



An  
Bord  
Pleanála

## Inspector's Report PL93.246902

---

<b>Development</b>	10 year permission for construction of a solar PV energy development
<b>Location</b>	Drumroe, Cappoquin, Co. Waterford
<b>Planning Authority</b>	Waterford City and County Council.
<b>Planning Authority Reg. Ref.</b>	16/126.
<b>Applicant(s)</b>	Highfield Solar Limited
<b>Type of Application</b>	Permission
<b>Planning Authority Decision</b>	Grant with conditions
<b>Type of Appeal</b>	Third Party
<b>Appellant(s)</b>	Dennis & Catherine Butcher
<b>Observer(s)</b>	None
<b>Date of Site Inspection</b>	20th September 2016
<b>Inspector</b>	Philip Davis

## Contents

1.0 Introduction .....	4
2.0 Site Location and Description .....	4
2.1. Drumroe townland.....	4
2.2. The appeal site.....	4
3.0 Proposed Development .....	5
4.0 Planning Authority Decision.....	5
4.1. Decision .....	5
4.2. Planning Authority Reports .....	6
4.3. Other Technical Reports .....	6
4.4. Prescribed Bodies.....	7
4.5. Third Party Observations .....	7
5.0 Planning History.....	7
6.0 Policy Context.....	8
6.1. Development Plan.....	8
6.2. Natural Heritage Designations .....	8
7.0 The Appeal .....	8
7.1. Grounds of Appeal .....	8
7.2. Applicant Response .....	9
7.3. Planning Authority Response.....	11
7.4. Observations.....	11
8.0 Assessment.....	11
8.1. Principle of development.....	11
8.2. EIA requirement .....	12

8.3. Residential amenity.....	13
8.4. Glint and glare.....	14
8.5. Visual impacts.....	16
8.6. Cultural heritage.....	17
8.7. Traffic impacts and safety .....	17
8.8. Drainage and flooding .....	18
8.9. EMT .....	18
8.10. Construction impacts .....	19
8.11. Grid connection.....	19
8.12. Appropriate assessment and ecology .....	19
8.13. Financial contribution.....	21
8.14. Conclusions .....	21
9.0 Recommendation.....	21
10.0 Reasons and Considerations .....	21
11.0 Conditions .....	22

## **1.0 Introduction**

- 1.1. This appeal is by local residents against the decision of the planning authority to grant permission for a solar farm development in open farmlands in west County Waterford. The grounds of appeal relate to the lack of information relating to the impacts of a solar farm and the absence of assurances on a number of detailed issues.

## **2.0 Site Location and Description**

### **2.1. Drumroe townland**

Drumroe is located in a shallow depression in open countryside in west county Waterford, just over 4 km east-south-east of the small historic town of Cappoquin, which is situated on high ground above the River Blackwater. The townland is mostly south of the N72 Dungarvan to Lismore national road. The area is characterised by medium to large fields in use for grazing or occasional tillage bounded by ditches with high unkempt hedgerows with a gently undulating topography. The N72 is the main route through the area, running east to west with the R671 running north to south, just east of Drumroe. The N72 is single carriageway with an intermittent narrow hard shoulder. There are a number of minor L-roads in the area, including a narrow cul-de-sac which was apparently a former pilgrimage route running in a west to east direction to the south of the townland. The area is settled by a scattering of farmhouses and occasional dwellings along the road network.

### **2.2. The appeal site.**

The appeal site, with a site area given as 28.8 hectares, is an irregularly shaped area of grazing land on a gently south facing slope – it drops between 5 and 10 metres north to south. There is a high point at the western side of the site of 31 metres AOD. It is part of a larger landholding consisting of several large fields between the N72 and a cul-de-sac L-road to the south. The landholding runs up to

the N72 but excludes the handful of dwellings along the road except for one apparently empty bungalow and appears to be around 60 hectares in extent (the full area is not given on the application form). The appeal site is the southern part of the landholding, in a large field subdivided by electric fencing that appears to have been amalgamated by removing ditches and hedgerows from a previous network of fields. It is in grazing use but seems to have been used for beet tillage in the past. The appeal site also includes a track running north through the farmland, providing access to the N72 next to the empty bungalow. The site is bounded by ditches and high hedgerows and some electric fencing. The southern boundary runs along a narrow country road, close to where it terminates at a farmhouse (it continues as a track running to the south).

