

Inspector's Report ABP-316303-23

Development	Development of a Solar Photovoltaic (PV) Energy Development. A Natura Impact Statement (NIS) has been prepared and accompanies this planning application.
Location	Within the townlands of Lumcloon, Bun, Derrycarney, Falsk, Derries, Rin, Lea Beg and, Lea More, Co. Offaly.
Planning Authority	Offaly County Council
Planning Authority Reg. Ref.	2320
Applicant(s)	Derrycarney Solar Ltd.
Type of Application	Permission
Planning Authority Decision	Refuse permission
Type of Appeal	First Party
Appellant(s)	Derrycarney Solar Ltd (Applicant)
Observations	Inland Fisheries Ireland
Date of Site Inspection	22 nd September 2023
Inspector	Laura Finn

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1.0 Introduction

This is a first party appeal against a notification of decision to Refuse Permission by Offaly County Council for 3 reasons for a solar farm. These reasons relate to impact on High Sensitivity Area and Area of High Amenity in Zone 2, Recreational and Amenity Potential in Zone 1 and contrary to Development Plan Standards.

2.0 Site Location and Description

The development site, which is located to the west of Tullamore in County Offaly measures c. 247 hectares comprises two separate parcels of land separated by a cutaway bog, scrublands, forestry and pastures.

Both Zones are located to the north of Shannonbridge Road (R357) and to the south of the Grand Canal, which is designated as part of the Grand Canal pNHA. Both Zones are accessed from the R357 regional road which runs between Cloghan (c. 5.6km west) and Blueball (7.5km east). The town of Ferbane is located c. 3.5km to the northeast of Zone 1. Tullamore is located c. 16km to the east of Zone 2. The nearest settlement is the Sráid of Boora (Leabeg) located southeast of Zone 1 and south of Zone 2 on the R357. The settlement extends south and adjoins the Lough Boora Discovery Park, which is located c. 1.2km to the south of the R357 and Zone 2. The Park, comprising 2000 hectares is a rehabilitated cut away peat bog which has been converted to a wetland for nature and amenity.

Zone 1 is located to the west, c. 1.5km at its nearest point from Zone 2 which is located to the east. The site consists of agricultural grasslands, largely flat, bounded by agricultural fields, forests and bogs. No buildings are located within the site. The site appears generally flat and varies from c. 47-50m AOD over the course of more than 4km east-west. Zones 1 and 2 are divided by a now disused Bord Na Mona Bog. There are four watercourses which traverse the site, the Silver River, Derrycarney Stream, Boora River and Lea Beg Stream.

The proposed development includes an underground grid connection to the existing operational Derrycarney 110kV Substation, along the internal site access tracks and linking along the R357.

The nearest European site to the development site is Ferbane Bog SAC (Site Code 000575), which is located c. 4.5km to the northwest. There is no connectivity to this site.

2.1. Zone 1 (Western Land Parcel)

Zone 1, which measures c. 128 hectares, extends northwards from the R357 for a distance of c. 2km. The Grand Canal is located to the north of the site, with Zone 1 site boundary located c. 125m at its nearest point to the Canal, being separated by the distance of one field boundary along the entire northern site boundary. The Silver River flows through the western portion of Zone 1 land parcel. Zone 1 will require a new site access layout and junction improvement at R357-L70095.

2.2. Zone 2 (Eastern Land Parcel)

Zone 2, which measures c. 110 hectares, is located c. 1,080m to the south of The Grand Canal with Tarraun Nature Park located near the site's northern boundary. The Offaly Way walking route, a 37km long-distance trail, dissects Zone 2 along the local access road towards Lough Boora Discovery Park. The trail also follows a pedestrian-only route around the northern and western site boundary. The site is accessed from the R357 where it extends northwards through an area known as Lea Beg for a distance of c. 2km. Zone 2 is bounded to the west by the Boora River, while Lea Beg Stream flows along the eastern site boundary before crossing through the centre of the site. The site is entirely grassland except for a small parcel in the north-eastern corner which is planted with forestry. Zone 2 will require a new access gate to a local lane from the R357.

3.0 Proposed Development

The proposed development consists of a solar farm, as follows;

The overall Solar PV Energy Development contains 5,704 No. full table solar panel arrays (c. 29.98m long x c. 4.57m wide x c. 2.8m high) and 927 No. half table solar Panel arrays (c. 14.98m long x c. 4.57m wide x c. 2.8m high). The solar panel modules will be fixed in position and arranged in rows running east to west.

- 30 No. medium voltage power station (MVPS) enclosures (c. 6.05m long x c. 2.34m wide x c. 2.89m high) positioned across the overall development. Each MVPS will be positioned on a concrete slab with supports, which will result in the MVPS unit being a maximum of c. 3.25m above existing ground levels;
- 2 No. temporary construction compounds (50m long x 35m wide) sited closed to the entrances of both Zone 1 and Zone 2;
- 6 No. weather monitoring stations;
- Internal site access tracks and underground cables (UGC);
- Underground cables in the public road network (L70095, L70099, L70208-3 & R357), which will electrically connect the development to the Derrycarney 110kV substation located within the townland of Lumcloon;
- All ancillary development, including: perimeter fencing with access gates at vehicle site entrances along public roads (L70095 and the R357), CCTV security cameras, landscaping and all associated civil engineering works;
- Zone 1 will require a new layout and junction improvement at R357-L70095; Zone 2 will require a new access gate to a local lane from the R357.
- The proposed development includes new access tracks and water course crossings of the Silver River, the Derrycarney Stream and two of the Lea Beg Streams to allow access across the site.
- The solar farm will connect to the operational Derrycarney 110kV substation located within the townland of Lumcloon by routing underground cables (UGC) from Zone 1 and 2 in the public road network (L70095, L70099, L70208-3 & R357).
- The proposed solar farm will have a capacity of c. 170MWp, thereby supplying c. 14,000MWh per annum of renewable power to the national grid.
- The applicant is seeking a 10-year permission in which to commence construction and a 40 year operation of the solar farm.
- A Natura Impact Statement (NIS) accompanies the application.

4.0 **Planning Authority Decision**

4.1. Decision

In their decision dated 22nd March 2023, Offaly County Council (OCC) refused permission for three reasons;

- It is considered that Zone 2 of the proposed development, which is located entirely within a High Sensitivity Area and Area of High Amenity, would result in an incongruous feature in the landscape, would be out of character, and if permitted, would set an undesirable precedent for similar proposals into the future. The proposed development would, therefore, be contrary to the Policy BLP-35 and Objective BLO-22 of the Offaly County Development Plan 2021-2027 and would not be in accordance with the proper planning and sustainable development of the area.
- 2. Given the scale of the proposed development and the proximity of Zone 1 to the Grand Canal, an Area of High Amenity with a high landscape sensitivity, the proposed development fails to protect the recreational and amenity potential of this waterway or enhance the appearance and character of the surrounding area. The proposed development would therefore, be contrary to the Policies: BLP-23 and BLP-38 of the Offaly County Development Plan 2021-2027 and would not be in accordance with the proper planning and sustainable development of the area.
- 3. The Applicant has failed to provide a suitable site selection assessment in accordance with CAEP-35 of Chapter 3 and Development Management Standard 110 of the Offaly County Development Plan 2021-2027. The proposed development would therefore, be contrary to the relevant Development Plan Policy and would not be in accordance with the proper planning and sustainable development of the area.

4.2. Planning Authority Reports

4.2.1. Planning Reports

The planning report prepared by OCC, which recommended the refusal of the proposed development (without recourse to a further information request) noted the internal reports and prescribed bodies reports made in relation to the proposed development. The Planning Report also notes the following:

- Zone 1 is located in an area classed as Low Landscape Sensitivity. It borders the Grand Canal to the north, pNHA and Area of High Amenity with a High Landscape Sensitivity classification.
- Zone 2 is located within an Area of High Amenity (Lough Boora), and within a High Landscape Sensitivity area.
- The submitted layout incorporates buffers to existing natural features such as watercourses, hedgerows and perimeter boundaries.
- Citing International, National Regional and Local Policy including the Energy Roadmap 2050, the NPF, The Climate Action Plan 2023, The RSES and Offaly County Development Plan 2021 – 2027, Chapter 3 – Climate Action Energy and Chapter 4 – Biodiversity and Landscape
- Ecological Management Plan, NIS, Glint and Glare Ecological Impact Assessment have been assessed by the Environment and Water Services Dept of the Local Authority and the DHLGH and no concerns have been raised.
- The site has been assessed from a Flood Risk Assessment point of view. Flood Zones A, B and C are present on the site. A number of mitigation measures have been recommended to facilitate the development. The Area Engineer and Environment and Water Services Section have raised no issue from a flooding point of view.
- LVIA includes 11 views. The magnitude of landscape impact is deemed to be low to negligible, Zone 1 – no LVIA photomontages included from The Grand Canal, mitigation and restoration measures included within and around the site, underplanting and interplanting in order to 'ensure dense and consistent screening of the site in perpetuity'. While the proposed mitigation measures

are noted, the Planning Authority have significant concerns regarding the visual impact of the proposed development when viewed from the Grand Canal and considers the proposals to be contrary to policies BLP-23 and BLP-38 of the Offaly County Development Plan (OCDP).

- The local authority noted that photomontages were not provided for viewpoints from the Grand Canal to the north or the Area of High Amenity directly to the west of the Zone 1.
- Section 3 of the accompanying Planning and Environment Report discusses site location and design rationale. The planner considers there was not enough consideration in relation to adjacent areas of High Amenity (Grand Canal and Lough Boora).
- Applicant has failed to provide a suitable site selection assessment.
- Planning Authority acknowledge the southern section of Zone 1 may be suitable for development of a solar farm, but concerned about impact on recreation and amenity on Grand canal corridor. Recommended that permission is refused for impact on surrounding landscape.
- Zone 2 located in close proximity to Tarraun Wetlands, the Offaly Way and the Grand Canal in an area classified as High Amenity in a landscape classified as High Sensitivity. Despite the proposed screening and mitigation measures, it is the view of the Planning Authority that the proposed development would result in significant negative visual impacts. The development would be an incongruous feature in the landscape and would be out of character.

4.2.2. Other Technical Reports

Area Engineer – Report dated 16th March 2023, has no objections to the proposed development subject to conditions recommended.

Roads – Roads Design Report dated 20th March 2023 are satisfied with the application subject to conditions recommended.

Environment & Water Services – Report dated 13th March 2023 considers the information submitted to be satisfactory and has no objection to the development subject to recommended conditions.

4.3. Prescribed Bodies

4.3.1. Inland Fisheries Ireland (IFI)

- IFI made a number of recommendations in relation to watercourses related to the proposed development site.
- IFI will require consultation on the final design for the watercourse crossings and final design for the site drainage scheme.

4.3.2. Department of Housing and Local Government (DHLGH)

- The Department notes the findings of the submitted archaeological assessment which recommends further archaeological investigations.
- In line with national policy (Section 3.6 of the Frameworks and Principles for the Protection of the Archaeological Heritage 1999), the Department recommends that an Archaeological Impact Assessment (AIA) should be prepared to assess any impact on archaeological remains within the proposed development site.

4.4. Third Party Observations

No third-party observations were received.

5.0 **Planning History**

5.1. On Site

There is no recent planning history on the subject site.

5.2. Other Relevant Planning History on Adjoining/Connecting Lands

Lumcloon/Derrycarney Substation Applications

33kV Substation and Compound – Planning permission granted for the construction of a 33kV substation and substation compound with associated electrical infrastructure, including transformer, and grid connection into the permitted Derrycarney 110kV substation. (Offaly Ref: 20/444) **Battery Energy Storage Facility –** Alterations to development of an energy storage facility granted permission under Offaly File Ref. PL2/17/194, to provide 100MW of system support services to the electricity grid at Lumcloon, Cloghan, Co. Offaly. (Offaly Ref. 19/55). A further application for an extension to the facility was withdrawn following a request for Further Information by the Council. (Offaly File Ref. 21/778)

350MW Gas Fired Electricity Generating Station – SID Permission granted permission (ABP Ref 19.PA0015) at Lumcloon, Cloghan, Co. Offaly. An extension to the duration of the permission was approved in Ref. EX1401.

Other Applications in the vicinity of the proposed development include:

Lough Boora Discovery Park Rail Line — Planning permission sought for the refurbishment of c. 5km of narrow gauge rail line for the use of 10-15 no. velo rail cars. The application was the subject of FI at this time of writing of this report. (Offaly File Ref - 23/291)

6.0 Policy Context

Regard is had to the following County, European, National, Regional and Other Relevant Policy documents:

County Policy

• Offaly County Development Plan 2021 – 2027

European Policy

- REPowerEU Plan 2022 and Directive EU 2018/2001, as amended 18.05.2022
- European Green Deal 2020

National Policy

- National Planning Framework 2018-2040 (NPF)
- The National Development Plan 2021-2030
- Climate Action and Low Carbon Development (Amendment) Act 2021
- Climate Action Plan 2023 (CAP 2023)
- Long-Term Strategy on Greenhouse Gas Emissions Reductions (April 2023)

- National Adaptation Framework (NAF) January 2018
- Policy Statement on Security of Electricity Supply, 2021
- National Energy Security Framework (April 2022)
- National Climate and Energy Plan 2021-2030 (NCEP)

Regional Policy

• Eastern and Midland Regional Spatial and Economic Strategy 2019-2031 (RSES)

Other Energy Sector Policy, Reports and Legislation

- All-Island Generation Capacity Statement 2022-2031
- CRU Information Paper, Security of Electricity Supply Programme of Actions (Sept 2021)
- SEAI Energy Security in Ireland (2020)

6.1. Offaly County Development Plan 2021 - 2027

The relevant plan to this assessment is the Offaly County Development Plan 2021 – 2027 which came into effect on 22nd October 2021. Chapter 3 relates to the Climate Action and Energy.

6.1.1. Site Selection for Larger Solar Farms

Section 3.2.4: Solar Energy discusses site selection for Larger Solar Farms:

'Larger solar farms have potential to be built on agricultural land and leave room for dual land use so that farm practices, such as grazing, can co-exist with the ground mounted solar panels. These projects are much less visually intrusive than wind and some other forms of energy generation, but may have impacts on local ecosystems, wildlife and the land's agricultural potential.

The following site selection criteria for ground mounted arrays apply:

- Typically suited to low lying lands due to an need for level sites;
- Accessibility/proximity to electricity networks. Ability to achieve a network connection, typically via a 10kV or 20kV overhead cable on the electricity

transmission grid. In general, it is not viable to locate solar farms over 1km from network infrastructure;

- The reuse of previously developed land such as brownfield land, contaminated land or industrial land and non-productive agricultural land in preference to productive agricultural land;
- South facing aspect with either flat terrain or sloping gently; and
- Land free from obstacles that may cause shading.

6.1.2. Climate Action and Energy Policies

The Plan lists a number of Climate Action and Energy Policies. Those of particular relevance to solar energy include:

CAEP-06 It is Council policy to promote the use of efficient energy storage systems and infrastructure that supports energy efficiency and reusable energy system optimization, in accordance with proper planning and sustainable development.

CAEP-11 It is Council policy to support the transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050, by way of reducing greenhouse gases, increasing renewable energy, and improving energy efficiency.

CAEP-23 It is Council policy to require that environmental assessments should address reasonable alternatives for the location of new energy developments, and where existing infrastructural assets such as sub-stations, power lines and roads already exist within the proposed development areas, then such assets should be considered for sustainable use by the proposed development where the assets have capacity to absorb the new development.

CAEP-25 It is Council policy to encourage and facilitate the production of energy from renewable sources, such as from bioenergy, waste material, solar, hydro, geothermal and wind energy, subject to proper planning and environmental considerations.

