of the site c635m at its southern end. The site boundary extends to the edge of the L-3052 in two separate stretches to the north of the proposed entrance and would have a combined road frontage of c360m. This boundary is marked by low hedging. A existing electricity line runs north to south through the northwestern corner of Parcel 3, while the land generally rises uphill from the road to the east and also rises uphill gradually from north to south.
- 1.5. The northeastern boundary of Parcel 3 has c215m of frontage onto the L3050 that connect to the N80 to the east. This boundary consists of relatively mature hedging and trees while a drain runs along the roadside of the boundary. From the L3050 the land rises uphill from north to south and from the road to the west to a central ridge, before falling downhill again towards the L3052. A number of houses are located in close proximity to different parts of parcel 3, with the nearest houses to panels at the northwestern part of the parcel being c85m, while a farmhouse that is accessed from the L3050, just east of where the revised substation is proposed, is c95m east of the nearest proposed panels. Further south, two houses on the eastern side of the L3052 would be c250m and c85m from the nearest panels.
- 1.6. Parcel 4 (11.6ha) lies directly to the east/northeast of Parcel 3 on the eastern side of the L3050. It has c282m of road frontage and was originally proposed to accommodate the site of the proposed substation. This site is rectangular in shape and has a depth of c525m, while the land is elevated above the road level and rises uphill to the rear/east. The N80 lies c 2.2km to the east of the site at its nearest point. This area was removed following the request for further information.
- 1.7. Notable local features are a large quarry c470m south of Parcel 1 and c620m west of Parcel 2, while the village of Nurney lies c1.2km to the south west of Parcel 3.

1.8. The Kellis 220/1100kV substation, is located c5km to the east of the site. It is proposed that the development would connect to the substation, but that does not form part of the application and will be applied for under a separate SID application.

2.0 **Proposed Development**

- 2.1. The originally proposed development consists of a solar photovoltaic energy development with a total site area of 192 ha, including:
 - Solar panels on ground mounted frames,
 - 30 no. single storey electrical inverter/transformer stations,
 - 4 no. single storey spare parts containers,
 - 4 no. Ring Main Units,
 - 8 no. weather stations,
 - Underground electrical ducting and cabling within the development site, private lands and within the L3051, L3052 and L3050 public roads to connect solar farm field parcels,
 - Security fencing and CCTV
 - Access Tracks
 - 2 no. stream deck crossings and 1 no. horizontal directional drill
 - Temporary construction compounds
 - Landscaping and all associated ancillary development and drainage works.
 - Access via 4 no. entrances from the L3051, L3052 and L3050.
- 2.2. Planning permission is sought for a period of 10 years and a 40 year operational lifespan. The application includes a NIS.
- 2.3. The planning application was accompanied by the following support documents:
 - Planning and Environmental Statement
 - Environmental Impact Assessment Screening Report
 - Ecological Impact Assessment Report & Outline Biodiversity Management Plan

- Appropriate Assessment Screening Report
- Natura Impact Statement
- Archaeological, Architectural and Cultural Heritage Assessment Report
- Construction and Environmental Management Plan
- Decommissioning and Site Restoration Plan
- Electrical Infrastructure Construction Methodology
- Electromagnetic Field and Electromagnetic Compatibility Assessment
- Glint and Glare Assessment
- Landscape and Visual Impact Assessment
- Noise Impact Assessment
- Site Access and Drainage Report
- Site Specific Flood Risk Assessment
- Photomontages / Viewpoints
- Landowner Consent
- Statutory Undertaker Confirmation Letter
- Maps and drawings including landscape and biodiversity plans.
- 2.4. A grid connection is not part of the application, but the applicant has engaged with the Commission, by way of a pre application consultation (ABP-321855-25) and on the 22nd of July 2025 the Commission advised the applicant, Ballyloo Solar Farm Limited that the development would be strategic infrastructure and that an application for approval must be made directly to the Commission (see 4.1). The applicant has also engaged with the Commission regarding a design flexibility option for a grid connection and this process is ongoing (ABP-321858-25) (see 4.1.5).
- 2.5. Following a request for further information the applicant submitted the following updated reports: 1) Archaeological, Architectural, and Cultural Heritage Impact Assessment; 2) Construction Environmental Management Plan (CEMP); 3) Landscape and Visual Impact Assessment; 4) Decommissioning and Restoration Management Plan, as well as additional photomontages and revised drawings.

- 2.6. The proposed amendments to the development at further information stage included:
 - Omission of c.11.6 ha of panels in the eastern most Parcel 4 and the relocation of the proposed substation from parcel 4 to parcel 3 (future SID application).
 - Altered layout and reduction in panels in other areas (in Parcels 1, 2 and 3) following archaeological investigations.
 - Omission of 2 no. inverters / transformers (now 28), 1 no. spare parts containers (now 3), 1 no. weather station (now 7), previously proposed horizontal directional drill, and modifications in underground cabling and access track lengths.
 - Related landscaping alterations include an additional 3,523 linear meters of new hedgerow planting, bolstering of 13,425 linear meters of existing hedgerows, as required, in addition to 2,611 sqm of native woodland planting and the sowing of 99,257 sqm of field margins in support of biodiversity gain.
- 2.7. The applicant also advised as part of the appeal, that the proposed solar farm would have the capacity to generate 203,960MW hours of renewable energy per annum.

3.0 Planning Authority Decision

3.1. Decision

The planning authority decided to refuse permission on the 25th of March 2025 for a single extensive reason, which is set out in full below.

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 visual impact on the landscape, by adopting a presumption against development on elevated or visually exposed sites or areas, and by protecting the aesthetic attributes of views and prospects. Solar energy policy in the CDP and County Renewable Energy Strategy applies a risk-based mapping approach to the sustainability suitability of locations for solar farms, by adding up the risk levels at certain distances from material assets, natural physical attributes

and sensitive receptors such as elevated lands and existing settlements, and ranging from high (maximum) risk to low (minimum) risk. It is considered that the proposed solar farm development on a total area of circa 192 hectares proximate to existing settlements and higher concentrations of residential amenity and including an eastern portion on elevated on more visually sensitive lands comprising the Farmed Ridges landscape type, by itself and cumulatively with proposed and permitted solar farm developments, would:

- (a) have disproportionate and adverse landscape and visual impacts on the character of the rural area;
- (b) would result in disproportionate impacts on an area with a higher concentration of residential amenity;
- (c) would be out of scale with and would unduly detract from and erode those characteristics which contribute to its landscape value, including primarily rural agricultural landscape, field pattern character, setting and visual aspect;
- (d) would negatively impact on the established appearance and aesthetic attributes and scenic quality of protected scenic route numbers 5, 6, 7, 8 and 9 and protected view numbers 31, 32 and 33, as identified in the Carlow County Landscape Character Assessment; and,
- (e) would, 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 and 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, the 'Carlow Landscape Character Assessment and Schedule of Protected Views.', Solar energy policy, including the County Renewable Energy Strategy, and would therefore 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 following 11 point request for further information was recommended:
 - 1 The Landscape and Visual Impact Assessment (LVIA) has not considered longer-range views from the elevated higher ground to the west and southwest across the site, from the full extent of the Ballyryan scenic route or from the Seskin Lower M9 Motorway overpass. Additional assessment is required from the west, southwest, and northwest, and from upland areas in the Killeshin Hills Landscape Character Area.
 - 2 The LVIA refers to a Landscape Management Plan that is not part of the application. Submit it, and a detailed hedgerow/ tree planting timetable.
 - 3 Submit a revised Glint and Glare Assessment factoring in the TII submission and views from the M9 overpass to the southwest.
 - 4 Submit updated Archaeological Impact Assessment (AIA) as per DoHLGH.
 - 5 Submit additional mitigation measures to address potential surface water runoff onto the local road network.
 - 6 All residential receptors identified in the glint and glare assessment to be consulted through additional community engagement.
 - 7 Provide details of the maximum expected MW export capacity to the grid.
 - 8 Despite the grid connection being a separate SID application, the Transport Section has expressed concern and require additional information thereon.
 - 9 Submit revised detail regarding Ballyloo Crossroads (L3052 / L3050 junction), which appears restricted, contrary to the submitted Swept Path Analysis.
 - 10 Address the submission of Uisce Éireann (see 3.6.3 below).
 - 11 Comprehensively address the third party submissions (See 3.7 below).

Planning Officer's Second Report (25th of March 2025)

3.2.2. Generally satisfied the applicant had satisfactorily addressed most of the matters of set out in the request for further information, but a number of concerns remained in respect of item 1 (LVIA) and item 11 (third party submissions).

- 3.2.3. In respect of item 11, the planning officer considered that the applicant had not provided a robust and thorough response to the issues raised by third parties with respect to potential impacts on residences.
- 3.2.4. To address the issues in item 1 of the RFI, the planning authority commissioned an independent report from CAAS Ltd. to advise and provide an opinion to the Planning Authority, on the likely landscape and visual impacts of the proposed development and its compliance with the Landscape Character Assessment.
- 3.2.5. The planning officer noted that the response included a report prepared by Macroworks, a specialist LVIA company but was not satisfied that the two additional viewpoints from higher ground were sufficient, having regard to potential visual impacts. They also expressed concern about potential for cumulative and in combination visual impacts with P.A. Reg. Ref. 24/60205 that they say adjoins the site to the north and considered that the receiving environment of the subject site is materially different to more rural areas within the county which may be more suitable for Solar Farm development as approximately half the site is in designated a high risk area for solar as per the Carlow Renewable Energy Strategy (RES), from the development plan and corresponds to more elevated lands with high landscape sensitivity. The planning officer continued by stating that the western portion of the site is within the Farmed Lowland landscape type, and that these lowlands are open to extensive views from the surrounding higher ground to the west at Killeshin Hills, from the southwest and the southeast.
- 3.2.6. Taking the CAAS report into consideration, the planning officer did not consider it appropriate to remove the eastern portion of the site, which is the High Risk Area in the Solar Opportunity Areas map in the RES, as it would substantially alter the proposed development. They were also concerned that to permit solar in a High Risk Area would set a precedent. Furthermore, they considered that the LVIA understated the significance of effects across a number of designated viewpoints and scenic routes and permitted, and would result in very significant landscape visual impacts on designated scenic routes.
- 3.2.7. The planning officer recommended a refusal of permission, and their remaining concerns are reflected in the planning authorities reason for refusal.

3.3. Other Technical Reports on initial application

3.3.1. **Environment** – 4th April 2024

- With respect to the suite of environmental report submitted with the application, they have no objection subject to conditions (see 3.5 below).
- They also carried out a Stage 1 AA Screening Assessment and concluded that
 potential overland flow of construction stage silt / pollutants from the watercourses
 crossing the site have the potential to indirectly impact on the River Barrow and
 River Nore SAC without the implementation of best practice measures or sitespecific mitigation measures during the project construction phase.
- They reviewed the NIS and concluded that it had considered the potential for effects on the River Barrow and River Nore SAC and on mobile qualifying interests, in particular Otter. Potential for cumulative impacts arising from other nearby solar farms developments was also examined. Best practice and mitigation measures were identified to ensure no risk of adverse effects from potential pollutant on the Qualifying Features of Natura 2000 sites within this project's Zone of Influence. It objectively concluded that the proposed development will not adversely affect the integrity of Natura 2000 sites, and there is no reasonable scientific doubt in relation to this conclusion.
- Its assessment of significant effects was that the Environment Section has ascertained that the project, alone or in combination with other projects, will not adversely affect the integrity of the site concerned.
- An EIA Sub threshold Screening Assessment (Form 1) was completed and determined that a Screening Determination was required, as Schedule 7A information has been submitted by the applicant.
- In its Screening Determination (Form 3), it was determined that an EIAR was not required.

3.3.2. Muinebheag Municipal District (MMD) – 9th of April 2024

- No objection subject to conditions (see 3.5 below).
- They noted that the 4 no. proposed entrances are well located with good sightlines available of a minimum of 90m in each direction at each entrance.

- Unlike Wind Farms, the construction works will not involve the movement of large quantities of stone, concrete and other materials in and out of the site/s.
- Site is within easy access of the M9 and the Powerstown Interchange.

3.3.3. **Transportation** – 10th April 2024

• Concurs with the MMD report, but notes that the roads section has concerns regarding this proposals connection to the electricity grid for onward distribution, that detail in this regard is sparce and further detail is required.

3.4. Other Technical Reports on response to further information

3.4.1. **Muinebheag Municipal District** – 24th of March 2025

No objection subject to conditions (see 3.5 below).

3.4.2. Executive Engineer Planning Department – 30th January 2025

No objection subject to conditions (see 3.5 below).

3.4.3. **Environment** – 6th February 2025

No objection subject to conditions (see 3.5 below).

3.4.4. Environment – 6th February 2025 – conclusion on EIA and AA

• They reviewed the submitted documents and note that the changes made as further information do not materially change the conclusions of the EcIA or the NIS.

3.4.5. Senior Assistant Chief Fire Officer – 25th of February 2025

• No objection subject to conditions (see 3.5 below).

3.4.6. CAAS Ltd - Review of landscape elements of further information response

• CAAS was commissioned by Carlow County Council to review the response to further information and to present options, not recommendations: the request stems about how best to consider the cumulative and 'in-combination' impacts of more and more large-scale solar farms in the same general area. Areas of granted solar farms amount to 527.31ha (c.1303acres) with a further potential area of 1,134.69ha (c.2803 acres). There is so much prior precedent development, it can be difficult for the planning authority to explain or justify a decision to refuse permission on a particular site.

- It identifies that Parcel 1 and most of the area in Parcel 2 where panels would be place, are deemed to be in 'No Risk' Solar Opportunity Areas, while Areas 3 and 4 area in the 'High Risk' areas. They also considered that the cumulative impact of the proposed substation and other substations in the area need to be considered.
- It references policy AG P3 from the development plan, which refers to encouraging environmentally sustainable agricultural practices, but that its compatibility with the surrounding area need careful consideration.
- Section 6 assessed the development under 1) Prior policy (CCC Solar Opportunity Areas); 2) Specific sensitivity of proposed location; 3) Likely impacts of the proposed development; 4) Likely cumulative effect of the project in the context of other developments in the same area.
- 3.4.7. Having regard to landscape and visual considerations 1-4 above, CAAS considered that Carlow County Council had the following options:

A. Grant on the basis of:

- conformity with elements of CCC policy and plan.
- conformity with elements of national energy policies and targets.

B. Grant with conditions relating to:

- Limited duration (15 years) and requirement for demonstrable capacity for reversibility.
- Reduction of extent to eliminate conspicuous elements in more elevated areas to the east.

CAAS added a note that state that 'In our opinion any conditions which alter a development substantially (as per the test requiring a revised public notice) are usually indicative of a project that should be refused.

3.4.8. **C. Refuse** – on basis of:

• Impacts that cannot be mitigated that arise from the intrinsics of the site – namely excessive proximity to established settlements and location on elevated conspicuous lands.

- Impact on local landscape character and on the context and setting of areas of elevated densities of rural settlement.
- Impacts that arise through non-conformity with existing relevant CCC policies.
- Disproportionate impacts on an area of elevated concentration of residential amenity.
- Precedence of incursion into high-risk policy areas.
- Prematurity in the absence of a determination of the cumulative effects of other relevant applications (particularly Planning Ref. 24/60205).

3.5. Conditions

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

- **Muinebheag Municipal District** Recommended standard conditions regarding 1) surface water; 2) drainage; 3) road opening licences required in accordance with RW7 of 2025 "Electricity transmission infrastructure development"; 4) Road sweeper to be used; 5) access gate set back 10m from roadside edge, with access roads to be sealed for the first 20m back from the roadside edge.
- Executive Engineer Planning Department 30th of January 2025 15 conditions proposed which can be summarised as 1) 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. 2) surface water and sediment control; 3) access tracks of permeable gravel; 4) stormwater from cabins or sealed bunds to pass through oil interceptor prior to discharge; 5) operational and maintenance plan to include routine inspection, monitoring and the implementation of a habitat management plan; 6) CEMP will be fully implemented.
- **Environment** 6th February 2025 3 conditions proposed which can be summarised as 1) construction and operation mitigation measures shall be implemented in accordance with submitted reports; 2) prevent the spread of Alien Invasive Species during construction works; 3) construction works to comply with parameters relating to water pollution, noise, dust, parking, site management and hours and days of working.

• **Senior Assistant Chief Fire Officer** – 25th of February 2025 – 2 conditions regarding Fire Brigade access and fire-fighting water supply.

3.6. Prescribed Bodies

Submissions on initial application

- 3.6.1. Health & Safety Authority 12th of March 2024
 - The application is <u>not</u> covered by Regulation 24(2) (a) of S.I. 209 of 2015.
 - The Authority <u>does not advise against</u> the granting of planning permission in the context of major accident hazards.
 - This application is approximately 8.9 kms away from Royal Oak Distillery and is therefore considered to be outside the scope of COMAH Regulations, 2015.
- 3.6.2. Transport Infrastructure Ireland (TII) 27th of March 2024
 - Have regard to Chapter 3 of the DoECLG Spatial Planning and National Roads Guidelines for Planning Authorities (2012).
 - Notes Glint and Glare conclusions. Appropriate levels of screening and
 mitigation should be identified and provided for in any approved scheme to avoid
 glint/glare impact on the M9 and N80. Short term glint and glare, while hedgerows
 screening is limited, needs to be addressed. Monitoring to be carried out and
 additional mitigation introduced if necessary or remove sections of the panels that
 have a glint/glare impact on road safety on the M9 and N80.
- 3.6.3. **Uisce Éireann (UÉ)** 2nd April 2024 (2 different submissions received)

Submission No 1

- Further information applicant to engage with UÉ about the feasibility of a diversion/overbuild or submit revised plans with required separation distances.
- Standard conditions 1) services connection agreement 2) adhere to UÉ's
 Standard Details and Codes of Practice and 3) it is not permitted to build over assets so confirmation of feasibility or diversion is required before commencing works.

Submission No 2

- Uisce Eireann infrastructure and privately owned water pipes are within the public road network that the proposed 33kV underground interconnector cabling will intersect with as identified in 'Electrical Infrastructure Construction Methodology'.
- Further information Applicant shall obtain a written Confirmation of Feasibility (COF) from UÉ Diversions section that the cabling infrastructure achieves separation distances and/or poses no risk to existing water and wastewater infrastructure.
- 3.6.4. Department of Housing, Local Government and Heritage 2nd of April 2024 The desk-based Archaeological, Architectural and Cultural Heritage Impact Assessment (AACHIA) report contains insufficient information to allow for an

informed planning decision. Further information sought:

- Updated Archaeological Impact Assessment (AIA), to include Archaeological Geophysical Survey (AGS) as the Recorded Monuments within the site represent specific and verifiable indicators of archaeological potential. Deferment of AGS and Archaeological Test Excavation, where required, to a post-consent stage by way of a condition of planning cannot be supported by the Department in this instance.
- Retain/engage a suitably qualified Archaeologist to carry out an updated AIA.
- AGS to be carried out under consent from National Monuments Service (NMS).
- Test excavations if necessary and approved, to be carried out under license.
- Excavation to take place in uppermost archaeological horizons only, where they survive.
- Archaeologist to submit a written report to the Planning Authority and the
 Department describing the findings of the AIA, including all test and survey results.
- Where archaeological material is present, further mitigation measures required.
- Construction Environment Management Plan (CEMP) shall be updated to incorporate any significant findings that emerge from the updated AIA process.
- The Decommissioning and Site Restoration Plan shall include the locations of all archaeological constraints.

3.6.5. Other Prescribed Bodies

 Submission were invited but not received from IAA (Irish Aviation Authority), EPA (Environmental Protection Agency), CRU (Commission for the Regulation of Utilities).

<u>Submissions on response to Further Information</u>

3.6.6. **Transport Infrastructure Ireland (TII) TII** – 5th of February 2025

- Planning authority to abide by official policy in relation to development on/affecting national roads.
- Glint and Glare mitigation proposed to safeguard the levels of safety on the M9, shall be incorporated into a condition in any permission granted.
- Council requested to identify a monitoring programme for the applicant to adhere to which should allow for additional mitigation if necessary and amendment/removal of any elements of the solar PV development that result in glint/glare and impact on road safety on the M9.
- Applicant shall be responsible for any costs associated with required mitigation.

3.6.7. **Uisce Éireann** (UÉ) – 25th of February 2025

- It notes that there are no proposals for a new water and wastewater connection and that the applicant has obtained a Confirmation of Feasibility (DIV24201) from Uisce Éireann's Diversions team to build over existing assets.
- No objection subject to conditions that:
 - 1 The applicant shall enter into a Build Over or Near Agreement(s) with Uisce Éireann in accordance with DIV24201 dated 9 September 2024 and adhere to the standards and conditions set out in that agreement.
 - 2 All development shall be carried out in compliance with Uisce Éireann's Standard Details and Codes of Practice.

3.6.8. **Department of Housing, Local Government and Heritage** – 4th of March 2025

• The updated Architectural and Cultural Heritage Impact Assessment report includes results of geophysical survey and advance licenced archaeological test

excavation. The CEMP and Decommissioning and Restoration Management Plan (DRMP) were also updated.

- Broadly concurs with the recommended archaeological mitigation strategy.
- It will comment separately on the SID application when it is submitted.
- No objection subject to Pre-Construction and Construction stage conditions.

Pre-Construction

- All mitigation measures in relation to archaeology and cultural heritage as set out in the revised AACHIA report shall be implemented in full.
- Retain/engage a suitably qualified Archaeologist to carry out pre-development geophysical survey (Phase 2) on all accessible areas not previously surveyed.
- Archaeologist to carry out pre-development archaeological testing in areas of archaeological potential identified in geophysical survey.
- Report of Phase 2 archaeological work to be submitted agreed in advance of site preparation/enabling works or groundwork.
- Where archaeological material is shown to be present, avoidance, preservation in situ, preservation by record and/or monitoring may be required.
- Exclusion Zones at all Recorded Monuments and No Dig Buffer Zones at areas of sub-surface archaeology identified through geophysical survey or test excavation, to be fenced off for the duration of the development and decommissioning phases.
- Final CEMP and DRMP to included locations of all relevant archaeological or cultural heritage constraints, shall describe all impacts and mitigations, with all workers made aware of same.

