



An
Bord
Pleanála

Inspector's Report PL04.248400

Development	Construction of a solar farm with photovoltaic panels on mounted frames with two transformer stations, one delivery station, fencing, CCTV and associated site works.
Location	Ballinvarrig East, Deerpark, Castlelyons. Co Cork.
Planning Authority	Cork Co Council.
Planning Authority Reg. Ref.	16/5414.
Applicant(s)	Amarenco Solar Ballinvarrig Ltd.
Type of Application	Permission.
Planning Authority Decision	To Grant Permission.
Type of Appeal	Third Party
Appellant(s)	Castlelyons Development.
Observer(s)	None.
Date of Site Inspection	August 15 th , 017.
Inspector	Breda Gannon.

1.0 Site Location and Description

- 1.1. The site lies between the villages of Rathcormack and Castlelyons, to the south of Fermoy in Co Cork. It is located on the south side of the local road (L1520-11) connecting the two villages. The site is accessed by a farm track, located between two dwelling houses. The track extends southwards, bounded by trees/hedgerow on both sides, towards a large agricultural field devoted to tillage. To the east side of the field there is an area of woodland with agricultural land extending out to the west. The River Bride runs a short distance to the south of the site.
- 1.2. The area is predominantly agricultural, in a gently rolling rural topography, rising significantly towards the R628 to the south. The pattern of development is dispersed, comprising isolated rural holdings, with a significant concentration of single dwellings located in ribbon form along the local road.

2.0 Proposed Development

- 2.1. The proposal is to develop a 5 MW solar farm comprising c. 22,200 photovoltaic panels on ground mounted frames within a site area of 8.86 hectares. The development will include 2 no. single-storey inverter/transformer stations, 1 no. single - storey delivery station, security fencing, CCTV and all associated ancillary development including separate temporary construction and operational accesses.
- 2.2. The civil works for the panels uses a simple, ground mounted system that avoids ground disturbance. The PV panels would sit on angled racks comprised of galvanised steel. The panels would be positioned on the rack at a minimum height of 2m above the ground and rise to a maximum height of approximately 3.55m and would be orientated to the south to capture maximum solar energy. The panels would be positioned at an angle of 15 degrees from the horizontal to ensure the best solar absorption. A typical separation distance of 3.4m would be maintained between the rows of solar arrays. The arrays will be set back from the site boundaries with a general minimum separation distance of 10m. The electricity generated will be cabled to the transformer stations, which would require the excavation of narrow trenches to a depth of 0.8m, which will be infilled and reseeded.

- 2.3. A 3.8m wide compacted gravel access track would run to the east side of the site and around the outside of the solar arrays, between the panels and the perimeter fence (2m). A c. 24m buffer would be retained to the south. The facility would be unmanned with no requirement for potable water or wastewater treatment facilities.
- 2.4. The 2 no. transformer/inverter stations are required to convert the direct current generated by the PV panels into alternating current before it feeds into the electricity network. These stations will arrive on the site in a pre-fabricated form and would be placed on compacted sand beds. A distribution/delivery station (concrete or steel) is proposed to the northeast of the site and would function as a delivery point to ESB networks for transfer to the electricity grid. It is proposed to connect into the existing ESB 38 kV substation c.1.3km north east outside the village of Castleyons.
- 2.5. The application is supported by the following documents;
- Planning Statement
 - Landscape & Visual Assessment
 - Glint & Glare Technical Report
 - Ecological Impact Assessment.
 - Construction Management Plan
 - Traffic Management Plan
 - Introductory Report to Solar Energy in Ireland and
 - Letters of consent from landowners.
- 2.6. Further information requiring the submission of an Archaeological Impact Assessment including geophysical survey and archaeological testing was requested on August 3rd, 2016.
- 2.7. The response of March 13th, 2017 was to the satisfaction of the planning authority.

3.0 Planning Authority Decision

3.1. Decision

The planning authority decided to grant permission for the development subject to 20 no. conditions, which contains the following conditions of note.

Condition No 2 – Decommissioning requirements after 25 years.

Condition No 3 – Requires archaeological geophysical survey prior to commencement of the development.

Condition No 4 – Archaeological monitoring.

Condition No 5 – Trees/hedgerows to be protected during construction and retained except where specific removal is authorised by the permission.

Condition No 6 –Water protection measures.

Condition No 7 – North eastern boundary to be planted with a native hedgerow following the removal of the construction access road.

Condition no 14 – Noise levels.

Condition No 16 - Construction Dust and Noise Management Plan.

Condition No 18 – Construction, piling, excavation and management plan to be agreed. Delivery traffic via regional and local primary routes only. Other traffic management measures.

Condition No 19 – Method statement for the management of the construction stage.

Condition No 20 – Hours of construction.

3.2. Planning Authority Reports

3.2.1. Planning Reports

The **Planning Officer's** report of 3/8/16 notes the policy support for renewable energy development at European, National Regional and local level, including the provisions of the CDP. States that there is no objection in principle to the proposed solar farm subject to normal planning considerations. While the site is located in a

rural area between two villages, there are no objections in land use terms to the proposed development.

Landscape & Visual

Acknowledges that one of the key issues arising in the assessment of the application relates to the impact on landscape and visual amenities of the area. The existing woodland area to the east screens the site from the northeast, east and southeast and from Castlelyons/Banbridge. The site is well set back from the public road to the north and the proposed solar farm will not impact negatively on visual amenities when viewed from this direction. The greatest impact arising would be on the more elevated lands to the south, including views from the regional road (R628). Given the proximity of the site to the adjacent woodland area, it is considered that the proposed development would be read in conjunction with same and is not likely to seriously detract from the visual amenities of the area. The provision of supplementary landscaping of the site could be managed by way of condition.

Residential Amenity

Arising from the separation distance between residences (nearest third party residence is c 355m from the nearest PV panels), the proposal is not likely to generate serious impacts on neighbouring amenities.

With regard to Glint and Glare, the Technical Note submitted with the application is noted to be generic and not site specific. Having regard to the siting of the solar farm relative to existing dwellings and neighbouring public roads together with separation distances, existing trees to the east and the retention of existing screening on other site boundaries, it is considered that the issue of glint and glare does not need to be subject to additional information.

Road/Traffic/Access

To address concerns raised in the previous application, new entrance arrangements are proposed for the construction phase. A construction access will be positioned to the east away from the bend in the road. The Area Engineer notes that traffic post construction will not be significant and there are no engineering objections to the amended access arrangements.

Ecology and AA

The findings of the Ecology Impact Assessment which includes an AA Screening Assessment are noted, together with the report from the Heritage Officer's. It is concluded that the proposed development is not likely to seriously impact on, or, detract from the heritage, ecology or biodiversity of the area or on the Blackwater River SAC.

Archaeology

The comments of the County Archaeologist report are noted i.e. the requirement for Archaeological Impact Assessment to include geophysical survey and archaeological testing.

Flooding

A small part of the southern portion of the site is located in an area that is susceptible to fluvial flooding, based on Draft PFRA Data. In advance of submitting the current application, existing drains were resurveyed and shallow water was recorded at the point where the eastern boundary field drain terminates. It is indicated that this open drain requires maintenance and there is a legal agreement between the applicant and the landowner, which necessitates ongoing maintenance and that the drain be maintained operational for the lifetime of the development.