### **3.0 Proposed Development**

The proposed development is described on the site notice as follows:

*A 10 year permission for the construction of a solar PV Energy development within a total site area of up to 28.8 hectares, to include one single storey electrical substation building and associated compound, electrical transformer/inverter station modules, solar PV panels ground mounted on steel support structures, access roads, fencing and associated electrical cabling, ducting and ancillary infrastructure.*

It is described in subsequent correspondence of having a maximum possible capacity of 12.5 MW.

### **4.0 Planning Authority Decision**

#### **4.1. Decision**

The planning authority decided to grant permission subject to 11 no conditions. Most are standard conditions. C.2 states that the permission is for 10 years, and the operational period shall be 25 years. I note that there was an error in one of the dates stated in Condition 1.

## 4.2. Planning Authority Reports

There are two planning reports on file. The first states that the site is in an area zoned agriculture. The area is not within a landscape designated area. It is considered that national and regional policy on renewable energy applies. Policies on the 'green economy', energy, landscape, climate change, flooding and access in the County Development Plan 2011-2017 are considered relevant. It is noted that a report is submitted on glint and glare – the planning authority is satisfied that this would not be significant in planning terms, nor would the loss of agricultural land. Other issues are considered acceptable subject to conditions. Additional information was sought on the output capacity of the proposed facility.

The second report states that they were advised that the maximum export capacity of the proposed solar farm would be 12.5 MW, but applying the development contribution as set out in the Scheme would be unreasonable, so it is reduced to the rate for wind farms – i.e. €125,000.

## 4.3. Other Technical Reports

### Planning application

In addition to plans and specifications, the planning application included:

- letters of permission from the landowners;
- A planning report outlining the purposes and background of the application;
- a Traffic Management Plan for the construction works (all deliveries to be via the N72);
- a Flood Hazard Map which indicates no flooding apart from the N72 close to the access;
- Geology mapping;
- An Archaeological Assessment. – which notes the boundary with an ancient trackway associated with St. Declan and recommends archaeological monitoring during construction;
- a 'Glint and Glare' assessment which concludes that due to the flat topography and surrounding hedgerow any negative impacts are unlikely;

- a Landscape and Visual Impact Assessment, which notes there are no designated landscapes in the vicinity and concludes that visual impacts will be very limited;
- An indicative grid connection route (not part of the application) – I note that this plan was incorrectly photocopied so the Board may wish to request a full copy;
- An Ecological Assessment, which concludes that none of the main habitats to be impacted are of significant value (primarily improved grassland and arable land). It is noted that the nearest European site is the Blackwater River and Estuary SAC, which includes a tributary about 1 km south of the site
- An AA screening report which concludes that there would be no significant effects on the Natura 2000 network and so an NIA is not required.

#### **Other reports**

An AA Screening Assessment attached to the Planners report states that the site is c. 77 metres north of the Blackwater River SAC, but concludes that significant impacts can be ruled out, hence no NIA is required.

#### **4.4. Prescribed Bodies**

##### ***Department of Arts, Heritage and the Gaeltacht.***

Notes the proximity of a recorded monument, WA029-014, an ancient route.

Requests a condition relating to archaeological monitoring.

#### **4.5. Third Party Observations**

A number of letters are on file from the appellant and others making observations and objections to the proposed development.