Construction stage

- Suitably qualified archaeologist to monitor site works, to ensure the preservation and recording of any surviving archaeological remains and to ensure appropriate mitigation.
- A final archaeological report of the monitoring following all archaeological work on site and any necessary post-excavation specialist analysis to be submitted to the planning authority and NMS.

All costs to be borne by the developer.

3.6.9. **Department of Housing, Local Government and Heritage** – 21st of March 2025

Imperative that all mitigation measures in the NIS are adhered to.

3.7. Third Party Observations

3.7.1. Four observations were received in respect of the initial application, while six observations were received in respect of the response to further information. One person made submissions at both stages. The issues raised in the observations are collectively set out below:

Industrial Nature and Scale

- Inappropriate scale and nature of development unsuitable for the rural area in close proximity to residential properties.
- It is considerably larger than other proposed solar farms in the county.
- None of the proposed infrastructure is in keeping with a rural area.
- Industrial scale would fundamentally alter character of the serene countryside.
- Solar farms should be appropriately located on already industrialised and land zoned for industrial use and on roof tops, not on productive agricultural land.
- Development of renewable energy should not be at the expense of the local community.

Visual and Landscape Impact

- 192ha or 474 acres equates to 192 football fields.
- The visual impact would have detrimental effects on properties, which would be directly overlooked by the towering panels, particularly from first floor windows.
- The views enjoyed of the rolling hills for entire lifetimes will be lost.
- The loss of unspoiled rural views, particularly of Killeshin Hill and surrounding area will be irreparable.
- The 2.4-meter fence and 3-4 meter hedgerows would obstruct cherished views.
- No hedge is high enough to hide the panels on elevated ground.

- Even with a low level of glint and glare, it would still be uncomfortable to look at.
- The European Landscape Convection which came into force in Ireland in 2004 promotes the protection, management and planning of the European landscapes.
- Chapter 9 of the Development Plan 9 is dedicated to protection of the landscapes. Development is not consistent with 9.8 Landscape Policies, where it is the policy to: Protect and maintain the overall integrity of the County's landscape.
- The proposed development, due to its size and scale does not maintain the
 agricultural character of the landscape, that unduly damage its values and that it will
 transform and changes it into an industrial landscape with all the negative
 consequences attached to it to be borne by the people, plants and animals living in
 its proximity.
- A much smaller solar farm would be much more appropriate in terms of both site area and panel height.

Loss of Agricultural land

- The 192ha should be used to grow food including grain to reduce the reliance on importing it from South America, negating claimed carbon savings.
- The land is prime tillage land as verified by Teagasc soil maps.
- The use of the land is inefficient compared to the land take for wind turbines that would produce the same quantity of energy.
- The operational life is 40 years and is unlikely to revert to agricultural use, so is not a temporary development.

Loss of Amenity

• Residents will not be able to walk through the fields anymore as they are accustomed to doing.

Traffic

• Will general significant transport impacts on the local narrow road network during development and residents will be significantly impacted by noise and vibration.

 Ballyloo cross is notorious for accidents and numerous near misses as traffic repeatedly fails to stop and this will be magnified during the lengthy construction period.

Noise

 Potential noise disturbance from the invertor/transformer stations, will be continuous and located close to residences.

Construction stage

- Will go on for an undetermined period of time.
- The exceptional circumstances that would require work to be carried out on Sundays or public holidays have not been defined.

Wildlife

- Potential to have a transformative effect on the land which could have consequences for local wildlife.
- Security fencing around the site could become a barrier to the movement of wild mammals and amphibians and represent a collision risk for some bird species, who may mistake the panels for water, while insects may also mistakenly lay eggs on the panels having mistaken them from water.

Heritage

- At odds with the Heritage Council supported Tinryland Heritage Trail, with links to the 1798 Rebellion, the Battle of Gettysburg, the Battle of Little Bighorn, the former monastic settlement of Ráith Melsigi and Clonmelsh Graveyard where Walt Disney's ancestors are buried.
- Will be widely visible and negatively impact heritage assets.

Policy / Lack of Policy

- The development plan states it will strive to favour the redevelopment of brownfield sites for solar farm development.
- Lack of government policy on what percentage of agricultural land can be developed for solar farms. Consultation on this has started in the UK and Italy have banned solar panels on agricultural land.

Lack of Community Benefits

• No direct or affordable power supply advantages to the residents living in close proximity to the farm. They will endure the adverse visual and environmental impacts without any compensatory benefits. It will simply enrich its developers.

Devaluation of Property

- Potential loss of property value due to proximity of the solar farm, its effects on the landscape, aesthetics and overall desirability of the area to prospective buyers.
- The Irish times reported that a property in Co. Meath has been on the market for 3 years and its proximity to ground mounted PV panels has put off potential buyers.
- The observors may wish to sell their homes to fund their retirements but will not be able to do so as a result of the proposed development.

Composition of the Solar Panels

• Studies have found solar panels contain hazardous metals and standard leaching tests indicate a release of lead and cadmium from solar panels. They have concerns about soil and water quality from damaged panels including to their own private well.

Layout changes at Further Information stage

• While the applicant states that the scale of the project had been reduced (by 11.6 hectares) at FI stage, a separate application (planning ref: 2460205) for a further parcel of land (73 hectares) has been submitted.

Revised Substation Location

• The revised plans have relocated the 110kv substation to 159m from an observors home. They are deeply concerned about the potential health effects and noise generated from the proposed substation as well as the visual impact.

4.0 **Planning History**

4.1. **Application Site**

4.1.1. The development described below (P.A. Reg. Ref. 24/60205) includes the laying of an underground cable connection running through Parcel 1 of the current application

site and follows the same underground cable route as is proposed in this application. It would also connect to the proposed substation in Parcel 3

- P.A. Reg. Ref. 24/60205 (Park Solar Farm) 10 year permission <u>GRANTED</u> to Ballyloo Solar Farm Limited, on the 27th of May 2025 for a solar farm on two separate parcels of land to the north of the application site. The largest parcel starts c600m to the north of the current application site and runs along the eastern side of the rail line for a distance of 1.65km. The width of the site would be c 200-300m. The second smaller parcel is located c200m to the east of the main parcel. The original site was 73ha and contained three parcels of land, but a third parcel was omitted by condition. It was located c1km to the east of the other two Parcels, was c12.8ha in area was deemed to be remote from the other parcels and to safeguard the potential expansion of Tinryland village to accommodate future development within the County.
- **P.A. Reg. Ref. 20/155** Permission <u>REFUSED</u> on the 17th of July 2020 for a single storey house on a site at the northern edge of Parcel 2 for 4 reason which can be summarised as 1) local housing need; 2) exacerbate ribboning of houses; 3) backland development adversely affect neighbouring amenity; 4) potential flood risk.

Grid Connection for this proposed solar farm

4.1.2. ABP-321855-25 – Pre Application Consultation Request regarding a proposed tail fed substation with associated grid connection to connect to existing 220/110kV Kellis Substation located in the townlands of Ballyloo, Linkardstown, Kilballyhue, Graiguenspiddoge, Castletown, Moyle Big, Kellistown West & Kellistown East, County Carlow. On the 22nd of July 2025, the Commission advised the applicant Ballyloo Solar Farm Limited that the development would be strategic infrastructure and that an application for approval must be made directly to the Commission.

Live applications

4.1.3. P.A. Reg. Ref. 25/60137 – Carlow County Council requested <u>FURTHER</u> <u>INFORMATION</u> on the 16th of July 2025 from Ballyloo Solar Farm Ltd in respect of a proposed 57ha. solar farm. It proposed to connect to the proposed substation in Parcel 3 via Parcel 1 (of this current application site).

- 4.1.4. This site is in two parcels, one immediately opposite the recently granted 24/60205, abuts the rail line for c1.35km. The second parcel starts c1.55km to the west of the current appeal site and extends to the river Barrow on its western side. The two parts of the site are located c1.5km apart. The F.I. request seeks cumulative landscape images from elevated lands to the west.
- 4.1.5. ABP-321858-25 Proposed Design Flexibility Opinion on ABP-321855-25 for proposed development of tail fed substation and associated grid connection located in the townlands of Ballyloo, Linkardstown, Kilballyhue, Graiguenspiddoge, Castletown, Moyle Big, Kellistown West and Kellistown East, County Carlow.

4.2. Adjacent Quarry to west of Parcel 2

- 4.2.1. There are three relevant commission decisions relating to the Clonmelsh quarry that operates to the immediate west of parcel 2 of the current application site. They are:
 - ABP-300034-17 Substitute Consent <u>GRANTED</u> on the 14th of December 2018 for the northern (81ha) and southern (27ha) quarry areas, with the southern area as close as c45m from the boundary of Parcel 2 of the current application site.
 - **ABP-300037-17** Substitute Consent <u>GRANTED</u> on the 14th of December 2018 for a plant area of 3ha at the northern end of the quarry site, c800m west of Parcel 1 of the current application site.
 - **ABP-300425-17** 20 year permission <u>GRANTED</u> on the 14th of December 2018 under Section 37L, to further develop a quarry over an application site area of 21.9ha with excavation over 13.6ha. This parcel lies between the areas subject to substitute consent under ABP-300034-17.

4.3. Nearby solar sites

4.3.1. The planning officer's report sets out a list of solar farms that had been granted in County Carlow at that time and 2 live applications. However, new applications have been submitted since that time and this section focusses on applications in close proximity to the application site and solar application within c10km of the site.

4.4. Site c.3.6km north of the site on the western side of the M9

• P.A Ref. Ref. 20/44 – 10 year permission GRANTED on the 31st of March 2021 on a 24.3ha site.

4.5. Three adjacent site c7.8km to the north east

- P.A. Reg. Ref. 23/60297 10 year permission <u>GRANTED</u> on the 24th of September 2024 for a 91.2ha solar farm. It incorporates the site of **ABP-309987-21** (P.A. Reg. Ref. 21/23) granted on the 26th of October 2021 for a 65ha solar farm.
- P.A. Reg. Ref. 22/149 10 year permission <u>GRANTED</u> on the 19th of May 2023 for a 68.8ha solar farm. It incorporates the site of P.A. Reg. Ref. 21/38.
- ABP-318475-23 (P.A. Reg. Ref. 23/92) 10 year permission <u>GRANTED</u> by the Commission on the 4th of June 2024 for a 77ha solar farm.

4.6. Site c1.4km north of the sites in 4.5 above

• P.A. Reg. Ref. 24/60196 – Permission <u>REFUSED</u> on the 24th of July 2025 for a solar farm on a site of 132.28ha. The first refusal reason is similar to the reason issued in the current appeal and references material contravention of the same 6 policies of the development plan, while a second reason related to impact on a protected structure that is also on the NIAH.

4.7. Connected sites located c2.06-8km to the southeast – east of the site

- ABP-307891-20 (P.A. Reg. Ref. 20/143) 10 year permission <u>GRANTED</u> by the Commission on the 28th of September 2021, for a 127ha solar farm. This site is c4km east of Parcel 4 and extends east for c1.7km and is c960m deep north to south. A separate parcel of the solar farm is located c750m to the north and is c320m x 270m. This development is under construction.
- **P.A. Reg. Ref. 22/163** 10 year permission <u>GRANTED</u> on the 4th of April 2022 for a 128ha solar farm. It consists of several dispersed fields and its easternmost part abutting ABP-307891-20. It extends both sides of the N80, c2.25km from east to west and 2.28km from north to south. At its closest point, the site would be c 2.06km from the southeastern corner of Parcel 4 of the current application.
- P.A. Reg. Ref. 24/60295 Permission REFUSED on the 31st of July 2025 for a solar farm immediately to the east ABP-307891-20 on 118.9ha in two separate fields. The first refusal reason is similar to the reason issued in the current appeal and references material contravention of the same 6 policies of the development plan, while a second reason related to impact significant an overbearing visual impact on nearby properties.

Current Live Application

• P.A. Reg. Ref. 25/60155 – Application for a battery storage system on a site to the immediate east of the permitted solar farm under ABP-307891-20 awaiting decision. This site is c 5.25km east of the current application.

4.8. Grants of permission for Solar in' Available Area with High Risk'

Part of the refusal reason refers to the proposed development setting a precedent for similar sites in 'high risk' areas as per the development plan solar policy. The appellant references two already granted permissions in such areas as a rebuttal. They are described below:

- **P.A Reg. Ref. 22/118** 10 year permission <u>GRANTED</u> on the 11th of April 2023 for a 14.16ha solar farm, at Kilcarrig, just east of Bagnelstown.
- ABP-318475-23 (P.A Reg. Ref. 23/92) See section 4.5 above.

4.9. Wind farms applications on Killeshin Hills – visible from the proposed site

- 4.9.1. Nearest permitted turbine c7.25km west of the site
 - ABP-318295-23 (P.A. Reg. Ref. 21/15) Permission <u>GRANTED</u> on the 21st of November 2024 for five wind turbines, meteorological mast, electricity sub-station and associated site works. The turbines would have an operational lifetime of 30 years, turbine blade diameter of 117m, hub height 78m and overall height to tip of 136.5m. This followed from earlier grants of permission on the same site under ABP-240245 (P.A. Reg. Ref. 11/154) and P.A. Reg. Ref. 21/15.
- 4.9.2. Live application on appeal, with nearest turbine c 8.6km west:
 - ABP-320245 (P.A. Reg. Ref. 24/60122) Decision awaited for application for 7 wind turbines with total tip height range of 179.5m–180m, Rotor diameter range of 149m–155m, and Hub height range of 102.5m–105m. A 10 year planning permission and 35 year operational life are sought.

The planning authority refused permission for 3 reasons being: -

1 Killeshin Hills Landscape Character Area and Uplands Landscape Type has a sensitivity rating of 5 where wind energy development is not normally permissible and would be contrary to Policies LA. P1, LA. P2, LA. P3 and LA. P11 that seek to protect and maintain the overall integrity of the County's

- landscape. The proposed development would have disproportionate and adverse landscape and visual impacts, would be out of scale with and result in overbearing impacts on protected scenic route numbers 4, 5, 6, 7, 8, and 9 and protected view numbers 27, 28, 31, 32, 33, and 34.
- 2 Failed to demonstrate that local road network is of adequate capacity.
- Inadequate information regarding cumulative noise environment for the operational phase of the proposed wind farm development and to show that it would not give rise to adverse impacts on local residents.
- 4.9.3. Site c 11km to the southwest of the proposed solar farm
 - **ABP-315365-22** Permission <u>GRANTED</u> on the 21st of November 2023 for the development of 7 wind turbines, hub height of 104m, rotor diameter of 162m and a maximum tip height of 185m on a site of approximately 290ha.

5.0 Policy Context

European Policy

- 5.1. 2030 Climate and Energy Framework (October 2014)
- 5.1.1. 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.
 - 5.2. Regulation (EU) 2018/842
- 5.2.1. Ireland's binding greenhouse gas emission reduction target for 2030 in relation to 2005 levels is 30%, to comply with Paris Agreement commitments.
 - 5.3. European Green Deal 2020
- 5.3.1. 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%.
 - 5.4. REPowerEU Plan 2022 & Directive EU 2018/2001 (REDII) (amended 18.05.2022)
- 5.4.1. The REPowerEU Plan amended the RED II Directive, to require that 42.5% of energy is from renewable sources by 2030.
 - 5.5. Council Regulation (EU) 2022/2577 (22nd December 2022)

- 5.5.1. 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'.
 - 5.6. Regulation 2024/223 (22 December 2023 amending Regulation (EU) 2022/2577)
- 5.6.1. 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'.
 - 5.7. RED III (European Renewable Energy Directive (EU/2023/2413))
- 5.7.1. 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.

National Policy

- 5.8. Project Ireland 2040 National Planning Framework, 2018 (updated April 2025)
- 5.8.1. 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.

- 5.8.2. 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'
- 5.8.3. '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'.
- 5.8.4. 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'.
- 5.8.5. '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

Lanascape

- 5.8.6. The following National Policy Objective are relevant to the appeal:
 - <u>National Policy Objective 23</u> 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.

5.9. National Development Plan 2021-2030

5.9.1. 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'.

5.10. National Development Plan Review 2025

5.10.1. 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.

5.11. Climate Action and Low Carbon Development 2015 (as amended)

- 5.11.1. 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.
- 5.11.2. 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.

5.12. Climate Action Plan 2024 (CAP 2024)

5.12.1. 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.

5.13. Climate Action Plan 2025 (CAP 2025)

5.13.1. 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.

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

5.14.1. 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.

5.15. Second National Adaptation Framework (NAF) June 2024

5.15.1. 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.

5.16. Sectoral Adaptation Plan for Electricity and Gas Networks (first edition 2019)

5.16.1. Section 2.3 states that 'electricity generation is fully open to competition in Ireland', and that the diverse range of power generation assets that contribute to the energy mix, is an important factor in delivering energy security, reducing Ireland's dependence on any one source.

Sectoral Emissions (2022)

5.16.2. 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.

5.16.3.

5.17. National Climate Objective

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

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

5.18.1. 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 in 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.

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

5.19.1. 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.

5.20. Programme for Government 2025 (Securing Ireland's Future)

5.20.1. 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'.

5.21. 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.

Regional Policy Context

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

- 5.22.1. 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...
- 5.22.2. 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.

5.23. 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

5.23.1. 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.
- 5.23.2. 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.
- 5.23.3. 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', indicates that approximately the western half of the site is located in 'Available Areas with No Risk Identified', while the eastern half is in an area deemed to be 'Available Areas with High Risk'.
- 5.23.4. 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.
- 5.23.5. 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

- 5.23.6. The site is located in the 'Central Lowlands' Landscape Character Areas (Map 9.1).
 Parcels 1 and 2, to the west are located in 'Farmed Lowlands' Landscape Types
 (Map 9.2), while Parcels 3 and 4 are on 'Farmed Ridges'.
- 5.23.7. 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.
- 5.23.8. 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. It assigns a sensitivity of 2-3 (decreasing/moderate) to Parcel 1 and most of Parcel 2 and a rating of 4 (increasing) to the east of Parcel 2 and Parcels 3 and 4. 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.
- 5.23.9. Table 9.3 of Chapter 9.7 'Views, Prospects and Scenic Routes' sets out a Schedule of Views and Prospects, three of which are referenced in the refusal reason being:

No	Description	Location
31	Vista east, panorama across central plain to Blackstairs	Ridge Cross
32	Vista east, panorama from Killeshin Hills across central plain to Blackstairs	Tuolcreen Cross
33	View east and north, of River Barrow	Milford

5.23.10. Table 9.4 of Chapter 9.7 contains a Schedule of Scenic Routes. The refusal reasons refers to five of the protected scenic routes, which are described as:

No.	Route	Description	Location
5	L3052-42	Mixed landscape low level to west	Ballyryan
6	L7123-0	Central Plain	Ridge Cross Roads
7	L3037-11	Panorama across central plain	Road to the Butts

8	L7130-26	Panorama to southeast	Tomard Wood
9	L3014-19	Panorama across central plain	Tomard Lower

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.

- 5.23.11. 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.
- 5.23.12. 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.
- 5.23.13. 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.
- 5.23.14. Policies **AH P3**, **AH P4**, **AH P5** and **AH P6** in Chapter 10: Natural and Built Heritage are relevant as there are a number of recorded monuments within the site boundary.
- 5.23.15. 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.
- 5.23.16. 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

<u>Appendix VI - Renewable Energy Strategy</u>

5.23.17. 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 excluded areas are generally urban areas, part of th and corridors carrying high voltage electricity lines

and access to the electricity grid; 16 Decommissioning Statement.

- 5.23.18. The different risk factors for solar farm development are:
 - <u>High Risk</u>: natural constraint with high sensitivity or adjacent to sensitive receptor / material asset etc

- <u>Medium Risk</u>: natural constraint with medium sensitivity or given distance from sensitive receptor etc
- <u>Low Risk</u>: natural constraint with low sensitivity or further distance from sensitive receptor etc.
- <u>No Identified Risk</u>: 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

- 5.23.19. It provides details of the characteristics of the Landscape Character Areas including the 'Central Lowlands' and notes that the sites landscape types are 'Farmed Lowland' and 'Farmed Ridges'. 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.
- 5.23.20. Under 'Landscape Capacity and Sensitivity in the Landscape Character Areas', The Central Lowlands are 'deemed to be moderately sensitive to development'.
 - 5.24. Irelands 4th National Biodiversity Action Plan (NBAP) 2023-2030
- 5.24.1. 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.
 - 5.25. Natural Heritage Designations

5.25.1. The River Barrow and River Nore SAC (Site code 002162) is located approximately 2.35km as the crow flies to the west of parcel 1.

6.0 **EIA Screening**

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

7.0 WFD Screening

7.1. Having regard to the Source-Pathway-Receptor linkage and to mitigation measures proposed as part of the application, I am satisfied that the proposed solar farm development would not cause a risk of to the water environment. Please refer to the WFD Impact Assessment Stage 1 Screening in Appendix.

8.0 The Appeal

8.1. **Grounds of Appeal**

8.1.1. The grounds of appeal consist of a planning appeal and appendices and the key issues are addressed below in the order set out in the appeal. The introduction notes that a comprehensive further information response included the panelled area being reduced by 11.6ha and that the proposed solar farm would have capacity to generate 203,960MW hours of renewable electricity per annum.

8.2. Principle grounds of appeal

• The solar opportunity areas policy of Carlow's RES does not preclude development in principle at this location, a point underlined in previous decisions of the planning authority.

- The site is close to the Kellis 220kV substation, which has capacity availability and can transmit large power volumes nationally. It is one of a small number of locations across the country with grid connection and route to market viability.
- This temporary form of agricultural diversification will not give rise to significant landscape and visual impacts, or adversely affect local residential amenities.
- The design is landscape based and the Landscape and Visual Impact Assessment (LVIA) confirms no significant impact on landscape character.
- On the basis that the development will not result in any adverse visual impacts contributing to degeneration of landscape character, it will not contravene the identified landscape policies from the development plan
- The Commission has obligations arising from Regulation (EU) 2022/2577 and Section 15 of the Climate Act, to exercise its discretion so as to afford the statutory priority to renewable energy projects required by Regulation (EU) 2022/2577.

