



An
Bord
Pleanála

Inspector's Report PL04.248278

Development	Permission for a 5MW solar Farm with approx. 22,200 photovoltaic panels on mounted frames within an area of 8.7 hectares, 2 inverter transformer stations, 1 delivery station, fencing and associated site works.
Location	Corrin/Kill St. Anne North, Castlelyons, Fermoy, Co. Cork
Planning Authority	Cork County Council
Planning Authority Reg. Ref.	16/04570
Applicant(s)	Amarenco Solar Rathcormac Ltd.
Type of Application	Permission
Planning Authority Decision	Grant subject to conditions
Type of Appeal	Third Party
Appellant(s)	Castlelyons Development
Observer(s)	None
Date of Site Inspection	22 nd June, 2017
Inspector	A. Considine

1.0 Site Location and Description

- 1.1. The subject site lies approximately 1.5km to the north west of the village of Castlelyons in the townlands of Corrin/Kill St. Anne North, Castlelyons, Fermoy, Co. Cork. The site is located to the east of the R639 Regional Road and to the east of the Motorway, the M8, approximately 2km to the south of junction 15 (toll junction) Fermoy South on the motorway. The lands contained within the proposed development site are currently agricultural lands and there are a small number of one off houses in the vicinity. The closest house is located approximately 150m to the south east of the site.
- 1.2. The site has a stated area of 8.7ha and comprises four different field parcels. The topography of the site is generally flat and has a number of mature hedgerow boundaries. The site itself comprises a four parcels of land, including part of two fields, and is set back from the public road. Access will be via an agricultural track measuring 135m in length. To the north east of the site lies the Barrymore ESB Substation which provides a potential connection point to the national grid.

2.0 Proposed Development

- 2.1. Permission is sought, as per the public notices for a 5MW solar farm comprising approximately 22,200 photovoltaic panels on mounted frames within an area of 8.7 hectares, 2 no. single storey inverter / transformer stations, 1 no. single storey delivery station, security fencing, CCTV and all associated ancillary development works at Corrin/Kill St. Anne North, Castlelyons, Fermoy, Co. Cork.
- 2.2. The development of the PV solar panels will generate electricity from sunlight and will export this electricity to the national grid as a clean, quiet and renewable source of electricity. The solar panels will be connected to inverter cabins by trenched cables, where the electricity will be converted from direct current (DC) to alternating current (AC). This AC will then be fed to the 110kV Barrymore substation where it will be exported to the national grid. It is anticipated that, while the development would provide for an installed capacity of up to 5MW.
- 2.3. The infrastructure associated with the proposed development will include a number of elements including:

- Solar panels and mounting system – the panels will be mounted to the steel frames and will be positioned at an angle of 15 degrees from the horizontal to ensure best solar absorption. The individual panels are approximately 1.65m x 0.95m in size and are made of specialist materials which maximise the absorption of natural light. The panels will be mounted between approximately 2m above the ground level at the lowest level and will have a maximum height of approximately 3.55m. The panels will be laid out in rows with a distance of 3.4m between the rows.
- Inverter cabins – the inverters are used to convert the direct current electricity to alternating current in order to be fed into the national grid. The development proposes 2 inverter cabins measuring 12.5m long x 3.5m wide with two rooms including the transformer and inverter room including low voltage board. The structures will arrive on site in a pre-manufactured form and will rise to a height of 3.7m. The two inverter cabins will be located along the existing hedgerow which runs almost centrally through the site. The cabins will be located to the north of this hedge which runs in an east – west direction.
- The ESB Delivery Station – this building is to be located at the entrance to the proposed site and at the end of the 135m wayleave access track from the public road. The building will have a footprint of approximately 28m² with an overall height of approximately 3m. The ESB room and switchgear room will be housed within this structure.
- Trenched electrical cabling – the cabling will be laid in shallow trenches, approximately 1m deep, that will run parallel to the solar panels and will link the panels to the inverter cabins.
- Security CCTV and fencing – the site will be bound by a 2m high ridge wire mesh panel fence. The submitted details relating to the fencing suggests that the fencing will run to the ground without any gap for small animal access. That said, some information is provided in the landscaping plans to provide access for fauna. All existing trees and hedgerows will be retained and existing boundaries will not be altered save where access is necessary and as indicated on submitted plans. A new hedgerow is

proposed along the currently open field in the northwest parcel of the site. CCTV units will be installed to monitor the solar farm remotely.

- Internal access track – A 3.8m wide compacted gravel access track will run around the outside of the solar arrays, between the panels and the perimeter fence.
- Landscaping – a detailed landscaping and visual impact has been prepared in support of the proposed development. Details of screening proposals and additional planting is provided.
- Temporary construction compound
- Site entrance – the design of the access to the site from the public road indicates that minor amendments to the existing entrance will be required to facilitate construction traffic. The existing roadside boundary will be reinstated on completion of the works.

2.3.1. The planning application was accompanied by a number of documents including:

- Relevant plans and particulars
- Letter of consent from owners of the land
- Landscaping Masterplan and details
- Landscape & Visual Assessment
- Autotrack
- Glint & Glare Technical Report
- Ecological Impact Assessment
- Appropriate Assessment Screening Report
- Introductory Report to Solar Energy in Ireland
- Planning Statement

2.3.2. Following a request for further information, the applicant submitted an Archaeological, Architectural and Cultural Heritage Impact Assessment report.

3.0 Planning Authority Decision

3.1. Decision

The Planning Authority granted planning permission for the proposed development, subject to 29 standard conditions including the following:

2. 25 year permission for the development after which the site must be reinstated.
29. Prior to the commencement of development, the developer shall lodge with the Planning Authority a cash deposit, a bond of an insurance company, or other security to the value of €65,318.

3.2. Planning Authority Reports

3.2.1. Planning Reports

An initial Planning report was prepared by the Assistant Planner who presented the information relating to the proposed development and summarised all relevant submissions and policy objectives for the proposed development. This report also included an AA screening report. The report also presented the planning history for the site and relevant developments.

The A/Senior Executive Planner prepared a report which presented an assessment of the proposed development. This report considers the principle of the proposed development in terms of national, regional and local policy and guidelines which support the development of renewable energy schemes. The report considers that there are no objections in principle land use terms to the proposed development. The report also considers the proposed development in terms of landscape and visual impacts, residential amenity, roads / traffic / access, ecology and AA, archaeology, environmental issues, flooding, environmental impact assessment and grid connection. The report concludes that the development is acceptable in principle and notes that there are no objections from the Area Engineer and Environment Officers from engineering or environmental perspectives. FI is however required with regard to matters of archaeology.

Following receipt of the Archaeological, Architectural and Cultural Heritage Impact Assessment in response to the further information request, the SEPs planning report

considered that all issues had been adequately addressed and that the proposed development was acceptable subject to conditions.

3.2.2. Other Technical Reports

Area Engineer: Raises no objection in principle to the proposed development and conditions recommended.

Environment Section: 3 Reports were prepared from the environment section of Cork Co. Co. dealing with waste, water and air / noise impact assessment. Overall the reports note no objections to the proposed development subject to compliance with 8 stated conditions. Following receipt of the response to the FI request, a further report advising no objections was provided.

Archaeologist: This report notes that this part of Cork has a high density of archaeological monuments. It is concluded that an Archaeological Impact Assessment is required to be carried out and submitted as further information. FI required. Following receipt of the response to the FI request, a further report was provided by the County Archaeologist. The report advises satisfaction with the mitigation proposals in section 5 of the submitted Archaeological, Architectural and Cultural Heritage Impact Assessment submitted, including the proposal to minimise the amount of ground disturbance caused by the construction process. The report concludes recommending that permission be granted subject to 4 stated conditions.

3.2.3. Prescribed Bodies

None received.