The proposal is also amended from the original by the provision of an increased buffer with the proposed solar panels now c. 95 m from the centreline of the River Bride and the access track sited c. 225m at the nearest point to the centreline of the river.

The reports of the Area Engineer and Environment Officer are noted, which raise no concerns regarding any additional risk of flooding or water quality issues.

EIA

Mandatory EIA is not required. Having regard to the characteristics of the proposed development, its location and potential impacts, it is not considered that it is likely to have significant effects on the environment to warrant sub-threshold EIA.

Grid Connection

The nearest grid connection is located c 1.3m northeast of the subject site, to the east of Castlelyons/Bridesbridge. The applicants have applied to ESB Networks for formal access to the electricity grid via the substation. The means of connection from the site delivery point and route will be decided at the discretion of ESB Networks.

Conclusion

There are no land use objections to the proposed development on established agricultural land. The revised application is on an enlarged site and provides for an alternative means of access for the construction phase. Operational traffic will use the existing farm laneway, which is to the satisfaction of the Area Engineer.

Revisions have been made to the layout with an increased buffer zone to the River Bride/Blackwater River SAC.

While the solar farm will be visible from the south, it is considered that the impact is such that it is not likely to seriously impact on the visual amenities of the area.

The internal reports indicate that there are no engineering or environmental objections to a grant of permission and there will be no significant impacts on the Blackwater River SAC and the potential for the development to impact on birds, mammals and local biodiversity can be ruled out.

The Planning Officer's report of 4/4/17 following the receipt of further information noted that there were no objections to the proposed development subject to conditions.

3.2.2. Other Technical Reports

The **Area Engineer's** report of 18/7/16 recommended a grant of permission subject to conditions.

There are three reports from the **Environment Section**. The reports, which comment separately on water quality (1/7/16), waste (11/7/16) and air/noise (18/7/16) raise no objection to the development subject to conditions.

The **Heritage Unit** report of 22/7/16 concluded that there was no requirement for the proposal to be subject to Appropriate Assessment.

The **Archaeologist's** report of 3/4/17 noted the rich archaeological heritage in the surrounding landscape and that there are sufficient archaeological indicators for the potential for subsurface archaeology. The report raised no objection subject to conditions requiring geophysical survey prior to commencement of the development and monitoring of groundworks, including the removal of the townland boundary.

3.3. **Prescribed Bodies**

An Taisce in their report of 6th May 2016 noted that a strategic National and Regional Strategy is required for solar array development on land with optimum location suitability, while at the same time protecting biodiversity, landscape sensitive area and good tillage.

Irish Water in their report of 15/7/16 raise no objection to the proposal subject to conditions.

The **Commission for Energy Regulation on 8/7/16** acknowledged receipt of the application.

3.4. **Third Party Observations**

Submissions were received by the planning authority from a number of observers. The issues raised are similar to those raised in the appeal and relate to the following;

- Road safety associated with entrance arrangements to/from the site.
- Flooding in the site and along the entrance road.
- Danger to local water supply taken from the River Bride.
- Fire hazard.
- Glint and glare.
- Surface water run-off generation and associated land drainage/flood risk consequences.
- Noise levels.
- EIA required
- Contrary to the policies/objectives of development plans.

- Lack of public consultation.

4.0 Planning History

16/4290 – Planning permission refused for the development of a 5 MW solar farm comprising approximately 22,200 photovoltaic panels on ground mounted frames on the appeal site for one reason relating to traffic hazard associated with the site entrance.

5.0 Policy Context

5.1. National Policy

The Government White Paper entitled *'Ireland's Transition to a Low Carbon Energy Future 2015-2030'* recognises that a radical transformation of Ireland's energy system is required to meet climate change objectives and to meet renewable energy targets. It includes an objective to *'accelerate the development and diversification of renewable energy generation' and increase the country's output of electricity from renewable sources'*. It states that this will be achieved through a number of means including wind, solar PV and ocean energy.

With regard to solar energy it states (Section 137)

Solar photovoltaic PV technology is rapidly becoming cost effective for electricity generation, not only compares with other renewables but also compared with conventional forms of generation. The deployment of solar energy 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.

5.2. Regional Policy

The **Regional Planning Guidelines for the South-West Region 2010-2022** recognises that the region has a key role to play in the attainment of the national renewable energy targets.

'The guidelines support the sustainable development of renewable energy generation subject to the sustainable development of local areas and the protection of areas of high scenic amenity. Possible effects on Natura 2000 Sites, including effects on water supply and hydrology, wildlife disturbance, habitat loss and species mortality associated with collisions should be an essential consideration when planning for renewables and these should be considered at the local or project-level stage. (Section 5.6.32)

5.3. Local Policy

The operative development plan is the **Cork County Development Plan 2014**. The site is located in a rural area which is unzoned.

Chapter 9 of the Plan deals with energy and the environment.

With regard to Energy/Electricity Network the following objectives are relevant.

Objective ED1-1: Energy - *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.*

Objective ED6-1: Electricity Network – *Support and facilitate the sustainable development, upgrade and expansion of the electricity transmission grid, storage and distribution network infrastructure.*

Support the sustainable development of the grid including strategic energy corridors and distribution networks in the region to internal standards. Facilitate where practical and feasible infrastructure connections to wind farms and other renewable energy sources subject to normal planning considerations. Proposals for development which would be likely to have a significant effect on nature conservation sites and/or habitats or species of high conservation value will only be

approved if it can be ascertained by means of an Appropriate Assessment or other ecological assessment, that the integrity of these sites will not be adversely affected.

5.4. Natural Heritage Designations

The nearest designated site is the Blackwater River (Cork /Waterford) Special Area of Conservation which is associated with the River Bride that runs to the south of the site.

6.0 The Appeal

6.1. Grounds of Appeal

Traffic

- The previous application (16/4290) was refused permission as the entrance was deemed to be unsafe. It is busy road used by Glanbia, Gleenon Brothers and South Coast who use the road for HGV traffic. There have been numerous accidents in close proximity to the site.
- A new access is proposed during construction which will have to be widened on the Castlelyons side of the site. The road is narrow at that point, with a continuous white line. It is not suitable as an exit/entrance for HGV's. The promoters of the scheme acknowledge that the road is dangerous and propose a stop/go system.
- When construction is finished it is proposed to use the actual entrance to the site, which Cork Co Council have deemed to be unsafe. The promoters of the scheme accept that the entrance is dangerous and propose that maintenance vehicles using the entrance will be restricted to a left in/left out movement. It is unclear how this will be enforced.
- It is clear that solar farms need constant monitoring (see attached Operation and Maintenance article attached). Unforeseen issues also arise. Should there be an accident or panels break emergency vehicles and HGV's needed will be required to use this entrance that the planning authority have deemed

to be unsafe. Following decommissioning, the panels etc will have to be removed using the same unsafe access.

Glint & Glare

- A very busy road that links Cork and west Waterford runs along the hill to the south. The promoters note that low/lying sun in the west/north-west gives the most glint and glare (which would affect the south/eastern side of the solar farm). There are no photos from the south-east, where the solar farm is clearly to be seen. The glint and glare will affect motorists/cyclists on this busy tourist route. It is an unfair comparison to suggest that the glint and glare is equivalent to a parked car across the street or a house window. There are thousands of panels with the potential to blind motorists.
- Although the developer suggests that the glare will be minimal, the area is identified as a lowland valley and the solar panels will be easily seen from higher areas in the surrounding landscape. The glare for the houses on the R628 which overlook the site will not be minimal.