CAEP-34 It is Council policy to promote the development of solar energy infrastructure for on-site energy use, including solar PV, solar thermal and seasonal storage technologies subject to environmental safeguards and the protection of natural or built environment.

CAEP-35 It is Council policy to ensure that the assessment of solar farm proposals will have regard to:

- Site selection, by focusing in the first instance on developing solar farms on previously developed and non-agricultural land, provided that it is not of high environmental value.
- Where a proposal involves greenfield land, whether (i) the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and (ii) the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays. Decommissioning and site rehabilitation plans will be required providing for the land to be restored to its previous use.

6.1.3. Biodiversity and Landscape

Other policies of relevance in the Development Plan are contained in Chapter 4, which relates to Biodiversity and Landscape (Policy BLO-22, BLO-23 & BLP-23 BLP-35, BLP-36, BLP-38) as follows;

Areas of High Amenity

BLO-22 It is an objective of the Council to ensure that new development, whether individually or cumulatively, does not impinge in any significant way on the character, integrity and distinctiveness of or the scenic value of the Areas of High Amenity listed in Table 4.17. New development in Areas of High Amenity shall not be permitted if it;

- Causes unacceptable visual harm;
- Introduces incongruous landscape elements; and
- Causes the disturbance or loss of (i) landscape elements that contribute to local distinctiveness; (ii) historic elements that contribute significantly to landscape character and quality such as field or road patterns; (iii) vegetation which is a characteristic of that landscape type and (iv) the visual condition of landscape elements.

Landscape

BLO-23 It is an objective of the Council to prepare a County Landscape Character Assessment in accordance with all relevant legislation and guidance documents and following the forthcoming National and Regional Landscape Character Assessment.

Waterways, Lakes and Wetland Landscapes

BLP-23 It is Council policy to consider the Waterways Corridor Study 2002 and protect the recreational, educational and amenity potential of navigational and nonnavigational waterways within the county, such as the Grand Canal Corridor, towpaths and adjacent wetland landscapes, taking into account more recent heritage and environmental legislation (including the SEA Directive) and environmental policy commitments.

Areas of High Amenity

BLP-35 It is Council policy to protect and preserve the county's Areas of High Amenity namely the Slieve Bloom Mountains, Clonmacnoise Heritage Zone, Durrow High Cross, Abbey and surrounding area, the River Shannon, **Lough Boora Discovery Park**, **Grand Canal**, Croghan Hill, Raheenmore Bog, Pallas Lake, Clara Bog, Clara eskers, Eiscir Riada and other eskers. Notwithstanding the location of certain settlements, or parts of, for which there are settlement plans (Towns, Villages, Sráids), within the Areas of High Amenity, it is not the intention of this policy to hinder appropriate sustainable levels of development (as set out in the plans and subject to proper planning). Further, it is policy to facilitate the sustainable extension and expansion of existing visitor, tourist related or other rural enterprises within the Areas of High Amenity, where such development is appropriate and where it can be demonstrated that it gives 'added value' to the extending activity and to the immediate area which is the subject of the 'Area of High Amenity' designation.

BLP-36 It is Council policy, to ensure that issues of scale, siting, design and overall compatibility (including particular regard to environmental sensitivities) with a site's location within an Area of High Amenity are of paramount importance when assessing

any application for planning permission. The merits of each proposal will be examined on a case-by case basis.

Landscape

BLP-38 It is Council policy to protect and enhance the county's landscape, by ensuring that development retains, protects and where necessary, enhances the appearance and character of the county's existing landscape.

6.2. European Policy

6.2.1. REPowerEU Plan 2022 and Directive EU 2018/2001, as amended 18.05.2022

This plan was prepared in response to the Russian invasion of Ukraine. It focuses on the need to end the EU's dependence on Russian fossil fuels and to tackle the climate crisis. Recovery and Resilience Facility is central to this plan. It includes the accelerated rollout of renewable energy. It amends the Directive on the Promotion of the Use of Energy from Renewable Sources (Directive EU 2018/2001) to require that 45% of energy is from renewable sources. It notes that lengthy, complex administrative procedures are a key barrier to investment in renewable energy and its infrastructure. The Directive simplifies and shortens the length of the administrative permit granting processes in certain environmental-related aspects. This includes national plans for designated renewable go-to areas, that have been subject to SEA.

In these areas, the Directive states:

"Renewable energy projects that comply with the rules and measures identified in the plan or plans prepared by Member States, should benefit from a presumption of not having significant effects on the environment. Therefore, there should be an exemption from the need to carry out a specific environmental impact assessment at project level in the sense of Directive 2011/92/EU of the European Parliament and of the Council 24, with the exception of projects which are likely to have significant effects on the environment in another Member State or where a Member State likely to be significantly affected so requests."

It confirms that:

Article 1(10) inserts a new Article 16d to ensure that plants for the production of energy from renewable sources, their connection to the grid, the related grid itself or storage assets are presumed to be of overriding public interest for specific purposes.

The following Article 16d on Overriding Public Interest is inserted:

"By [three months from entry into force], until climate neutrality is achieved, Member States shall ensure that, in the permit-granting process, the planning, construction and operation of plants for the production of energy from renewable sources, their connection to the grid and the related grid itself and storage assets are presumed as being in the overriding public interest and serving public health and safety when balancing legal interests in the individual cases for the purposes of Articles 6(4) and 16(1)(c) of Directive 92/43/EEC, Article 4(7) of Directive 2000/60/EC and Article 9(1)(a) of Directive 2009/147/EC.'

It states that:

"Renewable energy sources are crucial to fight climate change, reduce energy prices, decrease the Union's dependence on fossil fuels and ensure the Union's security of supply. For the purposes of the relevant Union environmental legislation, in the necessary case-by-case assessments to ascertain whether a plant for the production of energy from renewable sources, its connection to the grid, the related grid itself or storage assets is of overriding public interest in a particular case, Member States should presume these plants and their related infrastructure as being of overriding public interest and serving public health and safety, except where there is clear evidence that these projects have major adverse effects on the environment which cannot be mitigated or compensated. Considering such plants as being of overriding public interest and serving public health and safety would allow such projects to benefit from a simplified assessment.'

6.2.2. European Green Deal 2020

The aim of this policy is to make Europe climate neutral by 2050. In 2021, the European Climate Law made greenhouse gas emission targets a legal obligation. These were increased from 40% to 55% by 2030.

6.3. National Policy

6.3.1. National Planning Framework 2018-2040 (NPF)

The NPF sets out the UN Sustainability Goals. National Strategic Outcome 8 is to transition Ireland to a low carbon and climate resilient society. National Policy Objective 54 seeks to reduce our carbon footprint by integrating climate action into the planning systems. National Policy Objective 55 promotes renewable energy use and generation at appropriate locations within the built and natural environment to meeting national objectives towards achieving a low carbon economy by 2050. Ireland's national energy policy is focused on three pillars: (1) sustainability, (2) security of supply and (3) competitiveness. Ireland must reduce greenhouse gas emissions from the energy sector by at least 80% (compared to 1990 levels) by 2050, while ensuring security of supply of competitive energy sources. The transition to a low carbon energy future requires a shift to predominantly renewable energy.

The NPF states;

'In meeting the challenge of transitioning to low-carbon economy, the location of future national energy generation, for the most part, needs to be accommodated on large tracts of land that are located in a rural setting, while also continuing to protect the integrity of the environment and respecting the needs of people who live in rural areas'.

The National Planning Framework is subject to review at present, with part of the review focused on climate change, with an expected publication date of March 2024.

6.3.2. The National Development Plan 2021-2030

This plan underpins the NPF, and its sets a framework for investment priorities which includes expenditure commitments to secure a wider range of Strategic Investment Priorities which include support for a Transition to a Low Carbon and Climate Resilient Society. The NDP Review commits to increasing the share of renewable electricity up to 80% by 2030. This is an unprecedented commitment to the decarbonisation of electricity supplies.

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

The Act commits Ireland to the objective of becoming a carbon-neutral economy by 2050, reducing emissions by 51% by the end of the decade.

Section 4.8 of the amended act, requires the Minister and the Government to have regard to matters including the risk of substantial and unreasonable carbon leakage as a consequence of measures to pursue nation climate Objectives. Section 6(12)defines 'carbon leakage' as a transfer, due to climate policies, of production to other countries with less restrictive policies with regard to greenhouse gas emissions. Section 17 amends the principle act such that Section 15(1) requires;

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

- (a) the most recent approved climate action plan,
- (b) the most recent approved national long term climate action strategy,

(c) the most recent approved national adaptation framework and approved sectoral adaptation plans,

(d) the furtherance of the national climate objective, and

(e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.

"Relevant body" means a prescribed body or a public body.

6.3.4. Climate Action Plan 2023 (CAP 2023)

Climate Action Plan 2023 is the first plan prepared under the Climate Action and Low Carbon Development (Amendment) Act 2021 and following the introduction in 2022 of economy-wide carbon budgets and sectoral emissions ceilings. This plan sets a roadmap for taking decisive action to halve Irelands emissions by 2030 and reach net zero no later than 2050, as committed to in the Programme for Government. Among the most important measures in the plan is to increase the proportion of renewable electricity to up to 80% by 2030, including 8 GW of solar PV capacity including 2.5GW of non-new grid solar.

An updated draft of the Long-Term Strategy Climate Strategy is being prepared, which will be aligned with CAP 2023, and both strategy and plan will support Ireland's climate ambition, as set out in the Climate Act 2021.

6.3.5. Long-Term Strategy on Greenhouse Gas Emissions Reductions (April 2023)

Section 1, Security of Supply, notes that in the transition to a climate neutral future, the pathway to decarbonisation must be underpinned by affordability and security in how we access and use energy. Having a reliable source of energy is vital for consumers. An Energy Security Package is in preparation with recommendations for strengthening Ireland's energy security with a view to adoption in Q2 2023.

A number of security of supply gaps both in the short-term and the medium-term have been identified. In the short-term, we need to address capacity shortfalls in the electricity system and ensure adequate conventional generation is in place to support the elevated levels of renewable electricity being generated.

Section 7 discusses Pathways to Climate Neutrality by Sector. Section 7.1 Electricity, notes that Ireland will continue its efforts to decarbonise the electricity sector by taking advantage of its significant renewable energy resources in a way that is competitive, cost-effective and ensures the security of our electricity supply. As Ireland decarbonises demand for electricity will increase and total demand for natural gas will decrease. Deployment of renewable electricity presents challenges, as production is variable, and electricity is not easily stored as energy. Therefore, Ireland will focus on actions set out in the Climate Action Plan to increase the flexibility of the electricity system.

As set out in CAP 23, a long-term electricity system development strategy to achieve our 2050 objective may include the following:

• A policy to require future dispatchable generation to be zero carbon gas ready;

• The continued delivery of required levels of variable renewable electricity generation and supporting infrastructure as we electrify buildings, industry and transport;

• The continued delivery of demand flexibility, to incentivise demand when low carbon variable renewable electricity is available;

• Further policies to incentivise the construction of short and long duration storage to provide for smoothing of electricity supply and demand between times of high variable renewable production and low variable renewable production.

6.3.6. National Adaptation Framework (NAF) (January 2018)

In accordance with the 2015 Act, the framework specifies the strategy for adaptation measures in different sectors and areas in order to reduce vulnerability to the negative effects of climate change and to avail of any positive effects. Sectors are identified for the development of adaptation plans.

6.3.7. Policy Statement on Security of Electricity Supply (November 2021)

This states that the Programme for Government requires a 51% reduction in greenhouse gas emissions by 2030 and that 80% of electricity consumption will come from renewable sources by 2030. Ensuring energy security is a national priority, as the electricity system decarbonises towards net zero emissions.

6.3.8. National Energy Security Framework (April 2022)

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

6.3.9. National Climate and Energy Plan 2021-2030 (NCEP)

The NECP was prepared in accordance with Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action, to incorporate all planning policies and measures identified up to the end of 2019 and which collectively deliver a 30% reduction by 2030 in non- ETS greenhouse gas emissions (from 2005 levels). The Plan sets out the strategy in respect of five dimensions together with policies and measures to ensure that these objectives are achieved. Ireland's target to reduce greenhouse gas emissions increased from 40% to 55% by 2030. It refers to reach

70% of energy from renewables by 2030, underpinned by the Renewable Energy Support Scheme. Energy security is a key priority.

6.4. Regional Policy

6.4.1. Eastern and Midland Regional Spatial and Economic Strategy 2019- 2031 (RSES)

The RSES transposes the policies and objectives of the NPF to a regional level. There are 16 no. Regional Strategic Outcomes (RSO's). RSO 8 is to build climate resilience. RSO 9 is to support the transition to low carbon and clean energy. The RSES notes in Section 4.8 that '*Energy production, including renewable energy in the form of wind, solar and biomass have to date largely been provided in rural areas and the location of future renewable energy production is likely to be met in rural areas'*. RPO 4.79 and 4.84 support renewable energy developments in rural areas.

Section 7.9 (Climate Change) is relevant to the proposed development. 'The Strategy supports an increase in the amount of new renewable energy sources in the Region. This includes the use of ... solar photovoltaics and solar thermal, both on buildings and at a larger scale on appropriate sites in accordance with National policy and the Regional Policy Objectives outlined in this Strategy'.

Section 10.3 – In the context of a move towards a more energy efficient society and an increase in renewable sources of energy, there is a need to set a policy approach which will address an increased demand for indigenous resources and increased security of supply. To meet our energy targets, we need to better leverage natural resources to increase our share of renewable energy. There is an established tradition of energy production in the Midland counties by state agencies, however national environmental policies are dictating the wind down of traditional fossil fuel powered stations, such as peat fired power plants in these counties.

RPOs 10.20 and 10.22 are also particularly relevant in relation to their support for the development of enhanced electricity supplies across the island.

6.5. Other Energy Sector Policy, Reports and Legislation

6.5.1. All-Island Generation Capacity Statement 2022-2031

Capacity statements set out expected electricity demand and the level of generation capacity required, over the next ten years. The 2022 statement predicts a challenging outlook with capacity deficits identified to 2031. In the short-term, deficits will increase due to the deteriorating availability of power plants. In later years the deficits are expected to reduce as new capacity comes forward through the SEM capacity auctions. Further new electricity generation will be required to secure the transition to high levels of renewable electricity.

6.5.2. CRU Information Paper, Security of Electricity Supply – Programme of Actions (Sept 2021)

Key elements in the programme of actions, include:

• Delivery of new, enduring, capacity, complementary to renewable electricity and central to our low carbon transition.

• The procurement of additional temporary emergency generation capacity.

• The extended availability and operation of older generation capacity otherwise expected to retire in this timeframe.

6.5.3. SEAI Energy Security in Ireland (2020)

Energy security, in its simplest terms, means having uninterrupted access to reliable, affordable supplies of energy. Energy import dependency is described as one of the simplest and most widely used indicators of a country's energy security, with indigenous energy sources generally more secure than imported energy.

Section 5.2.3, Electricity from renewables notes that replacing the use of fossil fuels for electricity generation with electricity generated from zero-carbon renewable energy sources is a key part of Ireland's strategy to decarbonise the energy system. This also increases energy security by reducing dependence on imported fossil fuels.

6.6. Natural Heritage Designations

6.6.1. Natura 2000 Sites (SAC & SPA)

The nearest Natura site is Ferbane Bog (SAC Code 000575), located c. 4.5km to the northwest. There is no connectivity to the site.