3.2.4. Third Party Observations

Four objections were received by Kerry County Council in relation to the proposed development from the following parties:

Karen Kearney

Michael W. Lillis

Gail Peterson

Castlelyons Development

The objections raise similar issues and these objections are summarised as follows:

- Impact on dairy herd which graze adjacent lands during the summer.
- The land is high quality agricultural land and is prone to swallow holes / groundfall. The proposed use is inappropriate.
- The development is likely to have adverse impacts of the development on the property values of local residents by reason of the scale of the development proposed.
- Concern raised regarding the proposal for three solar farms in the vicinity of Castlelyons (PA refs 16/4290, 16/4570 and 16/4578) and that the large scale commercial solar installations are completely out of character for a scenic rural area and does not take into account the vision and goals of the Local Area Plan.
- The development is not agriculture diversification.
- Visual impact associated with the proposed development raised as a concern.
- Glint and Glare issues arising from the proposed solar panels.
- The local community consider that an Environmental Impact Assessment should be undertaken to assess the safety of the proposed development.
- Roads and traffic issues associated with the proposed development.
- Potential health and safety issues given that solar panels contain chemicals which are dangerous to the local environment and public health. The site is located on a karst aquifer with an extreme vulnerability rating.
- Lack of public consultation and the viability of the development questioned.

4.0 Planning History

4.1. The following is the planning history associated with the subject and adjoining sites:

PA ref 01/3046 – Permission granted by CCC to ESB Distribution to remove existing 110kV End Mast and install two 110kV line bays and associated End Masts; install a 110kV busbar and an additional 110k/38kV transformer including associated 110kV and 38kV equipment; extend the 38kV busbar; relocate the percolation area and provide a pole storage area between the outer and compound fence with access

from the splayed entrance to the left of the front gate at Kill St. Anne North, Castlelyons, Fermoy, Co. Cork. (26.07.2001)

PA ref 13/5689 – Permission granted by CCC to ESB for alterations to existing substation consisting of extension to the existing 38kV busbar, new 38kV line bay and associated site works, at Kill St. Anne North, Castlelyons, Fermoy, Co. Cork. (24.10.2013)

4.2. Other applications referred to by third parties:

PA ref 16/4290 – Permission refused by CCC for a 5 MW Solar PV Energy Development at Ballinvarrig, Castlelyons, Co. Cork. The decision date was 06.04.2016 and no appeal was lodged to the Board.

PA ref 16/4578 – Permission sought by CCC for a 5 MW Solar PV Energy Development at Mohera, Castlelyons, Fermoy, Co. Cork. Application withdrawn.

4.3. Similar type Solar PV Energy developments have been dealt with in Co. Cork as follows:

PL04.244539 (PA ref 14/6644) - Permission granted by the Board for a Solar PV Energy Development in County Cork. (07.07.2015)

PL04.245862 (PA ref 15/5424) - Permission granted by the Board for a Solar PV Energy Development in County Cork. (16.06.2016)

PA ref 15/6625 – Permission granted by CCC for a 5 MW Solar PV Energy Development at Curraleigh, Inniscarra, Co. Cork. (01.06.2016)

PA ref 15/6675 – Permission granted by CCC for a 5 MW Solar PV Energy Development at Shanagraigue, Carrigaline, Co. Cork. (04.03.2016)

PA ref 15/6768 – Permission sought from CCC for a 5 MW Solar PV Energy Development at Commons East, Cloyne, Middleton, Co. Cork. Application withdrawn.

PA ref 15/6814 – Permission sought from CCC for a 5 MW Solar PV Energy Development at Ballynacrusa, Cobh, Co. Cork. Application withdrawn.

PA ref 15/6968 – Permission granted by CCC for a 5 MW Solar PV Energy Development at Kilshinahan, Timoleague, Co. Cork. (02.06.2016)

PA ref 15/7003 – Permission granted by CCC for a 5 MW Solar PV Energy Development at Gortnagross, Mallow, Co. Cork. (13.07.2016)

PA ref 16/4185 – Permission granted by CCC for a 5 MW Solar PV Energy Development at Dromgariff South, Whitechurch, Co. Cork. (21.02.2017)

PA ref 16/4601 – Permission granted by CCC for a 5 MW Solar PV Energy Development at Dromalour, Coolclogh, Kanturk, Co. Cork. (28.02.2017)

5.0 **Policy Context**

INTERNATIONAL GUIDELINES

5.1. **Solar PV Development Guidelines in the UK.**

There are a number of guidance documents available in the UK. While they do not have a statutory basis in the Irish context, they are useful in informing the planning and environmental issues which arise.

5.2. **Planning Guidance for the development of large scale mounted solar PV systems' prepared by BRE National Solar Centre (UK)**

This national guidance provides best practice planning guidance in respect of how large ground mounted arrays are developed setting out planning considerations and requirements. It provides advisory information on planning application considerations including construction and operational works, landscape / visual impact, ecology, historic environment, glint and glare and duration of the planning permission. Guidance is included on the information which should accompany a Landscape and Visual Impact Assessment and on EIA Screening procedures.

5.3. **Other UK Guidance relevant to the appeal include:**

- 5.3.1. Planning practice guidance for renewable and low carbon energy – Department for Communities and Local Government – July 2013.
- 5.3.2. Renewable Energy Planning Guidance Note 2 – The Development of large scale (>50kW solar PV arrays) – Cornwall (UK) 2012

- 5.3.3. Devon Landscape Policy Group Advice Note No. 2 – Accommodating Wind and Solar PV Developments in Devon’s Landscape – LUC Environmental Planning Design and Management – January 2013.

NATIONAL GUIDELINES / POLICY

- 5.4. **Ireland’s Transition to a low carbon Energy Future 2015-2030 – White paper on Energy policy (Department of Communications, Energy and Natural Resources) – Dec 2015**

- 5.4.1. This document is a complete energy policy update for Ireland. It sets out a vision to reduce greenhouse gas (GHG) emissions by between 80% and 95%, compared to 1990 levels, by 2050, falling to zero or below by 2100 with the following statements:

- **Paragraph 130** – Thus far, renewable electricity projects have typically been large scale. While there will continue to be an important role for larger projects, there will also be an increasing role for smaller, community-level projects. As new renewable energy solutions such as bioenergy, solar photovoltaic (PV) and offshore energy mature and become more cost effective they will be included in the renewable energy mix.
- **Paragraph 137** – Solar photovoltaic (PV) technology is rapidly becoming cost competitive for electricity generation, not only compared with other renewables but also compared with conventional forms of generation. The deployment of solar in Ireland has the potential to increase energy security, contribute to our renewable energy targets, and support economic growth and jobs. Solar also brings a number of benefits like relatively quick construction and a range of deployment options, including solar thermal for heat and solar PV for electricity. It can be deployed in roof-mounted or ground-mounted installations. In this way, it can empower Irish citizens and communities to take control of the production and consumption of energy. Solar technology is one of the technologies being considered in the context of the new support scheme for renewable electricity generation which will be available in 2016.

5.4.2. The White Paper also sought to publish a Renewable Electricity Policy and Development Framework (with a spatial dimension) to underpin the proper planning and development of larger scale renewable electricity generation development on land. It is envisaged that such a plan will give guidance to those seeking development consent and to planning authorities in relation to larger-scale onshore renewable electricity projects.

5.5. **National Spatial Strategy 2002-2020**

5.5.1. Section 2.6 of the Strategy deals with 'How to Strengthen Areas and Places' and states that 'National and international evidence also demonstrates that rural areas have a vital contribution to make to the achievement of balanced regional development. This involves utilising and developing the economic resources of rural areas, particularly in agriculture and food, marine, tourism, forestry, renewable energy, enterprise and local services, while at the same time capitalising on and drawing strength from vibrant neighbouring urban areas.'