National/Regional Strategy

- There are no national guidelines in place for solar farms. The Irish Solar Energy Association have published their own to make up for the absence of policy. There are two solar farms within a mile of the site going through the planning stage and two more at design stage. Pending the publication of a national strategy, applications for permission should be put on hold.

Pollution/Serious risk of contamination to Castlelyons water supply.

- The Bride River runs almost adjacent to the site. A few hundred meters downriver water is extracted to supply the local area. Solar panels contain chemicals which are dangerous to the local environment and public health.
- Should the panels break or leak (due to flooding, an electrical fault, lightning strike, panel failure, drone strike or deliberate sabotage), the consequences would be devastating, due to the proximity of the site to the source of the local water supply.

- The site is located on a Karst Aquifer, with an 'Extreme' Vulnerability Rating. If there is a failure on the site due to poor management, groundwater and the source of the local water supply would be contaminated.
- There are potential failures associated with the solar farm that could result in the contamination of the local water supply such as ground erosion which could put operations at risk, breakage of cables/conduits etc.

Flooding

- The site is subject to flooding. The southern part of the site is on the Bride River floodplain and is recorded on the official floodmaps. It is suggested in the previous application that floodwaters would flow under the frames of the solar panels. However, it is debris and other material that do real damage, and which could potentially damage the panels.
- More recent flooding events such as that experienced on the road on the Rathcormac side of the site are not recorded. Flooding is occurring where it has never occurred before.
- There are concerns that the solar farm would increase flooding as the flow of water will become more concentrated and will not disperse evenly across the site, as it currently does. An extract from an English study of run-off generation from solar parks supports this (see text). The land slopes down towards the river which will increase flooding in the Bridesbridge area. The additional run-off and contamination issues are a major concern.

Archaeology

- The County Archaeologist requested that a Geophysical Survey be carried out, acknowledging the rich archaeological heritage of the surrounding landscape and the potential for subsurface archaeology. This was not carried out.

Renewable Energy

- The community is not against solar farms and the general principle of renewable energy. The concern is that the site is not suitable.

Other matters

- Impacts for residents from noise caused by wind blowing through the row of panels.
- The site is adjacent to a large wood and the solar farm is a potential fire risk.
- An independent EIS should be carried out.
- The village of Castlelyons is described a picturesque village in the Fermoy LAP. Residents are concerned regarding the number of applications for solar farms in the vicinity (16/4290, 16/4570 and 16/4578). Large scale commercial solar installations are completely out of character for a scenic rural area and do not take into consideration the visions and goals of the LAP.
- Contrary to the opinion expressed by the developer the proposal is a change of use not an agricultural diversification.
- The development constitutes inappropriate use of prime agricultural land. The Cork Landscape Strategy classifies the area as 'Broad Fertile Lowland Valley'
- It is vital that the scenic rural landscape that attracts tourists to the area is protected.
- The 2m security fence will not add to the visual amenity of the area and reinforces the commercial nature of the development in the rural landscape.
- There has been no public consultation in respect to the proposal.
- A bond should be sought to ensure effective decommissioning if the project fails. An abandoned solar farm close to the Castlelyons water supply would be catastrophic for the local community.

Conclusion

- It is critical that the planning authority identify the most appropriate sites for commercial solar installations. These installations are large scale and will result in a devaluation of property in the vicinity and potentially impact on residents daily lives.

- The solar panels contain chemicals which if the panels leak/break will contaminate the local water supply. The site is known to flood and the entrance has been deemed unsafe by the planning authority.
- The proposal is not in accordance with proper planning and sustainable development.

6.2. Applicant Response

The response is summarised as follows;

Principle of the development

Whilst the appellants submit that there is not an appropriate policy basis to determine the subject application, Cork Co Council's decision is strongly supported by national, regional and local policies. These include clear recognition of the need to 'accelerate the development and diversification of renewable energy generation' as espoused in the Government White Paper 'Ireland's Transition to a Low Carbon Energy Future 2015-2030'. This national policy document acknowledges the potential of solar to contribute towards energy security, contribute to meeting renewable energy targets and support economic growth and jobs.

Reference is also made in the Senior Executive Planner's report to the objectives of the South Western Regional Planning Guidelines 2010 to facilitate the sustainable development of additional electricity generation capacity and provide for strategies which plan for the promotion of renewable energy development. This is reflected in policy objective ED1-1 of the CDP which emphasises the need to ensure that 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.

National precedence also dictates that the absence of bespoke national guidance for ground mounted solar does not preclude the assessment of proposal of this scale. This is reflected in the decisions of An Bord Pleanála (04.247521).

Site Suitability

The location and operation of the wind farm is directly influenced by three key and interdependent requirements, namely access/proximity to the national grid (ESB

substations), the availability of a suitable solar resource (light irradiance) and suitable siting and design planning considerations. The subject site strikes an appropriate balance between the functional requirements of the developer and key planning considerations. It is agricultural land, naturally contoured and very well screened with a south facing aspect, located away from environmental sites, in close proximity to an ESB substation and benefits from long separation distances to adjoining residential properties. The planning authority have corroborated the view that the site is wholly suitable in planning terms. The site is not located in a high value landscape but in an area that is 'open for consideration' for wind energy development. It follows that this principle of suitability also applies to solar farms which represent a more sensitive form of renewable energy development in the local landscape.

The appellants opinion that the proposal constitutes a change of use from agricultural to commercial use is not substantiated. The application represents a temporary form of agricultural diversification on agricultural land and it is concluded by the planning authority that there is no objection in land use terms to the development of a solar farm in this location.

It is also suggested that the development is unsuitable as Castlelyons is an area of high quality agricultural land. Reference is made to the agricultural land classification system in the UK. Such a system does not exist in this country and nor does any other relevant planning policies against which this metric could be assessed, as highlighted by the Inspector in PL26.244351. In any event it is not a material planning consideration.

The reseeded grass under the panels will return to pasture very quickly. To minimise damage to the soil structure, the installation works will typically be confined to a 3 month period between mid-March and mid-October to allow for appropriate weather conditions/use of appropriate machinery. On completion of the works, the pasture will be restored using light farming machines and prepared for seeding to encourage early growth, restoration of the soil structure and natural creation of meadow grass.

Traffic & Road Safety

The appellants argument that the proposed development will have an adverse impact on traffic safety does not take cognisance of the fact that the proposal will

give rise to a significant reduction in traffic numbers relative to existing agricultural practices. Existing agricultural practices (harvesting) are supported by HGV movements. In response to the Council's previous concerns regarding road safety, alternative arrangements have been made to access the site via third party lands to the northeast for the duration of the construction phase. This access will be closed following the completion of construction. The requisite site lines are achievable at this site entrance to the east and west to facilitate safe entry/exit. A section of the existing boundary wall will be removed but will be reinstated following construction. Other mitigation measures proposed include the provision of four sets of warning signs staggered at 200m intervals at each side of the entrance, a stop/go system and overtaking restrictions greatly reducing road safety risks. Autotrack analysis confirmed the suitability of the proposed construction access. The Board is requested to note the comments contained in the Area Engineer's Report.