The site is bounded to the west of Zone 1 by the Silver River, while the Boora River runs to the west of Zone 2. A number of drainage ditches bounding portions of the site discharge into these two watercourses. Both the Silver River and Boora River are tributaries of the River Brosna, which enters the River Shannon just over 10km to the west. The River Shannon Callows SAC (Site Code 000216), and the Middle Shannon Callows SPA (Site Code 004096) include this portion of the River Shannon and are located c. 10.6km from the site. There is downstream connectivity to the River Shannon Callows sites via the Silver River.

The Slieve Bloom Mountains SPA (Site Code 004160) which is located c. 12.2ha from the site is designated for Hen Harrier. Hen Harriers were noted as a wintering species present on the development site.

An Appropriate Assessment of the proposed development has been carried out in Section 9 of this report in relation to the potential impacts to arise on the Natura 2000 network.

6.6.2. Proposed Natural Heritage Areas (pNHA)

The Grand Canal pNHA (Site Code 002104) is located at it's closest point c. 125m to the north of the proposed development site boundary. The site is separated by a green buffer zone which comprises at its closest point the distance of at least a field along the entire northern site boundary of Zone 1 and located 1,080m to the north of Zone 2. The Grand Canal proposed pNHA comprises the canal channel and the banks on either side of it.

Lough Boora pNHA is located c. 0.8km to the south of Zone 2 and is drained by the Boora River which is located adjacent to Zone 2.

6.7. EIA Screening

See completed Form 2 on file. Having regard to the nature and scale of development and the absence of any significant environmental sensitivity in the vicinity of the site as well as the criteria set out in Schedule 7 of the Planning & Development Regulations, there is no real likelihood of significant effects on the environment arising from the proposed development. The need for environmental impact assessment can, therefore, be excluded at preliminary examination and a screening determination is not required.

7.0 The Appeal

7.1. Grounds of Appeal

Reason for Refusal No. 1 (relating to Zone 2)

- Although lands identified as 'High Sensitivity' and 'Area of High Amenity' (AHA) in the County Plan, this should not preclude development as it presents an opportunity for appropriate land use diversification and green infrastructure enhancement on land which is considered marginal in terms of agricultural productivity.
- This is a landscape valued more for its ecological/recreational amenity/ education opportunities than for either its scenic amenity or rarity of the landscape features. It's a landscape that is transitioning from post-industrial cutaway peatland.
- Offaly has not prepared a Landscape Character Assessment for the County as per Objective BLO-23. In lieu of a Landscape Character Assessment, the County Plan designates Areas of High Amenity based on the following features/categories – Waterways & Wetlands, Upland Areas, Peatlands, Eskers and Archaeological and Historical. Zone 2 is contained within a c. 130sqkm area described as Lough Boora Discovery Park, which falls under Waterways and Wetlands. It is an extremely broad-bush designation, not based on a solid foundation of a county-wide Landscape Character Assessment.

- Lough Boora represents an opportunity to set an exemplary standard for the rehabilitation of cutaway peatlands that integrates a rich diversity of compatible land uses, which can and should, include renewable energy developments.
- Both Policy BLP-35 and BLO-22 relate to the protection of 'Areas of High Amenity' and inappropriate forms of development. There is reasonable scope for appropriate forms of development within the AHA, otherwise the policy would represent the sterilisation of vast areas of the County. The proposed development does not compromise the criteria set out in BLO-22.
- The low-lying, and heavily screened solar development will not be an 'incongruous' development in this low-lying site. Considered compatible with the landscape setting.
- Precedent set for renewable energy development in the High Amenity Area locally Leabeg Wind Farm, Cloghan and Meenwaun Wind Farms.
- The form and tone of solar arrays can appear distinctly similar to flooded/restored wetland areas of cutaway peatlands where the water pattern corresponds to the linear peat harvesting compartments.

Reason for Refusal No. 2 (relating to Zone 1)

- Same reasoning as outlined above in relation to AHA's.
- The Grand Canal AHA is located c. 130m and at least one field boundary between the canal and the proposed development.
- The solar array is located outside the area of High Sensitivity/AHA relating to the Grand Canal as well as the pNHA.
- The solar array is also located outside the first two protection zones identified in the Waterways Corridor Study (2002) (WCS), to which Policy BLP-23 relates. The protection zones are 'The Canal Corridor' itself and the 'Area of Immediate Influence', which extends as far as the fields immediately adjacent to the canal. This leaves the solar development partially within the 'Outer Area of Influence', which is '*not subject to the specific recommendations of this study'*.

- A series of four new photomontages have been prepared from the section of the Grand Canal. In all cases the views form the Grand Canal will result in imperceptible residual visual impacts once mitigation planting has become established. This planting will enhance and consolidate the vegetation and improve biodiversity.
- Site is located in Character Area 6 of the WCS with policy recommendation to 'strengthen and reinforce' and 'Improve and reinforce' the landscape character. The proposed development strengthens the landscape character of the canal through additional planting, without undermining the visual setting of the canal.

Reason for Refusal No. 3 – Site Selection Assessment

- The decision to split the site into two separate zones was based on a number of factors including policy, proximity to the substation, availability of suitable consolidated land type and sufficient amenable landowners favourable to compatible solar PV development, proximity of existing and proposed green public infrastructure (GI) and amenity, proximity and occurrence of designated conservation areas, their zones of influence, other sensitive environmental factors and residential receivers.
- Selection of final iteration of site boundary and design for proposed development was informed by analysis and design of site-specific factors identified through the baseline assessments including landscape and visual and enhancement of local GI and amenity; glint and glare; local hydrology, drainage and flood risk; traffic and transport; biodiversity – including bat, birds, habitats & flora and fauna and noise.
- Section 3.2.4 of the County Plan presents five site selection criteria which apply for ground mounted arrays. The criteria are as follows;
 - > Typically suited to low lying lands due to a need for level sites;
 - Accessibility/proximity to electricity networks. Ability to achieve a network connection, typically via a 10kV or 20kV overhead cable on the electricity transmission grid. In general, it is not viable to locate solar farms over 1km from network infrastructure;

- The reuse of previously developed land such as brownfield land, contaminated land or industrial and non-productive agricultural land in preference to productive agricultural land;
- > South facing aspect with either flat terrain or sloping gently; and
- > Land free from obstacles that may cause shading;

The appellant responds to each of the five criteria.

 Reason for Refusal 3 based on Policy CAEP-35 is reviewed in detail and responded to thereafter.

7.2. Planning Authority Response

There has been no further submission from the Planning Authority beyond its original reporting.

8.0 Planning Assessment

The planning assessment will address the following subjects;

- Planning Policy
- Road and Traffic Safety
- Glint and Glare
- Noise
- Flooding and Drainage
- Archaeology
- Biodiversity
- Landscape Assessment
- Area of High Amenity
- Site Selection

8.1. Planning Policy

The applicants Planning & Environmental Considerations Report (Section 5) sets out in detail the policy context and the need for the proposed development. The policy context is also referenced in Section 6 of this Inspectors Report. Strong support for development of renewable sources of energy is evidenced at all levels of the policy hierarchy to reduce reliance on fossil fuels. Renewable energy offers sustainable alternatives and the relevant policy framework support for solar farms is robust.

In terms of the rural location, the NPF acknowledges that 'the location of future renewable energy generation will, for the most part, need to be accommodated on large tracts of land that are located in a rural setting', while protecting the integrity of the environment and respecting the needs of residents of rural areas. The RSES also notes that 'the location of future renewable energy production is likely to be met in rural areas'.

The proposed development will not result in the permanent loss of a significant portion of agricultural land and the relevant policy framework acknowledges that rural areas are generally suitable locations in principle for the provision of renewable energy developments provided significant effects across a range of environmental media and receptors are mitigated/minimised. I, therefore, consider that the principle of the proposed development at this location will not have a significant adverse impact on agricultural activities or preclude agricultural practices returning to the site in the event of decommissioning.

The Offaly County Development Plan 2021 – 2027 (OCDP) indicates that renewable energy development in rural areas are supported in suitable locations, subject to particular considerations.

Having regard to the foregoing, and to the numerous examples of similar solar farm developments in rural areas, I consider that the principle of the solar farm at this location is acceptable, subject to the detailed considerations in this assessment. Having regard to the robust policy framework supporting renewable development and the pattern of permissions for such developments in the rural area, the proposed development is considered to be acceptable in principle, subject to normal planning considerations.

8.2. Road and Traffic Safety

There are two access points proposed to the solar farm, Zone 1 (west) will access onto the eastern side of the local road, L70095 c. 100m north of the R357/L70095 junction. Zone 2 (East) will be accessed directly from the R357 regional road. The access is shown on drawing no. 0344-PL-1101 Rev 1, dated 05.12.22.

The entrance works involve widening of the L70095 at the R357/L70095 junction, localised widening of the L70095, creation of a site access off the L70095 and, the creation of a site access off the R357 by replacing an existing field access. A Road Safety Audit has been submitted with the Planning Application.

Sightlines of 60m are shown egressing onto the L70095 (Zone 1) and 150m egressing onto the R357 (Zone 2), in line with Development Plan Standard 97.

The proposed development includes the laying of underground cables in the public road (L70095, L70099, L70208-3 & R357), electrically connecting the development to Derrycarney 110kV substation. The laying of cables in the public road will require Temporary Traffic Management.

The delivery route for the construction stage will be from Dublin Port via M50, along the M6 towards Athlone; the N62 to Ferbane and then onwards to the subject site via the R437 and R357. Both Zones will be built simultaneously. During construction, it is estimated that there will be on average 65 construction staff on site with c. 100 construction staff at peak times. In total, it is estimated that the project will give rise to an additional 5,032 HGV loads (one-way trips). In the event of a grant of permission, I recommend that construction traffic access the site strictly in accordance with the haul route as set out in the application documentation.

During the operation phase, solar farms are typically operated and managed remotely, only requiring a physical presence, for security (as necessary), once per month for scheduled maintenance (one return trip), and periodically as required for addressing remedial issues. Access will be via light vehicles.

I note that the report of the Transport Section Area Engineer dated 16th March 2023 has no objections to the proposed development subject to conditions.

In relation to water crossings, the application documentation contains details of approaches and methodologies being adopted to facilitate construction. Should the Board consider granting permission, I recommend that the requirements from Inland Fisheries Ireland be conditioned.

On review of the information lodged, I consider that the applicant has demonstrated that the site can be adequately accessed by construction traffic. I note the delivery/haul routes detailed and am satisfied that the construction activities can be carried out without significant adverse impacts on the road network or road users. Should the Board consider granting permission for the proposed development I recommend that the provision of a detailed construction traffic management plan be required prior to commencement in order to ensure impacts are minimised insofar as practicable during the construction and decommissioning phase.

8.3. Glint and Glare

While photovoltaic solar panels are not a highly reflective surface, glint and glare can arise from the development of solar farms. A Glint and Glare Assessment was submitted which details the impact within a 1km radius of the subject site. The assessment identified 64 residential dwellings and adjoining local and regional roads in the area.

In the current case the key receptors to be considered in relation to Glint and Glare can be classified into four categories - aviation, traffic (roads), transport (rail), and residential.

The solar panels are to be oriented in a south-facing direction to maximise solar gain and will remain in a fixed position.

In relation to aviation, no submissions have been received on the file. I do not consider that the development will generate glint or glare which could have an adverse effect on aviation.

No motorways, national roads or train lines are located within the glint and glare study area but the Regional Road R357 is located along the southern site boundary. There are a number of local roads within the study area including the L70083, L70093, L70095, L70098, L70098 all of which abut the site.

Of the 228 road receptor points analysed, only 2 of the Road Receptor Points (R54 and R55) have the potential to incur residential glint and glare effects post-mitigation.

R54 and R55 occurs on local road L70095 located along the western boundary of Zone 1. Reflectance is like to occur at R54 for an average of up to 4 minutes per day, over 21 days of the year, between April and August. Reflectance is like to occur at R55 up to 2 minutes per day over 19 days of the year, between May and August.

There must be clear sunshine for any glare to occur. Potential glare will only occur for road users travelling north and will be brief in nature. Any potential glare experienced will be outside of the central field of view i.e. offset greater than 50 degrees to the direction of travel. For these reasons, the report concludes in relation to R54 and R55, that it is unlikely that there will be any significant nuisance or hazard effects generated from glint and glare.

With regard to the transport routes, the report concludes that there is no potential for residual impacts on the road network in the vicinity of the proposed development and that glint and glare emanating from the proposed solar PV panels is considered unlikely to be significant for road users within the study area.

The most notable centre of population in relation to the site is the small linear settlement of Boora, located on the R357 close to the eastern section of the site. The report indicated that 1 dwelling adjacent to the western development boundary is likely to have a potential to be affected by the glint and glare. Following the establishment of proposed mitigation planting, the residual magnitude of impact would be reduced to **Very Low.** The assessment concludes that there will not be significant nuisance effects from glint and glare at any of the dwellings identified within the study area.

The Assessment was reviewed by the Local Authority Environment and Water Services Section, the Area Engineer and Road Sections who have raised no concerns in relation to Glint and Glare from the proposed development.

The Planning Authority has concerns that the assessment does not outline the exact mitigation measures proposed. In my opinion, it is clear from the applicants Glint and Glare Report that the mitigation is referring to the planting plan contained within the Green Infrastructure & Mitigation Plan. I recommend that in the event of favourable consideration that a separate mitigation plan for Glint and Glare is agreed with the Planning Authority to ensure significant impacts do not arise. In addition, the limited glint and glare impact indicated post mitigation, in particular at points on the local road

L70095 can if necessary be addressed by further mitigation. A condition to this effect should be included.

Having completed a review of the planning documentation, completed site inspection, as well as on consideration of the design of the proposed development, permitted and existing dwellings in the vicinity and combined with the fact that solar PV panels are designed to not be highly reflective, I consider that the development as proposed will not give rise to significant adverse impacts on dwellings in the vicinity from glint/glare.

8.4. Noise

The proposed development is not located in a densely populated area, however, there is an established dispersed rural settlement pattern in the vicinity of the site. Section 8 of the Planning and Environmental Considerations Report discusses noise associated with the proposed development for the construction and operational and decommissioning stages. Noise mitigation measures will be implemented during the construction phase in accordance with best practice to alleviate the temporary noise nuisance during construction works. Any expected noise during construction and decommissioning is expected to remain below recommended noise level thresholds at the nearest sensitive receptors. In my opinion noise during construction will not be significant.

In relation to operational noise, solar farm developments are not significant producers of noise. The applicant has advised that the solar panels and mounted structures are fixed in place with no moving parts and will not cause audible noise. In addition, they advise that there is no anticipated noise from the proposed inverters.

Once operational, the applicants advise there will be potential for slight noise emissions from the MPVS enclosures due to cooling fans, which is perceptible immediately adjacent to the inverter station. According to the manufacturer of the MVPS enclosures, they generate a sound pressure level of 63dB at a distance of 10m.

The applicant has advised that the siting of the 30MPVS enclosures across the site was informed by providing reasonable distances to sensitive receptors. The nearest dwelling in Zone 1 to an MVPS is 180m and in Zone 2, the nearest dwelling is 211m.

On the basis of the above, having regard to the design of the proposed development, the separation distances between the dwellings and elements of the proposed development that could generate noise, consideration of the mitigation measures that can be provided during the construction and decommissioning period and the nature of the proposed development, I consider that the proposed development will not give rise to significant adverse effects in the area in relation to noise. I recommend that in the event of favourable consideration that the proposed development be made subject to standard construction hours, good construction practices and noise limits to ensure significant impacts do not arise.

8.5. Flooding and Drainage

Two separate Stage 3 Flood Risk Assessment Reports (FRA) were prepared by Envirologic, dated 21st December 2022 for Zones 1 and 2. The results are summarised for both zones below.