8.3. Individual elements of appeal

8.3.1. Climate and Energy Policy

- RePower EU following from which the Council of the European Union adopted Regulation (EU) 2022/2577, 'Laying down a framework to accelerate the deployment of renewable energy' which has immediate and direct effect and applies to the solar farm. Regulation 2024/223 extended / amended Regulation 2022/2577.
- Renewable Energy Directive III extends the presumption from Regulation 2022/2577, that renewable energy projects and associated grid infrastructure are 'in the overriding public interest' until such time as "climate neutrality is achieved".
- Climate Action and Low Carbon Development 2015 and CAP 2024 –. The obligation in Section 15 of the Act was the subject of a High Court Judgment Coolglass Wind Farm Limited v An Bord Pleanála [2025] IEHC 1.
- The Coolglass Judgement set out a number of steps the Commission is required to follow regarding applications to help achieve Ireland's climate goals. In Coolglass, the Commission's had determined that 12 of 13 proposed wind turbines were located in areas "not open for consideration" constituted a material contravention. This was overturned by the court, which held that Section 15 of the Climate Act obliges the

Commission to exercise its evaluative judgement and discretion under Section 37G of the Planning and Development Act, 2000 (as amended) in a manner that supports our climate objectives and specifically the Climate Action Plan. The appeal cites an extract from the judgement being 'insofar as concerns material contravention, if such contravention arises, the Commission should exercise the power to permit such contravention in whatever way that furthers climate goals if practicable to do so'.

- An increased share of renewable electricity, including 8GW of solar power, is central to achieving the CAP 24 emission reduction of 75% between 2018 and 2030 and increase in the share of renewable electricity to 80%.
- Expert consensus is that Ireland is highly unlikely to achieve its targets and the Commission must consider its obligations under Regulation (EU) 2022/2577 and RED III to prioritise renewable energy projects.

8.3.2. Progress on Climate and Renewable Targets

- International and European targets to keep global warming below 1.5°C, urgently required the deployment of new energy systems, including solar energy.
- Government does not expect to achieve the GHG emissions reduction target of 51% and an increase in the share of renewable sources to 80% by 2030. Significant emission reduction can be achieved in a short period of time through the consenting, construction and operation of renewable energy projects, including this solar farm.

8.3.3. Key Solar Farm Development Considerations

- The attributes by which the applicant deems the site suitable for solar development include 1) favourable irradiance 2.5% 3.5% above the average level across the country; 2) access to the transmission grid network at EirGrid 220 / 110kV Kellis substation, low constraint levels of 1-6% compared to 45% in the west Dublin region; 3) strategic location and scale advantages for progressing with critical 'post-planning' milestones relating to grid connections and route to market processes.
- The high level of renewable generator project attrition is as a result of not having a combination of favourable factors such as exists at Ballyloo Solar Farm. Since 2018, applications were made for a total of 4.66 GW of solar electricity projects, but only 2.79 GW connected to the grid due to unfavourable grid connection conditions in the RESS Auctions (a 40% attrition rate of projects with planning permission).

• Having failed to deliver the required GWh capacity in RESS Auctions 1-4, including successful capacity from auctions 1 and 2 not connecting. further auctions past RESS-5 in 2025 will have to be carried out to make up for the large shortfall.

8.3.4. Statement on Grounds for Refusal

8.3.5. Introduction

- Refusal centred on the view that the proposed development is not appropriate at the subject location and would give rise to perceived landscape and visual impacts:
 - The site is unsuitable based on the 'solar opportunity areas' policy of the Renewable Energy Strategy (RES) in the development plan, as part of the site is in 'Available Areas with High Risk'.
 - Perceived impacts on residential amenity.
 - Landscape and visual impact concerns are based on longer range views, effects on scenic routes and that perceived cumulative impact with other permitted/ proposed solar farm projects in the area may erode characteristics which contribute to landscape value.
 - Following the above, the development would be contrary to and would materially contravene identified landscape-based policies.

8.3.6. Planning Considerations

Solar opportunity areas

- The refusal states that the proposed development would set an undesirable precedent for the 'incursion of solar farm development into lands identified as having High (Maximum) Risk in the solar energy policy of the CDP and Renewable Energy strategy'. The planning officer's report notes that almost half of the site would be in the high risk areas, as per the solar opportunities mapping. The other half is in 'Available Areas with No Identified Risk'. After amendments at FI stage only 38.9% of panels are in the High Risk areas.
- The Solar Opportunity Areas Map does not correspond with the Landscape Sensitivity mapping as is suggested in the planner's report and the important differences are not addressed in the planner's report.

- The planner's report fails to explore the policy methodology informing the 'Available Areas of High Risk and this should be a fundamental cornerstone of the decision making process.
- The RES mapping process for potential solar sites resulted in 755km2 being deemed available with different risk levels relative to '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 pretext is that regardless of the risk level, the application site is available, which is evident by past decisions of the planning authority to grant permission for solar farms.
- No analysis is carried out of the different risk classification categories and no specific reference is made to landscape sensitivity in respect of 'High Risk' areas, which is important given the reliance placed by the planning authority on risk categories and interpretation of solar opportunity map areas.
- The RES states a risk category in itself does not support or preclude solar development and other factors must be considered, including grid capacity availability. Section 6.2.7 states the Council will favourably consider development of solar farms on agricultural lands for farm diversification and multi-purpose land use.
- Commentary erroneously repeats reference to 'High (Maximum) Risk', when describing the eastern part of the site. The category is 'Available Areas with High Risk', which implies that the areas are available for solar farm development.
- The RES does include another category of 'Excluded Areas', that are not available owing to environmental and geographical considerations. This is important context that is not acknowledged by the planning authority.

Precedent Permissions by Carlow County Council

- Two solar farms have been granted in 'Available Areas with High Risk' during the life of the Carlow County Development Plan 2022-2028 being P.A. Reg. Ref. 23/92 and P.A. Reg. Ref. 22/118.
- Approximately 50% of 23/92 is in 'Available Areas with High Risk' and c25% is in 'Excluded Areas'. The entirety of 22/118 is in 'Available Areas with High Risk'. The planning authority has already set a precedent, justified by the policies of the RES.

Residential Amenity

- The reference to high density rural settlement is not adequately contextualised nor is how and adverse impact may materialise on these receptors.
- RES notes solar farms have limited external impact beyond the site boundary and applies a setback of 25m. The nearest panels to any house would be 55m.
- Although close to Carlow town, the site is not in a densely populated area.
- Most receptors are separated by one or more fields and intervening vegetation.
- Mitigation for residents was factored into the design and in a number of technical assessments LVIA, Noise Impact Assessment, EMF Report, CEMP.
- Macroworks have prepared a separate landscape and visual impact response.
- In the absence of a specific assessment, it can only be assumed some general proximity is identified as a refusal reason, a matter not identified in policy terms and contrary to the RES statement of limited solar farms impacts beyond their boundaries.
- Only nine community objections does not demonstrate that the community shares the planning authorities views in respect of impact on residential amenity.

Landscape and Visual Impact Considerations

This matter is addressed in detail in the 'Statement in support of Material Contravention' 8.3.18 below. The conclusions are:

- Solar is permitted in 'Available Areas with High Risk', subject to siting, design and environmental considerations.
- Though large, the entire solar farm will never be discernible and the anthropogenic baseline is capable of accommodating the development.
- There is no demonstratable impact on local residential receptors.
- The moderate to low level residual impacts are acceptable.

8.3.7. Material Contravention Considerations

• While part of the proposed development is located in areas identified as "High Risk" in the RES, solar farm development is not precluded. Instead the potential

impacts must be considered subject to site specific siting, design and environmental considerations, which the applicant is satisfied they have appropriately addressed.

- Macro Works Landscape and Visual Response report. It has been demonstrated that any landscape and visual impact or impact on residential amenity has been mitigated, such that any residual impacts are acceptable, and the proposed development is consistent with proper planning and sustainable development.
- The proposal is not a material contravention. However, should the Commission consider it to be a material contravention, it should exercise its discretion under section 37(2) of the Planning and Development Act and grant permission given its the strategic national, and European importance, a discretion it is obliged to exercise following from the judgement of Coolglass.

8.3.8. Other Planning Matters

8.3.9. Apart from the refusal reason, other matters that were addressed in the internal reporting of Carlow County Council are also addressed by the applicant.

8.3.10. Procedural Concerns

• The landscape focus of the further information request focussed on longer-range views of the proposed solar farm", including from overpasses along the M9. No concern was raised in respect of perceived cumulative impacts or impacts on the amenity of local residential properties. These new aspects were introduced as part of the refusal, contrary to Development Management Guidelines. The applicant has concern in respect of due process and compliance with ministerial guidelines.

8.3.11. CAAS Ltd. Report

- Without criticising the external consultant's report that provides an opinion on the likely landscape and visual impacts of the proposed development and compliance with the Landscape Character Assessment, the weight assigned to it in the refusal reason needs to be examined.
- The applicant considers the report does not fulfil its brief to provide an opinion "on the likely landscape and visual impacts of the proposed development and its compliance with the Landscape Character Assessment in the County Development Plan" as it repeatedly refers to 'concerns' regarding solar farms development, a

perceived 'tipping point' and the establishment of precedent, effectively diminishing the planning authority's ability to make a defensible decision on any one site.

- There is limited amount of commentary on the actual nature of the local area and no evidence/confirmation that the site was visited to inform the report.
- While Sections 4 and 5 outline some relevant considerations, and refers to Policy AG P3, this policy does not reference Residential Amenity, rather general visual amenity in the countryside, referencing protection of watercourses, wildlife habitats and areas of ecological importance. There is no material review of other landscape policy.
- While section 6 established criteria CAAS consider must be reviewed, being policy, specific sensitivity of proposed location, likely impacts of the proposed development and likely cumulative effects, there is no detailed/ critical analysis of how the proposed development relates to these aspects.
- Key judgements in Section 6 are ambiguous and are not supported by reasoned rationale. They include 'it appears the proposed development will give rise to high impact', while the refusal relied on the statement that 'the receiving environment here is materially different to more rural areas within the county'.
- The statement that there is an absence of information on in-combination effects is unsubstantiated, while there are also hypothetical assertions that policy was never intended to accommodate large scale solar near Carlow town and that the nature of receiving environment increases level of effect 'through force of numbers and scale'. The purpose of these statements is not clear and they conflict with the adopted policies of development plans and ministerial guidelines.
- The determination section confirms that the report presents options only and no clear written recommendation was made.
- Strikingly, the report is absent of any direct assessment of the LVIA or review of the particulars of the project design versus the landscape context, inclusive of proposed landscape mitigation. There is no reference to viewpoints, scenic routes or photomontages, which is a key component of the refusal reason and no material review of landscape policy or how the proposed design interacts with same. It is not possible to provide a reasoned opinion without these critical aspects.

• The Planner's Report on the file clearly relies on the CAAS Ltd. report to make its decision, with direct reference to "its findings and considerations", but the absence of any meaningful assessment of the proposed solar farm, means it cannot be relied upon as justification to refuse permission.

8.3.12. Third Party Observations of Planning Application

• The applicant disagrees with the Council's criticism of the further information response stating third party concerns had not been addressed.

Biodiversity

• The landscape plans include 13,425m of bolstered and 3,523m of new hedgerow, and 2,611sqm of native woodland planting, while margins across the site will be seeded. The ecological corridors will attract a rich population of native species, especially pollinators and provide food sources, nesting sites and allow connectivity for bird, bat and invertebrate species as well as small mammals.

Perceived Loss of Agri-Land

- There is no inventory of agricultural land in Ireland, so reference to the loss of 'good quality agricultural land' is purely subjective.
- Represents a form of agricultural diversification, and can continue to be grazed by sheep and will support wildlife. There are plenty of precedents nationally and internationally including from Carlow County Council and the Commission for colocation of green-energy development and the continuation of agricultural activities.

Perceived Scale of Development

The solar farm will never be fully discernible due to the dispersed nature of the
development and the proposed screen planting mitigation measures. It has been
demonstrated in the LVIA and other environmental reports, there will be no adverse
impact on local residential amenities.

Community Benefit

- The community will benefit from construction jobs, rates, tax, operational and indirect jobs, community benefit fund and energy security.
- Will contribute to national renewable electricity production and carbon emissions reduction targets by 2030 and reduce dependence on external energy sources.

8.3.13. Additional Third party Submission following Response to RFI

• The RFI submissions are largely the same as submissions on the application and are addressed in the application, response to further information and the appeal.

8.3.14. EIA Screening

• CAAS referred to EIA in the context of the combined Ballyloo and Park Solar Farm projects. Park Solar Farm, was submitted after Ballyloo and references and considers the proposed Ballyloo Solar Farm. The competent authority, Carlow County Council, determined that an EIAR was not required for that development.

8.3.15. Other Assessments

• The findings of various reports have been accepted by Carlow County Council, the planning officer and prescribed bodies. The reports are summarised as follows:

<u>Ecology</u> - Hedgerow planting will enhance overall habitat and species diversity. The fields are of low ecological value. No significant effects on designated sites, habitats, flora or fauna identified. Will have a slight positive residual effect on local ecology and biodiversity. NIS shows the site has hydrological connectivity to the River Barrow and River Nore SAC. Best practice design measures, mean development will not adversely affect the integrity of Natura 2000 sites.

<u>Traffic/Access</u> - Impacts will be limited to the construction period. Required sightlines are available at all entrances. Focused mitigation will minimise impact on road users.

<u>Flood Risk Assessment</u> - The SSFRA indicated the development is not expected to result in an adverse impact to the hydrological regime or increase flood risk elsewhere and is appropriate from a flood risk perspective.

Glint and Glare - No adverse impacts on residential, road, rail or aviation receptors.

<u>Archaeology</u> - A programme of geophysical survey and archaeological excavations have been undertaken. The design was amended and deemed acceptable, following engagement with the National Monuments Service.

<u>Noise</u> - Noise generating plant are inverters, battery storage cooling systems and the substation. This plant is located centrally, away from local receptors and this is reflected in the findings of the noise assessment, which recommends no mitigation is

necessary for the operational phase of the development. Construction noise impact will be short-term and will be controlled.

<u>Health and Safety</u> - No electromagnetic health or fire risk impacts from the project.

<u>Construction Management</u> - Construction will last 24 months and will include strict environmental controls as set out in the CEMP (and final CEMP to be agreed), which identifies all the potential issues and solutions.

<u>Community Engagement</u> - Two detailed phases of community engagement took place. There is wide support for the project locally, with only nine observers.

8.3.16. **Appendix B**

- Macroworks have over 20 years of experience and have produced LVIA for more than 150 solar farms and 150 windfarms and prepared a separate response, to the refusal, which is set out under 7 separate headings. Its format is followed below:
 - 1 Existing landscape context and review of relevant landscape designations in the current Carlow County Development Plan including the Landscape Character Assessment and Renewable Energy Strategy (RES);
- The landscape is highly modified with quarries, motorway, rail line and Carlow town all close to the site. Much of the site is flat with 72% of panels to be located on the flat farmed lowlands (Class 2-3 sensitivity) and 28% on the farmed ridged (class 4 sensitivity). No part of the site is in the most sensitive landscape (class 5).
- The landscape is neither distinctive nor rare and the scenic amenity views from elevated areas in the west are based on open and elevated views and not on any strong sense of natural beauty or remoteness.
- The entire site is in the 'central lowlands' which is a robust landscape as the plan states that wind farms and extractive industries would have a moderate effect on the landscape and it also states that it has the capacity to absorb most types of development subject to appropriate mitigation.
- The RES identifies solar opportunity site and it includes all of the site. The farmed lowlands are 'Available Areas with No Risk Identified'.
 - 2 Summary of submitted Landscape and Visual Impact Assessment (LVIA);

- Site would be difficult to discern beyond 5km and not likely to give rise to significant landscape or visual impacts beyond approximately 2km. 5km is a typical study area for solar projects in Ireland and the UK.
- Following initial survey work, considerable panel offsets were provided along both the eastern (higher ground) and western (lower ground) sides of Scenic Route 5.
- A 50m setbacks is provide from residential receptors at the northern end of Parcel 2 and 80m from a house adjacent to Parcel 3. The panels sit close to the ground, within the existing field pattern, which will also be enhanced as part of the mitigation strategy, resulting in some localised positive landscape effects. It will have a very modest physical impact and no excavation required.
- Planting will be caried out early stage to give 2 growing season before the panels are implemented, thereby screening and softening impacts for residential receptors.
- The overall significance of the operational stage landscape effect was deemed to be no greater than 'Moderate-slight' and of a 'Negative' quality.
- 19 Viewpoints were assessed initially, with a further 4 assessed at further information stage. Only partial views would ever be available of the arrays and this resulted in residual visual impacts at Viewpoints ranging from "Moderate-slight' to 'imperceptible' with 16 of the 19 slight or lower.
- After amendments made at further information stage, it was concluded that the development would not generate significant visual effects and effects were within the range already identified in the original assessment.

Cumulative LVIA effects

- Looked at permitted solar farms, the nearest being 2.3km east. The PA did not seek a cumulative assessment of the Park Solar farm as part of the RFI.
- There is very little potential for cumulative landscape and visual impacts as they are separated contextually and by the intervening rolling hills. Therefore, there would be no cumulative effects along scenic routes.
- The moderate to low level residual effects are not significant and represent an acceptable impact on the receiving landscape.

- 3 Assessment findings versus Carlow County Councils concerns perceived visual impact at scenic designations and perceived visual impact at surrounding residential receptors;
- Only 1 of 6 scenic views is considered relevant, no 27. It was determined to have
 a "slight imperceptible/ Negative / Long-term " residual visual effect.
- Scenic Routes 4 (Viewpoint 1), 5 (VP's 14 and 16) and 9 (VP 4) are considered relevant, with Route 5 being most relevant due to proximity. The comprehensive mitigation measures address Policies LA P2, LA P3, LA P4 and LA P11.
- The residual impacts will be moderate to low-level and are not deemed significant in terms of visual impact on the receiving landscape.
- Although the site will be visible from Scenic Route 9, the closest part of which is
 4.5km away, its context is a broad surrounding landscape, with the distant
 Blackstairs and Wicklow Mountains forming the backdrop. The visible part of the site
 will be more than 6km away, will not be prominent and will be seen amongst other
 features such as quarries and major transport corridors. The residual significance of
 the effect was deemed Slight/Negative/Long-term and is not considered to result in
 significant visual effects.
- The request for further information did request an assessment of potential impacts from 'long-range views'. Scenic Routes 6, 7 and 8 are an extension of route 9 and are well outside the 5km study area and viewpoint 4 is the closest and represents the worst case scenario. The additional viewpoints submitted at FI stage highlighted that the development would not generate any further visual effects beyond those already stated in the submitted LVIA as visibility diminishes the further south you go.
- The development will not block, disrupt or notably detract from scenic routes 6, 7, 8, and 9 and protected views 31 and 32 and will not negatively impact the established appearance, aesthetic attributes of the wider landscape.
- 12 viewpoints represent local residential receptors, with the nearest residences the most important to consider. The development incorporates numerous residential offsets and specific areas of native planting to screen and soften the development from the nearest receptors, considerably diminishing the visual effect on receptors.

- Residual visual effects at the representative viewpoints range between Moderateslight and Imperceptible, with 9 of the 12 representative viewpoints classified with a residual visual effect of 'Slight' or less.
- The local authority's reference to potential effects on residential receptors, was not raised at the RFI stage, yet the refusal states that the development 'would result in disproportionate impacts on an area with a higher concentration of residential amenity'. It is assumed they are referring to houses along Scenic Route 5, where comprehensive mitigation by design has been employed to reduce the potential visual effects at the scenic route receptor and from surrounding residential receptors, resulting in moderate to lower-level residual visual effects that are not deemed to be significant. The proposed development or its mitigation measures do not block or obstruct local elevated views in this landscape context.
- The development is not situated in a rural landscape with a high concentration of residential receptors and appropriate offsets have been designed in. The Renewable Energy Strategy (RES) includes a 25m setback distance around all dwellings as 'excluded areas'. The RES also states in relation to constraints to solar farms, that "proximity to housing is another factor, although solar farms have limited external impacts beyond the site boundary'.
- The development is deemed full consistent with the RES Policy S1.2, which is "To favourably considered the development of solar farms which allow for farm diversification and multipurpose land use".

4 Perceived Scale and Extent of development

- The refusal states that the development 'would be out of scale with and would unduly detract from and erode those characteristics which contribute to its landscape value, including primarily rural agricultural landscape, field pattern character, setting and visual aspect'.
- The site is experienced on the ground, not in plan form. The multi-parcel nature of the site, intervening vegetation and terrain markedly contributes to a reduction in its perceived scale and intensity. There is very limited potential to afford clear visibility of more than two parcels at any one time and these parcels are well offset from each other.

- 5 Perceived Cumulative impact with other existing, consented and proposed developments;
- The LVIA considered potential cumulative impact in relation to two other consented developments to the east. Only 1.6% of the 5km study area has the potential to afford combined views, before vegetation is factored in.
- The most notable cumulative impacts would be with Park Solar Farm (P.A. Reg. Ref. 24/60205 and Ballybannon Solar Farm, which are in a flatter area and are separated from the site by the M9 motorway and rail line as well as intervening mature vegetation. Intervisibility is possible as you rise up the Castelcomer plateau to the west, which give broad views of the wider Carlow central plain.
- Additional cumulative montages were submitted with the appeal to show the 3 proposed solar farms to the south of Carlow town. Even from an elevated position, there is limited intervisibility, due to vegetation that becomes stacked in perspective, the separation distance between the solar farms and the flat nature of the land.
- While the combined solar developments would become one of the most prominent single land uses within the landscape, the landscape can accommodate it and they will not cumulatively significantly detract from the working rural character, which 'has capacity to absorb most types of development subject to the implementation of appropriate mitigation measures'.
 - 6 Perceived non-compliance with landscape policies in the current Carlow CDP;
- See 8.17 below.