HGV trips to the site will average 1.3 HGV trips to/from the site per day during the construction phase, which represents a significantly less intensive concentration of trips than a typical harvest from the site. In addition to the HGV movements there will be some small associated vehicle movements to accommodate construction workers. The Board is requested to have regard to Condition No's 18 and 19 which is considered to be a reasonable approach to mitigate against any adverse traffic impacts during the construction phase of the development.

Once operational, the solar farm will be an unmanned facility and will generate no traffic movements per se. There may be a need for an ESB technician or maintenance van to visit the site on an ad hoc basis, limited to a few visits per year. The existing site entrance has reduced sightlines to the west but exceeds required visibility standards to the east. In recognition of this it is proposed that maintenance vehicles using this entrance be restricted to 'left in/left out' movements only which is an accepted standard. Monitoring of the site is done remotely via the installed CCTV and does not necessitate site visits for same.

With regard to decommissioning Condition No 2 requires a restoration management plan which will include a traffic management plan which addresses the concerns regarding the existing entrance.

Cork Co Council have satisfied themselves that the proposal will not result in any adverse traffic or road safety impacts.

Glint & Glare

Issues have been raised by the appellants regarding potential impacts of glint and glare on homes to the south. A technical note on glint and glare was submitted with the planning application which confirms that as a general rule receptors to the north and south of a solar farm will not be affected by glint. There is potential for receptors to the southwest and southeast to be affected in early morning hours or late afternoon for no more than a few minutes per year. Importantly, this excludes the presence of landform or vegetative screening in any particular case which would further reduce or eradicate any marginal potential for occurrence. This is very relevant in this case as illustrated in Fig 3 (see text). It is also widely acknowledged that potential glint impacts dissipate with distance, with the nearest receptor to the southwest being c750m from any potential visible panels. The modelled outputs of a glint/glare assessment for the subject site indicate that there is extremely limited scope for the proposal to impact on local residential amenities by way of glint/glare.

Flood Risk

A very small part of the site to the south is identified within an 'indicative' PFRA flood risk area. There is no historical record or evidence to suggest that the site has ever flooded from the River Bride. The site was visited during periods of adverse weather conditions (including December 2015) and it confirmed the non-presence of flood waters on the site.

The appellants suggestion that previous flooding could be seen from the R628 is completely without foundation. The site is c.350m from the route and as illustrated in Fig 3, as well as in images contained in the Senior Executive Planner's report, only the northern parcel of the field is visible from this road. The southern half of the site, including the area of suggested flood risk is not visible at all from the R628, due to the presence of extensive mature trees and hedgerows.

The suggestion that debris will enter the site in a flood scenario and smash the panels has no practical basis and precludes (1) the presence of a 82.4m buffer from the River Bride to the nearest array,(2) the presence of an intervening vegetative buffer which would significantly reduce any hydraulic water flows, including its

capacity to transport debris, and (3) beyond this, the presence of a 2m high security fence between the southern boundary of the site and the southernmost row of arrays.

Subject to appropriate design specifications, the installations of solar PV arrays will not give rise to increased surface water run-off (volume or rates) in an agricultural setting. This position is supported by both academic and industry testing of pre and post panelled ground conditions. The site was subject to technical site survey, with three distinct design aspects incorporated to mitigate against surface water issues. Generous separation distances have been established between the array rows to avoid blanket coverage of the site and the maintenance of normal ground conditions, with a substantial buffer strip established downgradient to the south of the site.

The installation frames and panels are pitched at a 15 degree angle a minimum of 3.55m off ground to the north and 2m off ground to the south. This provides two-fold benefits, namely mitigating against any potential for increased rates of run-off from the panels (compared with more pronounced angles sited closer to the ground surface) and the creation of natural conditions which allow seeded grass beneath panels to flourish and be maintained. The maintenance of grass beneath the panels is a critical component of the design scheme as it preserves peak water run-off rates at optimal natural rates. Once operational, the site will be used for sheep grazing, further removing the need for storm water management initiatives.

The Board is requested to have regard to the comments made in the Engineer's report assessing the application which confirms the proposal in itself cannot be classified as a water vulnerable development and that 'all surface water falls to the green field below the ground mounted frames'.

Archaeology

The planning authority's request for further information required the engagement of a suitably qualified archaeologist to carry out an Archaeological Impact Assessment (AIA), which included potential Geophysical Survey. The geophysical survey was omitted on the merits of the AIA baseline assessment, which was discussed with the Council's Heritage Officer. This study confirmed the likely non-presence of sub-surface archaeological heritage at this location, which was in keeping with new internal guidelines regarding Solar Farms and Archaeological Impact Assessment

issued by the National Monuments Service, which state that there is no longer a requirement for geophysical survey unless there are specific and verifiable indicators of archaeological potential. Condition No's 2 and 3 details measures to ensure that an approved mitigation strategy will be implemented if any archaeological material is shown to be present on the site.

There are no sites of archaeological and/or cultural heritage significance with the development area. Construction will involve minimal intrusion, with solar panel mounts being driven and not excavated. The use of pre-moulded concrete footings in the erection of security fencing and cable trenching at shallow sub-surface depths results in little ground disturbance. Effected areas of ground disturbance will be limited to 2-3% of total site coverage.

Request the Board to note the comments of the Council's Archaeological Officer.

Noise

PV panels as proposed do not generate any noise and there are no moving parts associated with the proposal which would give rise to noise emissions. The only components of a solar farm that give rise to noise emissions are the inverters and transformers which have a very low level hum, and in this case are located away from sensitive receptors. Solar farms only operate during daylight hours and no noise is generated during evening, night and early morning. The two inverters are housed in noise insulating prefabricated structures and transformers are housed in a delivery station where noise will be unperceivable.

Typical acoustic volumes excluding incorporated structure/building insulation measures for transformers are 58 dBA and inverters 33 dBA. When insulating building conditions are applied, actual audible noise levels will be below this and imperceptible from a few feet away. Normal farming operations and noise generated by traffic will emit greater noise levels locally. The nearest independent third party residence will be c 545m at its nearest point from any inverter/ transformer structures (TS1 and TS2). Noise was not considered to be an issue in other solar farm appeals dealt with by the Board (93.246902 & 27.246527)

Health & Safety

To support claims regarding wider health and safety concerns, the appellants attach an article from AltEnergyMag.com, which is not industry prepared or endorsed and should therefore not form part of an objective planning assessment.

It is suggested that damaged Cadmium Telluride-type panels will pollute ground water. The statement is false and has no scientific basis. These type of panels will not be used on the subject site, for commercial reasons only. The suitability of the local drainage regime has been investigated. The solar farm will not alter hydrological conditions on the site or give rise to any accelerated pollution to groundwater as intimated.

Similarly, An Bord Pleanala precedent demonstrates that fire risk was not considered to be a significant issue in the assessment of solar farm development.

Environmental Impact Assessment

The application included a detailed screening for EIA. It determined that the project is not a project which required an EIS and would not warrant a sub threshold EIS in accordance with Article 103 of the Regulations. This view was corroborated by the Senior Executive Planner. There is significant precedent at both local authority and Board level in relation to EIA requirements.