8.5.1. Zone 1 (Western Site)

The western site boundary of Zone 1 runs parallel and adjacent to the Silver River, while the Derrycarney Stream flows westwards close to the northern site boundary.

The site is covered by the OPW National Indicative Fluvial Mapping, which shows that some areas of the site are at risk of flooding from the Silver River and Derrycarney Stream. The northwestern portion of the site is located in Flood Risk Zone A in terms of fluvial flood risk with maximum flood depth at 0.75m.

The site is located in flood Zones A, B and C. The solar farm has been designed to be a water compatible land use. A number of mitigation measures have been recommended with a view to facilitating the development. There are no proposals to install flood defences or raise riverbanks as this would displace floodwaters elsewhere. Instead, the hydrological regime of the site will not be altered in any way. Solar panels and MPVS will be raised above the flood levels.

The FRA demonstrates that the site and the proposed site activities satisfy Part 1 and Part 2 of the Justification Test. The proposed works will not remove any potential flood plain storage and it is concluded that the proposed development will not have a negative impact, in terms of flood risk, on the local drainage network, on local private property, or to the surrounding environment and human health.

8.5.2. Zone 2 (Eastern Site)

The western boundary of Zone 2 runs parallel and adjacent to the Boora River, while the Lea Beg Stream flows alongside the eastern site boundary before crossing through the centre of the site.

The site is covered by the OPW National Indicative Fluvial Mapping, which shows that some areas of the site are at risk of flooding from the Boora River, most notably towards the northwestern end of the site with a small pocket in the southwestern corner.

The site is located in flood Zones A, B and C. The development is considered to come under 'less vulnerable development'. Culverts along the Lea Beg Stream were shown to surcharge under flood conditions. Maximum flood depth is between 0.5 and 0.6m being deepest alongside the drainage channels. Generally, the flood depth is less than 0.4m. There are no proposals to alter the hydrological regime of the site in any way. Instead, solar panels will be raised above the flood levels and two of the MVPS units finished floor levels will be raised to prescribed heights. Specifications have been presented for SuDS devices which will facilitate disposal of rainfall-runoff generated on hardstanding units to infiltrate to the ground. The report concludes that the development, being water compatible is deemed appropriate to progress in Flood Zones A, B and C. It further states that the proposed works will not remove any potential flood plain storage. It can be concluded that the proposed development will not have a negative impact, in terms of flood risk, on the local drainage network, on local private property, or to the surrounding environment and human health.

8.5.3. Flood Risk Conclusion

It is noted that both the Area Engineer and the Environment and Water Services Section have raised no issue in relation to flooding.

As pointed out in the Flood Risk Reports, solar panels are not a vulnerable development, and whereas these are extensive development, the siting of solar panels and MVPS units above the flood level appears to address the flood risk vulnerability of the proposed development. In my opinion the proposed development does not give rise to flood risk concerns, either for the development itself or for adjoining properties.

8.6. Archaeology

The application is accompanied by an Archaeological Impact Assessment (AIA) prepared by ACS dated 14th December 2022. The site does not contain any Recorded Monuments listed within the Record of Monuments and Place (RMP) or Sites and Monuments Record (SMR). Six monuments are located in a field adjacent to the northeast area of Zone 1 in an area subject to peat harvesting. The nearest monument to Zone 2 consists of an enclosure located in a field adjacent and west and another enclosure to the south. The site contains no Protected Structures as per the County Development Plan, nor any structures listed within the National Inventory of Architectural Heritage for County Offaly.

Following a site visit, two areas of archaeological potential were noted. These comprise a subcircular flat-topped ridge located in Zone 1 (Field 7), with large stone boulders observed within the field and the remains of a wet ditch, and in the centre of Zone 2 (Field 30), part of the rhomboid-shaped area surrounded by a wet ditch depicted on the 1909-10 OS map. It is also noted that three structures depicted on the 1837 map in Derrycarney townland are all demolished, with no surface remains present. In addition, wet areas along rivers and streams/wet ditches and low-lying fields were observed which the author advised that archaeological monuments such as prehistoric *fulacht fia* (burnt mounds), are often found.

The submission from the Department of Housing, Local Government and Heritage (Development Applications Unit (DAU)) in relation to archaeology, states that having regard to the AIA submitted with the application, further archaeological assessment is required in relation to the proposed development, due to the sites scale located within an archaeologically sensitive landscape. The Department recommends that an AIA should be prepared to assess any impact on archaeological remains, which would include geophysical surveys, potential underwater surveys and recommendations. The Department recommended that this been carried out prior to decision.

Since the planning authority decided to refuse permission for unrelated issues, further information regarding the issue of the archaeological potential of the site was not sought or obtained.

In my opinion an appropriate condition can adequately address the issue.

8.7. Biodiversity

The planning application documentation included an Ecological Impact Assessment (EcIA) and Bird & Bat Survey Reports. The EcIA notes that the development site is of relatively low ecological value with the mature hedgerow of moderate to high local ecological value, and the Silver River and Lea Beg Stream of moderate to high local ecological value.

There are no Annexed habitats on or adjacent to the proposed development site. There are no rare or protected species recorded on the site and there are no invasive species present. There are no protected habitats recorded within the study area.

The report notes that Construction Management is required to avoid potential impacts on The River Shannon Callows SAC and the Middle Shannon Callows SPA, which the site is hydrologically linked to. An NIS has been presented in this regard.

The proposed layout design has been developed to avoid water courses maintaining buffer zones of at least 10m from the Silver and Boora Rivers and at least 5m from drainage ditches.

Trees and Hedgerows will remain largely intact except for the proposed removal of 70m of hedgerow to facilitate site access to Zone 1. There will be no loss to grassland with the introduction of the solar panels.

The proposed development includes green corridors with buffer zones of between 5 and 40m between panels and hedgerows and water courses. Mammal passes in the security fencing have been provided. A non-polarising white grid, partitioning on solar panels to reduce or eliminate their reflection of polarised light has been included in the design to protect against bat collisions.

Mitigation and monitoring measures have been included for birds and bats in the accompanying documentation.

In conclusion, in relation to habitats, having considered the nature of the proposed development, the subject site and the application documentation, I consider the proposed development will not give rise to significant adverse impacts either during the construction, operational or decommissioning phases. Construction activities will bring change, with habitats of local ecological importance including hedgerows, treelines and grasslands being retained and enhanced through additional planting. I

consider that the proposed development is appropriate at this location and construction, operational and decommissioning activities can be adequately managed with appropriate mitigation applied to ensure that no adverse effects arise.

8.8. Landscape and Visual Impact

The application is accompanied by a Landscape and Visual Impact Assessment (LVIA) prepared by Macroworks, dated December 2022. The LVIA establishes the baseline environment of the study area and identifies key landscape receptors based on relevant landscape and visual designations. A study area of 5km was used. I consider that the methods used for viewpoint analysis, landscape assessment and visual assessment are satisfactory and in accordance with industry standards.

A Computed Generated Zone of Theoretical Visibility (ZTV) Maps were prepared to illustrate where the proposed development is potentially visible from. The ZTV map indicates where the proposed development will not be visible from within the 5km study area. The ZTV maps indicate there will be minimal potential theoretic visibility of the entire development. Digital surface model based ZTV maps were also prepared. This includes a more consolidated area incorporating the surrounding networks of roads and dwellings within c. 1km of the application site boundary. The LVIA considers that due to the high degree of mature tree-lined hedgerows, dense riparian corridors and mature woodlands in the surrounds of the site, there will be limited potential for site visibility in all directions. Beyond c. 500m in all directions, residual site visibility will typically be in the form of fleeting glimpses (generally below 20% of the proposal) and brief views of the proposal panel arrays.

The assessment is supported by 11 viewshed reference points (VRPs) for both Zone 1 and Zone 2, which were selected to reflect a range of difference receptor types, distances and angles. Photomontages have been submitted (an 'LVIA' Photomontages' booklet), prepared by Macroworks and dated December 2022. The photomontages provide for, where appropriate, pre and post mitigation views. I consider the locations for the images chosen to be representative and allow for a proper assessment of the landscape and visual impacts of the proposed development from the most sensitive locations in the surround area. In addition, 4 additional viewpoints along the Canal at Zone 1 were provided as part of the appeal documentation.

A tabular analysis and assessment of visual receptor sensitivity at each VRP is set out in Table 1.6 of the LVIA. Each VRP is individually described and considered. Of the 11 VPR's, in terms of visual receptor sensitivity, 7 views were categorised as **Medium Iow.** The sensitivity of the four other views were deemed to be **Medium** (VP6) and **High medium** including VP1 (Grand Canal at Pollagh), VP3 (Turraun Nature Park) and VP10 (L7009 at Cloghan Hill). The overall significance of residual visual impacts ranged between 'Slight' to Imperceptible'.

Additional Photomontages along the Grand Canal at Zone 1 - The 4 additional photomontages provided with the appeal submission are taken at interspersed locations along the Canal facing into the site. They provide an Existing View + Outline View and a Montage View + Mitigated View. I am of the opinion that the additional photomontages provided enable a proper assessment of the impact from the Canal walkway facing towards Zone 1. It is clear from the photomontages that the solar panels will be almost entirely screened by the proposed mitigation planting.

In relation to the Lough Boora Discovery Park (VP11), the LVIA states in relation to visual impact 'The proposed development will not be visible from here due to the dense stacked layers of vegetation in the direction of the site. Thus, the magnitude of visual impact is **Negligible** by default'.

In relation to the Turraun Nature Park (VP3) which is located directly north of Zone 2 and within the area designated Lough Boora Discovery Park Area of High Amenity, the LVIA states 'the development will be almost entirely screened by dense stacked vegetation to the south of the near lake. Even if briefly glimpsed to the southwest of this view, the proposed panels will have little impact on the visual amenity of this local lake context as they are located over c. 250m from the viewer and will have a limited visual presence due to their heavily veiled nature. Nonetheless, a local amenity trail passes south of this lake and a short distance to the north of this site. While there will likely be clearer views afforded of the panels from this section of the route that passes north of the site, the proposed panels are located on the opposite side of an old railway embankment and are typically viewed in the opposite direction to the principal aspect of scenic amenity on this route, which is across the wetlands area and the extensive old peat bogs.....Once fully established, the proposed mitigation screen planting which comprises a combination of hedgerow bolstering, native woodland planting and riparian planting along the Boora River, will further screen the proposed panels and limit any potential for clear views of this site. Thus post-mitigation establishment, the magnitude of visual impact will reduce to a conservative **Low.'**

In terms of landscape impacts, the proposed development is considered to have only a modest physical impact on the application site, as it is consolidated within the existing hedgerow network and will not require significant excavation works to construct either the solar panels or the access and maintenance tracks and underground cable connection. The solar array will hug the ground plain and is anchored into the existing field pattern, which will be enhanced as part of the mitigation strategy. The impact will be limited to an increase of enclosure along roads which are immediately adjacent to the site, where the mitigation planting will be located.

Overall, in terms of visual impact assessment, the proposed development would not give rise to any significant residual impacts and this is testimony to site selection within a well contained rural landscape. Despite its relatively broad scale across this landscape, only fleeting glimpses of the site will ever be afforded from some locations immediately adjacent to the site.

8.8.1. Landscape designations

Offaly County Council have not prepared a County Landscape Character Assessment. The County Development Plan (CDP) identifies the Landscape Classification of the County, through rating the sensitivity of different landscapes across the county into three levels based on the landscapes '*ability to accommodate change or intervention without suffering unacceptable effects to its character and values*'. Section 4.14.1 outlines the three levels of landscape sensitivity, with 'High' being the most sensitive, through to 'Moderate' and 'Low' sensitivity.

8.8.2. Landscape Assessment - Zone 1 (Western Site)

Zone 1 (Western Site) is rated 'Low Landscape Sensitivity' and is not an 'Area of High Amenity'. Table 4.18 of the CDP describes Low Sensitivity as '*robust landscapes which are tolerant to change, such as the county main urban and farming areas'* and '*have the ability to accommodate development'*.

The assessment of Zone 1 by the Local Authority has noted that the submitted LVIA did not include viewpoints from along the Grand Canal within the Area of High Amenity. For the purposes of the appeal, the applicants submitted four new photomontages, namely Canal View 1 - 4. The views indicate the montage view of the existing scenario and with the planting mitigation established. It is noted that because the riparian planting occurs along the northern side of the array, it can grow to 6-8m in height.

On my site visit, inconsistencies were found between the Green Infrastructure and Mitigation Plan in relation to the location and extent of what has been labelled 'Existing Hedgerow Retained', and what is currently present on the site. I consider that this can be overcome by condition.

In order to allay Council concerns, the applicant has suggested that if considered necessary, due to this being the most exposed section of the development to the Grand Canal, a deeper section of riparian woodland planting c. 30m wide could be provided in the north-western corner of the site. This would also serve to provide dense all-season screening to the nearest field of panels and those beyond. This would require the removal of 5 lines of panels and the applicant would welcome a condition to provide this additional planting. I consider this to be a good compromise and recommend that in the event of a grant of permission, a condition be attached requiring this additional screening.

I also acknowledge the Planning Authorities concern in relation to the location of the Grand Canal to the Zone 1 lands. I consider the buffer provided between the Grand Canal and the subject site, including the planting proposed to be sufficient to protect the recreational and amenity potential of the Grand Canal waterway, without undue negative impact on the appearance and character of the surrounding area.

I submit that the area is a highly managed agricultural landscape that the proposed development would no doubt change the local landscape from a visual perspective, I consider that the extent of the visual impact is acceptable and that the landscape is capable of absorbing change. Having regard to the mitigation measures proposed, I am satisfied that the proposed development would not adversely impact on the landscape and visual amenities of the area. I consider that the proposed development is acceptable from a landscape and visual impact perspective, and that its impact

would not be so significant as to outweigh the benefits of providing a significant renewable energy resource.

8.8.3. Landscape Assessment - Zone 2 (Eastern Site)

Zone 2 is located within the Lough Boora Discovery Park 'High Amenity Area' (AHA), as designated in the CDP. This area comprises c. 130 sqkm of land which covers the area between the Grand Canal to the north, the N62 to the west, the N52 to the south and the local road that runs south from the settlement of Pollagh to the east. This area of high amenity is automatically translated into 'High Sensitivity Landscapes'.

These areas are described as having an 'extremely low capacity to absorb new development'. (Table 4.20, CDP) High Sensitivity landscapes 'are vulnerable landscapes with the ability to accommodate limited development pressure' and 'are highly sensitive to certain types of change'.

The southern portion of Zone 2 has road frontage along the R357 for a distance of c. 150m which comprises of one large flat field. There is currently no hedgerow along this portion of the site facing the R357 roadway. The Green Infrastructure & Mitigation Plan submitted with the application indicates that it is proposed to provide a Native Woodland along the road frontage at this location to screen the solar farm from the R357. Both boundaries to the east and west at this location have mature hedgerow boundaries. The southern portion of Zone 2 comprises large agricultural fields which extend northwards and then to the northwest, being bounded to the east by forestry, which is located outside the site boundary. The lands are only accessible and visible in this location from farm tracks. The site also has frontage along the local access road which passes through an area known as Lea Beg, which links the R357 to the Grand Canal. The Offaly Way also follows this local access road. The southern portion of Zone 2 is heavily screened from the local road by existing mature hedgerows along the sites boundaries. A large area of the site in the centre of Zone 2, which has been described as 'Ecologically Sensitive' has been left undeveloped as part of the proposed development.