#### **5.0 Planning History**

There are no records on file for planning applications relating to the site. There are a number of relevant recent appeals relating to similar solar farms in Waterford and other counties, including **PL26.247366** for 88,000 square metres of panels near Baldwinstown, Wexford (no decision yet); **PL27.246527** for 13 hectares of solar

panels near Avoca in county Wicklow, (granted with conditions); **PL26.247217** for nearly 99 hectares in Tomhaggard, Wexford (no decision yet); **PL26.247179** in Clonroche, Wexford for nearly 20 hectares (no decision yet); **PL26.247176**, Enniscorthy, Co. Wexford, 12 hectares of solar (no decision yet); **PL92.247443** near Caher, Tipperary for 32,00 square metres (no decision yet); **PL10.246876** near Belview, Kilkenny for solar farm (no decision yet); **PL04.245862** for 33,000 square metres of solar panels near Coachford, Cork (granted with revised conditions); **PL04.233539** near Lissarda, Cork (granted with revised conditions); **PL26.244351** near Tintern, Wexford for a 5MW solar farm (granted with revised conditions); and **PL93.247310** near Tramore, County Waterford (no decision yet).

## 6.0 Policy Context

### 6.1. Development Plan

The site is in open countryside without any specific zoning designation, it is considered agricultural land and is not designated for having any specific landscape or heritage sensitivities. The closest zoned development lands are in Cappoquin, just over 4km distant. The relevant policies are set out in the **Waterford City and County Renewable Energy Strategy 2016-2030**, which is an adopted variation on all City and County Development Plans within Waterford county.

### 6.2. Natural Heritage Designations

There is one Natura 2000 site in the vicinity – the Blackwater River SAC. A tributary of the Blackwater (part of the designated area) runs just over 750 metres south of the site.

## 7.0 The Appeal

### 7.1. Grounds of Appeal

- It is disputed that the planning authorities use of guidance relating to wind farms in assessing the application is appropriate – it is submitted that the



proposed development is very different in nature and may have greater impacts.

- It is submitted that the planning authority did not adequately address either the visual impact of the proposed solar farm or the impact of construction (noise, vibration, etc.) – the appellant’s dwelling is within 100 metres of the site.
- It is argued that there should have been a consideration of alternatives.
- It is submitted that the application was decided in the absence of a relevant national or local energy strategy.
- It is argued that the application should have been subject to an EIA.
- It is submitted that the specifics of the visual impact from their property (on the minor road south of the site) was never addressed by the planning authority.
- It is argued that the potential impact on their property of glint and glare was not addressed in the Glint and Glare Report.
- The possibility of using the energy locally is questioned.
- Concerns are expressed at the proposals for access.
- Concerns are expressed at the lack of information on surface water management (including contamination) issues.
- The lack of information on connection requirements is noted.
- It is questioned as to why permission for 10 years should be required.
- Concerns are expressed at health and safety, including EMF issues and the potential for disruption of amateur radio.

## **7.2. Applicant Response**

- It is denied that the application is dependent on either assumptions relating to wind farms, or dependent on UK reports/guidance. Reference is made to the Inspectors report in appeal PL26.244351.
- It is argued that the planning authority carried out a full and proper assessment of the visual impact of the proposed development.

- With regard to construction impacts, it is argued that construction works will take place over a very limited period (16 weeks) and will be subject to a construction management plan as per condition 6 of the planning authority decision.
- It is noted with regard to the appellant's view on spacing that the proposed development will include sheep grazing to achieve what is claimed to be a balanced use of the lands.
- It is noted that the potential for solar energy development in County Waterford is outline in the Renewable Energy Strategy for Waterford City and County 2016-2030.
- With regard to EIA, the Board is referred to the planning authority's considerations on this matter.
- It is denied that the application with related submissions on glare and glint was made on an assumption of the site being flat.
- It is clarified that it is the intention to connect to the national energy grid.
- With regard to access arrangements, the Board is referred to the planning authority's assessment of the access.
- It is noted that the planning authority conditioned issues relating to surface water run-off.
- It is argued that the methodology for solar farm installation is well established and there is no basis for considering that there are significant issues with regard to contamination or impacts on water supply.
- With regard to grid connections, it is stated that the applicants will be subject to the requirements of ESB Networks.
- It is submitted that a 10-year permission is required for the reasons set out in the original application.
- With regard to archaeology, it is noted that the DoAHG was consulted and there is a condition relating to this.