Tourism

The main thrust of appellants argument is that the proposed development will have a negative impact on tourism arising from visual impact, glint and glare. The reflective impact arising from the solar PV arrays is almost negligible and suggestions to the contrary are misconstrued and unsubstantiated. To assess the visual impact of the development a detailed landscape and visual assessment (LVA) was carried out as part of the application. The assessment concluded that the site is very well suited to a solar farm proposal, which would represent a low sensitivity intervention in a low sensitivity landscape. The site is not within a designated 'high value' landscape, in close proximity to any scenic routes, or visible from any protected structures. There are some long range views, but distance and context reduces impacts to a minimal degree, buffers serving as a direct visual barrier. To aid sensitive integration, a number of key mitigation measures have also been deployed as part of the design

process. Generally, the site benefits from a dense perimeter of planting which does not need to be supplemented.

Solar panels by their nature are designed to absorb rather than reflect light for the purposes of capturing energy and turning it into electricity. Compared to other surfaces such as common glass, the reflection from PV modules is almost negligible. A lot of consensus has been built on this issue in recent times. In a recent appeal with respect to a solar farm in Kinsale in close proximity to a sizeable number of residential properties the Inspector concluded that 'glare is not a significant issue' and that 'there is a low potential for the occurrence of glint from the proposed development and would not result in any significant adverse impact on established amenities.

Community Engagement

Strongly disagrees with the appellants contention that there was no public consultation with the local community. Where people were not available to discuss the proposal at the time of the house call, a leaflet was deposited inviting members of the community to contact the applicant regarding the proposal. The idea was to generate an increased awareness of the proposal and encourage positive and meaningful engagement. Despite the acknowledged awareness of the leaflet, some individuals in Castlelyons Development opted not to engage. Any suggestion that the company has shirked its responsibilities is disingenuous and contrary to its ethos.

Project Viability

The appellants refer to a previously unfinished estate in the village as an example of blight that could arise from the development. These parallels have no basis whatsoever. Unlike residential development, funding for the construction of the solar farm will only be released when a legally binding tariff agreement is in place.

The cited NTR example is also irrelevant. The NTR example was based on pre-nascent solar thermal technology (not solar PV) that NTR bought and which was not commercially viable. Solar PV is a proven technology.

Conclusion

The proposal is wholly acceptable in planning terms. There is a pronounced need for decisive action nationally to address key environmental challenges such as reduction

in carbon emissions, as enshrined in national, regional and local policy. As a temporary use in the landscape, solar farms are typically inert with a negligible environmental impact. The site has been carefully selected and is deemed suitable for the intended use. Its position, setback from the public road and in close proximity to a substation means that the potential impacts on the public are minimal. All the required infrastructure is in place to support the proposed development. The nearest residential property is 312m. The proposed solar farm has been designed in accordance with best practice industry standards.

6.3. **Planning Authority Response**

No response to the grounds of appeal were submitted by the planning authority.

7.0 **Assessment**

7.1. I consider that the main issues that arise for determination by the Board relate to the following;

- Principle of the development
- Traffic & Road Safety
- Glint & Glare
- Impacts on Residential Amenity
- Landscape & Visual Impact/Toursim
- Archaeology
- Flooding
- Environmental Impact Assessment.
- Appropriate Assessment.
- Other matters

1. Principle of the development

I accept that the proposal accords with national, regional and local policy. It will provide a renewable energy resource, which will assist in a reduction in Ireland's dependence on fossil fuels and its transformation to a low carbon energy system. It will provide a reduction in green-house gas emissions associated with electricity production, enabling the country to work towards its renewable energy targets and climate change objectives. The proposed development is therefore, acceptable in principle.

There is currently no national guidance providing strategic guidance on site suitability etc., for solar farm development. At a local level, whilst there is support for solar energy production as a renewable resource, due to the emerging nature of the technology in this country, individual development plans have not identified areas considered suitable/unsuitable for solar farms. In the absence of a 'plan-led' approach, individual applications are currently being made in an ad hoc way and until guidance is provided, each site can only be considered on its individual merits and subject to normal planning considerations.

The Board will note that the site is located in a rural area and the planning authority did not raise any concerns in land use terms to the development of a solar farm on this site. I note that similar type applications have been favourably considered by the Board on agricultural lands in other areas of the country.

2. Traffic & Road Safety

The previous application (16/4583) for a similar development was refused on the grounds of traffic safety.

The existing farmyard access to the site is located between two houses on an unimproved section of the local road. The road has a posted speed limit of 80km/h, with a continuous white line at this location. The road suffers from poor vertical and horizontal alignment. To the west of the site access there is a sharp bend which seriously restricts visibility in this direction.

The applicant proposes alternative arrangements to address the previous concerns raised the planning authority. During the construction phase, it is proposed to access the site via an access located further east along the local road. The arrangement will

be temporary for the duration of the works only. Once operational, access to the site will be via the existing farm track.

The proposed construction access will be routed through third party farm land and the landowner has consented to the arrangement. There are dwellings on either side of the access. The house to the west, which is part of the farmyard appears unoccupied. The house to the east is a more recent development and is occupied. Visibility in both directions is a significantly improvement to that associated with the existing farm access to the east.

I note from the Traffic Management Plan Report that there will be c.118 no. HGV movements during the construction stage (c.4 HGV movements per day) associated with transportation of material, building material, access track aggregates etc, in addition to other small vehicle movements. A stop/go system will be implemented along the local road coupled with warning signs and overtaking restrictions to ensure that safe manoeuvres can be made by HGV's entering/leaving the site.

I consider that the alternative construction access proposals are acceptable and address concerns regarding sightlines. I note that the Area Engineer has raised no issues with regard to the revised arrangement. Subject to a Construction Management Plan including traffic management proposals, being submitted to and agreed with the planning authority, I consider that the development can be constructed without significant adverse impacts on public safety and that the effects of construction traffic on the local road network would be acceptable. I accept that the traffic management measures will inconvenience local road users and the residents of the adjacent dwellings but that these impacts are acceptable, having regard to the temporary duration of the works,

Issues have been also raised by the appellants regarding the suitability of retaining the existing farm access in use during the operational phase. Once operational, the facility will be unmaned and remotely monitored, which limits the amount of traffic that will be generated. Maintenance and other personnel would be required on site on an ad hoc basis. The applicants propose a 'left in/left out' arrangement to mitigate road safety issue associated with the use of the access. I accept, as contended by the appellants that this type of arrangement would be unenforceable.

The Board will note from the applicant's response that the existing access is used for very large machinery associated with the harvesting of crops. Having regard to the established use of the existing access and the low level of operational traffic that would arise as a result of the operation of the proposed development, I do not consider that a material intensification in the use of the access would arise. I consider that the use of the access post construction is acceptable.

3. Glint & Glare

The R628 is elevated relative to the solar farm site and concerns have been raised that glint and glare will cause distraction to motorists and cyclists on the busy tourist route and impact locally on dwelling houses to the south of the appeal site. I accept that the solar farm will be most visible from this location, but that views from the road will be intermittent, being blocked by high roadside and the intervening landscape. Some of the houses will have a more direct line of sight.

Glint and glare arise in certain conditions when the sun is low in the sky. Glint only occurs when the sun is shining and is caused by reflection. Glare is a result of a continuous source of brightness from diffused light and is less intense than glint. Both have the capacity to result in nuisance and to impact on amenities.