The northern portion of Zone 2 is located directly to the south of Turraun Wetlands and is visible and fronts directly onto the local access road to the east and west. These lands are agricultural fields currently in pasture. The proposed Green Infrastructure & Mitigation Plan indicates a potential greenway connection between the local access road and the Offaly Way to the west, but no specific details have been provided. This pedestrian connection can be conditioned in the event of a grant of permission. The northwestern boundary of Zone 2 is screened by a thick wooded area. Currently, there are no hedgerows in this location along the northeastern and western site boundary. The green infrastructure & Mitigation Plan indicates a proposed new native woodland along the entire length of the northeastern site boundary, extending along a portion of the eastern side of the local access road to where it meets the existing hedgerow line. The western side of the road has a very weak hedgerow line along the entire road with clear views across the lands to the southwest. This is also true of the eastern side of the local access road in some locations in this area. I consider that in the event of a grant of permission, a condition be attached requiring this additional screening.

The landscape is flat and dominated by trees and hedgerows which close off views. Having inspected the site, I consider the site does not contain any particular landscape sensitivities and has the capacity to accommodate the development. I acknowledge that the proposed development will be introducing a large-scale built form of development into the landscape that was not previously present, however, on consideration of the character of the landscape, application documentation and mitigatory planting proposed, I am of the opinion that the solar farm will not be visually dominant, nor will it present a significant visual intrusion at this location. There are certainly areas from which the solar panels will be visible, but due to the limited height of the panels (maximum c. 3.25m), the nature of the site (generally flat with local undulations but set at a low elevation), the significant visual screening that is in place in terms of existing hedgerows and the detailed mitigatory landscaping that is incorporated into the design, I consider that the proposal will not have an adverse visual impact on the landscape, the amenities of the area or the established character and is an appropriate form of development at this location. The application documentation provides for significant planting and screening to be provided and in the event of a grant of permission, I would recommend that conditions be imposed to ensure implementation and maintenance of the landscaping and planting scheme for the duration of the operational period.

8.9. Areas of High Amenity (AHA's)

In addition to Landscape Classifications, the CDP has classified Areas of High Amenity (AHA's). Section 4.13 states that these are 'areas worthy of special protection/enhancement due to their uniqueness and scenic/ amenity value. These designations are additional to statutory National and European designations....'

8.9.1. Zone 1 (Western Site)

Zone 1 is not classified as an 'Area of High Amenity' and is therefore capable, in my opinion of absorbing development associated with a solar farm.

8.9.2. The Grand Canal AHA

The Grand Canal is located c. 125m to the north of the Zone 1 site boundary and is listed as an AHA under the category of Waterways and Wetlands in Table 4.17 of the CDP. It is also classified as a 'High Sensitivity Landscape'. The CDP states in relation to the *Canal;*

'The Grand Canal is a focus for a wide range of uses, especially for recreation and tourism purposes. The visual quality of the surrounding area is intrinsic to maintain the attractiveness of the Grand Canal corridor. Hence, the corridor is especially sensitive to large development structures, insensitively designed or sited housing and large-scale land uses such as extractive industries.

The Heritage Council published Waterway Corridor Studies pertaining to Offaly in 2002 and in 2004. The Council will consider these studies in relation to funding and planning applications (See Policy BLP-23 in this chapter).

The recreational value of the Grand Canal is recognised and it is intended to preserve its attractiveness by carefully controlling development in order to protect its amenity and tourism potential.'

The Planning Authority acknowledge the southern section of Zone 1 may be suitable for the development of a solar farm.

The Planning Authority has concerns about the separation distance of the site to the Grand Canal AHA to the north of the site and the Lough Boora Discover Park AHA to the west. The Planning Authority considers the separation distances proposed would

fail to protect the recreational and amenity potential of the Grand Canal and would not enhance the appearance and character of the surrounding area, thus impacting on the distinctiveness of the surrounding area, and therefore be contrary to BLP-23 and BLP-38 of the CDP.

The Waterways Corridor Study 2002 referred to in CDP Policy BLP-23 provides a definition of the Canal Waterway Corridor in Section 2.2.1 as follows;

'Three linear spatial zones are recognised along the canal waterway corridor. Central to the three zones is the canal waterway itself. To each side of the canal waterway, the area is divided into two linear zones, namely, the 'Area of Immediate Influence' and outside of that the 'Outer Area of Influence''.

The Area of Immediate Influence comprises the land immediately adjacent to the canal waterway on each side. 'Depending on the topography, land use (e.g. rural or settled) and the vegetation cover in an area, the area of immediate influence may extend as far as one or two fields from the canal/river waterway corridor, as far as the nearest significant feature such as a substantial hedgerow, a line or cluster of buildings or a stand of trees. The width of this zone is also determined to an extent by its components.'

The study notes that any changes within this zone could have a direct influence on the visual / landscape experience as perceived from the canal waterway. Wildlife habitats within and adjacent the waterway could also be affected by changes to this area.

The Canals Outer Area of Influence comprises the land extending beyond the area of immediate influence as far as the horizon, as observed from the canal waterway corridor. The study states that 'Although this area does contribute to the over-all character of the waterway corridor, its influence on the experience and ecology of the canal waterway zone is limited and primarily visual in nature. Changes to this zone are likely to have a less pronounced or more subtle impact on the ecology and experience of the canal waterway corridor...'

The Study further states 'Due to the more limited influence of any changes to this zone on the canal corridor and in recognition of the limited influence of waterway-related concerns on its management/development, policies and strategies for this zone should be less specific than for the area of immediate influence.' Based on the definition from the 2002 Study, I am of the opinion that the Zone 1 site is located in the Canals '*Outer Area of Influence*' based on the fact that Zone 1 is located at its nearest point 125m from the Canal and is separated by the distance of at least a field boundary along the entire northern site development boundary. In terms of what constitutes the Zone of Influence, I consider that the substantial existing hedgerow which bounds the development sites northern boundary as being a significant feature in the landscape which provides a visual break in the horizon from the Canals Waterway.

Due to the separation distance of the site from the Canal Waterway, I consider the proposed development of the solar farm will have minimal impact on the Canals recreational and amenity potential. The lands are currently used as agricultural pasture lands. The development lands are not within the Canals Area of Immediate Influence and are not specifically used for the purposes of recreation or amenity in relation to the Canal.

The proposed PV panels will not rise more than c. 3.25 m above the ground. In terms of enhancement of the Canals attractiveness, I consider the retention of and enhancement of existing hedgerows, the planting of new native hedgerows, the planting along the riparian corridors and the planting of proposed native woodland both along the northern boundary facing the Grand Canal AHA and around the perimeter of the site as indicated in the Green Infrastructure and Mitigation Plan to be in accordance with BLP-23 and BLP-38 of the CDP. The mitigation measures will enhance the landscape in Zone 1, will screen the solar arrays from the Grand Canal AHA and the Lough Boora Discovery Park AHA. The proposed mitigation planting as outlined above should preclude the visibility of the solar arrays in all directions and will enhance the appearance and character of the existing landscape. This in my opinion will be in accordance with the proper planning and sustainable development of the area.

8.9.3. Lough Boora Discovery Park AHA - Zone 2 (Eastern Site)

As mentioned above, Zone 2 is located within the Lough Boora Discovery Park 'High Amenity Area' (AHA), as designated in the CDP. Table 4.17 indicates Lough Boora

Discovery Park under the category of Waterways and Wetlands. Specifically, the characteristics of the Wetlands is described under Section C, as follows;

'The Lough Boora Discovery Park includes Turraun Wetlands, Finnamore Lakes Area and Loch Clochan Wetlands. The areas which were previously cutaway bogs are now a nature reserve colonised by fen type vegetation, which boasts a rich diversity of flora and fauna. The Discovery Park is an open, expansive vista that is currently largely free of buildings and associated installations such as overhead wires.'

Lough Boora Discovery Park is located on the opposite side of the R357, c.1.2km to the south of Zone 2 at its nearest point. Turraun Wetlands is location to the north of Zone 2, being separated by a woodland along much of the site boundary.

In relation to the subject lands contained within Zone 2, the landcover is pasture, surrounded by woodland and hedgerow rather than the defining Waterways & Wetlands attributes of the Lough Boora Discovery Park, which is the focus of the High Amenity Area.

I acknowledge the Planning Authorities concerns in relation to the proposed Zone 2 development lands being located entirely within a High Sensitivity Area and Area of High Amenity (AHA). I consider the LVIA and photomontage booklet submitted with the application is an accurate reflection of the impact that the proposed development would have, and it is sufficiently detailed. The proposed solar panels, though extensive in overall area, are relatively limited in height, not rising more than c. 3.25m above the underlying terrain and will be considerably screened by existing and enhanced surrounding hedgerow and trees.

In relation to High Amenity Area designation, the detailed landscaping scheme/mitigation plan shows that the proposed development will enhance the extant hedgerows and plant extensive new hedgerow as well as providing wildflower meadows and tree planting throughout. This will result in improvements and active management as well as the retention of hedgerows and trees. I consider this to be of an overall net gain for local ecology and habitats arising from the proposed development.

Notwithstanding the designation of Zone 2 as a 'Area of High Amenity' and of 'High Landscape Sensitivity', having regard to the landscape character of the site, comprising of agricultural grasslands, largely flat, bounded by hedgerows, forests and

bogs, I consider the proposed development can be accommodated without resulting in significant adverse effects on the landscape character and sensitivities of the area.

8.9.4. Landscape and High Amenity Assessment – Conclusion

Having inspected the site and surrounding area and having reviewed the LVIA and photomontages, I consider that the visual impact of the proposed development will be limited due to the site topography, the extensive hedgerows and their enhancement with further planting and proposed woodlands. Unrestricted views in the immediate environs and from further distances will not be possible. Any views would be intermittent. I consider that the applicant has comprehensively demonstrated that there will be no significant effects on the wider area of Lough Boora Discovery Park and Grand Canal Area of High Amenities arising from the proposed development.

In conclusion, having regard to the content of the LVIA, to the relatively flat nature of the site parcels, the extent of existing and proposed landscaping at particular locations, the buffers to be provided and the limited height of the proposed solar panels, I consider that the proposed solar farm would not have an undue adverse impact on the visual amenity and areas of high amenity and would not be contrary to Policy Objective BLP-35, Objective BLO-22, Objective BLP-23 and Objective BLP-38 of the Offaly County Development Plan 2021-2027.

8.10. Site Selection

The Councils third reason for refusal in relation to site assessment states the following 'The Applicant has failed to provide a suitable site selection assessment in accordance with CAEP-35 of Chapter 3 and Development Management Standard 110 of the Offaly County Development Plan 2021-2027. The proposed development would therefore, be contrary to the relevant Development Plan Policy and would not be in accordance with the proper planning and sustainable development of the area.'

DMS-110 Solar Farms provides a list of considerations for assessing planning applications for solar farms. The CDP states in relation to the list of considerations *'This list is not exhaustive, and the Council may consider other requirements contained in the chapter on a case by case basis with planning applications should the need*

arise. Where impacts are predicted to arise as a result of the development proposed, suitably detailed mitigation measures shall be proposed.'

The appeal documentation has responded in relation to compliance with Policy CAEP-35, outlining the reasoning for site selection which includes the location of the site in relation to the existing Derrycarney 110kV substation and the advice provided by multiple specialists reports and assessments. The applicant notes that a preliminary examination of c. 400ha of lands was carried out which included preplanning meetings with OCC. Based on discussions and specialist advice, the subject site was finalised.

I consider the site selection process undertaken by the applicant to have been robust, and the accompanying planning application documentation to have encompassed the necessary specialist assessments to provide a comprehensive overview of the impacts of the proposed development and to enable mitigation against any potential environmental impacts.

It is not evident in the wording of Policy CAEP-35 or DMS-110 that a separate site selection assessment report must be provided as part of the planning application documentation. It is clear from reviewing the application and appeal documentation that regard was had to the various requirements of Policy CAEP-35 and DMS-110. The Planning & Environmental Consideration Report submitted by the application discusses the site location and design rationale in Section 3, which sets out the rationale for the site selection. I consider the site selection carried out by the applicant to be acceptable and in accordance with Policy CAEP-35 and DMS-110.

9.0 Appropriate Assessment

9.1. Compliance with Articles 6(3) of the EU Habitats Directive

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

The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site before consent can be given. The proposed development is not directly connected to or necessary to the management of any European site and, therefore, is subject to the provisions of Article 6(3).

9.2. Stage 1 Screening for Appropriate Assessment

The application is accompanied by a 'Screening for Appropriate Assessment' report and a 'Natura Impact Statement' (NIS) prepared by Moore Group – Environmental Services, both dated 31 December 2022. The application is also accompanied by a Bat and Bird Survey prepared by Eire Ecology both dated December 2022. The Bat Survey took place between June and August 2022. The Bat Report concludes that 'No impacts on roosting or feeding bats is anticipated on the development'. Bird Surveys were conducted from November 2021 to August 2022. Mitigation measures for the Hen Harrier is included in the Bird Survey report in Section 4.1.

The Stage 1 screening report submitted with the application comprises information in support of screening for AA to be undertaken by the competent authority. The Stage 1 screening report was prepared in line with current best practice guidance, provides a description of the proposed development, and identifies European sites within a possible zone of influence. The applicant identifies 4 no. European Sites (2 no. SPA's and 2 no. SACs) within a 15km radium of the proposed development site. While 15km is not a statutory requirement, I am satisfied that it is a reasonable parameter and that the sites identified are acceptable.