8.3.17. Statement in support of Material Contravention

- While the applicant does not consider that the proposed development constitutes
 a material contravention, nevertheless they have provided supporting evidence, in
 case the commission disagrees. They address two circumstances under which the
 Commission may grant permission by way of material contravention.
- 1 Conflicting or unclear development plan objectives
- Policies RE P1, IF P1, SE P2 and Objectives RE O1 and SE O1 all support the development of the solar farm and the achievement of a clean, secure and efficient energy supply.

- Central to the decision is the view that a grant of permission would set an unwanted precedent in the 'Available Areas with High Risk'. This policy interpretation is not clearly stated as applied by the Council. The RES explicitly states, 'the presence of a risk category in and of itself does not support or preclude solar development' and refusing on the basis that the site is partially located within 'Available Areas with High Risk' has no basis in principle.
- Policy LA P1 (capacity of the landscape to absorb development) The proposed development is consistent with LA P1. The siting and design has taken the local landscape into account. Field boundaries will be maintained and enhanced with new hedging and native woodlands to soften and screen the development. The site is in a working landscape that is neither rare nor distinctive and is influenced by other working and anthropogenic developments.
- <u>Policy LA P2</u> (disproportionate landscape or visual impact and to ensure development will not significantly interfere with or detract from scenic upland vistas)
- Comprehensive early-stage mitigation by-design measures were implemented in the siting and design of the proposed development to offset impacts on surrounding scenic designations, with panels set well back from the roadside along Scenic Road 5 and the development can be accommodated here. From Scenic View 9, the broad, open nature of the elevated views will remain uncompromised. The residual magnitude of visual effect does not exceed moderate-slight in terms of significance and there is very limited or no visibility from nearby settlements.
- Policy LA P3 (Presumption against developments located on elevated or visually exposed sites ...where landscape cannot accommodate ...with appropriate mitigation)
 Most of the site is low lying but the eastern end is elevated and robust mitigation has been introduced to screen the development at this point. The dispersed nature of the development diminishes the perceived scale in intensity.
- Policy LA P4 (Ensure developments on steep slopes or ridges will not be conspicuous or have disproportionate landscape or visual impacts when viewed from nearby areas, scenic views and routes) The development is neither situated along steep slopes nor along the ridgetop and is in the middle to lower end of the farmed ridgelines, so will never have the effect of skylining. Where visible, panels will be viewed against the sloping hills and softened by the enhanced and new native

vegetation. It is not visible in its entirety and through new planting the development has the potential to generate some localised positive landscape effects. Residual landscape effects range from the moderate-slight and imperceptible and the vast majority of residual visual effects are slight or less.

- Policy LA P6 (appropriate siting, layout, design and scale to ensure any potential adverse or landscape and visual impacts are minimised and/or removed and natural site features and characteristics are retained and maintained) The LVIA consultant was engaged from the start and resulted in considerable changes to the siting and layout, with setbacks included relating to scenic designations and nearby residential receptors. While the scale in plan form is notable, its scale will not be perceived on the ground due to heavy screening and its spatial extent. It is not incongruous and is consistent with the robust, working character of the receiving landscape that limits landscape and visual effects at the nearest and most sensitive receptors.
- Policy LA P11 (Protect and preserve the established appearance and aesthetic attributes of views, prospects and scenic views, particularly views to and from hills) Scenic Route 5 is most relevant and mitigation measures mean open views across the working countryside remain uncompromised. Development will not generate significant visual effects at any scenic route or view receptors within the study area (i.e. Scenic Views 24, 25, 26, 27, 28 and 33, and Scenic Routes 4, 5 and 9) or within the wider Killeshin Hills in the wider landscape to the west (Routes 6, 7 and 8).

Although visible from elevated locations, distant views will have a limited effect on the visual amenity of the panoramic views already influenced by an array of other working rural land uses. The development will assimilate into the robust working landscape without undue conflict with its pastoral character.

- Permission 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 obligation of any local authority of the area and any relevant policy of the government or Minister.
- The NPF and RSES support the targets in the CAP 2024, where it is Government policy to accelerate the provision of renewable energy to decarbonise the economy.
- Objective 55 of the NPF and Regional Policy Objective 100 of the RSES seeks to promote renewable energy generation, including solar, at appropriate locations.

- The refusal reason indicates the councils' only objection in principle is that the development would set an undesirable precedent for the incursion of solar farm development into lands identified as having a High (Maximum) Risk. This view is contrary to previous grants of permission in High Rish areas and the RES.
- The proposed solar farm and associated grid connection can reasonably be considered to be of strategic importance having regard to Section 37(2)(b)(i) of the Planning Act, and is of national importance as it would deliver on commitments to the European Commission on the delivery of renewable energy projects of scale.
- This is an efficient and optimal location for solar renewable electricity production, with good grid capacity and high irradiance.
- Ireland is highly unlikely to meet its binding target to increase its share of
 electricity generated from renewable sources to 80% by 2030 and is very unlikely to
 meet its target of 8 GW from solar energy. Planning authorities must consider
 obligations under Regulation (EU) 2022/2577 and RED III, to prioritise renewable
 energy projects and to exercise its discretionary powers in a manner consistent with
 the CAP2024 as required by Section 15 of the Climate Act.
- The proposed Solar Farm meets tests under Section 37(2) of the Planning and Development Act 2000 (as amended).

8.4. Planning Authority Response

- 8.4.1. The Commission received the planning authorities response to the grounds of appeal on the 21st of May 2025. Its observations are:
 - Concerns of significant potential for in-combination and cumulative impacts with regard to landscape and visual impact, construction impacts, traffic impacts, noise and vibration etc. from the proposed solar farm and one permitted to the immediate north on 73 acres under P.A. Reg. Ref. 24/60205. Combined, this is effectively a 6km extension to the permitted solar farm.
 - Section 4.1 of the Noise and Vibration report 'Predictive Cumulative Noise
 Impact, states cumulative noise impacts from other development has been
 considered, however, the adjoining application is not mentioned, there is no baseline
 provided for what other developments were considered.

- The P.A. are concerned both adjacent applications cannot be considered in isolation and it is not clear if the proposed mitigation measures are adequate.
- In assessing landscape and visual impacts of solar developments the Planning Authority has considered policies in the Development Plan and Renewable Energy Strategy and a large proportion of the proposed development and substation are in a Solar Opportunity Area of High Risk, which is defined as 'natural constraint with high sensitivity or adjacent to the sensitive receptor / material asset etc' and is a such highly susceptible to the impacts of a solar farm development of the scale proposed.
- The open landscape and large field pattern means the resulting visual impact will not be constrained by hills, woodlands or hedgerows, and due to its scale it would have very significant and disproportionate landscape and visual impacts contrary to the development plan.
- The Commission is referred to the planning officer's and internal department reports.

8.5. Observations

- 8.5.1. A total of 5 observations were received in respect of the appeal and each of the observors had previously made observations on the application. The majority of the matters raised in the observations on the appeal were previously raised in the third party observations on the initial application and the response to further information and I refer the Commission to Section 3.7 above, 'Third Party Observations' in that regard and Section 3.7 should be read together with this section as the constituting the observations on the appeal.
- 8.5.2. New issues not raised in the observations on the application are set out below:
 - All of the grounds of the refusal of Carlow County Council are still valid and merely appealing does not mitigate the refusal reason.
 - The scale of development would diminish scenic quality of the area including protected scenic routes and views in the development plan.
 - Would materially contravene policies and objectives of the development plan including to protect landscape character, scenic routes and views and avoid

development in areas of High (Maximum) risk under the Renewable Energy Strategy.

- Barn Owls currently nest in a house c100m from Clonmelsh Cemetery and the Wildlife Amendment Act 2000 prohibits disturbance, destruction or killing of their nests, eggs or young.
- Undesirable precedent of further industrialisation of the rural, high-risk and visually sensitive areas.

8.6. Further Responses

None

9.0 Assessment

- 9.1.1. 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 Landscape Policy
 - Material Contravention Section 37(2) of the Planning and Development Act
 - Other issues
 - Procedural Issues
 - Construction Timeframe
 - Traffic and Access
 - Biodiversity
 - Policy / Lack of Policy and Loss of Tillage Land
 - Heritage

- Glint and Glare
- Noise
- Flooding
- Community Benefits
- Devaluation of Property
- Revised Substation Layout
- Duration of Permission
- Proposed Conditions
- 9.1.2. The Commission will note that EIA Screening, Appropriate Assessment Screening and a NIS 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.
 - 9.2. Principle of Development Local, European, National & Regional Policy
 Carlow Development Plan 2022-2028
- 9.2.1. A key element of the refusal reason is that the proposed development would set an undesirable precedent for similar development in 'Available Areas with High Risk'. I have reviewed the relevant policies of the Carlow Development Plan 2022-2028 and note that when environmental and geographical constraints are removed, that there is still 755km2 of land potentially available for solar farm development in Carlow and this is illustrated in Figure 7.9 of the development plan titled 'Solar Opportunity Areas'. Figure 7.9 indicates that approximately the western half of the site (parcel 1 and most of parcel 2) is located in 'Available Areas with No Risk Identified', while the eastern half (part of Parcel 2, and all of parcels 3 and 4) is in an area deemed to be 'Available Areas with High Risk'. This effectively means 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 places on the two designations. Therefore, I am satisfied that there is no issue in principle with the development of a solar farm on the site.

European Policy

9.2.2. The Energy Roadmap 2050 noted the transformation of the energy system would include a growing share of renewables, while the Climate and Energy Framework (2014) set a renewable energy target of 27% for 2030. Regulation 2018/842 set a binding greenhouse emissions reduction target of 30% on Ireland for 2030 over its 2005 levels, while the European Green Deal (2020) places a revised legally binding target of 55% over 1990 levels and also proposed to double the renewable energy mix to 40% compared to 2020. REPower EU (2022) amended RED II and required that 42.5% of energy is from renewable sources by 2030. EU Regulation 2022/2577 introduced a rebuttable presumption that renewable energy projects are of overriding public interest when considered against the Habitats, Birds and Water Framework Directives, while it is open to countries to consider applying this presumption to national landscaping legislation. RED III has also raised the binding renewable energy targets to 42.5% from the previous target of 32% in RED II.

National

- 9.2.3. The updated National Planning Framework (April 2025) has 10 National Strategic Outcomes (NSO's) including No 8 'Transition to a Carbon Neutral and Climate Resilient Society', which states Ireland will have a more renewables-focused energy generation system harnessing energy sources such as solar. It notes that the Climate Action and Low Carbon Development (Amendment) Act 2021 commits to a binding target of 80% of electricity to be generated from renewable sources by 2030. It also notes that the accelerated delivery of additional renewable electricity generation is essential for Ireland to meet its climate targets. Chapter 9 seeks the accelerated roll out of solar development, with a target of 8GW of solar by 2030 in the Climate Action Plan 2024 (CAP 2024). It notes that development of renewable energy is a land use diversification options for farmers in line with the carbon budget programme and the CAP 2024. CAP 2024 also requires a 75% reduction in emission from electricity in the 12 years to 2030 and an increase in renewable energy to 80% by 2020 including from solar. CAP 2025 notes that the revised NPF needs to be implemented swiftly in full support of the expansion of wind and solar power necessary to meet renewable energy targets.
- 9.2.4. CAP 2024 notes the installation of wind and solar need to significantly accelerate and this will align with Ireland's EU commitments and support the REPower EU Plan.

- 9.2.5. The Second National Adaptation Framework recognises that Ireland needs to use energy sources and technologies that produce minimal environmental pollution and greenhouse gas emissions, while the Sectoral Adaptation Plan for Electricity and Gas Networks (2019) states that diversity of supply sources is critical to reducing Ireland's dependence on any one source. In July 2022, the government agreed an Emission Ceiling for the Electricity and Gas Network, which would require a 75% reduction in GHG emissions between 2018 and 2030.
- 9.2.6. Energy Security in Ireland to 2030: Energy Security Package (November 2023) states that energy security will be achieved by an electricity-led system maximising renewable energy potential. It notes that at the end of 2023 a rapid programme of solar delivery was underway and expects solar energy will reach existing levels of onshore wind by mid-late decade (and 8GW by 2030).
- 9.2.7. The National Energy & Climate Plan 2021-2030 (NCEP) (July 2024) includes the following objectives 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.
- 9.2.8. The Programme for Government 2025 (Securing Ireland's Future) stated that the Government is committed to achieving 80% of Ireland's electricity generation from renewable sources by 2030, including the delivery of 8GW solar by 2030.
- 9.2.9. Ireland's Greenhouse Gas Emissions Projections 2024-55 (May 2025) project that by 2030, 60 to 68 per cent of electricity generation will be from renewable sources.
 Regional
- 9.2.10. The Regional Spatial and Economic Strategy (RSES) for the Southern Region includes 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 and to integrate renewable energy sources into the grid. RPO 221 'Renewable Energy Generation and Transmission Network' states that Local Authority City and County Development Plans shall support the sustainable development of renewable energy generation and that the RSES supports the Southern Region as a Carbon Neutral Energy Region.

Conclusion

- 9.2.11. 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.
- 9.2.12. While I am satisfied that the principle of the proposed development is consistent with the designation of the site as 'available areas' 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.

9.3. Refusal Reason - Landscape Policy

- 9.3.1. The single, extensive reason for refusal states that the proposed development would materially contravene policies LA P1, LA P2, LA P3, LA P4, LA P6, and LA P11, the 'Carlow Landscape Character Assessment and Schedule of Protected Views' and Solar energy policy, including the County Renewable Energy Strategy.
- 9.3.2. Third party observations on the appeal state the development would materially contravene policies and objectives of the development plan including to protect landscape character, scenic routes and views and avoid development in areas of High (Maximum) risk under the Renewable Energy Strategy. They did not specify the particular policies or objectives that in their opinion would be contravened.

Planning Officer's Reports

- 9.3.3. The refusal reason stems from the planning officer's site visit and an assessment of an independent report that the planning authority commissioned from CAAS Limited.
- 9.3.4. Section 8 of the first planning officer's report restates Policies LA P1, LA P2, LA P4 and LA P6 under Relevant Development Plan Provisions, but no reference is made to Policies LA P3 or LA P11. The planner's assessments do not contain any consideration of the six policies, but state that the Planning Authority are not satisfied that a full and comprehensive assessment of the longer range views had been carried out and that Parcels 2 and 3 were located on farmed ridges, which are

- elevated and sensitive and are identified as 'available areas with high risk'. This ultimately resulted in item 1 of the request for further information.
- 9.3.5. Having assessed the response to further information, the planning officer still had serious concerns regarding the longer-range views of the proposed solar farm from the elevated Killeshin Hills, from where they consider proposed mitigation planting would have limited effect. They stated longer-range views in Photomontage Ref's. RF11 and VP4 do not distinguish between the portion of the proposed solar farm located on the more elevated ground to the east, that significant landscape and visual impacts that cannot be mitigated in view of the location, and that it would set an undesirable precedent for the incursion of solar farm development into High Risk Areas as identified on the Solar Opportunity Areas map. This assessment resulted in the planning officer concluding that particular scenic routes and designated protected views would be very significantly impacted and this is reflected in the reason for refusal

Applicant's Response

9.3.6. The applicant provided a very detailed response to each of the six policies and in that respect if have summarised the key issues raised by the applicant in section 8 and in particular section 8.3.17 above and I refer the Commission to that section of my report. In summary, the applicant considers that the proposed development is consistent with all six policies LA P1, LA P2, LA P3, LA P4, LA P6 and LA P11, and I have taken the applicant's grounds of appeal into consideration in my assessment.

Comment on Policies

- 9.3.7. Having read the documents on file I agree with the applicant that the report prepared by CAAS Ltd. does not specifically address any of the policies that are referred to in the refusal reason, while the planning officer's report does not address any of the policies in detail other than in a general context that they would be contravened.
- 9.3.8. In that regard, responding to Item 1 of the RFI at page 9 of their second report, the planning officer, in the final paragraph of the assessment of the RFI, which ultimately lead to the refusal reason, stated that the proposed development 'would if permitted adversely interfere with the character of the landscape and would <u>contravene</u> the 'County Carlow Landscape Character Assessment and Schedule of Protected Views'. Accordingly, the proposed development, if permitted, would be <u>contrary</u> to

- Policies LA PI, LA P2, LA P3, LA P4, LA P6, and LA P11 of the Carlow County Development Plan 2022-2028 (underline emphasis added).
- 9.3.9. I consider that the two underlined words 'contravene' and 'contrary' are relevant as the first and only mention of the words 'materially contravene' appeal in the reason for refusal and I am not satisfied that the planning has demonstrated that the proposed development would materially contravene any of the six policies that are referred to in the refusal reason, or that they have demonstrated that the proposed development would materially contravene the 'County Carlow Landscape Character Assessment and Schedule of Protected Views' or solar energy policy including the County Renewable Energy Strategy.
- 9.3.10. With respect to the reason why the longer-range views/photomontages do not distinguish between the portion of the proposed solar farm located on the more elevated ground to the east and the lower ground, as is evidenced in the photomontages submitted by Macroworks, it is in my opinion a product and consequence of the distance that exists between the site and the elevated views. With a minimum separate distance of 4.5km between the nearest elevated protected view and the site (Viewpoint 4 prepared by Macroworks), it is difficult to distinguish most landforms and even structures such as the M9 motorway and Clonmelsh quarry buildings, which when you are close to them are significant, but are barely visible from that distance and are certainly not significant or detracting features in the landscape.
- 9.3.11. From a distance such as viewpoint 4, which is the closest viewpoint to the site, I am satisfied that the proposed development would not have a significant landscape of visual effect from the elevated viewpoints and scenic routes in the Killeshin Hills. From these elevated positions, the field network reads as a patchwork of fields of different sizes and shapes, bounded by trees and hedgerows. At different times of the year the fields are green (grass), brown (ploughed) and yellow (crops), while the weather also influences visibility. From the distance of the Killeshin Hills, I consider that the proposed solar panels would be viewed similar to a ploughed field, that the impact would not be significant and that it would not negatively impact the established appearance and aesthetic attributes of scenic routes or protected views from the Killeshin Hills. I will return to this matter later in respect of material contravention.

Refusal reason Parts A-E and cumulative impact

- 9.3.12. The refusal reason stated that the proposed development would:
 - a) have disproportionate and adverse landscape and visual impacts on the character of the rural area;
 - b) would result in disproportionate impacts on an area with a higher concentration of residential amenity;
 - c) would be out of scale with and would unduly detract from and erode those characteristics which contribute to its landscape value, including primarily rural agricultural landscape, field pattern character, setting and visual aspect;
 - d) would negatively impact on the established appearance and aesthetic attributes and scenic quality of protected scenic route numbers 5, 6, 7, 8 and 9 and protected view numbers 31, 32 and 33, as identified in the Carlow County Landscape Character Assessment; and,
 - e) would, 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 and the CDP and County Renewable Energy Strategy.
- 9.3.13. I will examine each of these elements below in order of e), d), b), c) and a) and then examine cumulative impact. My comments below are related to Policies LA P1, LA P2, LA P3, LA P4, LA P6 and LA P11 which are set out in full in Section 5.23.11 above.

(e) Undesirable Precedent in areas having a High (maximum risk)

9.3.14. In response to this element of the refusal, the wording in the development plan is not 'lands identified as having a high (maximum) risk in the solar energy policy' but refers to 'Available Areas with High Risk'. The applicant states that while 38.9% of the proposed panels would be located in this area, the rest of the panels (61.1%) would be located in 'Available Areas with No Risk Identified'. (I note that Macroworks referred to a different split of 28% of panels in the High Risk area and 72% in the no risk area). I do not consider that the contradictory figures presented are critical to the assessment. I also note that the Renewable Energy Strategy states that the presence of a risk category in and of itself does not support nor preclude solar

- development, but it is a tool which flags areas of having a higher or lower concentration/distance from various sensitive receptors (see 5.23.3 above).
- 9.3.15. The applicant provided two examples of grants of permission that have been issued for solar farm developments in 'Available Areas with High Risk' since the Carlow County Development Plan 2022-2028 came into effect on the 4th of July 2022. They are P.A. Reg. Ref. 22/118, granted on the 11th of April 2023 and ABP-318475-23 (P.A. Reg. Ref. 23/92) granted on the 4th of June 2024. Approximately 50% of the site in 23/92, which is 77ha in area, is located on lands identified in the RES as 'Available Areas with High Risk' while c25% is in an excluded area. The entirety of 22/118 is in 'Available Areas with High Risk'.

P.A. Reg, Ref. 22/118

- 9.3.16. In their first report on P. A. Reg. Ref. 22/118, the planning officer describes the site as 'largely level and set on an elevated ridge'. It notes that the then draft development Plan 2022-2028 stated that there are no commercial solar energy facilities in the county and that it included a draft objective to favourably consider the development of solar farms on agricultural lands, as a means of farm diversification and the multi-purpose use of land. They also stated that the proposed development is in accordance with this policy.
- 9.3.17. The development plan notes that the site of 22/118 is located in a landscape that is moderately sensitive to development and has the capacity to absorb most types of development subject to the implementation of appropriate mitigation measures. The final decision was made when the 2022-2028 development plan was in effect and in their second report on 22/118 the planning officer stated that the proposed development is in accordance with national, regional and county policy, which recognises that dependence on non-renewable energy sources is unsustainable in the long term, and that there is a need for the exploitation of renewable energy sources such as solar.

P. A Reg. Ref. 23/92 (ABP-318475-23)

9.3.18. The planning officer's first report refers to the 2022-2028 development plan and notes that the site falls into the 'farmed lowlands' and 'farmed ridges' landscape types which have the capacity to absorb most types of development subject to the implementation of appropriate mitigation measures. In granting permission, the

Commission considered that the proposed development would not have an unacceptable impact on the character of the landscape, and to the national targets for renewable energy contribution to the overall grid.