There is potential for glint and glare to occur to the southwest and southeast of the solar farm in the early morning and late afternoon at certain times of the year. This would occur when the sun is lowest on the horizon (spring/autumn equinox and winter solstice). Episodes would only last for very short periods, when the sun rises above the planes of the PV panels. These would occur with very low incident angles and therefore a very low fraction of the sunlight is reflected. I note from the applicant's submission that as the sun incident angle in this case would be below 15 degrees, only about 0.1% to 1% of the sunlight is reflected. Due to the low incident angle associated with such events, there is no potential for the houses at higher elevations to the south to be impacted.

The solar panels are designed to capture as much solar energy as possible and a specific type of glass is used to reduce the degree of reflectivity. They do not therefore have comparable reflective surfaces to normal glass and other materials. This significantly reduces the amount of glint. I also note that its effects are reduced by natural screens such as clouds and vegetative screening and by distance. Taking

all of these factors into account, I accept that the potential for significant impacts on motorists/tourists travelling along the R628 and on the residential amenities of dwelling houses is negligible.

4. Impacts on Residential Amenity

The appellants contend that there will be impacts on residential amenity associated with noise and concerns have been raised regarding potential impacts on the local water supply arising from the development.

Noise associated with construction will impact on residents closest to the site.

However, having regard to the limited and generally non-intrusive nature of the works and their limited duration, I consider these temporary impacts are acceptable.

As noted in the application documents the solar farm will operate without any moving parts and the PV panels do not emit noise. Noise will be emitted from the transformer and inverter stations, which will be located along the eastern/western site boundaries. These will be housed within prefabricated structures/delivery station which will have insulating properties. The solar farm will only operate during daytime and consequently there will be no noise emissions during evening/ nighttime. Having regard to the low level of noise that will be generated, the separation distance to dwellings (>300m) and the daytime operation of the solar farm, when other noise sources such as traffic and farm machinery will contribute to the noise environment, I consider that that impacts arising will be negligible and insignificant.

The appellants state that the local water supply for the area is abstracted from the River Bride downstream of the site and concerns are raised regarding potential pollution from leakage of chemicals from the solar panels and contamination due to run-off during construction.

There will be no emissions during the operational stage which could impact on the water environment. During construction, there is potential for sediment and other polluting matter to impact on water quality (discussed in more detail below). Having regard to the limited nature of the works and the lack of direct hydrological connectivity between the site and the River Bride, the potential for direct impacts on water quality in the river are negligible. I note that the existing drainage system on the site will be maintained and that the works will be confined to the existing field, with a buffer maintained between the site and the River Bride. There will be no direct

discharges to the watercourse and mitigation will be achieved by adherence to best practice construction methodologies to protect water.

With regard to the leakage of chemicals from the solar panels, whilst there are documented environmental risks associated with the manufacture of the panels and their ultimate disposal, I am not aware of similar risks associated with the day to day operation of a solar farm.

5. Landscape & Visual Impact/Tourism

It is contended by the appellants that solar farms are out of character with the scenic amenities of the rural area and that the landscape that attracts tourists should be protected. Concerns are also raised regarding the cumulative impact of solar farms proposed in the area.

The site is not located in an area of high scenic amenity. It is located within a 'Broad Fertile Lowland Valleys' landscape character type which is considered to have a medium landscape value, with medium landscape sensitivity and local landscape importance. There are no designated views or designated scenic routes in the vicinity.

It site is located in gentle rolling topography and slopes gradually from north to south. The site is largely enclosed by field boundaries formed by trees/hedgerows and there is woodland to the east and south. The site is recessed from the local road to the north and there are no open views into the site from this loaction. Intermittent views will be available along the road network where gaps occur in vegetation and between houses. Views into the site from the northeast, east and southeast will be screened by existing woodland. There will be no views of the site from the surrounding villages. In a local context, the solar farm, which will include solar arrays extending up to 3.5m above ground level, will result in minimal visual intrusion.

There is an elevated ridgeline to the south which is traversed by the R628 Regional Road. From here the northern section of the site will be visible from the road network and adjacent residences, which are elevated significantly above the surrounding countryside. Views from the road are interrupted by high roadside vegetation and intermittent houses. Expansive views over the valley are available from some of the dwellings. However, the site is enclosed to a large degree by boundary vegetation. I

accept the conclusion reached by the planning officer that the site will be read against the backdrop of existing vegetation and will not detract significantly from the visual amenities of the area.

Having regard to the location of the development outside the designated high value landscapes in the county and the low impact nature of the development, I consider that the landscape has the ability to absorb the solar farm without resulting in significant adverse impacts on the visual amenities of the area. Whilst Castlelyons and Bridesbridge contain attractions which may be of interest to tourists (such as Castlelyons Castle), there is no direct intervisibility between the site and these villages. I do not consider that intermittent views of the site from the road network in the vicinity would deter tourists from visiting the area. Ballyvolane House and other accommodation referred to by the appellant are at a significant remove from the appeal site and will not be impacted by the proposed development.

It is also contended that the perimeter fence reinforces the commercial nature of the proposed development in the rural landscape. I note that the wire mesh fence will be painted green which will reduce its impact in the landscape. It will be placed behind the existing hedgerows that enclose the site and which will also be maintained.

6. Archaeology

The appellants raise issues regarding the potential for destruction of archaeological artefacts during construction and the absence of a geophysical survey as requested at further information stage.

Recent Internal Guidance to provide the National Monument Service staff with specific guidance on how to approach solar farm development (Solar Farm Developments – Internal Guidance Document National Monuments Service, November 2016- copy attached) states that requests for archaeological assessment must be tailored to the circumstances of the case. It cautions against blanket requests for geo-physical survey or archaeological testing across the whole area of a site, stating that such requests should be based on specific or verifiable indicators of archaeological potential. It states that conditions may be attached to a planning permission providing for geo-physical survey and/or archaeological testing of areas of archaeological potential (e.g. areas in proximity to known archaeological monuments or of potential archaeological features)

The archaeological assessment submitted in response to the further information request identified 24 no. sites of archaeological/cultural heritage significance within a 1km study area of the site. The locations of the sites are identified in Fig 2 and a description is provided in Appendix 1 of the report. No archaeological sites were identified within the site, but it was noted that a townland boundary bordered the site (CH024) to the east. It is acknowledged that the potential exists for subsurface archaeology.

To mitigate potential impacts on any subsurface archaeology, standard mitigation measures are proposed including archaeological monitoring of groundworks by a qualified archaeologist and minimisation of ground disturbance. A 9m wide segment of the townland boundary will be removed to facilitate construction, which will result in a direct physical impact. It is proposed that the removal of the wall will be monitored and recorded by a suitably qualified archaeologist. Subject to the appropriate re-instatement of the boundary following construction, I accept that significant adverse impacts will not arise.

The Archaeologist Report of 3/4/17 does not accept all of the conclusions reached in the archaeological assessment, noting that the adjacent townland of Deerpark would have been part of the design landscape associated with Castlelyons Castle/house and should not be dismissed as a common feature. It is stated that while there are no known archaeological sites within the solar farm site, given the archaeological heritage in the surrounding landscape, there are sufficient archaeological indicators for the potential for subsurface archaeology. It is recommended that a geophysical survey be carried out (Condition No 3 of the planning authority's decision).

I would point out to the Board that the site comprises an area of 8.86 ha. The construction effort will involve minimal physical intrusion. The metal frames supporting the solar panels are anchored by piles. It is estimated that the maximum zone of disturbance is 0.04 sq.m per anchor. A total of 6,000 on a site of 8.86 ha would constitute 240 sq. m and less than 1% of the site. There are no specific or verifiable indicators of archaeological potential to warrant geophysical testing across the site.