Sites considered relevant to this appeal site are set out below:

Summary Table of European Sites Within the Zone of Influence of the Proposed

Development

River Shannon Callows SAC (000216)		
c. 10.62km to the west of the Proposed Development Special Conservation Objectives are set by the NPWS (18 Jan 2022 – Version 1)		
Qualifying Interest	Conservation Objectives	Connectivity- Source-Pathway- Receptor
Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]	To restore the favourable conservation condition of Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) in River Shannon Callows SAC	Yes The Proposed Development involves a bridge crossing of the
Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510]	To restore the favourable conservation condition of Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) in River Shannon Callows SAC	Silver River, which has downstream connectivity to this site.
Alkaline fens [7230]	To maintain the favourable conservation condition of Alkaline fens in River Shannon Callows SAC	Screened in due to potential hydrological connection by reason of surface
Limestone pavements [8240]	To maintain the favourable conservation condition of Limestone pavements in River Shannon Callows SAC	water flow and the source- pathway-receptor model
Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	To maintain the favourable conservation condition of Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno- Padion, Alnion incanae, Salicion albae)* in River Shannon Callows SAC	
Lutra lutra (Otter) [1355]	To maintain the favourable conservation condition of Otter (Lutra lutra) in River Shannon Callows SAC	
Middle Shannon Callows SPA (004096) c. 10.61km to the west of Proposed Development		
Special Conservation Objectives are set by the NPWS (15 Nov 2022 – Version 1)		
Qualifying Interest	Conservation Objectives	Connectivity- Source-Pathway- Receptor

Whooper Swan (Cygnus cygnus) [A038]	To maintain the favourable conservation condition of whooper swan in Middle Shannon Callows SPA	Yes The Proposed
Wigeon (Anas penelope) [A050]	To restore the favourable conservation condition of wigeon in Middle Shannon Callows SPA	Development involves a bridge crossing of the Silver River, which has downstream
Corncrake (Crex crex) [A122]	The status of corncrake as a Species of Conservation Interest for the Middle Shannon Callows SPA is currently under review. The outcome of this review will	connectivity to this site.
	determine whether a site-specific conservation objective is set for this species.	to potential hydrological connection by reason of surface
Golden Plover (Pluvialis apricaria) [A140]	To maintain the favourable conservation condition of golden plover in Middle Shannon Callows SPA	water flow and the source- pathway-receptor model
Lapwing (Vanellus vanellus) [A142]	To restore the favourable conservation condition of lapwing in Middle Shannon Callows SPA	
Black-tailed Godwit (Limosa limosa) [A156]	To restore the favourable conservation condition of Black-tailed godwit in Middle Shannon Callows SPA	
Black-headed Gull (Chroicocephalus ridibundus) [A179]	To restore the favourable conservation condition of black-headed gull in Middle Shannon Callows SPA	
Wetland and Waterbirds [A999]	To maintain the favourable conservation condition of wetlands in Middle Shannon Callows SPA	
Slieve Bloom Mountair		
	f the Proposed Development ojectives are set by the NPWS (23 Sep 2022 -	- Version 1)
Qualifying Interest	Conservation Objectives	Connectivity-
		Source-Pathway- Receptor
Hen Harrier (Circus	To restore the favourable conservation	Yes
cyaneus) [A082]	condition of hen harrier in Slieve Bloom Mountains SPA,	The Slieve Bloom Mountains SPA is designated for Hen Harrier.
		Screened in as Hen Harrier were

		noted as a wintering species on the Subject Site.
Ferbane Bog SAC (000		
	t of the Proposed Development	
Qualifying Interest	pjectives are set by the NPWS (02 Nov 2015 - Conservation Objectives	- Version 1) Connectivity- Source-Pathway- Receptor
Active raised bogs [7110]	To restore the favourable conservation condition of Active raised bogs in Ferbane Bog SAC	No Screened out. No hydrological
Degraded raised bogs still capable of natural regeneration [7120]	The long-term aim for Degraded raised bogs still capable of natural regeneration is that its peat-forming capability is re- established; therefore, the conservation objective for this habitat is inherently linked to that of Active raised bogs (7110) and a separate conservation objective has not been set in Ferbane Bog SAC	impact and distance sufficient for no impacts due to works.
Depressions on peat substrates of the Rhynchosporion [7150]	Depressions on peat substrates of the Rhynchosporion is an integral part of good quality Active raised bogs (7110) and thus a separate conservation objective has not been set for the habitat in Ferbane Bog SAC	

The site is not located in or immediately adjacent to a European site. The closest European site is Ferbane Bog SAC (Site Code 000575), located c. 4.5km to the northwest, however there is no connectivity to the site. For this reason, the Ferbane Bog was screened out.

The Stage 1 Screening Assessment concluded that 'The potential for indirect significant adverse effects on the River Shannon Callows SAC and Middle Shannon Callows SPA is uncertain in the absence of control of potential pollution on surface water during construction. The Project will require Construction Management to avoid potential impacts on these sites and the value of the site and potential ex-situ disturbance to Hen Harriers as Special Conservation interests of the Slieve Bloom Mountain SPA needs to be further assessed. It is concluded that a Natura Impact Statement be prepared for the purpose of Article 6(3) of the Habitats Directive and

Part XAB of the Planning and Development Act 2000, as amended. An appropriate assessment is therefore required.'

As stated, the site is hydrologically linked to the River Shannon and is potentially an ex-situ site for Hen Harrier. For these reasons, there is a requirement for further assessment.

Following the screening process, it has been determined that Appropriate Assessment is required as it cannot be excluded on the basis of objective information that the proposed development of a solar farm individually or in-combination with other plans or projects will have a significant effect on the following European sites (i.e. there is the possibility of significant effect):

- River Shannon Callows SAC (000216)
- Middle Shannon Callows SPA(004096) and
- Slieve Bloom Mountains SPA (004160)

The possibility of significant effects on other European sites has been excluded on the basis of objective information. The following European site has been screened out for the need for appropriate assessment.

• Ferbane Bog SAC (Site Code 000575),

Measures intended to reduce or avoid significant effects have not been considered in the screening process.

9.3 Stage 2 Appropriate Assessment

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

The proposed development is examined in relation to any possible interaction with European sites designated Special Conservation Areas (SAC) and Special Protection Areas (SPA) to assess whether it may give rise to significant effects on any European Site in view of the conservation objectives of those sites. The conservation objectives and qualifying interests for The River Shannon Callows SAC (Site Code 000216), and the Middle Shannon Callows SPA (Site Code 004096) and the Slieve Bloom

Mountains SPA (Site Code 004160) are set out in Section 9.2 of this report. The AA Screening Report 'screens in' these three European sites.

The NIS submitted by the applicant contains a description of the proposed development, the project site and surrounding area. It outlines the methodology used for assessing potential impacts on habitats and species within the European Site that has the potential to be affected by the proposed development. It predicts the potential impacts for the site and its conservation objectives, it suggests mitigation measures, assesses in-combination effects with other plans and projects and it identifies any residual effects on the European sites and their conservation objectives.

Having reviewed the documents and submissions, I am satisfied that the information allows for a complete examination and identification of any potential significant effects of the development alone, or in combination with other plans and projects on European Sites. Potential adverse effects are assessed in view of best scientific knowledge, based on objective information in relation to the project including the proposed avoidance, reduction and preventative measures. Any likely direct or indirect effects of the proposed development, both alone and in combination with other plans and projects, on European Sites, by virtue of the following criteria: size and scale, landtake, distance from the European Sites or key features of the site, resource requirements, emissions, excavation requirements, transportation requirements and duration of construction and operation were considered in the NIS.

9.4 Summary Description of the Proposed Development

The applicant provides a description of the project in Section 1.7 of the NIS. The site is divided into two Zones, Zone 1 to the west and Zone 2 to the east. The proposed development interacts with four water courses; the Silver River, Derrycarney Stream, Boora River and Lea Beg Stream, each flowing to the River Brosna and ultimately the River Shannon downstream. The overall site lies adjacent to but separated from the Grand Canal. The proposed development includes new access tracks and water course crossings of the Silver River, the Derrycarney Stream and two on the Lea Beg Stream to allow access to distant fields.

The proposed development is bounded to the west by the Silver River, while the Boora River runs to the west of the eastern section, and a number of drainage ditches

bounding portions of the site discharge into these two watercourses. Both the Silver River and the Boora River are tributaries of the River Brosna, which enters the River Shannon just over 10km to the west. The River Shannon Callows SAC (Site Code 000216), and the Middle Shannon Callows SPA (Site Code 004096) encompass this portion of the River Shannon and are located c. 10.6km to the west of the Proposed Development. There is downstream connectivity to the River Shannon Callows (Site Code 000216) sites via the Silver River. The Slieve Bloom Mountains SPA is designated for Hen Harrier (Circus cyaneus). Hen Harrier were included as they were noted as wintering species present on the Proposed Development site.

It is proposed to allow 5m ecological buffer zones between the field boundaries, hedgerows, fencing and field drains, and 10m ecological buffer zones between rivers and streams.

9.5 Identification of Potential Effect Pathways

The Screening Assessment has identified potential impacts to the River Shannon Callows SAC and the Middle Shannon Callows SPA due to the hydrological connectivity between the proposed solar farm development and the European Sites. Given the nature and scale of the proposed construction, operational and decommissioning phases of the works, within an area of improved agricultural grassland, the potential for effects on surface water quality as a result of suspended solids discharged has been identified in the absence of mitigation.

The Slieve Bloom Mountains SPA was also identified due to the presence of Hen Harrier on the development site.

Assessment of pathways for potential adverse effects on the integrity of the individual Qualifying Interests (QIs) of the **River Shannon Callows SAC** are set out as follows:

River Shannon Callows SAC		
Qualifying	Assessment of Pathways for	Potential Effects
Interest	Effect	
Lutra lutra (Otter)	There will be no direct effects on	There will be no direct effects
[1355]	otters and no barriers to	on otters and no barriers to
	movement. There is the	movement. There is the
	potential for indirect effects on	•
	water quality or prey species,	on water quality or prey
	which will need to be controlled	species, which will need to
	by employing a CEMP to avoid	be controlled by employing a

	effects on water quality. In the absence of mitigation measures to control the potential contamination of surface water from chemical pollution such as a hydrocarbon spill or from elevated suspended solids from earth movement, potential effects on Otters cannot be excluded. The potential for significant effects on these species is therefore considered further.	CEMP to avoid effects on water quality. In the absence of mitigation measures to control the potential contamination of surface water from chemical pollution such as a hydrocarbon spill or form elevated suspended solids from earth movement, potential effects on Otters cannot be excluded.
Molinia meadows on calcareous, peaty or clayey- silt-laden soils (Molinion caeruleae) [6410] Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis([6510]	In the absence of mitigation measures to control the potential contamination of surface water from chemical pollution such as a hydrocarbon spill or from elevated suspended solids from earth movement, potential effects on this habitat cannot be excluded. The potential for significant effects on these species is therefore considered further.	In the absence of mitigation measures to control the potential contamination of surface water from chemical pollution such as a hydrocarbon spill or from elevated suspended solids from earth movement, potential effects on this habitat cannot be excluded.
Alkalinefens[7230]Limestonepavements [8240]AlluvialforestswithAlnusglutinosaandFraxinus excelsior(Alno-Padion,Alnionincanae,Salicionalbae)[91E0]	This habitat is outside the zone of influence of the proposed development. The potential for significant effect on these habitats is therefore not considered further.	This habitat is outside the zone of influence of the proposed development.

Assessment of pathways for potential adverse effects on the integrity of the individual Qualifying Interests (QIs) of the **Middle Shannon Callows SPA** are set out as follows:

Middle Shannon Callows SPA		
Qualifying Interest	Assessment of Pathways for Effect	Potential Effects
Whooper Swan (Cygnus cygnus) [A038] Wigeon (Anas penelope) [A050]	In the absence of mitigation measures to control the potential contamination of surface water from chemical pollution such as a hydrocarbon spill or from elevated suspended solids from	In the absence of mitigation measures to control the potential contamination of surface water from chemical pollution such as a
Corncrake (Crex crex) [A122]	earth movement, potential effects on this habitat cannot be excluded.	hydrocarbon spill or from elevated suspended solids from earth movement, potential effects on this
Golden Plover (Pluvialis apricaria) [A140]	The potential for significant effects on these species is therefore considered further.	species cannot be excluded.
Lapwing (Vanellus vanellus) [A142]		
Black-tailed Godwit (Limosa limosa) [A156]		
Black-headed Gull (Chroicocephalus ridibundus) [A179]		
Wetland and Waterbirds [A999]	Any significant impact on the quality functioning and accessibility of the wetland habitat within the SPA would likely significantly negatively impact the regularly occurring migratory waterbirds that utilise this wetland habitat. Impacts on wetland quality, functioning and accessibility would likely reduce the diversity and abundance of waterbird species that the wetland can support. This, in turn, could negatively impact the Conservation Objectives for waterbirds species listed as Special Conservation interests in the SPA or other regularly	the quality, functioning and accessibility of the wetland

occurring m species.	gratory waterbird	Objectives for waterbird species listed as Special Conservation Interests in
The potentia	al for significant	the SPA or other regularly
effects on t	hese species is	occurring migratory
therefore cor	sidered further.	waterbird species.

Assessment of pathways for potential adverse effects on the integrity of the individual Qualifying Interests (Qis) of the **Slieve Bloom Mountains SPA** are set out as follows:

Slieve Bloom Mountains SPA		
Qualifying Interest	Assessment of Pathways for Effect	Potential Effects
Hen Harrier	There will be no direct effects on birds of conservation concern.	There will be no direct effects on birds of conservation concern.
	The potential for significant effects on these species is considered further.	

There will be no direct effects as the proposed development is located entirely outside the designated European Sites. In the absence of mitigation measures, the potential indirect effects on European sites is uncertain, thus Stage 2 AA is required for the following European Sites:

- River Shannon Callows SAC (000216)
- Middle Shannon Callows SPA(004096) and
- Slieve Bloom Mountains SPA (004160)

There will be no direct effects on any Annex I Bird Directive, birds roosting or birds nesting and so the main concern is with regard to disturbance effects and indirect effects on water quality. In relation to Habitats Directive Annex II species, there are suitable habitats for otters at the proposed development site. There will be no direct effects on otter holts or resting places. It is unlikely that the construction phase would generate significant disturbance to otters and there will be no permanent barriers to otter movement during the construction phase. Indirect effects in the form of a pollution event will need to be controlled.

Potential pathways for indirect effects on the Qualifying Interests were identified and are listed as follows:

- Otter (Lutra lutra) [1355]
- Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]
- Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510]
- Whooper Swan (Cygnus cygnus) [A038]
- Wigeon (Anas penelope) [A050]
- Corncrake (Crex crex) [A122]
- Golden Plover (Pluvialis apricaria) [A140]
- Lapwing (Vanellus vanellus) [A142]
- Black-tailed Godwit (Limosa limosa) [A156]
- Black-headed Gull (Chroicocephalus ridibundus) [A179]
- Wetland and Waterbirds [A999]
- Hen Harrier (Circus cyaneus) [A082]

9.6 Bats

In addition to domestic legislation bats are also protected under the EU Habitats Directive (92/43/EEC). All bat species are listed in Annex IV of the same Directive.

A Bat Survey Report prepared by Eire Ecology accompanies the application. I would like to point out that there is a typographical error on the report header, which refers to the 'Yellow River Windfarm Bat Survey'. It is clear from the report that the surveys refer to the Derrycarney Solar Development.

The report concludes that seven species of bat were positively identified during the various bat surveys.

There are no buildings within the site suitable to host bats. As such bridges and buildings in the general area were examined for the potential to host bat roosts. A bat roost was recorded close to the eastern section of the site. 8 or 9 Natterers bats were observed flying around a small shed before entering a tree roost close by. An additional roost for Soprano Pipistrelle and Daubenton's is likely located to the north

of the western section where a bridge is located over the Silver River. The report concludes that neither roost will be impacted as a result of the proposed development.

9.6.1 Interactions between bats and solar panels

A laboratory study undertaken by Grief & Siemers (2010) showed that bats attempted to drink from panels and occasionally collided with them. There is evidence that this potential effect can be mitigated by a non-polarising white grid, portioning on solar panels to reduce or eliminate their reflection of polarised light (Horvath, 2010). This measure has been included in the design to avoid potential effects on commuting bats. Further mitigation and monitoring has been included in Section 7 of the Bat Survey Report. Should the Board consider granting permission, I recommend that the mitigation and monitoring outlined in Section 7 be conditioned to protect bats.

9.7 Preventative Measures to Avoid Identified Effects/Pathways

9.7.1 Construction Phase

- It is noted that only minor intrusive works will be required for the installation of the solar panels. The frame legs will be pile driven into the ground and therefore no intrusive foundations are required as part of the sub-structure works.
- A preliminary Construction Environmental Management Plan (CEMP) has been prepared for the site and was submitted as part of the application documentation. This makes reference to the Planning and Environmental Considerations Report, the Ecological Impact Assessment and Flood Risk Assessment which accompanied the application. The CEMP will be updated in collaboration with the building contractor and in line with all conditions and obligations which would apply to any grant of permission.
- The CEMP sets out the environmental management framework to be adhered to during the pre-commencement, construction and operational phases of the development. It incorporates the mitigating principles to ensure that the work is

carried out in a way that minimises the potential for any environmental effects to occur. Minimum setback distances have also been incorporated into the project design phase for the protection of watercourses (e.g. 10m setback from watercourses and 5m ecological buffer zones between the field boundaries, hedgerows, fencing and field drains,). The implementation of these measures on site will avoid potential for significant impacts on downstream Designated European Sites and sensitive ecological receptors.