Conclusion

- 9.3.19. I am satisfied that both of the grants of permission are relevant to the current proposal, as part of the current application site is located in an 'Available Areas with High Risk' where solar farm development is permissible subject to mitigation. In light of the existing and relevant grants of permission cited above, I do not consider that a grant of permission would set an undesirable precedent, as such a precedent already exists.
 - (d) Negatively impact on the established appearance and aesthetic attributes and scenic quality of Protected Scenic routes and Protected Views and Prospects

Scenic Routes 6, 7, 8 and 9 and views and prospects 31, 32 and 33

- 9.3.20. I have considered the LVIA prepared by Macroworks, that includes a Landscape Impact Assessment and a Visual Impact Assessment. The methodology included a desk study to establish a study area which was defined as 5km from the site, then field work to establish the landscape character and refine viewpoint locations. This was followed by an assessment of the significance and magnitude of landscape impacts, supported by photomontages. Having carried out the assessment, mitigation measures were proposed to reduce potential impacts and finally residual impacts were assessed. I am satisfied that the applicants methodology in preparing the LVIA is consistent with the EPA's 'Guidelines on the Information to be contained in Environmental Impact Statements (2022) and the Guidelines for Landscape and Visual Impact Assessment.
- 9.3.21. While they were not satisfied with the information submitted with the application or the additional photomontages submitted as further information, including viewpoints more than 5km from the site in the Killeshin hills to the west, the Planning officer did not elaborated on what exactly they expected to be the outcome of the assessment in the LVIA or the additional photomontages submitted as further information.

9.3.22. As part of my site visit I visited each of the scenic routes and views and prospects specifically referenced in the refusal reason. Scenic Routes 6, 7, 8 and 9 are located on elevated land in the Killeshin Hills and all except route 9 are more than 5km from the site. The overall route consists of a series of narrow roads with much roadside vegetation that restricts views towards the site from all but a number of vantage points. I also assessed the viewpoints prepared by Macroworks as part of the application, as further information and as part of the appeal and I am satisfied that the viewpoints represent an accurate representation of what views of the site would be like from the distant viewpoints. This is particularly evident in Photomontage RFI2, which is taken from a distance of c6.85km and 7.14km from the nearest parts of Parcels 1 and 2. The easternmost parts of Parcel 3 is c9.4km east of Viewpoint RFI2. I do not share the planning officer's opinion that the additional viewpoints provided by the applicant by way of further information are inadequate. I consider that they lack clear detail because of the significant separation distance that exits between the scenic roads and viewpoints and the site and that the viewpoints represent what can be seen by the naked eye at a significant distance. I also note that the planning authority has recently granted permission for a solar farm closer to the Killeshin Hills than the current proposed development, although is it located to the north of Parcel 1 and views of the site would be restricted due to the level nature of the site.

Within the Killeshin Hills, under ABP-318295-23 the Commission granted permission on the 21st of November 2024 for five wind turbines, a meteorological mast and a sub-station adjacent to Scenic Route 8, c1.2km north of View and Prospect 32, both of which are stated in part (d) of the refusal reason to be negatively impacted by the proposed solar farm development. The permitted turbines would have heights to blade tip of 136.5m and would be visible along the scenic route and from the viewpoints. Under ABP-315365-22 permission was granted on the 21st of November 2023 for the development of 7 wind turbines, the closest of which would be c 1.4km from scenic routes 6 and 7. While these development were not considered in the LVIA, I am satisfied that they demonstrate that the landscape has the capacity to absorb development, without having a significant impact on Protected Scenic routes and Protected Views and Prospects. In contrast, the nearest part of the solar farm to view and prospect 32 is c7.7km away, while View and prospect 31 would be

between 9 and 11km away from the solar farm. The Protected Scenic routes and Protected Views and Prospects are also restricted by roadside vegetation and buildings along the roadside particularly close to viewpoint 31. Viewpoint RFI1 clearly shows the panels in place and they sit well below the ridgelines in the background. Taking into consideration the low profile of the proposed solar panels and the intervening distance, I am satisfied that the proposed solar development would not negatively impact on the established appearance and aesthetic attributes and scenic quality of protected scenic route numbers. 6, 7, 8 and 9 and protected view numbers 31 and 32.

- 9.3.23. The refusal reason also refers to similar negative impacts on protected View No 33 as identified in the Carlow County Landscape Character Assessment (LCA). View and Prospect 33 is described in Table 9.3 Schedule of Views and Prospects of the LCA as 'View east and north, of River Barrow' from Milford. I have reviewed the Views and Prospects map in the Carlow County Landscape Character Assessment and Schedule of Protected Views, but it does not contain a Viewpoint 33. Therefore, I am not satisfied that it can be determined whether or not the viewpoint would be affected. I did visit Milford as part of my site visit including the bridges over the River Barrow and I note that Milford lies at a low elevation and views from there are limited by dense vegetation. I do not consider that any potential visibility of the solar farm site from this area would be such that a refusal of permission would be warranted.
- 9.3.24. Scenic Route 5 runs north to south from just north of Nurney village to the approximate location of the farmyard and buildings located between parcels 2 and 3 on the L-3052. The applicant has stated that they engaged Macroworks to advise on mitigation through design from the start of the project and for that reason the proposed panels would be set well back from the roadside edge along both the northern and southern sides of scenic Route 5. This is evident on the ground when you view the site from along the L-3052 and in particular I refer to viewpoints 13a, 13b and 13c, prepared by Macroworks that accompany the appeal. The applicant has proposed extensive mitigation in the form of new and enhanced planting and the photomontages submitted with the application, as further information and as part of the grounds of appeal show how the panels would be viewed when in situ, after two planting seasons and when the planting would mature. Photomontages 10a, 13b and part of 13c relating tm the more elevated parts of the site, which are good examples

- of how the new and enhanced planting would eliminate views of the much of proposed solar panels and associated infrastructure, when it matures, so and the visual and landscape impacts of the development, from these vantage points would be only temporary, which I consider to be acceptable.
- 9.3.25. Even with the planting in place there will still be some limited views of the panels at the southwestern end of parcel 3a, and would be visible when travelling south on scenic route 5. This is evident on the right side of Photomontage 13c. I note that the view is limited and that the photographs were taken when deciduous trees were without foliage. I visited the site during the summer when the trees were in foliage and I consider this level of visibility to be acceptable and taking into consideration that the central lowland landscape that the site is located in is stated in the development plan to be capable of accommodating wind farms and quarries and has a moderate sensitivity to development with mitigation, I do not consider that this level of residual visibility on the northern side of Scenic Route 5 would warrant a refusal of permission or that it could be described as negatively impacting on the established appearance and aesthetic attributes and scenic quality of scenic route 5.
- 9.3.26. The land slopes downhill from Scenic Route 5 to the west and as part of the design mitigation, the closest panels to the road would be located c180m from the roadside edge. The ground level slopes downhill from the roadside edge to the panels and the pre-development and post mitigation landscape is shown in Photomontage 13a. It also identifies the locations of the two other applications to the north and west of the site that I have previously described in the planning history section. These other permitted and planned solar farm sites would not be visible from the site with mitigation and neither would Parcel 1 of the current application, as it as they are all located as a distance from Scenic Route 5. I note that the planning officer's report described P.A. Reg. Ref. 24/60205 (Park Solar Farm - now granted permission) as being immediately adjoining, when it is in fact located 600m north of Parcel 1 of this site at its nearest point, while Ballybannon Solar Farm (P.A. Reg. Ref. 25/60137) is 1.35km to the west of Parcels 1. Parcels 1 and 2 of the current application are also 600m apart and the extend of all of these sites is outlined in Photomontages VP4 and RFI2. While the pre and post mitigation photomontages show that a significant area of the panels in Parcel 2 would no longer be visible with the mitigation planting is established, part of the panes, would remain visible from Scenic Route 5.

9.3.27. I note that Scenic Route 5 is described in the LCA as 'Mixed landscape low level to west' from 'Ballyryan'. Ballyryan is a townland that ends c 300m to the south of the location where photomontage 13a was taken from in the townland of Ballyloo. Notwithstanding that the scenic route does not mention Ballyoo, the map in the LCA appears to indicate that this section of the road is part of the scenic route. Having considered all of the matters on the file including the proposed landscaping mitigation and the setting back of panels by c180m from the roadside edge and visited the site, and noting that Section 6.2.6 of the Carlow Renewable Energy Strategy states that solar farms have limited external impacts beyond the site boundary, whilst also stating that constraints may arise in relation to landscape impacts, I am satisfied that the solar panels in parcels 2 and 3 would not negatively impact on the established appearance and aesthetic attributes and scenic quality of Protected Scenic route 5 to such an extent that permission should be refused.

(b) higher concentration of residential amenity;

- 9.3.28. Part (b) of the refusal reason states that the proposed development would result in disproportionate impacts on an area with a higher concentration of residential amenity.
- 9.3.29. While this wording appears in the refusal reason, it is not addressed to any extent in the planning officer's reports, other than as a reference to the options available to the planning authority in the report prepared by CAAS Ltd. Section 6.2.2 of the Renewable Energy Strategy (RES) states that when environmental and geographical constraints are removed, there is still 755 km² of land potentially available for solar farm development. That includes the entire site of the proposed development being considered in this application. The planning officer's first report states by reference to risk categories, that the presence of a risk category in and of itself does not support nor preclude solar development, but is a tool which flags areas of having a higher or lower concentration/distance from various sensitive receptors. These sensitive receptors are material assets, sensitive receptors, European Sites and natural physical attributes (such as groundwater vulnerability, geological heritage sites, soil drainage, landslide, and flooding susceptibility. There is no reference in that context to residential receptors.

- 9.3.30. Section 6.2.6 of the RES states that the suitability assessment undertaken by the SEAI considered residences, while Table 6-7: 'Potential solar capacity availability' includes a footnote that states the calculations of potential solar development is based on a setback distance of 25m imposed on solar farms from domestic dwellings. 6.2.6 continues to state that proximity to housing is another factor, although it also states that solar farms have limited external impacts beyond the site boundary and this is reflected in the reference to a 25m setback. I agree that the impact of solar farms, due to their low height is limited.
- 9.3.31. The area in which the site is located is not a heavily population area, although there are a number of houses located close to the northern boundary of Parcel 2, where it is proposed to leave a buffer strip devoid of panels, so that the nearest residences to the proposed panels would be 55m away, which is 30m further than deemed necessary in the RES. I am not satisfied on the basis of the information in the planning authorities planning reports that it has demonstrated that the site is located in an area with a higher concentration of residential amenity, and I am also not satisfied that it has been demonstrated that the development would have a disproportionate impacts on the area in respect of residential amenity. I do not consider that it is sufficient to use working proposed in the independent assessment when it did not carry out a detailed assessment of the proposed development versus the development plan policies referenced in the refusal reason. Therefore, I do not consider that this element of the refusal reason has been proven.
 - (c) Would be out of scale, would erode the characteristics which contribute to the landscape value including primarily rural landscape, field pattern character and setting and visual aspect.
- 9.3.32. I note that, the planning authority has recently granted permission for a solar farm on a 60ha site, c600m to the north of the current application site, while I have previously referred to three separate grants of permission for adjacent solar farms c7.8km to the north east of the site and which would have a combined area of 237ha, which is 45ha larger than the site that is subject to this appeal, before factoring in that Parcel 4 was omitted at further information stage. The proposal in this application would have an area of c181ha in 3 parcels of land and if it was permitted, I would not consider it to be out of scale with other solar developments already granted permission in the area.

- 9.3.33. With respect to the scale of the development relative to the landscape. I consider that parcel 1, though electrically connected, is located 600m from Parcel; 2 and this acts to reduce the perceived scale of development in the landscape, when viewed from elevated parts of the Killeshin Hills and this is evident in Photomontage RFI1. Parcel 1 is also the smallest of the proposed parcels at 32.62ha and due to the intervening topography and vegetation, I consider that parcel 1 does not appeal as part of the same development with Parcel 2 or 3 as one development. Similarly, while parcels 2 and 3 are close to each other, parcel 2 at 83.52ha, it lies predominantly in flat land and the panel have been laid out in such a manner, that with landscaping in place, the two parcels effectively appear to be separate development. While the two parcels would be visible from the Killeshin hills, Viewpoint VP4 (Paged 2 of 2) and Photomontage RFI1 clearly show that there is separation between the two different elements of the development.
- 9.3.34. The Macroworks Report prepared as part of the appeal noted that the field pattern will not be affected and that early landscape planting of advanced nursery stock will be carried out to ensure that the new and enhanced hedgerows have two full growing seasons before the panels are operational. This will soften and screen the impact of the panels. It also notes that no notable excavation is required to facilitate the development. The operational landscape impact is deemed to be medium to low as a result of the careful mitigation by design that was introduced at the start of planning of the project, which I consider to be an accurate reflection of the layout. I also consider that the layout has been influenced by the topography and proximity of residential receptors with clear separations are proposed between the panels and nearby houses.
- 9.3.35. With respect to the characteristics which contribute to the landscape value, I note that Policy SE P2 of the development plan seeks to favourably consider the development of solar farms on agricultural lands which allow for farm diversification and multipurpose land use. Chapter 9.5 addresses 'County Landscape Sensitivity and Capacity states that matters that influence visual impact are topography, vegetation and development and that there will be a presumption against development proposals located on elevated and visually exposed site. While part of the parcel 3 is locally elevated, I am also satisfied that the applicant has proposed appropriate mitigation measures that once grown out, would mean that the panels

- would not be open or exposed. I have also previously noted that while parcel 3 is locally elevated, with mitigation, the panels would not be visible from the local road network. In addition, while there would be distant views of the site from the Killeshin hills, these views are between 4.5 and 9km away and the panels would not have a significant negative impact on the panoramic views that are available at points along scenic routes 6, 7, 8 and 9.
- 9.3.36. With respect to the field pattern character, it is only proposed to remove 47 linear metres of boundary hedging to facilitate access between fields while it is proposed to plant an additional 3,523 linear meters of new hedgerow planting, bolster 13,425 linear meters of existing hedgerows, as required, in addition to 2,611 sqm of new native woodland planting and the sowing of 99,257 sqm of field margins in support of biodiversity gain. I consider that the proposed development would enhance and not detract from the field patterns in the area.
- 9.3.37. Having regard to the foregoing paragraphs, I do not consider that the proposed development would erode the characteristics which contribute to the sites setting and visual aspect. In fact, I consider that the proposed landscaping would have a positive impact on the sites setting and visual aspect.
 - (d) disproportionate and adverse landscape and visual impacts on the character of the rural area;
- 9.3.38. The Landscape Character Area in which the site lies is the 'Central Lowlands', withing which th Parcel 1 and most of Parcel 2 are located in the 'Farmed Lowlands' Landscape Type, while part to Parcel 2 and Parcels 3 are in the 'Farmed Ridges' landscape type.
- 9.3.39. I note that a large quarry operates in close proximity to the western side of the site while the M9 motorway and the Dublin to Waterford rail line both pass close to the west of the site also. This is not an unspoilt or undeveloped rural landscape.
- 9.3.40. Chapter 9.6 of the development plan includes a 'Land Use Capacity Matrix' which states that the central lowlands have moderate capacity for wind farming, extractive industry, forestry plantation, rural housing and urban development expansion, and it would have low capacity for industrial development. It does not refer to solar farms, but in the context of the issued addressed in the reports of Macroworks and in paragraphs 9.33 to 9.38 above, and with mitigation in place, that the impact of the

proposed development would not have a disproportionate or adverse landscape and visual impacts on the character of the rural area.

Cumulative Impacts

- 9.3.41. The refusal reason referred to cumulative landscape impact with other proposed and permitted solar farms.
- 9.3.42. I have also reviewed the LVIA report submitted with the application, which addressed the only permitted solar farms in the 5km study area at the time the application was submitted, which were two sites to the south and east. I visited the site of that solar farm, which is currently under construction c2km to the east (127ha under ABP-307891-20). I am satisfied, having visited the sites, that there is no significant intervisibility between sites and I would accept Macroworks response to the appeal, where it illustrates, in Figure 7 the cumulative Zone of Theoretical Visibility (ZTV, the potential for intervisibility and states that only 1.6% of thew study area has the potential to afford combined views. I am satisfied that the potential for intervisibility is not significant. I have also reviewed the report prepared by Macroworks as part of the appeal, which referred to P.A Reg. Ref. 24/60295 (then in planning but refused permission on 31st of July 2025). That site is located close to ABP-307891-20.
- 9.3.43. Macroworks report on the appeal, also refers to two applications to the north and north west of the application site. They are P.A Reg. Ref. 24/60205 (then in planning but now granted) on a site, c600m north of Parcel 1 of the current application, and P.A. Reg. Ref. 24/60137 (on further information). These applications are respectively called Park Solar Farm and Ballybannon Solar Farm and are illustrated for cumulative impact purposed in VP4 submitted with the appeal. I have also visited these site locations and considered the various photomontages and viewpoints submitted, including the cumulative photomontages.
- 9.3.44. With respect to the Park solar farm I noted earlier that permission has been granted on the 27th of May 2025 on a 60ha site that starts c600m north of the northern extent of Parcel 1. That site, like Parcel 1 and most of parcel 2 in this application, is in the farmed lowlands and is separated from the site by the M9 motorway and intervening vegetation. It is not, as described at page 6 of the planning officer's second report 'adjoining' the site. I agree with the comment of the applicant that nobody experiences a solar farm as it is shown in plan form and the fact that the parcels of

land in this application are separated, with parcel 1 being 600m north of parcel 2 and also 600m south of the permitted solar farm in P.A. Reg. Ref. 24/60205, I am satisfied that the flat nature of the landscape and an intervening vegetation mean that the will be no significant cumulative impacts. I refer the Commission to VP4 (page 2 of 2) to see the two sites in context when viewed from the Killeshin Hills. I further note that P.A. Reg. Ref. 24/60205 is located closer to the Killeshin Hills than the permitted development, but it was not deemed to be unacceptable form of development from the scenic routes or protected views that are referenced in the refusal reason on this application.

- 9.3.45. There is scope for intervisibility between the permitted Park Solar Farm, the current application and the Ballybannon Solar Farm, which is on further information, when viewed from the Killeshin Hills. However, I consider that the three parcels of the current application have significantly reduced its potential landscape effect, while it located as a sufficient distance from the hills and protected views and second routes, and is also offset from the other permitted and proposed solar farms, such that I am satisfied that its impact would not be significant. In addition, Park solar farm is located on flat land with good vegetation cover that would restrict any potential for significant visual or landscape impacts.
- 9.3.46. I am satisfied that with mitigation in place in the form of landscaping, that the central lowland landscape has the capacity to absorb the proposed development in its entirety in the 3 parcels (1, 2 and 3) as well as the other proposed and permitted solar farms in the immediate area, and combined they would not result in significant cumulative visual or landscape impacts such that a refusal of permission should be issued.

Conclusions on refusal reason v policies

- 9.3.47. The following comments are made by reference to the preceding paragraphs.
- 9.3.48. Policy LA P1 I am satisfied that the landscape has the capacity to absorb the proposed development and that the applicant has demonstrated that through mitigation, in particular the setting back of panels from scenic route 5 would allow the proposed development to sustainably integrate with the existing landscape and that the development can be absorbed into the landscape. The proposed landscaping, when mature, will enhance the appearance and character of the landscape that is

- characterised by hedgerow and tree lined field boundaries. I am satisfied that the proposed development would not materially contravene Policy LA P1.
- 9.3.49. Policy LA P2 This policy refers to development not having 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.
- 9.3.50. The proposed development would have no impact in the sensitive upland areas of the county, while I visited the protected scenic routes in the Killeshin Hills, which are routes 6, 7, 8 and 9 as well as protected views 31 and 32 and I considered the photomontages provided as part of the application and appeal. While parts of the proposed development would remain visible following mitigation, both in the lower parcels of 1 and 2 and in the more elevated parcel 3, I am also satisfied that the significant separation distance that exists between the site and these protected views and scenic routes are such that the proposed development would not significantly interfere with or detract from scenic upland vistas. In coming to this conclusion I also considered the permitted solar farm c600m to the north (P.A. Reg. Ref. 24/60205) and the proposed solar farm c 1.35km to the west of the site (P.A. Reg. Ref. 25/60137). I also noted the visual impact of the M9 motorway and Clonmelsh quarry buildings that are closer to the Killeshin hills than the proposed site and while visible they are not significant features in the wider landscape and panoramic vistas offered from select points along the elevated scenic routes. I am satisfied that the proposed development would not materially contravene Policy LA P2.
- 9.3.51. Policy LA P3 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.
- 9.3.52. While part of the site is located in what is a landscape type that is called 'farmed ridges', the overall site is located in the 'central lowlands' landscape character area which the Landscape Character Assessment deems is moderately sensitive to development and it is also deemed to have a relatively high potential capacity to

- accommodate wind farming, which would have a significantly greater visual impact than a proposed solar farm. I am satisfied that the applicant has demonstrated through the layout of panels in parcels 2 and 3 and through landscape mitigation, as illustrated in the submitted photomontages, that the landscape can accommodate the proposed development. Therefore, I am satisfied that the proposed development would not materially contravene Policy LA P3.
- 9.3.53. Policy LA P4 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.
- 9.3.54. By reference to Photomontage RFI1 that was submitted to the planning authority as further information, I am satisfied that the proposed development is not located on steep slopes or ridges. Therefore, the proposed development would not materially contravene Policy LA P4.
- 9.3.55. Policy LA P6 I am satisfied that through design mitigation and landscaping that the applicant has demonstrated that any potential adverse landscape or visual impacts are minimises or removed, while the development would not change the topography meaning that natural site features and characteristics will be retained. Therefore, I am satisfied the proposed development would not materially contravene Policy LA P6.
- 9.3.56. Policy LA P11 I consider that the views and prospects that are referred to in the refusal reason would not be affected due to the distance between the site and views 31 and 32, and while view and prospect 33 is referred to in writing, its location is not marked in the Landscape Character Assessment map. Therefore, I am satisfied the proposed development would not materially contravene Policy LA P11.
- 9.3.57. In light of the above, I am also satisfied that the proposed development would not material contravene either the Calow Landscape Character assessment and schedule of protected views or the solar energy policy including the county Renewable Energy Strategy.