I would also point out to the Board that there has been significant intervention on the subject lands (deep ploughing) and the lands immediately to the east are planted

with commercial forestry. Subject to archaeological monitoring of groundworks, I consider that adequate protection will be afforded to archaeological heritage.

7. Flooding

It is accepted that an area to the south west side of the site may potentially be subject to flooding. As noted in the submissions, the area is identified in the draft PRFA Flood Maps and may be prone to a 1% Annual Exceedance Probability. According to the OPW the maps are for indicative purposes only and should not be used as the sole basis for making decisions on planning applications.

There is a difference of opinion between the applicant and the appellants regarding historical flooding. The appellants argument that the site is subject to flooding has not been substantiated. The applicant states that while there are poor ground conditions at the boundary with the commercial woodlands to the south, this does not constitute evidence of flood risk. It is noted that the site was inspected during adverse weather conditions and after sustained rainfall and was not subject to any flooding from the River Bride. It was acknowledged that drains on the site did require maintenance. I note that there are no historical flood events recorded on the site by the OPW, the closest one being in Bridesbridge to the east.

The solar arrays would be located above ground level and floodplain flows, should they arise, would run freely between the open metal frames of the array support structures, without any reduction in the floodplain. No works are proposed in the southwestern corner of the site, which is the area identified as at flood risk. I note that the access track will terminate along the eastern boundary and consequently there will be no stripping of topsoil in the southern section of the site. A buffer zone of in excess of 80m will be maintained between the river and the closest set of arrays.

The proposed development is designed to ensure that increased/accelerated run-off rates will not occur which could contribute to flood risk in the site. The existing drainage regime will be maintained and the arrays will be placed above ground level with grass maintained beneath the panels and the rows of arrays, allowing run-off rates to be maintained close to natural run-off rates.

There is no potential for debris transported by floodwaters to enter the site and cause damage to the arrays. A 2m wire fence coupled with intervening screening will prevent material from entering the site in the event of a flood event.

Having regard to the nature of the development proposed I consider that the Board can be satisfied that the proposed development will not exacerbate or contribute to flooding.

8. Appropriate Assessment

The Stage 1 Screening Report for Appropriate Assessment identified designated sites within 10km of the subject site (not 15km as per DoEHLG guidance). The closest is the Blackwater River Cork/Waterford SAC, located c 35m to the south of the site, which is associated with the River Bride, a tributary of the River Blackwater. The other Natura 2000 site in the vicinity is the Blackwater Callows SPA, located at 7.2km distance.

The River Blackwater (Cork/Waterford) SAC (Site Code 002170) is a large site and of considerable conservation significance for plant and animal species that are listed on Annex 1 and 11 of the EU Habitats Directive. Site specific conservation objectives have been published for the site which are *'to maintain/restore the favourable conservation condition of the features of conservation interest'*.

The Blackwater Callows SPA (Site Code 004094) is located to the north of the site between Fermoy (Co Cork) and Lismore (Co Waterford). The site is selected for the following bird species; Whopper Swan, Wigeon, Black-tailed Godwit and Wetlands and Waterbirds. Site specific conservation objectives have not been published for the site. The generic objectives are

to 'maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for the SPA', and

to 'maintain or restore the favourable condition of the wetland habitat at Blackwater Callows SPA as a resource for the regularly occurring migratory waterbirds that utilise it'.

The proposed development will take place within the confines of a large field which is currently in agricultural use. The site slopes gently towards the south and the River Bride. I note that there are no ditches/drains linking the site to the River Bride, but

that due to its proximity to the river and that the southwestern corner of the site may be prone to occasional flooding (PFRA mapping), a hydrological link is assumed.

There are no Annex 1 habitats present within the site boundary. There will be no works outside the boundaries of the site with the potential to result in direct impacts on the SAC or its qualifying interests. There will be no encroachment into the SAC or loss/fragmentation of any qualifying habitats. The only potential impacts that could arise would be from the discharge of silt laden/polluted water during construction to the River Bride, which could impact on aquatic qualifying features of the SAC including River, Brook and Sea Lamprey, Salmon, Freshwater Pearl Mussel etc.

The construction effort, which includes some minor earthworks and will involve temporary soil storage, has the potential to cause temporary siltation of watercourses. A temporary storage area for excavated topsoil will be provided in the temporary construction compound to be established in the northern section of the site adjacent to the delivery station (location shown in CMP) and > 400m from the SAC.

There are no waste water disposal requirements associated with the development and surface water will be accommodated within the existing drainage regime. There will be no direct drainage between the development site and the River Bride/SAC.

The access track will culminate along the eastern site boundary (Inverter/Transformer Station No 2) and will not extend into the southern area of the site. Therefore, there will be no soil stripping or storage of soil in the area proximate to the SAC (130m) or within the area identified as susceptible to potential flooding. Works will be scheduled to coincide with the drier months of the year (March-October) and standard best practice measures are outlined in the CMP to prevent the migration of sediment and polluting matter to water.

Having regard to the limited nature and duration of the construction works which involves minimal ground disturbance, the lack of direct hydrological connection between the site and the SAC, the maintenance of the existing drainage regime within the site and the buffer that will be maintained between the works and the SAC, I consider that any potential impacts that may arise can be effectively mitigated using recognised best practice and well established measures to protect water quality.

In terms of operational impacts, there will be no emissions to ground, water or air. The arrays panels will be placed above ground level with separation distances between the array rows, allowing vegetation to grow and maintaining natural conditions. The panels will also be placed at an angle of 15 degrees ensuring that accelerated rates of run-off do not occur and that greenfield run-off conditions are largely maintained. Whilst the development site is potentially within the flood plain of the River Bride, the panels will be located above ground and no hard standing areas or access tracks will be located in the southern section of the site. There will therefore be no removal of flood storage in the River Bride catchment and no indirect impacts on the SAC downstream of the proposed development

In terms of impacts on mammalian species, Otter is identified as a qualifying species of the SAC that may frequent the site. It is found in a diverse range of habitats, from small streams to large rivers, estuaries etc. The River Bride would provide a suitable habitat. Whilst Otter tends to occur within the immediate area of riparian vegetation close to streams and rivers they can be found some distance from the aquatic environment. I note that no signs of the species were recorded during site visits.

There will be no interference with bank side vegetation or loss of aquatic habitat as a result of the development. All works will be maintained within the existing field boundaries. The species is more active at night and therefore unlikely to be disturbed by noise and general construction activity, which will take place during the daytime. Having regard to the presence of similar habitat in close vicinity and the limited duration of construction works, I do not consider that the construction phase of the development is likely to cause significant disturbance/displacement of this species. I note that mammal access points will be maintained in the perimeter fence during the operational stage which coupled with the lack of permanent staff on the site will ensure that significant impacts will not occur.

I would point out to the Board that one of the main threats to the SAC and current damaging activity identified by NPWS includes the high input of nutrients into the river system from agricultural activity. The site has and continues to be used for tillage purposes, which would have been subject to regular ploughing/ application of fertilisers etc which would pose a significantly greater risk of siltation/nutrient release run-off to water than the proposed development.