- Prior to any works taking place, all personnel involved will receive an on-site induction relating to operations adjacent to watercourses and the environmental sensitive nature of the receiving environment downstream and re-emphasise the precautions that are required as well as the construction management measures to be implemented.
- The Flood Risk Assessment prepared by Envirologic submitted with the application concludes that the proposed development will not have a negative impact in terms of flood risk on the local drainage network, on local private property or to the surrounding environment and human health. It is not proposed to install flood defences or raise riverbanks as this would displace floodwaters elsewhere. Instead, the hydrological regime of the site will not be altered in any way.
- Regular visual condition surveys of the road network near the site will be undertaken. Where identified/required, the contractor shall carry out road sweeping operations. A self-contained wheel wash facility shall also be used at both proposed site entrances.
- It is also proposed to adopt the following pollution prevention measures for the protection of watercourses leading to the River Brosna and the downstream River Shannon European sites:
 - There will be no direct discharge of suspended solids or any other deleterious matter to drains or watercourses. A silt barrier and a buffer zone will be utilised to protect the Silver and Boora Rivers.
 - Prior to any works commencing, surface site drainage and silt control measures will be established. No run-off from machine servicing or concrete mixing areas will be allowed to enter water courses.

- On completion of the works, all apparatus, plant, tools, offices, sheds, surplus materials, rubbish and temporary erections or works of any kind will be removed from the site.
- Any works directly affecting watercourses or riparian habitats will be submitted for assessment to IFI and approval in the form of a detailed method statement.
- All works will follow the guidance set out in the guidance note Control of Water Pollution from Construction Sites (CIRCA, 2001)
- Storage locations for excavated materials, equipment, hydrocarbons (including fuels for machinery) will be designated prior to commencement of works. Excavated materials will not be stored within 10m of any ditches, dry or wet, watercourses or wetland areas. Site compounds will be located at lease 20m from an aquatic feature.
- Fuels, oils, greases, hydrocarbons and hydraulic fluids will be stored in 110% bunded compounds well away from the surface water drains.
- A spill method statement will be drawn up which personnel must adhere to. Spill Kits and hydrocarbon absorbent packs will be available at stations throughout the site with all vehicles on site carrying spill kits. All relevant personnel will be fully trained in the use of the equipment. Any used spill kits will be disposed of appropriately off-site.
- All concrete will be mixed off-site and imported into the site. All concrete browsers will be washed down at a dedicated concrete washout on-site at least 50m from a drainage ditch or watercourse. Concrete washings will not be disposed of on-site to any surface or ground water feature. All washings will be removed off-site and treated at a licenced facility.
- A 24 hour, seven day week Emergency Response protocol will be drawn up and implemented. This will be implementable in the event of an accidental spillage of chemicals, hydrocarbons or release of sediment to the surface or ground water system.

- Refuelling of machinery will be carried out on level, hard surfaced designated areas where possible. In the event that refuelling is required outside of these areas, fuel will be transported in a mobile double skinned tank and a spill tray will be employed during refuelling operations.
- All machinery will be regularly maintained and checked for leaks. Service will not be undertaken within 50m of aquatic features. Servicing will be undertaken on level, hard surfaced designated areas.
- All equipment and machinery will be cleaned prior to entry as a bio security measure. This is to avoid transfer of invasive species on equipment and machinery which may have been used elsewhere to the receiving catchment. The IFI bio security protocol will be complied with.
- Post-development, chisel ploughing will occur between solar panels rows to loosen the soil that will be compacted during construction. Chisel ploughing will reduce soil compaction on the site and promote seed growth; it has been proven to significantly increase infiltration rates, thereby, reducing runoff rates from the site.
- The proposed setback distances in combination with other measures to protect water quality incorporated into the project design including setbacks from watercourses and drains, dust minimisation measures, storage of excavated material to suitable stockpile areas, prevention of run-off water flowing directly into watercourses, will ensure that no deleterious material enters waterbodies within the development site.

Hen Harrier Mitigation Measures

Mitigation measures for the Hen Harrier and other bird species is included in the Bird Survey report in Section 4.1.

- It is proposed to avoid construction in the western zone (300m wide buffer zone, where hen harrier were noted commuting west to east until periods outside the wintering period.
- A large exclusion area to the south and centre of the site has been provided in the design to alleviate pressures for the hen harrier found in the area.
- An Ornithologist will be employed during the construction phase to micromanage construction locations to avoid disturbance on key species.
- Commuting corridors for Hen Harriers comprising 25m wide strips of grassland have been designed into the development. These corridors are located in the western section to enable a commuting corridor between bogs, in a west to east direction.
- An area measuring c. 5.8ha on the eastern site will be left free from solar panels for breeding territory for birds.
- Newer equipment will be utilised where possible as it is generally quieter than older equipment.
- All solar panels will be fitted with a non-polarising white grid portioning to mitigate against polarised light pollution.
- The mitigation measures provided for the Hen Harrier as outlined above will minimise impacts associated with the construction and operational phase of the development. No significant indirect impacts on the habitats and species of the SPA are anticipated if mitigation measures are fully implemented.

Based on the information available, it can be concluded that the proposed development will not adversely affect the identified Qualifying Interests of the River Shannon Callows SAC (000216), Middle Shannon Callows SPA (004096) and Slieve Bloom Mountains SPA (004160).

9.7.2 Operational Phase

The solar farm has been designed to prevent any surface water runoff entering the waterbodies within the development site.

9.7.3 Decommissioning Phase

Any demolition or maintenance works on the site would be likely to have similar effects in terms or disturbance of water quality to those associated with the construction phase of the project. For this reason, best practice environmental control measures proposed under the construction phase should also be adhered to during the decommissioning to avoid any potential for deterioration in water quality.

9.7.4 In-Combination/ Cumulative Impacts

No potentially significant cumulative and/ or in-combination pollution, disturbance, displacement or habitat loss effects on any of the Qualifying Interests has been identified with regard to the proposed development. With the implementation of the mitigation measures, the proposed development either alone or in-combination with other plans and projects will not adversely affect the relevant European Sites, having regard to the sites Conservation Objectives.

9.7.5 Applicants NIS Conclusion

The applicants NIS concluded as follows;

'This NIS has reviewed the predicted effects arising from the Proposed Development and found that with the implementation of appropriate mitigation measures specifically with regard to surface water, significant effects on the River Shannon Callows SAC (000216) and the Middle Shannon Callows SPA (004096) can be ruled out. The omission of any potential habitat for the Hen Harrier on the site footprint means any impact on the Slieve Bloom Mountains SPA can also be ruled out.

It is the conclusion of this NIS, on the basis of the best scientific knowledge available, and subject to the implementation of the mitigation measures set out under Section 3.6, that the possibility of any adverse effects on the integrity of the European Sites considered in the NIS, or on the integrity of any other European Site (having regard to their conservation objectives), arising from the Proposed Development, either alone or in combination with other plans or projects, can be excluded beyond a reasonable scientific doubt.'

9.8 Conclusion

I am satisfied that an examination of the potential impacts has been analysed and evaluated using the best scientific knowledge. Significant effects on Natura 2000 sites were identified. Where potential adverse effects were identified, key design features are prescribed to remove risks to the integrity of the European sites. Taking into consideration the submissions made and the extensive mitigation measures detailed in the planning application documentation, based on best scientific evidence, there is no predicated in-combination impact on the River Shannon Callows SPA (004096) and Slieve Bloom Mountains SPA (004160).

I consider it reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the River Shannon Callows SAC (000216), Middle Shannon Callows SPA (004096) and Slieve Bloom Mountains SPA (004160) or any other European site, in view of the site's Conservation Objectives.

10.0 Recommendation

Having regard to the foregoing, I recommend that permission for the above-described development be **GRANTED** for the following reasons and considerations subject to conditions.

11.0 Reasons and Considerations

Having regard to;

- County, European, National, Regional, and other support for renewable energy development as follows:
 - (i) The provisions of the Offaly County Development Plan 2021 2027,
 - (ii) REPowerEU Plan 2022 and Directive EU 2018/2001, as amended 18.05.2022,
 - (iii) The governments Project Ireland 2040 National Planning Framework,
 - (iv) The governments Climate Action Plan 2023,

- Eastern and Midland Regional Spatial and Economic Strategy 2019-2031 (RSES),
- The documentation submitted with the planning application and appeal, including the Appropriate Assessment Screening and Natura Impact Statement, Planning & Environmental Considerations Report including Preliminary Construction and Environment Management Plan, Ecological Impact Assessment, Bat and Bird Surveys, Traffic and Transport Assessment, Stage 1 Road Safety Audit, Stage 3 Flood Risk Assessment, Glint and Glare Assessment, Landscape and Visual Assessment, Landscape Management Plan, and Archaeological Assessment,
- The report of the inspector,
- The nature of the landscape and its capacity to visually accommodate the proposed development without significant adverse effects,
- Mitigation measures proposed for the construction, operation, and decommissioning of the site,
- The topography of the area,
- The existing hedging and woodland screening at the site,
- The pattern of development in the area,
- The separation distances between the proposed development and dwellings or other sensitive receptors,
- The proposed connection of the solar farm to the national electricity grid at the existing operational Derrycarney 110V Substation,
- The likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the absence of likely significant effects of the proposed development on European Sites,

It is considered that, subject to compliance with the conditions set out below, the proposed development would be in accordance with European, national, and regional renewable energy policies and with the provisions of the Offaly County Development Plan 2021-2027, would not seriously injure the visual amenities of the area or have an

unacceptable impact on the character of the landscape, areas of high amenity or archaeological heritage, would not have a significant adverse impact on ecology, would be acceptable in terms of traffic safety and would make a positive contribution to Ireland's renewable energy and security of energy supply requirements. The proposed development would therefore be in accordance with the proper planning and sustainable development of the area.

Appropriate Assessment: Stage 1:

The Board considered the Screening Report for Appropriate Assessment and all other relevant submissions and carried out an appropriate assessment screening exercise in relation to the potential effects of the proposed development on designated European sites. The Board noted that the proposed development is not directly connected with or necessary for the management of Ferbane Bog SAC (Site Code 000575) located c. 4.46km from the development site and considered the nature, scale, and location of the proposed development, as well as the report of the Inspector. The Board agreed with the screening report submitted with the application and with the screening exercise carried out by the Inspector. The Board concluded that, having regard to the gualifying interests for which the site was designated and in the absence of connections to and distance between the application site, Ferbane Bog SAC (000575) could be screened out from further consideration and that the proposed development, individually or in combination with other plans or projects would not be likely to have significant effects on this European Site or any other European Site in view of the sites' conservation objectives and that a Stage 2 appropriate assessment is therefore not required in relation to this European Site.

The Board considered that an appropriate assessment of the implications of the proposed development for the Lower River Shannon SAC (000216), the Middle Shannon Callows SPA (004096) and the Slieve Bloom Mountain SPA (004160) required further investigation.

Appropriate Assessment: Stage 2:

The Board considered the Natura Impact Statement and all other relevant submissions and carried out an appropriate assessment of the implications of the proposed development for the Lower River Shannon SAC (000216), the Middle Shannon Callows SPA (004096) and the Slieve Bloom Mountain SPA (004160). The Board considered that the information before it was adequate to allow the carrying out of an Appropriate Assessment as well as the report of the Inspector. In completing the assessment, the Board considered the likely direct and indirect impacts arising from the proposed development both individually or in combination with other plans or projects, the mitigation measures which are included as part of the current proposal and the Conservation Objectives for these European Sites. In completing the Appropriate Assessment, the Board accepted and adopted the Appropriate Assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the aforementioned European Sites, having regard to the sites' Conservation Objectives. In overall conclusion, the Board was satisfied that the proposed development would not adversely affect the integrity of the Lower River Shannon SAC (000216), the Middle Shannon Callows SPA (004096) and the Slieve Bloom Mountain SPA (004160) or any other European Site in view of the sites' Conservation Objectives.

12.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of the development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

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

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

3. The structures shall be removed at the expiration of a period of 40 years from the date of commissioning of the development unless planning permission for a further period has been granted. **Reason:** To enable the planning authority to review the operation of the solar farm having regard to the circumstances then prevailing.

4. 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.

5. All of the environmental, construction and ecological mitigation and monitoring measures, as set out in the application documentation including the Planning and Environmental Considerations Report, the Green Infrastructure and Mitigation Plan, the Flood Risk Assessments, the Natura Impact Statement, the Landscape and Visual Impact Assessment, the Ecological Impact Assessment, the Traffic & Transport Report, Bird and Bat Survey Reports and the Preliminary Construction Environmental Management Plan submitted with the application shall be implemented by the developer in conjunction with the timelines set out therein, except as may otherwise be required in order to comply with the conditions of this Order.

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

 (a) Prior to commencement, a mitigation planting plan for Glint and Glare is agreed in writing with the Planning Authority to ensure significant impacts do not arise.

(b) Upon commissioning of the development and for a period of two years following first operation, the developer/operator shall provide detailed glint and glare surveys on an annual basis to the Planning Authority to confirm that no significant impact has occurred and shall undertake such further mitigation measures as the Planning Authority may specify in writing, to ensure the absence of significant impact from glint and glare is achieved.

Reason: To mitigate against any glint impact.

 (a) The Potential Greenway Connection in Zone 2, as indicated on the Green Infrastructure and Mitigation Plan (Sheet 1 of 4) shall be reserved free from development.

(b) Preliminary proposals for a future connection shall be submitted to the Planning Authority prior to commencement of operation.

Reason: In the interest of permeability and promotion of the Offaly Way.

8. (a) The applicant shall appoint a suitably qualified ecologist to monitor and ensure that all avoidance/mitigation measures relating to the protection of flora and fauna are carried out in accordance with best ecological practice. A report on the implementation of these measures shall be submitted to the planning authority and retained on file as a matter of public record.

(b) An ornithologist shall be employed during the construction phase to micromanage construction locations to avoid disturbance to key species.

(c) All of the environmental, construction and ecological mitigation and monitoring measures, as set out in the Bird Survey and the Bat Survey Report shall be implemented by the developer in conjunction with the timelines set out therein, except as may otherwise be required in order to comply with the conditions of this Order.

(d) Construction shall be avoided in the western zone (300m wide buffer zone) where hen harrier were noted commuting west to east until periods outside the wintering period, to be further advised by the ornithologist.

(e) The scheme shall be monitored for bird and bat fatalities for the first three years of operation (post construction surveys) A comprehensive onsite fatality monitoring programme is to be undertaking following published best practice. Monitoring report to be submitted to the Planning Authority and the NPWS.

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

9. (a) Prior to commencement of development, an accurate tree and hedgerow survey shall be carried out by an arborist or landscape architect. Based on the survey, a detailed Green Infrastructure and Mitigation Plan shall be prepared and agreed in writing with the planning authority. (b) 5 lines of solar arrays in the north-western corner of Zone 1 shall be replaced by a c. 30m woodland to screen the development from the Grand Canal walkway. This shall be agreed in writing by the planning authority.

(c) Existing field boundaries shall be retained, notwithstanding any exemptions available and new planting undertaken in accordance with the Green Infrastructure and Mitigation Plan which shall be agreed in writing with the planning authority.

(d) All landscaping shall be planted to the written satisfaction of the planning authority prior to commencement of development and shall be carried out within the first planting season following commencement of construction of the solar PV array. Any trees or hedgerow that are removed, die or become seriously damaged or diseased during the operative period of the solar farm as set out by this permission, shall be replaced within the next planting season by trees or hedging of similar size and species, unless otherwise agreed in writing with the planning authority.

(e) There shall be no felling or scrub clearance within the bird nesting season (1st March to 31st August).

Reason: In the interests of clarity, biodiversity and of the protection of the environment and visual amenity.