5.5.2. Section 5.5 of the strategy deals with Environmental Quality and states that 'in economic development, the environment provides a resource base that supports a wide range of activities that includes agriculture, forestry, fishing, aquaculture, mineral use, energy use, industry, services and tourism. For these activities, the aim should be to ensure that the resources are used in sustainable ways that put as much emphasis as possible on their renewability.'

5.6. **Draft Strategic Environmental Assessment Scoping Report for a Renewable Electricity Policy and Development Framework 2016 (DCENR)**

5.6.1. The Draft Scoping report was published in early 2016. The consultation phase has ended but the final document has not yet been published. This document outlines a process which seeks to identify potentially suitable land areas for the large scale generation of renewable energy (over 50MW), which would in future inform any revised NSS and/or regional and local planning policy. It is stated that up to 4,000MW of renewable energy generation capacity will be required to allow Ireland to meet its 40% renewable electricity needs by 2020. It is stated that 'A Progress Report on the NREAP was issued in January 2012, showing that 3,900MW of

renewable energy grid connection offers had been made. Not all of these projects have planning permission and it is likely that a significant number will not be developed.'

- 5.6.2. Reference to solar power is made in Section 5.1.3 where it is stated that 'The 2010 NREAP does not envisage solar power making a contribution to Ireland's 2020 renewable electricity targets. However, it is noted that there has recently been a significant decrease in the cost of solar PV panels and that this technology should offer some possibilities in Ireland in the medium term up to 2030. The recently published Green Paper on Energy Policy in Ireland, May 2014, DCENR, raises the question of the future role of solar energy. The contribution made in 2014 by solar power on the island of Ireland is shown in Table 1. This indicates that out of a total of 3,194MW of renewable capacity, 5.6MW was contributed by solar power.'

5.7. Planning and Development Guidance Recommendations for Utility Scale Solar Photovoltaic Schemes in Ireland October 2016

- 5.7.1. This is a research paper which was funded by the SEAI. It sets out the policy framework for renewable energy, including reference to relevant targets, and provides information on the achievements to date. It is noted that at the beginning of October 2016, planning applications for over 100 utility scale solar PV (USSPV) developments had been submitted to planning authorities across the state. It was estimated that, if implemented, these would contribute at least 594MW of renewable electricity. However, it was also noted that there is currently no REFIT scheme to subsidise the generation of electricity from USSPV sources. The document also provides guidance on the assessment of proposed solar farm developments. It is suggested that this guidance may contribute to the evidence base that will inform the development of Section 28 planning guidance for Utility Scale Solar Photovoltaic (USSPV) developments in Ireland in due course.

REGIONAL POLICY/GUIDELINES

5.8. The Southwest Regional Planning Guidelines, 2010-2022

- 5.8.1. While there is no specific reference to solar farms in the Regional Guidelines, the guidelines identify that the demand for electricity in the region will rise by

approximately 60% by 2025 (Section 5.6.30) and it is anticipated that the additional demand will be met through a variety of sources including wind and wave. It is an objective of the guidelines to facilitate the sustainable development of additional electricity generation capacity throughout the region and to support the sustainable expansion of the transmission network. The expansion of the network will also facilitate the development and connectivity of sustainable renewable energy resources at both national and regional levels.

- 5.8.2. It is an objective of the Regional Authority, RTS-09, ‘to facilitate the sustainable development of additional electricity generation capacity throughout the region and to support the sustainable expansion of the network. National grid expansion is important in terms of ensuring adequacy of regional connectivity as well as facilitating the development and connectivity of sustainable renewable energy resources.’ In addition, it is an objective ‘to ensure that future strategies and plans for the development of renewable energy and associated infrastructure development, will promote the development of renewable energy resources in a sustainable manner.’

LOCAL POLICY

5.9. Cork County Council Development Plan 2014.

- 5.9.1. The Cork County Development Plan 2014-2020 is the relevant policy document and identifies the subject site as being located within an area zones ‘Rural Area under Strong Urban Influence’ and within the ‘Greater Cork Ring Strategic Planning Area’. The Landscape Character Type is described as type 6c being Broad Fertile Lowland Valleys.
- 5.9.2. Chapter 9 of the Plan deals with Energy and Digital Economy where it is the stated policy, ED1-1: Energy, states ‘ensure that through sustainable development County Cork fulfils its optimum role in contributing to the diversity and security of energy supply and to harness the potential of the county to assist in meeting renewable energy targets.’ In addition, section 9.2 deals with Renewable Energy and section 9.4 deals with Other Renewable Energy. It is the aim of the Plan ‘to support the sustainable development of renewable energy sources.’ Solar Energy is dealt with in paragraphs 9.4.13 – 9.4.18 of the CDP. The Plan generally concludes that large

scale electricity generating schemes is not generally available in the County due to climatic conditions. However, with technological advances these large scale solar energy developments may become practical in Cork.

5.10. **Natural Heritage Designations**

The site itself is not located within any designated site but is within 2.5km of the Blackwater River (Cork / Waterford) SAC, Site Code 002170, which is located to the south of the site. The subject site is used for agricultural purposes being tillage and pasture with some hedgerows and tree boundaries.

6.0 **The Appeal**

6.1. **Appellants**

This is a third party appeal against the decision of Cork County Council to grant planning permission for the proposed development.

6.2. **Grounds of Appeal**

The grounds of appeal are similar to those objections raised during the PAs assessment of the proposed development and are summarised under headings as follows:

- Traffic
- Entrance
- Farran Bridge
- No National or Regional Strategy for Solar Farms
- Serious pollution / contamination risk to the ground water supply
- Groundfall / swallow holes
- Transformer leakage
- Noise
- Fire risk
- Environmental impact
- Other solar farm applications in the vicinity
- Change of use from agriculture to commercial
- Inappropriate use of prime agricultural land
- Tourism impacts

- Lack of public consultation
- Project viability.

6.3. Applicant Response

The first party has submitted a response to the third party appeal. The response is summarised as follows:

- The matters raised in the appeal are almost identical to those raised during the application process and the appeal has no regard to the assessment of these concerns carried out by the PA.
- A number of raised grounds of appeal are non-material, with others subjective and unsubstantiated in nature.
- In terms of the principle of the proposed development, it is submitted that the PAs decision to grant permission is strongly supported by national, regional and local policies and these were referenced in the reports. The absence of bespoke national guidelines for ground mounted solar does not preclude the assessment of such proposals.
- In terms of the site suitability, it is submitted that the location for solar farms is directly influenced by three key and interdependent requirements:
 - Access / proximity to the national grid
 - Availability of solar resource
 - Suitable siting and design planning considerations.

The proposal represents a temporary form of agricultural diversification and sheep will be allowed to graze at the subject site.

- In relation to the high quality agricultural land reference, it is submitted that the UK land classification system does not apply in the Irish context.
- With regard to the issue of groundfall, no concrete evidence is put forward to support the claim. The site was inspected by an engineer prior to legal optioning for potential solar farm development. Ground disturbance pilling to facilitate the development will extend to no more than 0.01% of the total site area. Construction processes are very flexible and a full geotechnical survey will be undertaken prior to construction to inform the laying out of panel anchors.

- With regard to the roads and traffic issues raised, it is submitted that all matters have been addressed to the satisfaction of the County Councils engineer and all conditions of permission will be complied with.
- In terms of noise, the issue raised of wind blowing through the panels is not a recognised operational issues. The PV panels do not generate any noise and there are no moving parts associated with the proposal. The only noise emitting elements are the inverters and transformers, which are located away from any sensitive receptors.
- With regard to health and safety issues, the first party advises that the solar farm will not alter hydrological conditions on the site or give rise to any accelerated pollution to groundwater as intimated in the appeal. Fire risk is not deemed to be a significant issue.
- Screening for EIA was included in the application and it was determined that the proposed development is not a project defined by Part 1 and Part 2 Schedule 5 of the Planning & Development Regulations 2001 as requiring an EIS.
- With regard to the issues raised in relation to tourism through landscape impacts and glint and glare, it is submitted that a detailed landscape and visual assessment concluded that the degree of impact ranges from imperceptible to moderate impacts. Landscaping proposals and the fact that the site is not within a designated 'high value' landscape, the visual impact is deemed slight.
- With regard to public consultation, the first party strongly disagrees with the third party.
- Project viability was raised as a third party concern. The first party references an unfinished estate in the village of Castlelyons as an example of the blight that could arise, which is not comparable.