- 9.4. Section 37(2) of the Planning and Development Act 2000 (As Amended)
- 9.4.1. Notwithstanding my conclusions in section 9.3 above, 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. 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 <u>section</u> <u>28</u>, policy directives under <u>section 29</u>, 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.
- 9.4.2. 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 <u>Strategic or national importance</u>

9.4.3. By reference to the policies in Section 9.2 above 'Principle of Development – Local, European, National & Regional Policy', 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.
- 9.4.4. I am satisfied that the proposed development is of a scale (203,960MW hours per annum) 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

- 9.4.5. While the applicant is of the opinion that the proposed development is not a material contravention of the development plan, they nevertheless set out why in their opinion that there are conflicting or unclear objectives in the development plan. They listed the policies RE P1, IF P1, SE P2 and Objectives RE O1 and SE O1. Section 37(2)(ii) refers to Objectives only, not policies. RE O1 is to 'seek to achieve a minimum of 130MW of renewable electricity in the County by 2030, by enabling renewable energy developments', while SE O1, is 'increase the penetration of solar energy developments at appropriate locations subject to compliance with proper planning and environmental considerations.". I am satisfied that the proposed development would be consistent with both of the above objectives, and I am also satisfied that the objectives are clear.
- 9.4.6. The appellant continues this point by setting out why the development is consistent with policies LA P1, LA P2, LA P3, LA P4, LA P6, and LA P11. The planning authority refused permission, not on the basis of conflicting with objectives but the aforementioned policies of the development plan as well as the 'Carlow Landscape Character Assessment and Schedule of Protected Views.', Solar energy policy, including the County Renewable Energy Strategy. I will examine these policies in detail later in my assessment but for the purposes of Section 37(2)(ii), I am not satisfied that there are conflicting or unclear objectives in the development plan.

iii <u>permission for the proposed development should be granted having regard</u> 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

- 9.4.7. The applicant also addressed this point in their Statement in Support of Material Contravention and states that the CAP 2024 sets out targets that are directly supported by the NPF and RSES. It notes that the 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', while RPO 100 is 'to support the integration of indigenous renewable energy production and grid injection'. They also note that Ireland has a binding target to increase its share of electricity generated from renewable sources to 80% by 2030 and is very unlikely to meet its target of 8GW from solar energy. They also note that planning authorities must consider obligations under Regulation (EU) 2022/2577 and RED III to prioritise renewable energy projects when balancing competing legal interests and that evaluative judgement and any discretionary powers afforded to the Commission must be used in a manner consistent with the Climate Action Plan 2024 as required by Section 15 of the Climate Act.
- 9.4.8. I previously addressed the RSES in paragraph 9.2.10 and I refer the Commission thereto. I am satisfied that permission for the proposed development should be granted having regard to the regional spatial and economic strategy for the area in particular 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.
- 9.4.9. 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.
- 9.4.10. In paragraphs 9.3.14 to 9.3.19 above, I addressed two precedent grants of permission for solar farms during the life of the current Carlow County Development Plan on lands designated as 'Available Areas with High Risk' and I refer the Commission to P.A. Reg. Ref. 22/118 and ABP-318475-23 (P.A. Reg. Ref. 23/92) as they demonstrate a pattern of development in the area since the making of the development plan.
- 9.4.11. In addition, permission was granted to the current applicant, Ballyloo Solar Farm Limited, on the 27th of May 2025 for a solar farm on c60ha site, c600m north of Parcel 1 of this application (P.A. Reg. Ref. 24/60205).
- 9.4.12. Two grants of permission have also been issued for solar farms on sites c7km to the north-east of the current application site and adjacent to the site of ABP-318475-23 (P.A. Reg. Ref. 23/92) since the current county development plan came into effect. They are P.A. Reg. Ref. 22/149, a 68.8ha solar farm granted on the 19th of May 2023 and P.A. Reg. Ref. 23/60297 on a site of 91.2ha, which was granted on the 24th of September 2024. The three sites have a combined area of 237ha, which is 45ha larger than the site that is subject to this current application. If combined, the current application site at 181ha and that of 24/60205, 60ha, would have a similar combined area to that of 22/149, 23/60297 and 23/92, so I am satisfied that is cannot be stated that the current proposed development would have a significant cumulative impact, when there is a directly relatable precedent in close proximity.
- 9.4.13. Under ABP-318295-23 (P.A. Reg. Ref. 21/15) permission was granted on the 21st of November 2024 for five wind turbines, meteorological mast, electricity sub-station and associated site works in the Killeshin hills adjacent to Scenic Route 8 and close to View and Prospect 32, both of which are stated in part (d) of the refusal reason to be negatively impacted by the proposed development which is c 7km away. The permitted turbines would have heights to blade tip of 136.5m, Hub height 78m & rotor diameter 117m, would be visible from the application site and were permitted in proximity to protected views and prospects and scenic routes in the Killeshin hills.

- Permission was also granted in November 2023 under ABP-315365-22 in close proximity to scenic routes 6 and 7.
- 9.4.14. I do note one recent refusal of permission on the 24th of July 2025, for a solar farm on 132.28ha c9.2km north of the site under P.A. Reg. Ref. 24/60196.
- 9.4.15. Notwithstanding a recent refusal of permission by the planning authority for a solar farm, I am satisfied that the provision of Section 37 (2) (b) iv apply and that 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.

Conclusion

9.4.16. Having regard to the above, should the commission not agree with my assessment in 9.3 above, that the proposed development does not constitute a material contravention of the development plan, 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).

9.5. Other Issues

9.5.1. This section addresses other issues that have been raised in third party observations and in the grounds of appeal which are outside of the scope of landscape policies and the planning authorities refusal reason.

9.6. Procedural Issues

9.6.1. I would agree with the applicant, that the refusal reason addressed matters that were not raised in the request for further information, however, the applicant has submitted a comprehensive response to these matters in the form of the grounds of appeal and appendices, so I am satisfied that the applicant has been given the opportunity to address the matters raised in the comprehensive refusal reason issued by the planning authority.

9.7. Construction Timeframe

9.7.1. Observors raised concerns the development would have an undefined construction period. The Construction and Environmental Management Plan states it is expected that the overall programme for construction of the solar farm and substation/grid connection would be 24 months and it also includes an indicative construction programme setting out the timeframe for each of the different phases of construction. I am satisfied that the applicant has provided a clear construction timeframe.

9.8. Traffic and Access

- 9.8.1. A number of the third parties raised concerns about the carrying capacity of the public road. I note that the site is located in close proximity to the M9 motorway and the applicant has indicated that the haul route would be via the M9 to a point where it would exit onto the N80, before entering onto the local road network for the final few km of travelling. Following a request for further information regarding the carrying capacity of the junction of the L-3050 and L3052 roads, the transportation department of CCC has not expressed any concerns and recommended a grant of permission subject to conditions, while TII did not express any concerns in respect of the use of the National road network. I also note that the Indicative Construction Programme in the CEMP sets out the estimated number of monthly, weekly and daily vehicle movements to the solar farm, with a peak daily number of 21 occurring in months 17 and 18, which would relate to the peak of panel installation. With respect to the carrying capacity of the wider road network I note that another solar farm development is under construction that also uses the N80, while a long established quarry operates to the west of the site. The interconnector cable trenching is proposed to take place over a period of 7-10 weeks given that sections of same are located in public roads and this will be subject to a detailed traffic management plan. This would be standard for underground cable connections and would require a road opening licence as well as agreement with Irish water in respect to building over its services and an informal agreement has been reached in that respect with Uisce Éireann.
- 9.8.2. The applicant has also provided details of sight lines at the proposed entrance points to each of the 3 parcels of land and also detailed how they will minimise the potential for surface water runoff from the site onto the adjoining public road network.
- 9.8.3. I am satisfied that subject to appropriate conditions and the preparation and agreement of a final CEMP that the proposed development would be acceptable in traffic safety and access terms.

9.9. **Biodiversity**

- 9.9.1. The development plan notes that the landscape had been changed by the removal over time of field boundaries to create much larger and open field patterns. There is still a strong defined boundary pattern with hedgerows and trees of various cover levels and density in the area, and I am satisfied that the applicant's proposal to bolster existing boundaries and plant new hedging as well as planting trees and seeding the field margins would have a beneficial impact on biodiversity in the wider area. These proposals are articulated in the submitted landscape plans and in the Ecological Impact Assessment (EcIA), NIS and Biodiversity Management Plan.
- 9.9.2. Habitat, botanical, bird, bat and mammal baseline surveys were carried out and the bird survey notes that the relatively large field size and habitat homogeneity makes it unlikely that the site would support a very broad range of, or a high overall density of breeding bird species. It also states that no plant species that have been listed as an invasive alien plant species of concern in the European Union were detected within the site and that no evidence of otter was found in or in proximity to the waterbodies traversing the site, that in turn connects to the River Barrow and River Nore SAC, c2.3km downstream. I agree with the assessment within the EcIA where it is considered that there will be no significant negative effects on habitats, or fauna (otters, bats, amphibians and birds) as a result of the proposed development.
- 9.9.3. Identified mitigation measures include mammal perimeter friendly fencing, which will provided a 200mm gap at the bottom to allow mammals to pass beneath. It is also proposed that no development, other than some boundary fencing, would be located closer than 10m from waterbodies passing through the site. The development would also include minimal hedgerow removal (c47m), but would include extensive reinforcement of existing hedgerows, new hedgerows and native woodland planting.
- 9.9.4. Subject to appropriate mitigate measures, which can be addressed by condition, if the Commission is minded to grant permission, I am satisfied that significant negative effects on biodiversity would be avoided by the proposed development.

9.10. Policy / Lack of Policy and Loss of Tillage Land

9.10.1. Observors refer to Policy SE P1 of the development plan that states that the council will 'Favourably consider the redevelopment of brown field sites for solar PV projects subject to proper planning and environmental considerations'. They also state that

- there is a lack of government policy on what percentage of agricultural land can be developed for solar farms, and that Italy have banned solar panels on agricultural land.
- 9.10.2. Whilst noting the above, Policy SE P1 does not preclude the development of solar farms on agricultural land such as the current application site, and I note Policy SE P2, which states that the council will 'Favourably consider the development of solar farms on agricultural lands which allow for farm diversification and multipurpose land use'. The applicants' appeal correctly states that there is no inventory of agricultural land in Ireland, so reference by the observors to the loss of 'good quality agricultural land' is purely subjective, while I also agree that the land can be used for the grazing of sheep, with the solar panels in place, and would also be available to wildlife. I consider that the absence of government policy on the appropriate location for the development of solar farm does not preclude the granting of permission in this instance and also note that the Development Plan has identified 755 sq.km of land that is deemed suitable for the development of solar farms in Figure 7.9 of the plan. The entire application site is located in a suitable area.

9.11. Heritage

- 9.11.1. A number of recorded monuments are located with the site boundary and the site was subject to a comprehensive request for further information following from which the panel layout was amended and Parcel 4 was omitted entirely. In response to the request for further information, a revised Architectural and Cultural Heritage Impact Assessment report was submitted. It includes the results of a geophysical survey and advance archaeological test excavation carried out under licence. Upon review of this document, the DoHLGH was satisfied that subject to conditions, the proposed development would be acceptable and I concur with their conclusion in that regard.
- 9.11.2. Observors have expressed concern about the impact of the proposed development on the Tinryland Heritage Trail, which includes the Clonmelsh Graveyard where Walt Disney's ancestors are buried. I visited and observed Viewpoint 11 and I also noted that a significant quarry structure is located immediately adjacent to the graveyard. I consider that this structure would have significantly greater impact on the graveyard than the solar farm, while the intervening fields and vegetated boundaries, as well as the topography between the site and the graveyards act to reduce or eliminate views

between the graveyard and the proposed solar farm. The Clonmelsh Graveyard is not listed as one of the Historic Landscapes in the Landscape Character Assessment of the Central Lowlands. I am satisfied that the proposed development would not have a significant negative impact on views to or from the graveyard.

9.12. Glint and Glare

- 9.12.1. I have reviewed the glint and glare assessment submitted with the application and I consider the methodology to be acceptable and I agree with its conclusions there was no potential for reflectance from the solar farm on either the M9 or the mainline railway, while a study of all residential receptors within 1km of the site concluded that the solar farm would not generate any significant nuisance affects towards surrounding residences. Observors stated that even with a low level of glint and glare, the development would still be uncomfortable to look at, but did not elaborate on this point.
- 9.12.2. I also reviewed the response to item 3 of the request for further information, prepared by Macroworks, that outlines the changes made at that stage by removing panels and relocating the proposed substation, and specifically references changes to viewpoints 9, 10 and 13. I agree with the conclusion that potential reflectance dissipates at increasing distances from the potentially reflecting panels and would not considered to materially affect receptors beyond 1km. I note that the applicant stated that photovoltaic solar panels are by no means a highly reflective surface, as they absorb rather than reflect sunlight, while more than 90% of panels are now fitted with a reflective coating, while uncoated panels also have very low levels of reflectance and the level of reflectance would be similar to shed roofs, lines of plastic on the ground and wet road surfaces. However, the applicant did to not state whether such coated panels would be used in the proposed development. The most reflective element of the panels would be the steel surrounds of the panels.
- 9.12.3. After assessing the further information, TII's requested that glint and glare mitigation, in the form of a monitoring programme proposed to safeguard the levels of safety on the M9, be incorporated into a condition in any permission granted. This would allow for additional mitigation, if necessary, and amendment/removal of any elements of the solar PV development that result in glint/glare and impact on road safety on the M9. The planning officer concurred with the TII's submission. In the interest of

- safeguarding the Motorway network, I consider that the attachment of such a condition would be acceptable, if the Commission is minded to grant permission.
- 9.12.4. By reference to the glint and glare assessment and to the response to further information, I consider the applicant has adequately demonstrated the overall impact of the proposal on receptors will be low, and I am satisfied there is low potential for the occurrence of glint and glare at nearby residential receptors, as the nearest house to the panels would be 55m. I note the development plan refers to a 25m separation distance from housing as being acceptable and that solar farms do not have much impact outside of their boundaries. I am satisfied that subject to mitigation measures, in the form of new and enhanced hedgerow field boundaries, would mean the proposed development would not result in any significant adverse impacts on established residential amenities and would not cause nuisance to local residential or infrastructural receptors.
- 9.12.5. I am satisfied, subject to mitigation measures, which can be addressed by way of condition, that the proposed development would not cause nuisance to local residential or infrastructural receptors.

9.13. **Noise**

- 9.13.1. Observors have stated that there is potential for operational noise disturbance from the invertor/transformer stations that will be continuous and will be located close to residences. The applicant responded to this issue the response to further information and submitted that there is no evidence to suggest that Solar Farm development would impact negatively on human health and supported their statement with an updated noise report in the form of a report by Wave Dynamics, which reconsidered the noise and vibration impacts in light of the layout changes. The original noise impact assessment and the additional technical note have been noted and are considered appropriate. The predicted operational noise levels at 21 Noise Sensitive Locations, would be well below the 55dB L_{Aeq} level for the hours of 07:00 to 19:00, and the 45 L_{Aeq} level for the hours of 23:00 to 07:00, with slight improvements noted as a result of the reduction in the number of invertor/transformer stations at further information stage.
- 9.13.2. One observor referenced noise impact from the proposed substation, but it does not form part of this application.

9.13.3. I am satisfied that subject to appropriate conditions that the proposed development would be acceptable in respect to construction noise and vibration and operational noise.

9.14. Flooding

9.15. In section 4.1.1 of this report I noted that permission had been refused in 2020 for a single storey house on the northern edge of Parcel 2 for four reason including potential flood risk. I also note that a number of streams run through or adjacent to the site boundary and i have addressed this in more detail in Water Framework Directive Assessment in Appendix 5 to this report and in Sectio 7.0 above. I note that it is not proposed to install panels in the area which was previously identified as being liable to flooding in that application. In addition highly vulnerable developments such as transformers or invertors would not be installed in areas identified in the Site Specific Flood Risk Assessment as being at the highest risk of flooding. I am also satisfied that the maintenance of the grass beneath the solar panels will act to control the flow of water so that there would not be an increase in surface water runoff while the access tracks would be built of permeable materials. The planning authority sought further information regarding potential for surface water to run off onto the public roads, but this was satisfactorily addressed in the applicants Engineering response where they detailed that the roadside drainage would be designed to ensure surface water does not run onto the adjoining roads. I am satisfied that the proposed development would not give rise to a risk of increases flooding.

9.16. Community Benefits

9.16.1. The observors state that there will be no direct or affordable power supply advantages to local residents. I consider that this matter is outside of the scope of this planning appeal, but I do note that should permission be granted, development contributions would be payable under the terms of the current Development Contribution Scheme 2017-2021 (revised 1st of January 2024), where a contribution of €12,500 per MW payable for 'Other Renewable Energy Developments – Solar Farms etc. greater than 0.1MW'. I also note that a new draft Carlow County Council Development Contribution Scheme 2025-2029 was subject to public consultation

- that closed on the 25th of June 2025. In it, Solar Energy would attract a contribution at a rate of €12,170 per MW.
- 9.16.2. Further to the above, should permission be granted, and the scheme is successful in a RESS and the development is constructed and energised, the developer of the solar farm would be mandatorily required to make a financial contribution to a Community Benefit Fund. The contribution is currently set at €2 per Megawatt hour of generation of the RESS Project.
- 9.16.3. On the basis of the above, I do not concur with the observors that they would not benefit from the proposed development, if it is permitted and then constructed and energised.

9.17. **Devaluation of property**

- 9.17.1. The observors state that there is potential for a loss of property value and overall desirability of the area to prospective buyers and that the Irish Times reported that a property in Co. Meath has been on the market for 3 years and its proximity to ground mounted PV panels has put off potential buyers. Other than these statements, the observors have not substantiated their claims with any evidence.
- 9.17.2. I note that the nearest residences to the proposed panels would be 55m away, which is 30m further than deemed necessary in the RES, which states that a separation distance of 25m deemed to be an excluded area while solar farms have limited external impact beyond their site boundary. I also note that extensive landscaping is proposed that will significantly reduce the visual impact of the panels from the nearest residential receptors.
- 9.17.3. The development plan has determined that the site is in 'Available Area with No Risk' and 'Available Areas with High Risk', but is nonetheless deemed suitable for the development of solar farms, subject to normal planning and environmental considerations. The site is located adjacent to or in close proximity to the M9 motorway, a large active quarry and a piggery, so I do not consider that the proposed development would devalue property values in the local area any more so than any other development that could be permitted on the site.

9.18. Revised Substation Layout

9.18.1. While the applicant has proposed to relocate the substation to parcel 3, from the originally proposed parcel 4, as part of the revised layout, the applicant for the submission will be subject to a separate Strategic Infrastructure Development (SID) application to the commission and does not fall to be considered in this application. The proposed substation has been subject to a now concluded Pre-Application Consultation with the Commission (ABP-321855-25) and is also the subject matter of a Proposed Design Flexibility Opinion (ABP-321858-25) which has yet to be concluded.

9.19. Duration of Permission

- 9.19.1. The application has applied for a 10 year permission. Such duration would be consistent with previous decisions of the Commission in respect of similar solar farm developments, a number of which I have referred to in Section 4.0 Planning History of this report. I note that the applicant has engaged in consultation with the Commission with respect to the submission of an application for a substation, and I also note that the applicant has indicated in the revised CEMP that they hope to have the development energised by 2028. Having regard to the scale of development and requirements in respect of grid connection, I consider a ten-year permission to be reasonable.
- 9.19.2. I have also noted national policy to support the increase in electricity generated from renewable energy sources. The application is seeking that the development would have an operational life of 40-years and if the Commission is minded to grant permission I am satisfied that a 40 year operational life is appropriate for this type of development

9.20. Proposed conditions

9.20.1. A significant number of the actions required to carry out this development in a manner that safeguards the environment, roads and residential receptors, are set out in the form of mitigation measures in the various reports submitted either as part of the initial application, or an updated version of the reports as part of the response to further information, and these measures can be captured in a number of appropriate conditions, if the Commission is minded to grant permission, along with other

standard or topic specific conditions such as relating to noise, bonds and development contributions.

- The <u>Muinebheag Municipal District Engineer</u> recommended that a condition be attached regarding the requirement for road opening licences in accordance with RW7 of 2025 "Electricity transmission infrastructure development. I consider that this is a matter that will be dealt with under a different process outside of planning and it is not necessary to attach a planning condition to that effect.
- <u>TII</u> recommended that a monitoring programme is established for the applicant to adhere to which should allow for additional mitigation if necessary and amendment/removal of any elements of the solar PV development that result in glint/glare and impact on road safety on the M9.
- The applicants glint and glare report notes that due to the southerly orientation of the PV panels in the proposed solar farm, ground-based receptors including the M9 to the west can only be affected by morning reflectance, when the sun is rising in the east. The glint and glare assessment also determined that the proposed development would have no impact on the M9 on the basis of mitigation by design, meaning that all existing hedgerows within and around the perimeter of the site would be allowed to 'grow-out' prior to construction. I also note that landscaping proposal can fail, and parcel 1 of the proposed development is located less than 100m from the M9, so I consider that it would be reasonable to attach such a condition.
- <u>Uisce Éireann</u> recommend a condition is attached relating to a build over agreement. I consider that this is a matter that will be dealt with under a different process outside of planning and it is not necessary to attach a planning condition to that effect.
- 9.20.2. The DoEHLG recommended that an archaeological condition be attached to in respect of a geophysical survey (phase 2) and further possible excavation following from the work carried out as part of the response to further information. I consider that it would be reasonable to address these matters in a condition, if the Commission is minded to grant permission.

10.0 AA Screening

10.1. Screening Determination

10.1.1. 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 River Barrow and River Nore SAC (002162) in view of the sites conservation objectives. Appropriate Assessment is required.

10.1.2. This determination is based on:

- The nature and scale of the proposed development/works.
- The hydrological connections to the River Barrow and River Nore SAC (002162) and the potential for significant effects on QI habitats and QI species, by way of pollution and deterioration of water quality
- The potential for significant ex-situ impacts on QI and SCI (otter and Whiteclawed Crayfish).
- Potential for spread of invasive species.

10.2. Appropriate Assessment Conclusion: Integrity Test

- 10.2.1. In screening the need for Appropriate Assessment, it was determined that the proposed development could result in significant effects on River Barrow and River Nore SAC (002162) in view of the conservation objectives of the site and that Appropriate Assessment under the provisions of S177U was required.
- 10.2.2. 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 River Barrow and River Nore SAC (002162) can be excluded in view of the conservation objectives of this site and that no reasonable scientific doubt remains as to the absence of such effects.