- 10. Prior to commencement of development, a method statement for the following matters shall be prepared;
 - (a) Planting in the 10m riparian zone along the Silver and Boora riverbanks.
 - (b) The detailed design of the watercourse crossings and bridges.
 - (c) The detailed plans of the site drainage scheme.
 - (d) Delineation of buffer zones across the site.

(e) Livestock shall be restricted from drinking directly from the river bank and alternative drinking facilities for livestock shall be provided.

Inland Fisheries Ireland shall be consulted prior to submission of the method statement to the Planning Authority. The method statement shall be agreed in writing with the Planning Authority. Reason: In the interest of biodiversity and of the protection of the environment.

11. (a) No 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 unless otherwise agreed with the Planning Authority.

(d) The inverter stations and all fencing shall be dark green in colour unless otherwise agreed with the Planning Authority prior to commencement.

Reason: In the interest of clarity, and of visual amenity.

12. (a) During the operational phase of the proposed development, the noise level arising from the development, as measured at the nearest noise sensitive location shall not exceed:

i. An LAeqT value of 55 dB(A) during the period 0800 to 2200 hours from Monday to Saturday inclusive. [The T value shall be one hour.]

ii. An LAeqT value of 45 dB(A) at any other time. [The T value shall be 15 minutes]. The noise at such time shall not contain a tonal component.

At no time shall the noise generated on site result in an increase in noise level of more than 10 dB(A) above background levels at the boundary of the site.

(b) All sound measurement shall be carried out in accordance with ISO Recommendation R 1996 "Assessment of Noise with respect of Community Response" as amended by ISO Recommendations R 1996 1, 2 or 3 "Description and Measurement of Environmental Noise" as applicable.

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

13. Prior to commencement of development, details of the structure of the security fence showing provision for the movement of mammals shall be submitted for prior approval to the planning authority. This shall be facilitated through the provision of mammal access gates designed generally in accordance with standard guidelines for provision of mammal access (National Roads Authority 2008). **Reason:** To allow wildlife to continue to have access across the site, in the interest of Biodiversity protection.

14. The construction of the development shall be managed in accordance with a Construction 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 but not limited to;

(a) Location of the site and materials compound(s) including area(s) identified for the storage of construction refuse, site offices, construction parking and staff facilities, re-fuelling arrangements security fencing and hoardings;

(b) a comprehensive construction phase traffic management plan including details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site;

(c) measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network;

(d) details of appropriate mitigation measures for noise, dust, and vibration, and monitoring of such levels;

(e) 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;

(f) off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil;

(g) 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.

(h) Surface Water Mitigation measures set out in Section 6 of the submitted Stage 3 Flood Risk Assessment to be applied.

(i) An audit list of all construction and operational mitigation and monitoring measures, their timelines for implementation and responsibility for reporting.

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.

15. Site development and building works shall be carried out only between the hours of 0700 to 1830 Mondays to Fridays inclusive, between 0800 to 1330 hours on Saturdays and not at all on Sundays and public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.

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

 (a) Prior to commencement of development the results of a pre-construction survey of the condition of delivery routes, bridges and culverts shall be submitted to the planning authority for written agreement.

(b) The developer shall carry out at its expense the necessary upgrades of roads and/or junctions in advance of delivery operations.

(c) A post-construction survey of the condition of delivery routes, bridges and culverts shall be submitted to the planning authority for its written agreement within six months of completion of construction works. Any damage to the road and/or junctions shall be repaired to its previous condition within one year following the receipt of the post-construction survey by the planning authority.

Reason: In the interest of traffic safety.

17. Prior to commencement of development, and in accordance with the Stage 1 Road Safety Audit, a Stage 2 Road Safety Audit shall be submitted to the Planning Authority for written approval. Prior to opening to traffic, a stage 3 Road Safety Audit shall be submitted to the Planning Authority for written approval.

Reason: In the interest of traffic safety.

18. Drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such

works and services. Surface water from the site shall not be permitted to drain onto the adjoining public road or adjoining properties.

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

19. (a) All mitigation measures in relation to archaeology as set out in the archaeological assessment carried out by Archaeological Consultancy Services Unit submitted with the application documentation shall be implemented in full, except as may otherwise be required in order to comply with other conditions here specified.

(b) The developer shall engage a suitably qualified archaeologist to carry out an Archaeological Impact Assessment (AIA) in advance of any site preparation works and groundworks, including site investigation works/topsoil stripping/site clearance, and/or construction works. The AIA shall involve an examination of all development layout/design completion of drawings. documentary/cartographic/ photographic research and fieldwork, the latter to include, geophysical survey and archaeological testing (consent/licensed as required under the National Monuments Acts). The archaeologist shall prepare a comprehensive report, including an archaeological impact statement and mitigation strategy, to be submitted for the written agreement of the planning authority in advance of any site preparation works, groundworks and/or construction works. Where archaeological remains are shown to be present, preservation in-situ, establishment of 'buffer zones', preservation by record (archaeological excavation) or archaeological monitoring may be required and mitigatory measures to ensure the preservation and/or recording of archaeological remains shall be included in the AIA. Any further archaeological mitigation requirements specified by the planning authority, following consultation with the National Monuments Service, shall be complied with by the developer. 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. All resulting and associated archaeological costs shall be borne by the developer.

(c) Should the proposed development have any impacts on the course of the River Silver (its banks or river bed), then the archaeological assessment should include an archaeological underwater survey, which should include metal detection, (licenced under the National Monuments Acts 1930-2004), having consulted the site drawings and the Department.

(d) The developer shall engage a suitably qualified archaeologist to monitor (licensed under the National Monuments Acts) all site clearance works, topsoil stripping, groundworks, and/ or the implementation of agreed preservation insitu measures associated with the development. The use of appropriate machinery to ensure the preservation and recording of any surviving archaeological remains shall be necessary. Should archaeological remains be identified during the course of archaeological monitoring, all works shall cease in the area of archaeological interest pending a decision of the planning authority, in consultation with the National Monuments Service, regarding appropriate mitigation [preservation in-situ/excavation]. The developer shall facilitate the archaeologist in recording any remains identified. Any further archaeological mitigation requirements specified by the planning authority, following consultation with the National Monuments Service, shall be complied with by the developer. Following the completion of all archaeological work on site and any necessary post-excavation specialist analysis, the planning authority and the National Monuments Service shall be furnished with a final archaeological report describing the results of the monitoring and any subsequent required archaeological investigative work/excavation required. All resulting and associated archaeological costs shall be borne by the developer.

Reason: To ensure the continued preservation either in-situ or by record of sites, features or other objects of archaeological interest.

20. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site on cessation of the project coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as

agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure satisfactory reinstatement of the site.

21. 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 developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

Laura Finn Planning Inspector

2nd November, 2023

FORM 2

EIA Preliminary Examination

An Bord Pleanála Case	316303-23
Reference	
Proposed Development Summary	Development of a Solar Photovoltaic (PV) Energy Development comprising of solar photovoltaic arrays, grid connection and associated infrastructure.
Development Address	Within the townlands of Lumcloon, Bun, Derrycarney, Falsk, Derries, Rin, Lea Beg and, Lea More, Co. Offaly.

The Board carries out a preliminary examination [Ref. Art. 109(2)(a), Planning and Development Regulations 2001 (as amended)] of, at least, the nature, size or location of the proposed development having regard to the criteria set out in Schedule 7 of the Regulations.

In addition, the Planning and Development (Amendment) (No. 2) Regulations 2023 (S.I. 383 of 2023) requires from 1st August 2023 that Projects for the restructuring of rural land holdings are screened for the purposes of Environmental Impact Assessment, as follows:

Amendment of Schedule 5, Part 2, Class 1 of the Principal Regulations is amended: (a) By the insertion of the following before paragraph (c):

(a) Projects for the restructuring of rural land holdings, undertaken as part of a wider proposed development, and not as an agricultural activity that must comply with the European Communities (Environmental Impact Assessment) (Agriculture) Regulations 2011, where the length of field boundary to be removed is above 4 kilometres, or where re-contouring is above 5 hectares, or where the area of lands to be restructured by removal of field boundaries is above 50 hectares.

	Examination	Yes/No/ Uncertain
oftheDevelopmentIs the nature and	site area of c. 247ha including the grid	No

exceptional in the context of the existing environment?	examples in the midlands. Lands within the site are generally agricultural pastures with some arable lands. The pastoral landscape is not considered to be highly distinctive and is a relatively typical rural landscape found throughout the midlands of Ireland. Many of the agricultural fields within the development site are enclosed within dense hedgerows and woodlands. The proposed solar development although extensive will be nestled within the existing hedgerow boundaries, which will be enhanced where necessary with additional hedgerows or trees to screen the visibility of the development from the immediate locality.	
Will the development result in the production of any significant waste, emissions or pollutants?	The Landscape and Visual Impact Assessment (LVIA) notes the installation of the solar panels and mounting frames is undertaken using local piling to reduce the impact of construction and to facilitate the long-term use of the field as farmland. Panels are constructed using small-scale machinery minimising damage to the grass surface. This ensures the fields green characteristics can be retained or quickly redressed following construction. Low intensity sheep grazing is anticipated to be the main land use. The layout allows sufficient width between the rows for pastureland to be productive. Reinstatement of temporary construction areas, construction compounds and cable trenches to the pre-construction conditions will be carried out at the end of the construction phase. Restoration of any areas disturbed during the construction completion by appropriate grass seeding to return to grassland.	No
	The Construction Environmental Management Plan (CEMP) notes that removal of excavated material from the site is not envisaged. All construction traffic consists of deliveries to the site transported by HGVs. The construction programme is expected to take 1 year with a total of 2701 deliveries expected, which will be spread out evenly over most of the construction period. Weeks 16-44 are expected to be the busiest, with a total of 69 two-way HGV trips envisaged each week. Regular road cleaning will be	

	undertaken as necessary and a wheel wash facility will be utilised in both Zone 1 and 2. This is a proposed 40-year permission. The decommissioning of the site will involve the removal of all solar panels and associated fencing, storage and operation facilities. The site will be fully restored to agricultural use through reseeding of grassland. Any site access tracks not required for on-going agricultural purposes will be excavated and top-soiled to their original state. Existing hedgerow field boundaries, which will have been maintained and reinforced with additional planting during the construction and operational phases, will remain intact following the restoration phase. Due to extensive planting proposed as part of the landscape mitigation the field boundaries are likely to be more extensive and consolidated than they are at present.	
Are there significant cumulative considerations having regard to other existing and/or permitted projects?	There are no other developments under construction in proximity to the site. All other development are established uses which include existing wind farm development and electrical infrastructure developments. Refer to Table 10 of EcIA for planning applications approved within 500m of the site within the last 3 years. I concur that there are no predicted cumulative effects given that it is predicted that the Proposed Development will have no significant effects on the environment after mitigation measures are employed.	No
Location of the Development Is the proposed development located on, in, adjoining or does it have the potential to significantly impact on an ecologically sensitive site or	The site lies adjacent to but separated from the Grand Canal which is designated as part of the Grand Canal pNHA. The Grand Canal pNHA (Site Code 002104) comprises the canal channel and the banks on either side of it. A buffer zone of a minimum of 130m has been designed into the proposed development maintaining a green corridor between the development zones and the Grand Canal.	No
location?	adjacent or within a European site, therefore, there is no risk of habitat loss or fragmentation or any effects on QI habitats or species directly or ex-situ.	

The nearest European site to the Proposed Development is Ferbane Bog SAC (Site Code 000575), approximately 4.5km to the northeast. There is no connectivity to this site.	
The site is divided into two zones which interact with four water courses; the Silver River, Derrycarney Stream, Boora River and Lea Beg Stream. Each flowing to the River Brosna and ultimately to the River Shannon downstream. Hence, there is downstream connectivity to the River Shannon Callows sites via the Silver River. The River Shannon Callows SAC (Site Code 000216) and the Middle Shannon Callows SPA (Site Code 004096) encompass this part of the River Shannon and are located c. 10.6km to the west of the proposed development.	
The layout has been designed to avoid water courses maintaining a buffer zone of at least 10m from the Silver and Boora Rivers and streams and at least 5m ecological buffer zones between field boundaries, hedgerows, fencing and field drains. This buffer will ensure no direct effect on the drainage network in the proposed development areas.	
A bridge crossing the Silver River is part of the development. The project will require Construction Management to avoid potential impacts on these sites and the value of the site to avoid any impact on the downstream European Sites and potential ex situ disturbance to Hen Harriers as Special Conservation interests of the Slieve Bloom Mountain SPA.	
With appropriate construction management, there is expected to be no significant effects on either the Silver River, Boora River or any of the drainage ditches.	
The Slieve Bloom Mountain SPA (Site Code 004160) located 12km from the site is designated for Hen Harrier. Hen harriers have been considered as part of the proposed	

	development because they were noted as wintering species present on the site. The EcIA states in relation to Hen Harriers; 'The subject site does not contain suitable roosting habitat for this species thus direct loss of roosting habitat is not anticipated. Hen Harrier was noted flying and hunting within the western section of the site. Improved grassland is not a primary feeding habitat for this species. Flights here showed hen harrier flying over hedgerows and roads thus it is assumed this species would simply fly over solar panels. Following a precautionary approach and in order to minimise commuting impacts in this location open corridors (20m wide) of grassland will be retained providing commuting routes through this section from west to east.	
	In addition, the main mitigation proposed in relation to birds is the exclusion of large areas of the site to the south and the centre.	
Does the proposed development have the potential to significantly affect other significant environmental sensitivities in the area?	Lough Boora pNHA (Site Code 001365) is located c. 0.81km to the south of the proposed development and is drained by the Boora River which passes adjacent to Zone 2 of the proposed development. Turraun nature reserve (Site Code 0R003) is located directly north of Zone 2.	No
	Based on the Ecological Impact Assessment (EcIA) submitted with the application, there are no annexed habitats on or adjacent to the proposed development site. There were no rare or protected species recorded on the site and there were no invasive species present under the footprint of the proposed development. There are no rare or protected habitats recorded within the study area. The grassland habitats under the footprint of the proposed development are of relatively low local ecological value with the mature hedgerows of moderate to high local ecological value, and the Silver River and Lea Beg Stream of moderate to high local ecological value.	

	The proposed development does not have the potential to significantly affect other significant environmental sensitivities in the area.	
Restructuring of rural land holdings i. Is the amount of field boundary to be removed greater than 4ha. ii. the amount of re- contouring to take place above 5 hectares. iii. Is the area of land to be restructured by removal of field boundaries above 50 hectares.	 i. The EcIA notes that treelines and hedgerows will remain largely intact, with some small potential loss of hedgerows for access at the entrance to Zone 1 on the L70095 (R357 junction) for a distance of 70m. The loss of this fringing woodland for 70m is not considered significant and will be mitigated by replacement of like for like species. I note that this is below the length of 500 meters of hedgerow removal which triggers EIA Screening as per the <i>Department of Agriculture, Food and the Marine, Advice for Farmers Guide to Environmental Impact Assessment Regulations, 2023.</i> Micro-removal of hedges will be required for cable routes. These will be replanted the following winter. Existing hedgerow field boundaries, which will have been maintained and reinforced with additional planting during the construction and operational phases, will remain intact following the restoration phase. Indeed, due to the supplementary planting proposed as part of the landscape mitigation, the field boundaries are likely to be more consistent and consolidated that their current status. ii. There are no site levelling works required for the development site so there will be minimal earthworks carried out. iii. There is no proposed restructuring of lands by removal of field boundaries above 50 hectares. 	No

Conclusion
There is no real likelihood of significant effects on the environment.
EIA not required.

Inspector:	Date:
DP/ADP:	Date:
(only where Schedule 7A infor	mation or EIAR required)