It is requested that the decision of Cork County Council be upheld.

6.4. **Planning Authority Response**

The Planning Authority has not responded to this appeal.

6.5. Observations

There are no further observations noted in relation to this appeal.

6.6. Further Responses

There are no further responses noted in relation to this appeal.

7.0 Assessment

7.1. Introduction

7.1.1. Having inspected the site and considered the information presented in support of the proposed development, together with the third party reports and submission and my site inspection, the following are the relevant issues in this appeal.

- Principle of Development
- Landscape / Visual Impact
- Impact on Residential Amenity
 - Visual Impact
 - Noise
 - Devaluation of property
 - Glint & Glare
- Traffic and Access
- Ecology
- Surface Water Drainage
- EIS Screening
- AA Screening
- Other Issues

7.2. The Principle of the proposed development

- 7.2.1. In considering the principle of a proposed solar panel development it is appropriate that the Board have regard to both national and regional policy provisions and site specific objectives. It is notable that since the publication of the 2009 Renewable Energy Directive (2009/28/EC) that Ireland has a target objective requiring that 16% for all energy comes from renewable sources by 2020. This Directive is enshrined into national policy objectives. I refer the Board to Paragraph 130 of Ireland's 'Transition to a low carbon Energy Future 2015-2030 - White paper on Energy policy', which was published in December, 2015 and which includes an explicit objective to reduce carbon emissions. In this regard, the development of solar photovoltaic systems is both support by policy and is considered an integral part of achieving this objective. In addition, the National Spatial Strategy, 2002 – 2020, recognises the importance of renewable energy as it is stated that the aim should be to ensure that resources such as energy is used in sustainable ways.
- 7.2.2. There is currently no national guidance in relation to solar panel developments in Ireland but in the absence of same, I have considered the content of the UK Guidelines '*Planning Guidance for the development of large scale mounted solar PV systems*'. These guidelines recommend that when solar panels are located in agricultural land there is a preference to locate them in poorer or more marginal agricultural land as opposed to fertile agricultural land.
- 7.2.3. In terms of regional policy, I would refer the Board to the South West Regional Planning Guidelines, 2010 – 2022. Paragraph 5.6.32 of these Guidelines refers to renewable energy and it is stated that it is an objective to ensure that future strategies and plans for the promotion of renewable energy development and associated infrastructure development in the region will promote the development of renewable energy resources in a sustainable development. In principle, I am satisfied that the development as proposed generally accords with the requirements of both national and regional policy as it relates to the development of renewable energy developments.
- 7.2.4. In terms of local policy, the Cork County Development Plan, 2014 – 2020, is the relevant policy document. The Plan identifies the subject site as being located within an area zones 'Rural Area under Strong Urban Influence' and within the 'Greater

Cork Ring Strategic Planning Area'. The Landscape Character Type is described as type 6c being Broad Fertile Lowland Valleys. There is no specific policy objective in relation to these designations which would suggest that a grant of planning permission could not be considered.

- 7.2.5. Chapter 9 of the Plan deals with Energy and Digital Economy where it is the stated policy, ED1-1: Energy, states 'ensure that through sustainable development County Cork fulfils its optimum role in contributing to the diversity and security of energy supply and to harness the potential of the county to assist in meeting renewable energy targets.' In addition, section 9.2 deals with Renewable Energy and section 9.4 deals with Other Renewable Energy. It is the aim of the Plan 'to support the sustainable development of renewable energy sources.' Solar Energy is dealt with in paragraphs 9.4.13 – 9.4.18 of the CDP. The Plan generally concludes that large scale electricity generating schemes is not generally available in the County due to climatic conditions. However, with technological advances these large scale solar energy developments may become practical in Cork. The current proposal would suggest that such solar energy developments are workable in the climatic conditions and would be economically viable.
- 7.2.6. In principle, I am satisfied that there is a presumption in favour of alternative energy projects, including solar PV energy, and this is acknowledged at National, Regional and County level. In this regard, I am satisfied that, in principle, the development can be considered as acceptable. That said, there are site specific issues which are required to be considered and addressed prior to a positive decision issuing. These issues are considered further below

7.3. Landscape / Visual Impact

- 7.3.1. The subject site is located within an area of Co. Cork which has been identified as Broad Fertile Lowland Valleys (6c) landscape character type. In terms of sensitivity and value, the landscape is considered to be medium and a locally important landscape. The subject site covers an area of 8.7ha and the landscape is gently undulating. There are a number of one off houses in the vicinity of the site, with the closest located approximately 150m to the south east of the site, another 140m to the north of the site. The M8, Dublin – Cork motorway, is located over 1km to the west of the site.

- 7.3.2. The existing 110kV Barrymore ESB Substation bounds the site to the north east. The predominant use of the lands is agriculture and it lies approximately 0.5km to the north of the key village of Castlelyons / Bridesbrige. The site benefits from considerable hedgerow and treeline cover and there is an existing commercial tree farm located to the north of the site. There are few views towards the site from the surrounding public roads due to the presence of these features. The Board will note the intention of the applicant to retain existing hedgerows within and abounding the site as well as proposals to establish 0.5m ditches with native hedgerow planting in two areas which currently do not have such features, essentially creating two further boundaries which will limit further, any views towards the site from the adjacent public road.
- 7.3.3. In support of the proposed development, the applicant included a series of View Receptors in order to establish how the proposed development will impact the views and character of the landscape, from those receptors. In terms of impacts on the landscape, the Landscape and Visual Impact report concludes the majority of visibility is slight, typically seeing only a small few arrays and often at long distances. Only one view receptor received a moderate impact due to proximity and lack of screening but this is from a Ringfort which is located on private lands and not accessible to the public. In terms of character and visual sensitivity perspective, the report concludes that the breakdown of the site into parcels, together with proposed additional planting amongst other mitigation measures, only small portions of the site will be visible from any one receptor. The assessment concludes that no adverse landscape character or visual impacts are anticipated.
- 7.3.4. I accept that while the proposed new boundaries are establishing, there may possibly be views over the proposed development but do not consider that this is reason enough to refuse permission for a development which otherwise might be considered acceptable and appropriate as well as complying with national and local policies for the provision of renewable energy developments. I also note that following decommissioning, the visual impact of the development will be entirely removed. I am satisfied that the development is acceptable in terms of landscape and visual impact.

7.4. Impact on Residential Amenity

7.4.1. Visual Impact:

One of the primary concerns associated with the proposed development, and which was raised in the third party submissions to the PA during its assessment, relates to impacts on the existing residential amenities of properties in the area. I have discussed the issue of visual impact above, and overall, I am satisfied, given the existing boundaries of the subject site, together with the proposals to plant two new boundaries around the site and the distances from the closest properties, there will be no significant adverse impacts arising on existing residential amenities.

7.4.2. Noise:

It is submitted that the proposed construction phase of the development will take approximately three months, and the working hours will be 8am to 6pm Monday to Friday and 8am to 4pm on Saturday (if required), with no working on Sundays or Bank Holidays. A workforce of up to 18 people will be employed during the construction phase and the Construction Management Plan provides details of the traffic volumes that will be generated during the construction period, in addition to the types of construction plant and machinery to be used. It is noted that given the location of the subject site, and other than the noise from road traffic and the timber processing facility to the north, the ambient background noise is low. As such, it is likely that the construction phase of the development will have an impact, albeit a temporary impact. I am satisfied that the noise levels generated during the construction phase can be considered acceptable, subject to the inclusion of a condition in any grant of planning permission to limit the working hours and compliance with the recommended EPA noise emission limits.