10.2.3. My conclusion is based on the following:

Detailed assessment of construction and operational impacts.

- The proposed development will not affect the attainment of conservation objectives for Otter or White-Clawed Crayfish or prevent or delay the restoration of favourable conservation condition for River Barrow and River Nore SAC (002162).
- The effectiveness of planning conditions to provide for the implementation of mitigation measures set out in the NIS and in the Ecological Impact Assessment Report, Biodiversity Management Plan, Noise Impact Assessment, Site Access and Drainage Report that were submitted with the application and in the updated Landscape and Visual Impact Assessment, Construction and Environmental Management Plan, Archaeological, Architectural and Cultural Heritage Assessment Report, and Decommissioning and Site Restoration Plan submitted to the planning authority by way of further information.

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 Sectoral Plan 2019 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 20212030, 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,
- (I) 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 River Barrow and River Nore Special Area of Conservation (Site Code 002162) is 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 the site 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 Site.

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 Site, 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 River Barrow and River Nore Special Area of Conservation (Site Code 002162), in view of the site's 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 (47 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

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 29th day of January 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.

Reason: In the interest or clarity.

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

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.

- 3 (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 of the period, planning permission shall have been granted for their continuance for a further period.
 - (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 and to in accordance with condition 16 (g) of this Order

- and also be updated, submitted to and agreed with the planning authority prior to the commencement of decommissioning.
- (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.

Reason: To enable the relevant planning authority to review the operation of the solar farm in the light of the circumstances then prevailing.

The mitigation measures contained in the submitted Natura Impact Statement (NIS), shall be implemented in full.

Reason: To protect the integrity of European Sites.

All of the environmental, construction and ecological mitigation measures, as set out in the Ecological Impact Assessment Report, Biodiversity Management Plan, Glint and Glare Assessment, Noise Impact Assessment, Site Access and Drainage Report that were submitted with the application and in the updated Landscape and Visual Impact Assessment, Construction and Environmental Management Plan, Archaeological, Architectural and Cultural Heritage Assessment Report, Noise Technical Note and the Decommissioning and Site Restoration Plan submitted by way of further information, revised landscape plans and other 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.

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

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.

Reason: In the interest of clarity.

Prior to commencement of development, details of the structure of the security fence showing provision for the movement of mammals at regular intervals shall be submitted for prior approval to the planning authority.

Reason: To allow wildlife to continue to have access across the site and in the interest of biodiversity protection.

Site development and building works shall be carried out only between the hours of 0700 to 1900 Mondays to Fridays inclusive, between 0800 to 1400 hours on Saturdays and not at all on Sundays or public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.

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

- 9 (a) No additional artificial lighting shall be installed or operated on site unless authorised by a prior grant of planning permission.
 - (b) CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property or the road.
 - (c) Cables within the site shall be located underground.
 - (d) The transformers/inverters shall be dark green in colour.

Reason: In the interest of the long-term viability of this agricultural land and in order to minimise impacts on drainage patterns, clarity, visual and residential amenity.

- During the operational phase of the proposed development the noise level shall not exceed
 - (a) 55 dB(A) rated sound level between the hours of 0700 to 2300, and
 - (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.

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

11 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. The developer shall agree such details in writing with the planning authority prior to the commencement of development.

Reason: in the interest of environmental protection.

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. Prior to the commencement of development, a road condition survey shall be taken along the full extent of the L3050, L3051 and L3052 haul route to provide a basis for reinstatement works. Details in this regard shall be submitted to, and agreed in writing with, the planning authority prior to the commencement of development.

Reason: In order to ensure a satisfactory standard of development.

13 Upon completion of the installation of the panels and in advance of the commencement of operations at the development, an operational glint and glare assessment shall be carried out and submitted for the written agreement of the planning authority to confirm compliance with the conclusions of the assessment contained in the Glint and Glare Assessment. Where necessary, additional mitigation measures shall be undertaken to achieve compliance in this regard, to be agreed in writing with the planning authority.

Reason: To mitigation any potential post-construction impacts on adjacent lands, property and public road network.

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. Any gates shall open inwards only and shall be located a minimum of 10m from the roadside edge.

Reason: in the interest of traffic safety.

- 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:
 - (a) location of the site and materials compound(s);
 - (b) location of areas for construction site offices and staff facilities;
 - (c) details of site security fencing and hoardings;
 - (d) details of on-site car parking facilities for site workers during the course of construction;
 - (e) 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;
 - (f) measures to obviate queuing of construction traffic on the adjoining road network;
 - (g) measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network;
 - (h) details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels;
 - (i) 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;

- (j) off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil;
- (k) details of on-site re-fuelling arrangements, including use of drip trays;
- (I) details of how it is proposed to manage excavated soil;
- (m) 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.
- (n) hours of construction.
- (o) 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.

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.

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

- (a) The developer shall engage a suitably qualified Archaeologist (licensed under the National Monuments Acts) to carry out a predevelopment geophysical survey (phase 2) on all accessible areas not previously surveyed and to carry out archaeological test excavation in all areas of proposed ground disturbance and archaeological potential identified in the geophysical survey. Then submit an updated Archaeological Impact Assessment (AIA) report for the written agreement of the planning authority, following consultation with the National Monuments Service, and in advance of any site enabling/preparation works or ground works including site investigation works, topsoil stripping, site clearance works or construction works. The AIA report shall include an archaeological impact statement and mitigation strategy.
 - (b) Where archaeological material is shown to be present, avoidance, preservation in situ, preservation by record (archaeological excavation) and/or

- monitoring may be required, a Suitably qualified archaeologist to monitor site works, to ensure the preservation and recording of any surviving archaeological remains and to ensure appropriate mitigation.
- (c) Any further archaeological mitigation requirements specified by the planning authority, following consultation with the National Monuments Service, shall be complied with by the developer. No site preparation and/or construction works shall be carried out on site until the Archaeologists report has been submitted to, and approval to proceed has been agreed in writing with, the planning authority.
- (d) The planning authority and the National Monuments Service shall be furnished with a final archaeological report describing the results of any subsequent archaeological investigative works and/or monitoring following the completion of all archaeological work on site and the completion of any necessary post-excavation work.
- (e) The Construction and Environmental Management Plan (CEMP) shall be updated to include the location of all archaeological constraints relevant to the proposed development (as set out in the Archaeological and Architectural Heritage Impact Assessment and geophysical survey reports and as may become relevant subsequent to the archaeological test excavation). The CEMP shall clearly describe all identified likely archaeological impacts, both direct and indirect, and all mitigation measures to be employed to protect the archaeological environment during all phases of site preparation and related construction activity.
- (f) Exclusion Zones at all Recorded Monuments and No Dig Buffer Zones at areas of sub-surface archaeology identified through geophysical survey or test excavation, to be fenced off for the duration of the development and decommissioning phases.
- (g) The Decommissioning Statement shall be updated to include the location of all archaeological constraints relevant to the proposed development (as set out in the Archaeological and Architectural, Heritage Impact Assessment report and as may become relevant subsequent to the archaeological test excavation). The Decommissioning Statement shall clearly describe all

identified likely archaeological impacts, both direct and indirect, and all mitigation measures to be employed to protect the archaeological environment during all phases of site decommissioning and related activity

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

Drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works and services and shall otherwise comply with submitted Site Specific Flood Risk Assessment and the Site Access and Drainage Report. A drainage management plan shall be developed for the construction and the operational phases of the development to include details of the proposed access routes and drains and is to be submitted to the planning authority for approval prior to commencement of development.

Reason: In the interests of environmental protection and flood prevention.

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 reinstatement of public roads which may be damaged by the transport of materials to the site, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory reinstatement of the public road. 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

Reason: in the interest of traffic safety and the proper planning and sustainable development of the area.

19 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.

Reason: To ensure satisfactory reinstatement of the site.

20 The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Coimisiún 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.

Joe Bonner Senior Planning Inspector 13th August 2025

Appendix 1 - Form 1 - EIA Pre-Screening

	ACP-322347-25
Case Reference	
Proposed Development Summary	A 10 Year Planning Permission for a solar farm with a total area of circa 192 hectares
Development Address	Townlands of Ballybar Upper Ballyloo Ballyryan, Garryhundon and Linkardstown , County Carlow.
	In all cases check box /or leave blank
1. Does the proposed development come within the definition of a 'project' for the	Yes, it is a 'Project'. Proceed to Q2.
purposes of EIA?	☐ No, No further action required.
(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)	
2. Is the proposed development Planning and Development Regula	of a CLASS specified in Part 1, Schedule 5 of the ations 2001 (as amended)?
☐ Yes, it is a Class specified in Part 1.	
EIA is mandatory. No Screening required. EIAR to be requested. Discuss with ADP.	
No, it is not a Class specified in	Part 1. Proceed to Q3
and Development Regulations 20	of a CLASS specified in Part 2, Schedule 5, Planning 01 (as amended) OR a prescribed type of proposed e 8 of Roads Regulations 1994, AND does it
☐ No, the development is not of a Class Specified in Part 2, Schedule 5 or a prescribed type of proposed road	

development under Article 8 of the Roads Regulations, 1994. No Screening required.	
Yes, the proposed development is of a Class and meets/exceeds the threshold.	State the Class and state the relevant threshold
EIA is Mandatory. No Screening Required	
 Yes, the proposed development is of a Class but is subthreshold. Preliminary examination required. (Form 2) 	Solar 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.
OR If Schedule 7A information submitted proceed to Q4. (Form 3 Required)	Section 3 of the EIA Screening report prepared by HW Planning outlines a number of project types in Parts 1 and 2 of Schedule 5 to Planning and Development Regulations 2001 (as amended). The following classes and section are considered be potentially applicable to the proposed development:
	 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.
	Class 1 of Part 2 of Schedule 5 refers to:
	Projects for the restructuring of rural land holdings, undertaken as part of a wider proposed development, and not as an agricultural activity that must comply with the European Communities (Environmental Impact Assessment) (Agriculture) Regulations 2011, where the length of field boundary to be removed is above 4 kilometres, or where re-contouring is above 5 hectares, or where the area of lands to be restructured by removal of field boundaries is above 50 hectares
	Comment

The proposed development has been subject to preliminary examination for environmental impact assessment (refer to Form 2 below of this report).

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 (recontouring within farm-holding) and 50ha (area of lands to be restructured by the removal of field boundaries).

The proposed development would include the removal of c47 linear metres of hedgerow to facilitate access between fields, which is significantly below the 4km threshold and does not relate to the enlargement of fields

The panels are to be laid on the existing surface and re-contouring is not proposed as a part of the development.

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 47m of field boundary hedgerow.

Class 10 of Part 2 of Schedule 5: Infrastructure Projects:

(dd) All private roads which would exceed 2000m in length.

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.

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. (ABP-321991-25, ABP-316078-23, ABP-301028-18, 302681-18 and PL 17.248146 refer).

		Although the site area extends to c192ha, 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				
	t for the purposes of th	een submitted AND is the development a Class of he EIA Directive (as identified in Q3)? nation required (Complete Form 3)				
No 🗆	Dre covering determination conclusion remains as shows (04 to 02)					
Inspec	etor:	Date:				

Appendix 2 - Form 3 - EIA Screening Determination Sample Form

A. CASE DETAILS			
An Bord Pleanála Case Reference	ACP-322347-25		
Development Summary		A 10 Year Planning Permission for a solar farm with a total area of circa 192 hectares	
	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 HWP Planning with Schedule 7A information accompanied the application.	
3. Has an AA screening report or NIS been submitted?	Yes	A NIS, prepared by Ecology Ireland Wildlife Consultants Limited has been submitted and includes a Stage 1 AA Screening and a Stage II Natural Impact Statement.	
4. Is a IED/ IPC or Waste Licence (or review of licence) required from the EPA? If YES has the EPA commented on the need for an EIAR?	No		
5. Have any other relevant assessments of the effects on the environment which have a significant bearing on the project been carried	Yes	Prior to the coming into effect of the Carlow County Development Plan 2022-2028, the draft plan was subject to Strategic Environmental Assessment (Directive 2001/42/EC), Strategic Flood Risk Assessment and Appropriate Assessment.	

out pursuant to other relevant Directives – for example SEA		Other assessments included in the application are: • Habitats Directive (92/43/EEC) and Birds Directive see Ecological Impact Assessment, AA Screeter Floods Directive (2007/60/EC) – See Site Speaksessment (FRA). • Water Framework Directive (2000/60/EC) – See Site Speaksessment, AA Screening / NIS.	ning Report and NIS. ecific Flood Risk
B. EXAMINATION	Yes/ No/ Uncertain	Briefly describe the nature and extent and Mitigation Measures (where relevant) (having regard to the probability, magnitude (including population size affected), complexity, duration, frequency, intensity, and reversibility of impact) Mitigation measures –Where relevant specify features or measures proposed by the applicant to avoid or prevent a significant effect.	Is this likely to result in significant effects on the environment? Yes/ No/ Uncertain
This screening examination should be read with, and the screening examination should be read with the screening examination of the screening examina		on, construction, operation, or decommissioning)	ith
1.1 Is the project significantly different in character or scale to the existing surrounding or environment?	Yes	The existing surrounding environment consists of agricultural lands to the north, south and east and a large quarry to the west. the M9 motorway runs to the north of the site, while one off housing is located close to the various site boundaries.	No
		The proposed solar farm has a stated site area of c.192ha (reduced to 181ha after FI), this particular	

		site is divided into 3 parcels (originally four) and the three areas would be 32.62ha (Parcel 1), 83.52ha (Parcel 2) and 64.23ha (Parcel 3). The consenting of solar farm developments in this rural landscape is well established, and increasingly commonplace in terms of rural diversification, as is evidenced by nearby examples including a recent grant of permission for a 60ha solar farm on lands c600m to the north (P.A. Reg. Ref. 24/60205), while several other large solar farms have been permitted within 7km of the site, one of which is under construction (127ha under ABP-307891-20). The site also lies in close proximity to an operational quarry, while the M9 motorway and Waterford to Dublin rail line also pass close to the site. 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.	
1.2 Will construction, operation, decommissioning or demolition works cause physical changes to the locality (topography, land use, waterbodies)?	Yes	The land use will change from solely agricultural to a mix of solar farm and agricultural where the land can be uses for the grazing.	No
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?	Yes	The project will use standard construction methods, materials and equipment, and the process will be managed though the implementation of a CEMP (Construction and Environmental Management Plan). Other than the construction of the access roads, no significant use of natural resources is anticipated.	No

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?	Yes	The construction phase activities would require the use of potentially harmful materials, such as fuels, hydraulic oils and other such substances and create waste for disposal. The use of such substances would be typical of construction sites. Any impacts would be local and temporary in nature and the implementation of a Construction and Demolition Waste Management Plan (CDWMP) and mitigation measures outlined in the NIS will satisfactorily mitigate potential impacts. No operational impacts in this regard are anticipated. I do not consider this aspect of the project likely to result in significant effects on the environment in terms of human health or the environment.	No
1.5 Will the project produce solid waste, release pollutants or any hazardous / toxic / noxious substances?	Yes	Conventional waste will be produced from construction activity and will be managed through the implementation of a CEMP which incorporates a CDWMP.	No
		Limited waste will be generated during the construction and decommissioning phases and this will be segregated, stored and disposed of appropriately with best practice measures put in place. The CEMP states that all stone and soil excavated on site will be re-used in full on site and it not-expected to be taken off site for recovery. All waste will be stored in a dedicated area and its removal from site will be documented.	
		Noise and dust emissions during the construction phase are likely. Any impacts would be local and temporary and would be managed through implementation of the CEMP.	
		Significant operational impacts are not anticipated.	

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	The project involves preparatory works of access track construction and facilitation of site services. Standard construction methods, materials and equipment are to be used, and the process would be managed though the implementation of the CEMP. Surface water will be attenuated during construction and appropriate mitigation measures included. 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.	No
1.7 Will the project cause noise and vibration or release of light, heat, energy or electromagnetic radiation?	Yes	Noise and vibration impacts are likely during the site development works. The works would be short term in duration, and impacts arising would be temporary, localised, and be managed through implementation of the CEMP and the mitigation measures set out in Noise Impact Assessment. and the Technical Noise Note, which would comply with the recognised best practice standards typically adopted for such projects in Ireland.	No
1.8 Will there be any risks to human health, for example due to water contamination or air pollution?	Yes	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 appropriate use of and temporary installation of silt fences, cut-off drains, silt traps and drainage to vegetated areas where appropriate. Stilling ponds will be used to minimise the risk of suspended solids, where necessary.	No

		There is potential for dust emissions during the construction phase. However, such emissions would be controlled through the implementation of the CEMP. The operational phase of the project would not likely cause risks to human health through water contamination or air pollution due to the nature of the development. Accordingly, in terms of risks to human health, I do not consider this aspect of the project likely to result in a significant effect on human health.	
1.9 Will there be any risk of major accidents that could affect human health or the environment?	No	The site is not located within close proximity to any Seveso / COMAH sites. There is no risk of major accidents given the nature and scale of the project and the location of the site. There is no significant flood risk as outlined in the applicant's Site Specific Flood Risk Assessment	No
1.10 Will the project affect the social environment (population, employment)	Yes	The project would increase localised temporary employment activity at the site during the construction phase. The development would not affect significantly affect the population of the area, as views of the solar farm will largely be mitigated by additional planting. I do not consider this aspect of the project likely to result in a significant effect on the social environment of the area.	No
1.11 Is the project part of a wider large scale change that could result in cumulative effects on the environment?	Yes	The entire site is identified in the Carlow County Development Plan 2022-2028 as being an area suitable for the development of	No

		solar farms, subject to consideration of planning and environmental factors. A number of other solar farm developments have been permitted within between 600m and 8km of the site in the last 4-5 years. One of those solar farms is now under construction. 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.	
2. Location of proposed development 2.1. Is the proposed development located on	Yes	The project is not located in, on, or adjoining any	No
 2.1 Is the proposed development located on, in, adjoining or have the potential to impact on any of the following: 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 	res	European site, any designated or proposed NHA, or any other listed area of ecological interest or protection. The nearest European site is the River Barrow and River Nore SAC (Site Code 002162) which is c 2.35km to the west of Parcel 1. I do not consider this aspect of the project likely to result in a significant effect on the environment in terms of ecological designations or biodiversity.	INO
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-	Yes	The site is not under or adjacent to any wildlife or conservation designation. No rare of protected floral species were recorded.	No

wintering, or migration, be affected by the project?		The NIS stated that there is potential for otters to occasionally traverse the site. Mitigation measures in the form of a landscape plan that would include planting of new and enhancement of existing hedgerows, have been included to create additional habitat for on completion of the development. In addition, it is proposed to remove only 47 linear metres of hedging to facilitate the development. Subject to mitigation measures in the CEMP, the EcIA determines that the development will not affect surface water or groundwater quality, no significant impacts are predicted.	
2.3 Are there any other features of landscape, historic, archaeological, or cultural importance that could be affected?	Yes	I note that the refusal reason issued by the planning authority referred primarily to impacts on landscape While the panels would be visible from a number of elevated scenic viewpoints to the west, the field pattern, that is bound by trees and hedgerows, reads as a quilt like pattern of fields of different sizes, shapes and colours, depending on the time of year, with green grass, brown earth, and crops of different colours evident. While the proposed solar panel would be noticeable from these elevated viewpoints, due to the separation distance from the viewpoints and second routes to the solar panels (c4.5km at closest), and the low profile of the solar panels, this is evidenced in the photomontages prepared by Macroworks and submitted with the	No

		application, as further information and as part of the appeal. I do not consider this aspect of the project likely to result in a significant negative effect on the environment in terms of landscape The proposed development would involve the removal of I also note that the planning authority and the Department of Housing, Local Government and Housing has no concerns regarding the proposed development and I do not consider this aspect of the project likely to result in a significant negative effect on the environment in terms of archaeology and cultural heritage.	
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?	Yes	A large quarry operates close to the western boundary of Parcel 2. The quarry is not identifies as containing important, high quality or scarce resources, which could not be sources at another location.	No
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?	No	A number of streams run through or adjacent to the site. A small number of parts of the site have been identified as being potentially liable to flooding. No highly vulnerable development such as transformers/invertors proposed within areas of highest risk of flooding. PV Modules are considered to be water compatible and arrays to be a minimum 10m to all watercourses including drains. The installation of solar panels in the agricultural fields is not expected to give rise to increased surface water runoff (volumes or rates) which will be facilitated by the maintenance of grass	No

		underneath the panels and generous separation distances between the arrays. Access tracks are to be constructed using permeable materials, from which potential surface water will infiltrate naturally to the ground. These elements of the scheme are design to preserves peak water runoff rates at natural levels.	
2.6 Is the location susceptible to subsidence, landslides or erosion?	No	There is no evidence identified of these risks.	No
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?	No	The M9 Motorway runs close to the northern boundary of Parcel 1, and while the motorway would form part of the haulage route for vehicles servicing the site, this part of the motorway network is not susceptible to congestion.	No
2.8 Are there existing sensitive land uses or community facilities (such as hospitals, schools etc) which could be affected by the project?	No		No
3. Any other factors that should be considered wh	nich could le	ead to environmental impacts	
3.1 Cumulative Effects: Could this project together with existing and/or approved development result in		Existing and / or approved planning consents in the vicinity of the site have been noted in the application documentation and associated	No

		Most notable is a grant of permission for another solar farm developments on a site of c60ha only 600m north of parcel 1 on this site. Other grants of permission have been issues for other solar development in the wider area (2-8km from the site. The developments would use different haul routes to and from the national road network. Taking into consideration the separation distance between the proposed development and other permitted solar farm developments, I am satisfied that no existing or permitted developments have been identified in the vicinity which would give rise to significant cumulative environmental effects with the project.			
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.	х	EIAR Not Required			
Real likelihood of significant effects on the environment.		EIAR Required			
D. MAIN REASONS AND CONSIDERATIONS					
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 (47 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

Inspector	Date
Approved (DP/ADP)	Date
Approved (DF/ADF)	Date

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

Step 1: Description of the project and location	al site characteristics
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Step 1. Description of the project a	ilu local site cital acteristics
Brief description of project	A 10 Year Planning Permission for a solar farm with a total area of circa 192 hectares. Refer to Section 2.0 of the Inspector's report for a detailed description of the proposed project
	The construction phase is estimated to be 24 months and the operational life of the solar farm 40 years.
Brief description of development site characteristics and potential impact mechanisms	The site includes 4 no. separate parcels of land on an overall site of 192 hectare, although following further information the number of parcels to be developed was reduced to 3.
	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 and other planning documents and reports provided by the applicant.
	The main features of the project are the installation of solar panels, 28 no inverters / transformers, 3 no. spare parts containers, 7 no. weather station underground cabling, access track lengths and landscaping as well as new and improved access points to the three parcels of land.
	The site is hydrologically connected to River Barrow and River Nore SAC (002162) via a number of waterbodies flowing through or along the boundaries of the site. In relation to flooding, the proposed site is partially located within areas deemed at risk of flooding from pluvial and fluvial sources
Screening report	Yes - (Ecology Ireland Wildlife Consultants Ltd.)
Natura Impact Statement	Yes - (Ecology Ireland Wildlife Consultants Ltd.)
Relevant submissions	Potential to have a transformative effect on the land which could have consequences for local wildlife.
	Security fencing around the site could become a barrier to the movement of wild mammals and amphibians and represent a collision risk for some bird species, who may mistake the panels for water, while

insects may also mistakenly lay eggs on the panels having mistaken them from water.