The Ecological Impact Assessment noted that 13 bird species were noted during the site visit. No Annex 1 species were recorded on the site but it was noted that Kingfisher (Annex 1) are known to breed along the River Bride. A further five Annex 1 species were recorded in the 10km grid square on which the site is located e.g. Corncrake, Golden Plover, Peregrine Falcon, Little Egret and Short-eared Owl.

The Blackwater Callows SPA is located 7.2km from the site. The current land use on the site (tillage) is not the favoured habitat of any Annex 1 species for which the site is designated. There is no evidence that any of these species listed frequent the site. Kingfisher, whilst not a qualifying interest of the SPA, will continue to use the riparian zone associated with the river and its nesting habitat (banks of the river) and foraging habitat will not be impacted during the construction or operational phases of the development.

I am not aware of any development, existing or proposed, in the vicinity which could give rise to cumulative impacts.

Having regard to the nature and scale of the development involving minimal ground works and with no direct hydrological links between the site and Natura 2000 sites, I consider that the proposed development either alone, or, in combination with other plans or projects, would not be likely to have significant effect on the Blackwater River (Cork/Waterford) SAC, the Blackwater Callows SPA or any other European Site, in view of the sites conservation objectives and that, therefore, a Stage 11 Appropriate Assessment and the submission of a Natura Impact Statement is not required.

9. Environmental Impact Assessment

The proposed development falls below the threshold levels in Schedule 5 of the Planning and Development Regulations, 2001 as amended. Notwithstanding the proximity of the Natura 2000, having regard to the characteristics of the proposed development, the limited nature of the development (including civil works), the lack of direct connectivity to the designated site and the absence of any emissions from the development, it is concluded that the development is not likely to result in significant

impacts on the environment to warrant the submission of a sub-threshold EIS under Article 103 of the Regulations.

10. Other matters

The appellants have raised concerns regarding the loss of high value agricultural land and I accept that such projects would be more appropriately located on more marginal land. I do note that the site can continue to be used for agricultural purposes and that the area surrounding and underneath the panels can continue to be grazed by small livestock, such as sheep.

The applicant has raised issues regarding the number of applications for solar farms in the vicinity. I note that Reg Ref No 16/4290 refers to a previous application on the subject site which was refused. I note that 16/4570 for a 5 MW solar farm at Corrin/Kill-Saint-Anne to the north of the site is currently on appeal and a decision has not yet been issued by the Board (PL04.248278) and an application for a 5MW farm at Mohera (16/4578) to the north-east has been withdrawn.

Whilst there is a difference of opinion regarding the level of public consultation in relation to the project, it is clear that local residents were aware of the application and third party rights have not been compromised in any way.

I consider that the issues raised regarding health and safety are unfounded. Issues regarding fire risk have been raised in previous appeal for similar development and not considered to be a significant issue by the Board.

11. Recommendation

Having considered the contents of the planning application, the decision of the planning authority, the further information received by the Board, the provisions of the development plan, the grounds of appeal and the responses thereto, my inspection of the site and my assessment of the planning issues, I recommend that permission be granted for the development for the reasons and considerations set out below

Reasons and Considerations

Having regard to the nature and scale of the proposed development, the provisions of the current Cork County Development Plan, 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 solar farm would not be seriously injurious to the visual and residential amenities of the area or depreciate the value of property in the vicinity, would not endanger human health or the environment, would not contribute to, or, exacerbate flooding, and would be acceptable in terms of traffic safety and convenience. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application as amended by the further plans and particulars submitted on the 13th day of March 2017, 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 interests of clarity.

2. The period during which the development hereby permitted shall 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 permission in excess of five years.

3. The permission shall be for a period of 25 years from the date of commissioning of the solar array. The solar array 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. Within one month of the completion of construction, the access route to be used for construction shall be permanently closed and restored to its original condition, to details to be submitted to and agreed in writing with the planning authority prior to commencement of the development.

Reason: In the interests of clarity.

5. Water supply and drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works and services.

Reason: In the interests of public health.

6. The proposed development shall be undertaken in compliance with the environmental commitments made in the documentation supporting the application.

Reason: To protect the environment.

7. The gap created in the hedgerow to facilitate the construction of the access route to be used during construction shall be reinstated using indigenous trees/hedgerow using similar species within the first planting season following the completion of construction. All landscaping, including augmentation of existing boundary trees and hedgerows, shall be planted to the written satisfaction of the planning authority, prior to commencement of the development. Any trees or hedgerow that are removed, die or become seriously damaged or diseased within five years from planting shall be replanted within the next planting season by trees or hedging of similar size and species unless otherwise agreed in writing with the planning authority. Existing field boundaries including hedgerows and tress shall be retained.

Reason: In the interest of biodiversity, the visual amenities of the area, and the amenities of dwellings in the vicinity.

8. The inverter/transformer and delivery stations and the perimeter fence shall be green in colour.

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

9. (i) No artificial lighting shall be installed or operated on site unless authorised by a prior grant of permission.
- (ii) CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property or the road.
- (iii) Each fencing panel shall be erected such that for a minimum of 300mm of its length, its bottom edge is no less than 150 mm from ground level.
- (iv) The solar panel shall have driven or screw pile foundations only, unless otherwise agreed in writing with the planning authority.
- (v) Cables within the site shall be located underground.

Reason: In the interests of clarity, of visual and residential amenity, traffic safety, and to allow wildlife to continue to have access and through the site.

10. (i) 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.
- (ii) On full or partial decommissioning of the solar array, or if the solar array ceases operation for a period of more than one year, the site 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.

11. The developer shall facilitate the archaeological appraisal of the site and shall provide for the preservation, recording and protection of archaeological materials or features which may exist within the site. In this regard the developer shall-

(a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development,

(b) employ a suitably-qualified archaeologist prior to commencement of development. The archaeologist shall assess the site and monitor all site development

The assessment shall address the following issues:

(i) the nature and location of archaeological material on the site, and

(ii) the impact of the proposed development on such archaeological material.

A report, containing the results of the assessment, shall be submitted to the planning authority and, arising from this assessment, the developer shall agree in writing with the planning authority details regarding any **further** archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation (in situ or by record) and protection of any remains that may exist within the site.

12. The portion of the townland boundary that will be removed to facilitate construction access shall be monitored, recorded and reinstated under the supervision of the on-site archaeologist.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation (in situ or by record) and protection of any remains that may exist within the site.

13. 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. The plan shall provide details of the intended construction practice for the development, including

- (a) details of site security fencing and hoardings,
- (b) 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) a traffic management plan incorporating haul routes for materials, measures to ensure safe ingress/egress from the construction site and including measures to obviate queuing of construction traffic on the adjoining road network,
- (d) measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network,
- (e) details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels,
- (f) containment of all construction-related fuel and oil within specifically constructed bunds to ensure that fuel spillages are fully contained; such bunds shall be roofed to exclude rainwater.

- (g) details of on-site re-fuelling arrangements, including use of drip trays,
- (h) details of how it is proposed to manage excavated soil, and
- (i) 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.

A record of daily checks that the works are being undertaken in accordance with the Construction Management Plan shall be kept for inspection by the planning authority.

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

14. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or other security to secure the satisfactory reinstatement of the site as envisaged at Condition 9 above. 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 the satisfactory reinstatement of the site.

15. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the public roads that may be damaged by construction transport serving the development 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 the reinstatement of public roads that may be damaged by construction traffic.

16. 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 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 this permission.

Breda Gannon
Senior Planning Inspector

22nd August 2017.