In terms of operational noise, the Board will note that the nature of the development would indicate that there is no significant operating noise. The primary noise sources would be from the cooling fans associated with the inverter boxes and transformers in the control cabins. Overall I would consider that operational noise from the proposed development is not a significant issue.

7.4.3. Devaluation of Property:

The third party appellants submit that the proposed development will devalue their property. These claims, however, are not substantiated with any documentary evidence or empirical studies. There is potential for impacts on the established residential amenity of the area during the construction phase of the development, but it must be acknowledged that this period will be short and temporary in nature. It is noted that once operational, there will be no permanent personnel located on site and the site will be visited by maintenance personnel occasionally. It is the applicants intention to use CCTV to monitor the site following the completion of the development works. The use of CCTV cameras is a common and important feature of solar PV farms and they are used in the interest of crime prevention. I refer the Board to the UK Guidelines '*Planning Guidance for the development of large scale mounted solar PV systems*' in this regard as they include a consultation with the police service who recommend a CCTV system as a defence mechanism. The CCTV system would be a deterrent to crime in the general area and would not, in my opinion, interfere with privacy of residents or impact on residential amenity. I am satisfied that the proposed development would not significantly impact on the residential amenities of the area. I am satisfied that the proposed development, in principle, is acceptable in terms of policy requirements and subject to the implementation of the mitigation measures, would not devalue properties in the local area.

7.4.4. Glint & Glare:

The issue of glint and glare arises in certain conditions when the sun is low and light can be reflected from the solar panels to ground based receptors, and can cause nuisance as well as having an impact on established amenities in the local area. Glint only occurs when the sun is shining and it is submitted that a fixed receptor will be subjected to glint once per day over two periods per year either side of the summer solstice. The proposed PV panels, the subject of this appeal, will be fixed in one orientation, facing due south, and will not track the sun. The Board will note that in the previous appeals in relation to similar type developments, the inspectors appear to agree that the issue of glare is not particularly relevant to solar panels and this was the same conclusion reached in the submitted Planning and Environmental Report in the current appeal before the Board.

As such the primary issue for assessment and consideration is whether glint from the proposed development would have any adverse impact on local amenities. The submitted report on Glint of PV Power Plants seeks to address the effects of glint as a result of the proposed development and advises that the solar panels are designed to absorb the maximum amount of sunlight available. Light which is reflected is wasted light and serves to impact negatively upon the overall efficiency of the panel. The panels themselves are much darker than normal glass and are close to black in colour. The surface of a panel may be treated in a certain way, incorporating an anti-reflective coating to maximise the amount of light captured and to scatter any reflected light as opposed to causing specular reflections. In addition, the report submits that the PV modules are considered to reflect less than 10% of sunlight, which is similar to the level of sunlight reflected by a smooth water surface. The submitted Report advises that although the technology is new to Ireland, it is mature and proven in continental Europe in large scale since the early 2000s. Glint is not generally associated with excessive distraction or nuisance for motorists or indeed pilots with large scale Solar PV developments in the UK, Europe and USA constructed in close proximity to airports.

In addition, I would consider that vegetation will also mitigate against any significant glint impacts in the wider area. This matter has been addressed by way of mitigation measures proposed. A condition should be included in any grant of planning permission that the mitigation planting, occurs in the first planting season following a grant of planning permission, should the Board be so minded to grant permission for the proposed development. Overall, I am satisfied that given the low potential occurrence of glint from the proposed development as outlined by the applicant, the sparsely populated local area and the nature of the landscape that the proposed development will not have any significant impacts on the surrounding area in relation to glint and glare.

7.4.5. Conclusion:

I am satisfied that subject to compliance with appropriate conditions, the proposed development will be acceptable in terms of impact on residential amenity.

7.5. Traffic and Access

- 7.5.1. In support of the proposed development, the applicant included details on the construction phase traffic that will arise within the Construction Management Plan. Included were the likely haul and delivery routes, which will be via the motorway from Ringaskiddy for a distance of 19km, national road over 19km, regional road over 7.2km, and over 2km of local roads to be used to access the site. It is submitted that there will be no abnormal loads and during the peak construction phase, the average equivalent of 1.3 HGV trips per day over the 90 day construction period are expected. A graphical representation of the vehicular breakdown is presented in Tables 1 and 2 of the Construction Management Plan with a total of 118 vehicles over the 12 week construction period.
- 7.5.2. The Board will note that the Roads Section of Cork County Council raised no objections to the proposed development. Third party objections have raised concerns regarding the ability of the local road network, and in particular Farran Bridge to accommodate the level of traffic generated by the development during the construction phase. Specifically in the roads report, the Area Engineer advises that the 'existing bridge to the west of the development has been accessed locally and is fit for purpose.' The report further requires that 'A health and safety and structural assessment of the existing bridge at the junction of the L-5790 / L-1517 shall be forwarded to the planning authority 3 months in advance of construction. This will involve a before and during construction phase monitoring of the structural integrity of the bridge to facilitate the continued import of the panels and their sub structure.'
- 7.5.3. A special development contribution in the amount of €65,318 is also required to upgrade the local secondary road (L-5790) post construction. A breakdown of the figure is provided in the Engineers Report and is considered reasonable. I am concerned however that the amount should be requested by way of a special development contribution rather than seeking a bond to secure the reinstatement of the public road that may be damaged by the transport of materials to the site. The Board will note that the Planning Authority dealt with this request by way of a Bond and should the Board be minded to grant permission in this instance, I am satisfied that this is a more appropriate approach. I also note that there has been no objection from the applicant in relation to the inclusion of this condition.

7.5.4. Having considered all of the information presented, I consider that the construction traffic, over a limited period of time, would not result in a significant level of traffic generation and would not cause significant disruption on the local road network. I would accept, based on the information available, that the applicant has adequately demonstrated that the delivery route would be adequate to accommodate the proposed construction traffic. In terms of the concerns of local residents in the area, I am satisfied that the traffic generated by the proposed development, during both construction and operational phase, would not adversely impact on the established road network.

7.6. Ecology

- 7.6.1. In support of the proposed development, the applicant submitted an Ecological Impact Assessment and Appropriate Assessment Screening Report to deal with ecological impact assessment and seeks to address the potential impacts arising from the proposed development. The applicants undertook desk top and field surveys in February 2016 to establish a baseline ecological assessment, and notes that the footprint of the proposed solar farm site is dominated by Arable Crop (BC1) with Hedgerows (WL1) and Dry Meadow and Grassy Verge (GS2) habitats. There are no habitats within the study area that conform to those listed under Annex 1 of the EU Habitats Directive.
- 7.6.2. The surveys carried out found no evidence of rare or protected flora, habitats or fauna within the proposed development site. That said, the report notes the probable sighting of a Peregrin Falcon occurring during the site visit. The considered male falcon was briefly sighted foraging over the site. There is no suitable breeding ground habitat for the species on the site. A number of other birds have been recorded historically in the 2km square (V89G), with a further 63 species previously been recorded in the 10km grid square (W89). Four of these species are listed in Annex 1 of the EU Birds Directive, being the Corncrake *Crex crex*, Golden Plover *Pluvialis apricaria*, Little Egret *Egretta garzetta* and Short-eared Owl *Asio flammeus*. It is concluded that the proposed development site would not offer suitable habitat for these Annex 1 species. The habitat of highest value for most bird species is hedgerow and this will not be significantly impacted by the proposed development.