Step 2. Identification of relevant European sites using the Source-pathway-receptor model

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

European Site (code)	Qualifying interests ¹ Link to conservation objectives (NPWS, date)	Distance from proposed development (km)	Ecological connections ²	Consider further in screening ³ Y/N
River Barrow and River Nore SAC (002162)	 Desmoulin's Whorl Snail Freshwater Pearl Mussel White-clawed Crayfish Twaite Shad Sea Lamprey Brook 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 Ranunculion fluitantis and 	2.2 km west	Potential hydrological link to the River Barrow and River Nore SAC (002162) via streams running through the site.	Yes

Slaney River Valley SAC (000781)	Callitricho-Batrachion vegetation 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 https://www.npws.ie/protected-sites/sac/002162 Bestuaries Mudflats and sandflats not covered by seawater at low tide Atlantic salt meadows Mediterranean 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	9.7 km West	No hydrological connection.	No
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	Sea, Brook and River Lamprey			
	Twaite Shad			
	Salmon			
	Otter			
	Harbour Seal			
	https://www.npws.ie/ protected-sites/sac/000781			
	21st October 2011			
Blackstairs	Northern Atlantic wet	13.6 km	, ,	No
Mountains SAC (000770)	heaths with Erica tetralix	Southeast	connection	
	European dry heaths			
	https://www.npws.ie/ protected-sites/sac/000770			
	29th November 2019			

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

There are no Special Protection Areas (SPAs) within 15km of the proposed development site, the nearest being the River Nore SPA, located over 23km to the west of the proposed development site and there are no hydrological link between the development site and this SPA.

The proposed development will not result in any direct effects on any SAC. However, due to its size and scale and proximity to the River Barrow and River Nore SAC (002162), impacts generated by the construction of the development require consideration. Sources of impact and likely significant effects are detailed in the Table below.

AA Screening matrix

Site name Qualifying interests	Possibility of significant effects conservation objectives of the site*	(alone) in view of the
	Impacts	Effects
River Barrow and	Direct:	Potential damage to
River Nore SAC	 No works are proposed within the 	habitats associated with
(002162)	SAC. There will be no direct impact on	inadvertent spillages of
(See Ql's listed in step 2)	the QI habitats or species of this site Indirect:	hydrocarbons and/or other chemicals during construction phase;

- Release of silt and sediment during site works, including excavation and storage of soil and release of construction related pollution including hydrocarbons to watercourses.
- Disturb and/or displace faunal species associated with designated conservation sites through noise and/or visual cues including ex-situ disturbance/displacement effects need in relation to highly mobile fauna.
- Potential spread of invasive species that are found along site boundaries.
- There will be no runoff effect from ploughing and spreading of fertiliser during the construction or operational phases.

Undermine conservation objectives related to water quality.

Potential for indirect habitat loss or deterioration of White-clawed Crayfish and other QI species that may be present in the downstream habitats cannot discounted without be further analysis and assessment.

Potential impact on otter, although no trace of otter found during the ecological survey work.

The absence of ploughing n fertiliser may improve the water quality by reducing the potential for nutrients from land-spread of fertilisers entering the aquatic environment

Likelihood of significant effects from proposed development (alone): Yes

If No, is there likelihood of significant effects occurring in combination with other plans or projects?

Possibility of significant effects (alone) in view of the conservation objectives of the site*

Possibility of significant effects cannot be ruled out without further analysis and assessment

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 River Barrow and River Nore SAC (002162) from effects associated with the proposed solar farm development including indirect potential damage to QI habitats, QI species and SCI by way 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 connections to the River Barrow and River Nore SAC (002162) and the potential for significant effects on QI habitats and QI species, by way of pollution and deterioration of water quality
- The potential for significant ex-situ impacts on QI and SCI (otter and White-clawed Crayfish).
- Potential for spread of invasive species.

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 proposed development of a solar farm on a site of 192ha in view of the relevant conservation objectives of the River Barrow and River Nore SAC (002162) based on scientific information provided by the applicant and the expert report of the Environment Section of Carlow County Council.

The information relied upon includes the following:

- Natura Impact Statement prepared by Ecology Ireland Wildlife Consultants Ltd
- NIS Appendices Outline Biodiversity Management Plan, Outline Construction Environment Management Plan, eDNA Analysis, Plant species recorded Historically within the 2km Grid Squares where the solar farm is to be located, Electrical Infrastructure Construction Methodology
- Ecological Impact Assessment prepared by Ecology Ireland Wildlife Consultants Ltd.
- Environmental Impact Assessment Screening Report prepared by HW Planning.
- Noise Impact Assessment
- Site Access and Drainage Report
- Site Specific Flood Risk Assessment

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. The Planning Authority did not consider the proposed development to come within a Class of development for the purposes of EIA.

Public Observations

- Potential to have a transformative effect on the land which could have consequences for local wildlife.
- Security fencing around the site could become a barrier to the movement of wild mammals and amphibians and represent a collision risk for some bird species, who may mistake the panels for water, while insects may also mistakenly lay eggs on the panels having mistaken them from water.

River Barrow and River Nore SAC (002162)

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

- (i) Water quality degradation (Otter and White-Clawed Crayfish)
- (ii) Disturbance of mobile species (otter)
- (iii)Spread of invasive species

See Section 3 and Table 3.1 of the NIS.

While there are 22 separate habitats and species listed in the River Barrow and River Nore SAC (see Step 2 of the Screening for Appropriate Assessment above), Section 3 of the NIS sets out reasons why not all of the qualifying interests are relevant in terms of potential impact from the proposed development, including that some are terrestrial and not subject to potential indirect hydrological impacts, while other are not located downstream of the site and some habitats are located in coastal and estuarine environments and are considered outside of the potential zone of influence.

Carlow County Council's environment section agreed with the habitats and species (qualifying interests (Ql's) that the applicant deemed to have relevance in terms of potential Impact-Receptor pathways and I consider that the Ql's considered by the applicant are appropriate. They are further considered in the table below.

Qualifying Interest features likely to be	Conservation Objectives	Potential adverse effects	Mitigation measures (summary)
affected	Targets and attributes (summary)		NIS Section 3.2
European dry heaths (4030)	Maintain favourable conservation condition.	Potential overland flow of construction stage silt/pollutants	

Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels (6430) Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles (91A0) Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	No decline from current habitat distribution, subject to natural processes. Maintain favourable conservation condition. No decline in habitat distribution, subject to natural processes. Restore favourable conservation condition. No decline in habitat distribution. Restore favourable conservation condition. Restore favourable conservation condition. No decline in habitat distribution. No decline in habitat distribution.	from the watercourses crossing the site can result in indirect habitat loss or deterioration as well as reduction in density of qualifying aquatic species. Spread of invasive species by hydrological link would negatively affect habitat.	related to the potential run-off of or contamination of watercourses and best construction management practices including buffer zones. Measures relating to Storage/Use of Materials, Plant & Equipment. Surface water mitigation during construction. Mitigation of construction dust.
(91E0) White-clawed Crayfish Austropotamobius pallipes (1092) Sea Lamprey Petromyzon marinus (1095)	Maintain favourable conservation condition. No reduction from baseline distribution, heterogeneity or habitat quality Restore favourable conservation condition. No decline in extent and distribution of	Potential overland flow of construction stage silt/pollutants from the watercourses crossing the site can result in indirect habitat loss or deterioration as well as reduction in density of qualifying aquatic species. As above	including Ecological Clerk of Works. Measures for Habitats and Flora including pre- construction survey and if detected and Invasive Species Management Plan will be prepared. Measure for Flora including bat boxes.
	spawning beds. Artificial barriers can block or cause		

	1		
	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.		
Brook Lamprey Lampetra planeri (1096)	Restore favourable conservation condition.	As above	
	Artificial barriers can block or cause difficulties to upstream migration, thereby limiting species to lower stretches and restricting access to spawning areas.		
	Targets are access to all watercourses down to first order stream and no decline in extent and distribution of spawning beds.		
River Lamprey Lampetra fluviatilis (1099)	Restore favourable conservation condition.	As above	
	Artificial barriers can block lampreys' upstream migration, thereby limiting species to lower stretches and restricting access to spawning areas.		
	Targets are no decline in extent and distribution of		

Salmon	spawning beds and greater than 75% of main stem and major tributaries down to second order accessible from estuary. Restore favourable	As above	
Salmo salar (1106)	conservation condition.		
	Artificial barriers are currently preventing salmon from accessing suitable spawning habitat		
	Target is no decline in number and distribution of spawning beds due to anthropogenic causes.		
Otter <i>Lutra Lutra</i> (1355)	Restore favourable conservation condition.	As above	
	Target is no significant decline in distribution of extent of terrestrial, marine and freshwater habitat or couching sites, holts and fish biomass.		

The above table is based on the documentation and information provided on the file and I am satisfied that the submitted NIS has identified the relevant attributes and targets of the Qualifying Interests. In particular, I note those relating to the target of no heterogeneity or habitat quality for White-Clawed Crayfish and 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 SAC and result in indirect habitat loss or deterioration as well as reduction in density of qualifying aquatic species. 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.

Mitigation measures and conditions

The focus of mitigation measures is to prevent ingress of pollutants and silt into surface and groundwater and receiving water courses. This is to be achieved via the implementation of specific mitigation measures, in particular measures outlined in the Construction and Environment Management Plan and the NIS. They include:

- Temporary installation of silt fences, cut-off drains, silt traps and drainage to vegetated areas where appropriate. Stilling ponds will be used to minimise the risk of suspended solids, where necessary. Silt fences to be checked twice daily.
- Typical buffer of 10m from the closest drain typical setback from all field drains.
- Re-fuelling in site compounds in bunded areas. Plant to be checked regularly for leaks.
- Hazardous liquid and materials stored remote from watercourses.
- Wheel wash facilities with silt traps.
- Topsoil stripping to be carried out outside of periods of wet weather insofar as practicable
- Emergency operation plan to be established.
- Site personnel are made aware of the importance of the nearby estuary/aquatic environments and the requirement to avoid pollution of all types.

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.

(ii) Disturbance of mobile species

No Otter activity was observed within or directly adjacent to the application site during survey work or on the deployed trail cameras and no holts, resting places or other field signs were identified within the site. However, the NIS also stated that given the nature of the watercourses running through the site, it is probable that Otter may occur locally at least on

occasion and is known to occur in the wider environment of the 10km grid squares (S76, S77) in which the proposed development is located. The construction phase of the proposed development has the potential to cause disturbance to Otters occurring through the movement of vehicles (noise) and site workers. Otters are primarily nocturnal and are therefore much more likely to be active during times when construction noise and activity levels at the site are low.

As the subject site includes habitat which could be utilised by commuting Otter (drainage ditches and grassland) the proposed development could result in habitat loss or fragmentation and has the potential to undermine the respective SSCO attribute and target in relation to distribution and terrestrial and freshwater habitat or couching sites, holts and fish biomass.

Mitigation measures and conditions

- A 200m void will be includes at the base of the perimeter fence will maintain access for otter
- Pre construction walkover survey of all watercourses to check for signs of otter. If Otter breeding site found, and appropriate exclusion zone for site traffic will be implemented.
- Implementation of buffer zones to watercourses
- Standard best practice environmental controls from Section 3.2 of the NIS.

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.

(iii) Spread of invasive species

The spread of invasive species may undermine conservation objectives for qualifying habitats, by way of impact on habitat. Invasives species may outcompete native species, negatively affecting habitats and supporting habitat of QI species.

Mitigation measures and conditions

A pre-construction survey will be undertaken to identify and map the occurrence and extent of any Third Schedule Invasive Plant species within or adjacent to the works footprint. If such species are found to occur at this time, an Invasive Species Management Plan (ISMP) to control invasive species shall be developed following best practice guidance with the advice

of a suitably qualified ecologist. Mitigation measure forms part Section 3.2 of the NIS and will be captured in the proposed planning conditions in the Inspector's Report.

In-combination effects

I am satisfied that in-combination effects have been assessed adequately in the NIS.

The projects considered in the assessment of in combination effects are set out in Table 4.1 of the AA Screening Assessment section of the NIS and I am satisfied that in-combination effects have been assessed adequately in the NIS as of that date that the document was received by the planning authority on the 28th of February 2024. The projects include solar developments under P.A. Ref. Ref's 22/163, 22/199 and ABP-313139 (128ha solar farm, underground electricity interconnector cable and substation), ABP-307891-20 (127ha solar farm), 3 x substitute consent applications to An Bord Pleanála for Plant area, quarry and further quarry development on the quarry site to the east of Parcel 2 of this application site.

Since the application was submitted on the 28th of February 2024, permission has been granted to the current applicant Ballyloo Solar Farm Limited, for a solar farm to the same applicant on a site of c60ha, c600m to the north of the site under P.A. Reg. Ref. 24/60205. In granting permission, the planning authority screened the development for AA and included in combination impacts arising from the proposed application (Ballyloo Solar Farm). The Environment Section of Carlow County Council concluded that subject to the implementation of proposed mitigation measures, the project, alone or in combination with other projects, will not adversely affect the integrity of the network of River Barrow and River Nore SAC and that there is no reasonable scientific doubt in relation to this conclusion.

Another application by Ballyloo Solar Farm Limited under P.A. Reg. Ref. 25/60137 is currently the subject to further information. The in-combination section of the NIS considered the current application. No issues were raised by the planning authority in respect in combination effects.

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

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 this European site.

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 River Barrow and River Nore SAC (002162) considered in the NIS. No direct impacts are predicted.

Indirect impacts would be temporary in nature and mitigation measures are described to prevent ingress of silt laden surface water and other construction related pollutants and to prevent disturbance of barrier effects. Pre-commencement surveys and monitoring measures are also proposed to ensure compliance and effective management of measures. 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 River Barrow and River Nore SAC (002162). 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 River Barrow and River Nore SAC (002162) in view of the conservation objectives of the site 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 River Barrow and River Nore SAC (002162) can be excluded in view of the conservation objectives of this site and that no reasonable scientific doubt remains as to the absence of such effects.

My conclusion is based on the following:

- Detailed assessment of construction and operational impacts.
- The proposed development will not affect the attainment of conservation objectives for Otter or White-Clawed Crayfish or prevent or delay the restoration of favourable conservation condition for River Barrow and River Nore SAC (002162).
- The effectiveness of planning conditions to provide for the implementation of mitigation measures set out in the NIS and in the Ecological Impact Assessment Report, Biodiversity Management Plan, Noise Impact Assessment, Site Access and Drainage Report that were submitted with the application and in the updated Landscape and Visual Impact Assessment, Construction and Environmental Management Plan, Archaeological, Architectural and Cultural Heritage Assessment Report, and Decommissioning and Site Restoration Plan submitted to the planning authority by way of further information.

Appendix 5 - WFD Impact Assessment Stage 1: Screening								
Step 1: Nature of the Project, the Site and Locality								
An Bord Pleanála ref. no.	ABP-322347-25	Townland, address	The townlands of Ballybar Upper Ballyloo, Ballyryan, Garryhundon and Linkardstown, County Carlow.					
Description of pr	oject	A 10 Year Planning Permission for a solar farm with a total area of circa 192 hectares. The application includes an AA Screening Report, Natura Impact Statement and an Ecological Impact Assessment. They contain references to matters relating to the Water Framework Directive Screening Assessment.						
Brief site description, relevant to WFD Screening,		The 192ha site is located in four separate parcels of land (reduced to three parcels after further information of matters relating to archaeology). The nearest part of the site is parcel 1 in the north west of the site which lies c2.35km in a direct line from the nearest part of the River Barrow to the west. The eastern part of the site slopes downhill from east to west while the western part of the site is flatter and undulating. The site is separated from the River Barrow by both the M9 Motorway and the Dublin to Waterford Rail line as well as a number of active and inactive quarries.						

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Several waterbodies traverse the site which are described below and are illustrated in Figure 9.1 of the Applicant's Site Access Report, while they are also addressed in the Site Specific Flood Risk Assessment. They are: 1 A local drain runs westwards along the north eastern roadside boundary of Parcel 3 close to the revised substation location and then flows through third party lands in a westerly direction before running along a section of the northern boundary of Parcel 2 where it is known as Barrow_180 (called the Ballybannon Stream in Flood Risk Assessment). It then enters and exits Parcel 1 in a northwestern direction where it exist and flows along the south-eastern side of the M9. 2 Part of the Barrow_180 runs along parts the northern boundaries of Parcel 2 and part of this area is deemed liable to flooding. No panels are proposed in this area, which is also proximate to a house to the immediate north of the red lined boundary. Ballyboley Stream_010 flows north-westwards through the southwestern part of parcel 3 and crosses the L-3052 road and continues in a western direction where runs along part of the southern boundary of Parcel 2 before flowing southwards towards the River Barrow. **Proposed surface water details** The installation of solar panels in the agricultural fields is not expected to give rise to increased surface water runoff (volumes or rates) which will be facilitated by the maintenance of grass underneath the panels and generous separation distances between the arrays. Access tracks are to be constructed using permeable materials, from which

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potential surface water will infiltrate naturally to the ground. These elements of the scheme are design to preserves peak water runoff rates at natural levels.

No surface water will be allowed to drain from the proposed site entrances onto the local roads. This will be achieved via a linear drainage system, within the site lands, which will run parallel to the public road at the site entrances.

There will be areas of hard standing relating the electrical inverter/transformer stations and spare parts containers.

The Muinebheag Municipal District office recommended standard conditions regarding surface water and drainage. The Executive Engineer 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. They also proposed conditions regarding surface water and sediment control, access 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 a condition regarding water pollution.

Proposed water supply source & available capacity

N/A

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Proposed wastewater treatment		N/A						
system & available								
-								
capacity, other is	ssues							
Others?		N/A						
	Step 2: Ide	entification of relevan	t water bodie	s and Step 3: S-P-R co	nnection			
I do natiti o do nos to n	Distance to	Matan hada	WED	Dial- of mot		Dethans		
Identified water	Distance to	Water body	WFD	Risk of not	Identified	Pathway		
body	(m)	name(s) (code)	Status	achieving WFD	pressures	linkage to		
				Objective e.g.at risk,	on that	water feature		
				review, not at risk	water body	(e.g. surface		
				,		run-off,		
						-		
						drainage,		
						groundwater)		
		Ri	ver Waterbodi	es				
	<u>, </u>							
		Downson: 400						
		Barrow_180				Surface water		
River Waterbody	0m	(IE_SE_14B012700)	Moderate	At Risk	UR, Ag,	runoff, drainage		
		· ·	(Monitoring)	AL KISK	UWW			
		(incorporating Ballybannon River						

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		and Nurney 14 stream)					
River Waterbody	0m	Ballynaboley Stream_010 (IE_SE_14B080700) (incorporating Garryhundon stream)	Poor (Monitoring)	At risk	Ag, Unknown	Surface water runoff, drainage	
	Groundwater Bodies						
Groundwater waterbody	Underlying Parcel 1 and the majority of Parcel 2 at the western side of the site	Bagenalstown Lower (IE_SE_G_157)	Good	Not at risk	No pressures	Well drained sub soil conditions	
Groundwater waterbody	Parcels 3 and 4 and the easternmost part of Parcel 2	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

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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.	Flooding	Barrow_180	Along and close to waterbody flowing through the site	Fluvial or pluvial flood	No highly vulnerable development such as transformers/invertors proposed within areas of highest risk of flooding. PV Modules are considered to be water compatible.	No	Screened out
					Stockpiles of soil will be stored well away from the watercourses on site and (if appropriate) ringed with silt fences.		
					Temporary installation of silt fences, cut-off drains,		

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	2.	Surface	Ballynaboley Stream_010 Bagenalstown Lower	Along and close to waterbody flowing through the site Parcel 2 according to the 2019-2020 SAR seasonal flood map	Fluvial or pluvial flood Flooding of surface	drainage to vegetated areas where appropriate. Stilling ponds will be used to minimise the risk of suspended solids, where necessary. As above The indicative mapped are at threat of flooding does not	No No	Screened out Screened out
				ocaconal noca map	area	correspond to site contours so confidence is low that the mapped information is accurate.		
						Support silt fencing on any downslope edges to watercourses/drain of temporary construction compound		
4	1.	Ground	New Ross	None	None	None	No	Screened out
	OPERATIONAL PHASE							

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1.	Drainage	Barrow_180 and Ballynaboley Stream_010	Along and close to waterbody flowing through the site	Increase in surface water runoff	Arrays to be a minimum 10m to all watercourses including drains except a small number of localised areas where a fence line or CCTV pole may marginally extend within buffer.	No	Screened out		
	DECOMMISSIONING PHASE								
1.	N/A								

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