- 7.6.3. In terms of potential impacts, the proposed development is to occupy approximately 5% of the total land area, including the supporting structures for the PV panels as well as the other infrastructure and roads etc to service the development, and that buffers between 6.5m and 14.5m will be maintained between the development area and the site boundary. Overall, it is concluded that the development will have a neutral impact on the existing habitats and plant species, which will be compensated by the planting of approximately 200m of new native hedgerow. The operational phase of the development will not result in the loss of any habitat and given that fertilisers and chemical based substances will not be used during the operation of the solar farm, there is likely to be an increase in flora species.
- 7.6.4. In terms of terrestrial mammals and bats, the report notes evidence of fox *Vulpes vulpes* and Rabbit along the hedgerows surrounding the site. A Badger *Meles meles* print was also found near the entrance to the site. While there was no evidence of breeding at the site, foraging is likely from time to time. An additional nine species were recorded in the 10km grid square. These included otter *Lutra lutra* and Red Squirrel *Sciurus vulgaris*. There is no suitable habitat for otters or squirrel on the site while the adjacent woodland plantation may provide habitat for squirrel and also deer. No potential impacts on fauna are expected as a result of habitat loss at the development site. The highest value habitat on the site is the hedgerow, which will not be significantly impacted upon.
- 7.6.5. In terms of bats, there are a number of semi-mature trees present on the site which could be used by roosting bats. In addition, the hedgerows could provide suitable foraging habitat for bats. However, the open arable fields are considered to be of low suitability for bats, which prefer linear vegetated features for commuting and foraging. The proposed development will not result in the loss or removal of mature trees or other suitable bat roosting habitats / structures and therefore, no impacts are expected. While a section of hedgerow will be removed to accommodate the proposed development, an additional hedgerow will be planted with a net increase of c150m provided across the site. I am satisfied that the development not significantly impact upon the bats using the site.
- 7.6.6. The proposed grid connection to the existing Ballymore 110kV substation will be agreed with ESB Network. The perimeter fence proposed will rise to a maximum of 2m and propose to provide 'Fauna Gates' every 100m to allow badgers and other

small-medium size animals to pass through. The 'gate' will be a 600mm concrete pipe installed at the base of the fence with the wire mesh fence cut around it. The result will be a 450mm passage with wires across the top of the pipe to discourage the sheep from trying to exit the site. While dealing with similar development applications, I have come across a variety of proposals to facilitate the free movement of animals through sites including the provision of a 200mm gap underneath fencing to accommodate commuting and foraging ground mammals. I am satisfied that the applicant has sought to protect the ability of animals to commute between the site and adjoining land. The maintenance of the grassland beneath the solar panels will be facilitated by the grazing of sheep. The existing hedgerows and treelines on site are to be retained and additional hedgerow planting of native species is proposed.

7.6.7. The subject site is located within the Blackwater River Catchment (Blackwater Bride River Management Unit). That said, the site does not interact with or occur in the proximity of watercourses or field drains and therefore there are no hydrological links between the development site and the River Bride, which is a component of the Blackwater River (Cork/Waterford) SAC. The nearest watercourse, being the Shanowennadrimina Stream, which is a tributary of the River Bride, is located approximately 600m to the east of the subject site. The River Bride - Blackwater River (Cork/Waterford) SAC - is located approximately 2km to the south of the subject site.

7.6.8. Overall, I consider that the ecological impact of the development as proposed is acceptable and that given the nature of built structures proposed, it would not significantly alter the characteristics of the site. The Board will also note that the site will be wholly reinstated quite easily following the decommissioning of the solar PV farm. The site is located where there is extensive areas of similar lands and habitats in the vicinity of the site which could easily accommodate any potentially, although unlikely, displaced species. I would also consider that the proposal would have no significant or adverse impact on existing aquatic habitats in the area due to the lack of a significant connection between the site and the proposed works to such habitats in the vicinity. The Board will note comments from the third party appellants in relation to the issue of groundfall / swallow holes in the area. In terms of the minimal land take for the proposed development, I am satisfied, subject to appropriate good

site management practices, that the proposed development is acceptable. I am satisfied that with adequate construction management in regards to dust suppression, chemical/fuel storage and surface water drainage, that the proposal would be acceptable in this regard.

7.7. Surface Water Drainage

- 7.7.1. The Board will note that third party appellants have raised concerns in terms of the potential for serious pollution / contamination risk to the ground water supply arising from the proposed development. In response, the applicant has submitted that the types of panels referred to are not proposed to be used at the subject site. It is submitted that the proposed development will not alter hydrogeological conditions on the site or give rise to any accelerated pollution to groundwater. Subject to good site management practices, I am satisfied that the potential for serious pollution or contamination of ground waters is minimal.
- 7.7.2. The subject site is not bound by any water courses and that there are no water courses traversing or affecting the subject site. In addition, there is no hydrological connections from the site to the proximate rivers which are components of Natura 2000 sites. The proposed development will result in very little interference with the existing drainage systems of the site. While I accept that the proposed development will result in additional hard surface, including the provision of tracks and the temporary site compound, the nature of the panels, which are raised off the ground, will not generate any significant additional surface waters. I am satisfied that the development is acceptable in terms of surface water drainage, subject to compliance with an appropriate condition to be included in any grant of permission.

7.8. EIA Screening

- 7.8.1. Schedule 5 of the Planning and Development Regulations, 2001 (as amended), sets out Annex I and Annex II projects which mandatorily require an EIS. Part 1, Schedule 5 outlines classes of development that require EIS and Part 2, Schedule 5 outlines classes of developments that require EIS but are subject to thresholds. Solar farms are not listed as a class of development under either Part 1 or 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended, and

therefore, I conclude that a mandatory EIA and the submission of an EIS is not required. I note that there are some projects under No. 3 of Part 2, 'Energy Projects' which relate to energy production, but suggest that none of these projects would be applicable to a solar farm as proposed. The Board will note that a similar conclusion has been reached in relation to their recently decided solar farm developments including references PL04.244539, PL26.244351 and PL04.245862 and PL04.246527.

- 7.8.2. In accordance with the 'EIA Guidance for Consent Authorities regarding Sub-threshold Development', 2003, the following is stated "there is a requirement to carry EIA where competent/consent authority considers that a development would be likely to have significant effects on the environment". The guidelines advise the criteria to be considered for the need for sub-threshold E.I.S. and this includes (i) characteristics of the proposed development, (ii) location of the proposed development, and (iii) characteristics of potential impacts. Schedule 7 of the Planning and Development Regulations, 2001 (as amended), sets out criteria for determining whether a sub-threshold development is likely to have significant effects on the environment and therefore would require an EIS.
- 7.8.3. Article 92 of the Planning and Development Regulations, 2001, (as amended) defines sub-threshold development, as 'development of a type set out in Schedule 5 which does not exceed a quantity, area or other limit specified in that Schedule in respect of the relevant class of development'. In light of the above, the Board will note that I have determined that the solar PV farm development is not a development set out in Schedule 5 and therefore, I do not consider that the subject development is a 'sub-threshold development' for the purpose of EIA.

7.9. **AA Screening**

- 7.9.1. The obligation to undertake appropriate assessment derives from Article 6(3) and 6(4) of the Habitats Directive. Essentially it involves a case by case examination for Natura 2000 site and its conservation objectives. Appropriate Assessment involves consideration of whether the plan or project alone or in combination with other projects or plans will adversely affect the integrity of a European site in view of the site's conservation objectives and includes consideration of any mitigation measures to avoid reduce or offset negative effects. This determination must be carried out

before a decision is made or consent given for the proposed plan or project. Consent can only be given after having determined that the proposed development would not adversely affect the integrity of a European Site in view of its conservation objectives.

- 7.9.2. While the subject site does not have any conservation designation applying to it, given that a number of Natura 2000 sites are located within 10km of the site, the Board will be required to consider the potential effects of the proposed development on the identified European Site. Arising from the requirements of Articles 6(3) and 6(4) of the Habitats Directive, the Board as the competent authority is required to carry out an appropriate assessment using a 4 stage process where the outcome of each stage determines whether the next further stage is required. The site must be subject to AA regarding its implications for the Natura 2000 site in view of the site's conservation objectives *"if it cannot be excluded, on the basis of objective information, that it will have a significant effect on that site, either individually or in combination with other plans or projects"* (EC, 2006). In other words, where doubt exists about the risk of a significant effect, an Appropriate Assessment must be carried out.
- 7.9.3. An Bord Pleanála, as the competent authority is responsible for obtaining the information necessary to enable an AA screening to be undertaken, and if required, obtain from the proponent, a Natura Impact Statement. Integral to the AA process, is the consideration of alternatives. The purposes of AA screening will determine whether appropriate assessment is necessary by examining:
- whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of the site, and
 - the potential effects of a project or plan, either alone or in combination with other projects or plans, on a Natura 2000 site in view of its conservation objectives, and considering whether these effects will be significant.

The Board will note that a Stage 1 Appropriate Assessment Screening Report was submitted by the applicant in support of the proposed development. It identified two Natura sites within 10km of the proposed development including Blackwater River Blackwater River (Cork/Waterford) SAC (site code 002170) located approximately 6km to the south and the Blackwater Callows SPA (site code 004094) & Blackwater

Callows pHNA (site code 000073), which is located approximately 5.5m to the north of the subject site.

7.9.4. AA Stage 1: Screening:

- a. Description of the project and local site: This is an application for the development of a solar PV farm, located approximately 1.5km to the north west of Castlelyons village. The development will involve an area of 8.7ha, including four agricultural fields / parcels and the development will have a maximum export capacity of up to 5MW of electricity.
- b. Is the proposed development directly connected with or necessary to the nature conservation management of a Natura 2000 site: No.
- c. Identification of relevant Natura 2000 sites, within 15km of the subject site: Within 10km of the subject site, 2 no. key Natura 2000 sites have been identified.
- d. Existing expert reports, advice or guidance:
- Planning Statement
 - Ecological Impact Assessment
 - Appropriate Assessment Screening Report
 - Reports from personnel of Cork County Council
- e. The potential for significant impacts on Natura 2000 sites, having regard to potential significance indicators and to qualifying interests and conservation objectives for the site. Where doubt exists, it should be assumed that effects could be significant. In terms of the relevant Natura 2000 sites in this instance, the Conservation Objectives are stated as follows:
- Blackwater River (Cork/Waterford) SAC (site code 002170) located approximately 6km to the south. It is the objective for this site to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected. The Board will note that no habitats or species associated with the Blackwater River SAC present on the subject site. In terms of the fauna supported by the SAC, there is no watercourse in proximity to the subject site which would support Annex 1 species, eg the Otter.

- Blackwater Callows SPA (site code 004094) located 55km to the north. It is the objective for this site to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests of this SPA has been selected:

Bird Code	Common Name	Scientific Name
A038	Whooper Swan	<i>Cygnus cygnus</i>
A050	Wigeon	<i>Anas penelope</i>
A052	Teal	<i>Anas crecca</i>
A156	Black-tailed Godwit	<i>Limosa limosa</i>

f. Potential significance indicators¹:

- Causing interference with, reduction, erosion or fragmentation of the Natura 2000 site: Not likely
- Causing direct or indirect damage to the physical quality of the environment (e.g. water quality and supply, soil compaction) in the Natura 2000 site: Not likely
- Causing serious or ongoing disturbance to species or habitats for which the Natura 2000 site is selected (e.g. increased noise, illumination and human activity): Not likely
- Causing direct or indirect damage to the size, characteristics or reproductive ability of populations on the Natura 2000 site: Not likely
- Interfering with mitigation measures put in place for other plans or projects: Not likely
- Causing a cumulative impact and other impacts: Not likely.

7.9.5. Assessment of likely effects - direct, indirect and cumulative – undertaken on the basis of available information as a desk study or field survey or primary research as necessary: The possible effects of the proposed development on the

¹ Using the Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities, DoEHLG, 2009 I consider that the potential significant indicators should include as presented. There is no defined list of indicators, with each site potentially generating a different list.

conservation status of the designated sites in the vicinity of the subject site include loss/reduction of habitat, disturbance of key species, habitat or species fragmentation, reduction in species density and decrease in water quality and quantity. The Board will note that the site is remote from any designated sites and there is no direct or indirect pathways or links to the site including any hydrological link. Overall, there are no significant earthworks required to facilitate the development and the proposal will not result in any habitat loss or reduction in the quality of the habitat.

7.9.6. Screening Statement with conclusions: The safeguards set out in Article 6(3) and (4) of the Habitats Directive are triggered not by certainty but by the possibility of significant effects. Thus, in line with the precautionary principle, it is unacceptable to fail to undertake an appropriate assessment on the basis that it is not certain that there are significant effects. Given the nature and scale of the proposed development on an existing greenfield site, and having considered the above potential significance indicators I consider that the development, if permitted, is likely to have little or no impact, either alone or in conjunction with other plans or projects on any designated Natura 2000 sites.

7.9.7. It is reasonable, therefore, to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on European Site Blackwater Callows SPA (site code 004094), or any other European site, in view of the site's Conservation Objectives, and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.

7.10. Other Issues

7.10.1. Archaeology:

The Archaeological, Architectural and Cultural Heritage Impact Assessment was submitted following a request for further information from the Local Authority. Within the defined study area, eight recorded archaeological monuments were identified. In total eighteen sites of archaeological, and / or cultural heritage significance were identified within the study area. None of these were identified within the subject site.

The closest monuments, both identified as ringforts, are located approximately 170m from the boundary of the site to the west and to the south east.

The results of the assessment identify eight RMPs, one of which is on the NIAH and is also a protected structure, as well as seven further NIAH sites which are outside the development site and are not impacted upon. A townland boundary, identified within the development area will remain preserved in situ, while two areas of archaeological potential identified have resulted in the redesign of the development in order to avoid same. The assessment identified the possibility of impacts in an area of geophysical anomaly and testing prior to construction is recommended. The minor visual impacts associated with a ringfort is temporary, for the lifetime of the array, and the ring fort is located on private property and therefore is not a public amenity.

The geophysical survey which was carried out and identified previous unrecorded archaeological monuments on the western edge of the proposed development site as well as other less distinctive and unclear anomalies. The proposed development has been redesigned to avoid the enclosure, identified as CH017 and include suitable buffer zones. With regard to the anomalies, it is proposed to undertake further testing to clarify their nature and date in the event of a grant of planning permission. The Board will note that the County Councils Archaeologist considered the content of the Report submitted by the applicant. I am satisfied that the issue of archaeology has been adequately dealt with and should the Board be minded to grant planning permission in this instance, the conditions in relation to archaeology should be included as per the Archaeologists report dated 01/03/2017.

7.10.2. Use of prime agricultural land and change of use to commercial:

Third party appellants have submitted that the proposed development cannot be considered as farm diversification and should be considered as an industrial development which would constitute poor use of prime agricultural land. The very nature of the proposed development, together with the details submitted, suggests that farming can continue with the solar farm in place. In this regard, it is clearly indicated that sheep will graze the land below the PV panels and therefore, I am satisfied that the agricultural use of the land will continue. There is no policy objective contained in the Cork County Development Plan which precludes such

developments on what is perceived to be 'prime agricultural land'. In addition, given the proximity of the 110kV Ballymore ESB Substation to the north east of the site, I would consider that there is already a nominal 'industrial' element to the area. The mitigation measures proposed, and in particular, the level of existing and proposed hedgerow boundaries, I am satisfied that the visual impacts associated with the proposed development as appropriately mitigated to minimise any potential visual impacts.

7.10.3. Public Consultation:

It is considered by the third party appellants that insufficient consultation with the affected home owners was undertaken by the project promoters. The applicant has responded to disagree and submits that all efforts to engage with the local community were made including leaflet drops inviting consultation. In principle, I am satisfied that consultation has been conducted in accordance with the requirements of the Planning & Development Act, 2000 and the Planning & Development Regulations, 2001 as amended, in terms of public notification of the proposed development. I am wholly satisfied that the planning application has been lodged in accordance with the requirements of the relevant legislation as it relates to public consultation.

7.10.4. Health & Safety:

In terms of the proposed development and concerns of health and safety issues that may arise, the fact that the use of solar PV is a comparatively new concept in Ireland, and proximity to residences are common. The primary health concern in relation to solar farm developments is from the inverter, which is a device that takes the electricity from the panels and turns it into alternating current (AC) and puts it out on the electric grid. The inverter generates electromagnetic fields. The inverter cabins are located at a distance from the nearest residential dwelling to prevent any health impacts.

Further health and safety issues which arise in relation to the type of development proposed include fire and transformer leakage. In terms of fire, there has been no evidence to suggest that fire is a significant issue in the assessment of solar farm developments. Subject to appropriate site management and work practices, there is

no evidence to suggest that transformer leakage will arise to generate concern. I am satisfied that the proposed development is acceptable in this regard.

8.0 Recommendation

- 8.1. It is recommended that planning permission be granted for the proposed development for the following stated reasons and considerations and subject to compliance with the following conditions.

9.0 Reasons and Considerations

Having regard to the nature and scale of the proposed development, the suitability of the aspect and topography of the site, the proximity of the grid connection, the pattern of development in the vicinity, the provisions of the Cork County Development Plan 2014-2020 and of regional and national policy objectives in relation to renewable energy, it is considered that, subject to compliance with the conditions set out below, the proposed development would not seriously injure the visual amenities of the area or the residential amenities of property in the vicinity, would not be likely to have significant effects on the environment, or the ecology of the area. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

10.0 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 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 considers it appropriate to specify a period of validity of this permission in excess of five years.

3. The permission shall be for a period of 25 years from the date of the commissioning of the solar farm. The solar farm and related ancillary structures shall then be removed unless, prior to the end of the period, planning permission shall have been granted for their retention for a further period.

Reason: To enable the planning authority to review the operation of the solar array in the light of 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. The container, inverters, and fencing shall be dark green in colour. The external walls of the proposed substation shall be finished in a neutral colour such as grey or off-white; the roof shall be of black tiles.

Reason: In the interest of the visual amenity of the area.

6. Prior to commencement of development, proposals for the following shall be submitted to, and agreed in writing with, the planning authority:-

- (i) infra-red lighting in lieu of artificial security lighting, or,

(ii) motion-sensor controlled lighting, which shall be directed onto the site and away from adjacent property and roads; such lighting shall be directed and cowled such as to reduce, as far as possible, light scatter in the vicinity.

No artificial lighting otherwise shall be installed or operated on site, unless authorised by a prior grant of planning permission.

Reason: In the interest of residential amenity and traffic safety.

7. CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property or the public road.

Reason: In the interest of the amenities of the area.

8. Cables within the site shall be located underground.

Reason: In the interest of visual amenity.

9. Each fencing panel shall be erected such that its bottom edge is no less than 200 millimetres from ground level.

Reason: To allow wildlife to continue to have access to and through the site.

- 10 (1) Existing field boundaries, including trees and hedgerow, shall be maintained save as is required to achieve improvements to sightlines at the site entrance.

(2) All landscaping shall take place in the first planting season following commencement of development and in accordance with the scheme which shall be submitted to, and agreed in writing with, the planning authority. The landscaping and screening shall be maintained at regular intervals. Any trees or hedgerow that are removed, die or become seriously damaged or diseased within five years from the completion of the development shall be replaced within the next

planting season with others of similar size and species, unless otherwise agreed in writing with the planning authority.

Reason: In the interest of the visual amenities of the area.

- 11 (1) Prior to commencement of development, a detailed restoration plan, including a timescale for its implementation, shall be submitted to, and agreed in writing with, the planning authority.
- (2) On full or partial decommissioning of the solar farm, or if the solar farm ceases operation for a period of more than one year, the site, including access roads, shall be restored and structures removed in accordance with the said plan within three months of decommissioning/cessation, to the written satisfaction of the planning authority.

Reason: To ensure the satisfactory reinstatement of the site on full or partial cessation of the proposed development.

12. 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 hours of working, noise management measures, the management of construction traffic and off-site disposal of construction/demolition waste.

Reason: In the interests of public safety and residential amenity.

13. A buffer zone of 20m shall be established within the development site from the outer extent of the enclosure CH017 as identified in the Geophysical Survey (Fig 3) in advance of the development by a suitably qualified archaeologist. The buffer zone shall be delimited using appropriate temporary boundary fencing and signage. Prior to the commencement of the development the archaeologist shall submit a site layout showing the location of the buffer zone supported by photographic evidence. No construction

works, stockpiling of topsoil etc, or any development, or landscaping and/or planting should take place within the designated buffer zone. No trees, plants etc shall be removed from this buffer zone.

Subsequent to the completion of the development the buffer zone shall remain around the Archaeological Monument. Planting within this buffer zone shall be limited to shallow-rooted plants and/or grass.

Reason: To preserve items of archaeological importance

14. The applicant is required to engage the services of a suitably qualified archaeologist (licensed under the National Monuments Acts 1930–2004) to carry out archaeological testing of the archaeological anomalies (excluding CH017) identified in the geophysical survey and on a sample area across the site where ground works is to take place. No sub-surface work shall be undertaken in the absence of the archaeologist without his/her express consent. The archaeologist is required to notify the National Monuments Service of the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs (DAHRRGA) in writing at least four weeks prior to the commencement of site preparations in order to ensure sufficient time to obtain a licence to carry out the work.

On completion, the archaeologist shall submit a written Planning Authority and to the National Monuments Service (DAHRRGA) for consideration. Where archaeological material is shown to be present, avoidance, preservation in situ, preservation by record (excavation) and/or monitoring may be required and the Planning Authority and National Monuments Service of (DAHRRGA) will advise the Applicant/Developer with regard to these matters. No site preparation or construction work shall be carried out until after the archaeologist's report has been submitted and permission to proceed has been received in writing from the Planning Authority in consultation with National Monuments Service (DAHRRGA).

Reason: To preserve items of archaeological importance

15. The applicant is required to engage the services of a suitably qualified archaeologist to monitor under licence from the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs (DAHRRGA) all ground works associated with the development including access tracks, cables, boundary fences and solar panel supports. In the event that archaeological material is found during the course of monitoring, the archaeologist shall have work on the site immediately stopped and notify the Local Authority Archaeologist and National Monuments Service (DAHRRGA). No further surface clearance shall take place, pending a decision as to how best to deal with the archaeology.

The developer shall be prepared to be advised by the Local Authority Archaeologist in regard to any necessary mitigating action (e.g. preservation in situ, or excavation). The applicant shall facilitate the archaeologist in recording any material found. The Planning Authority and National Monuments Service of the DAHRRGA shall be furnished with a written report describing the results of the monitoring.

Reason: In interest of preserving items of archaeological interest

16. A new sod bank and hedgerow shall be constructed at western end of Field 1 as outlined in Figure 7 of the Archaeological Assessment.

Reason: To preserve the setting of an archaeological monument

17. Prior to commencement of development, the developer shall lodge with the planning authority a bond of an insurance company, a cash deposit, or other security to secure the provision and satisfactory reinstatement of the local public road (L-5790), if damaged by the transport of material to the site in connection with the development, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory completion of any part of the development. The security to be lodged shall be an approved insurance company bond or cash sum of €65,318 (Sixty five thousand, three hundred and eighteen euro), or such other security as may be accepted in writing by the planning authority.

Reason: To ensure the satisfactory completion of the development.

18. 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.

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

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.

A. Considine

Planning Inspector

07/07/2017