- A document relating to EMF issues is attached in the appendix – it is submitted that solar panels produce very low EMF's and is lower than in some household devices.
- As a final point, the Board is referred to correspondence with regard to condition no. 2. It is requested that the wording of condition no. 2 be updated to specifically reference 12.5MW of maximum export capacity.

The response includes a number of appendices in support of the arguments.

### 7.3. **Planning Authority Response**

The planning authority stated that they had no further comments to make and refers the Board to the planning report.

### 7.4. **Observations**

#### ***Commission for Energy Regulation***

The appeal is acknowledged.

## 8.0 **Assessment**

### 8.1. **Principle of development**

The appeal site is in open agricultural countryside without any specific zoning designation. It is not in any areas zoned for landscape protection. The only designation in the immediate vicinity is the minor road which forms the southern boundary – this is a recorded ancient monument, an old pilgrim route.

National policy (within the EU context) on renewable energy is set out in the **National Renewable Energy Action Plan (NREAP)** submitted under Article 4 of Directive 2009/28/EC, which sets out targets for increasing the proportion of renewable energy in the national energy mix. This sets out (Section 3.1) a target of 16% of all energy from renewable sources of 16% by 2020 (up from 3.1% in 2005). It does not provide specific target figures for solar PV. In addition, the 2015 White Paper '**Ireland's Transition to a low carbon energy future 2015-2030**' sets out targets for the further development of the renewable energy sector. This White

Paper notes the potential importance of PV technology (paragraph 137), but does not provide specific targets. There are no specific national or regional planning guidelines relating to the locational aspects of solar PV farms. The Sustainable Energy Authority of Ireland have a best practice guide for solar electricity and the grid, but it does not address locational or planning aspects in detail.

Waterford County Council have adapted a '**Renewable Energy Strategy for Waterford City & County 2016-2030**'. This is intended as a statutory variation on the three main Development Plans for the County – the Waterford and Dungarvan city/town plans, and the County Development Plan. Section 5.0 of this Strategy addresses solar energy. It notes that Waterford is in the top 15% of solar resource in Ireland, and describes it as having 'good potential'. Table 3.3 of the Strategy provides a target of 84.1 MW of solar PV (from zero at the moment). It projects that this would require just over 168 hectares of land. It does not provide any guidance on the best locations. It notes the potential disadvantages (table 5.4) as land take, impact on crop production, glint/glare issues and possible hydrological effects.

I would conclude from this that there is a general presumption in favour in both national and local policy for developing commercial scale commercial solar farms in suitable areas on agricultural land, subject to normal planning and environmental considerations.

I would note in this regard that as solar farms are likely to be dependent on both financial support from the government, and access agreements with ESB Networks, there would be a significant delay before it could potentially be brought to site. For this reason, I consider that a 10-year permission is reasonable within the policy context.

## 8.2. EIA requirement

The appellant has argued that a solar farm may require EIA. Photovoltaic solar farms are not listed as a specific use category under Schedule 5 of the 2001 Regulations as amended. Under Part 1, Article 2(a) includes:

*A thermal power station or other combustion installation with a heat output of 300 megawatts or more.*

The proposed development is for photovoltaics, so is not by any reasonable definition a 'thermal' power station and does not involve combustion, and will be of far lower capacity than 300 MW. I do not consider that any other categories under Part 1 apply. Under Part 2, Article 3(a) includes:

*Industrial installations for the production of electricity, steam and hot water not included in Part 1 of this Schedule with a heat output of 300 megawatts or more.*

My interpretation of 3(a) is that EIA may apply for power plants of a thermal design independent of the source of energy – i.e. if they produce '*electricity, steam **and** (my emphasis) hot water*'. I note that other non-thermal types of electricity generation such as hydroelectricity and wind power are specifically included in other subsections. Photovoltaics are **not** included. As the proposed development is for the production of electricity by way of direct solar power using photovoltaics and does not involve the production of heat or hot water, I conclude that it does not come within this category. In any event, total output will be far below the 300MW threshold and so would be sub-threshold if 3(a) applied. I conclude therefore that a photovoltaic (non-thermal) power station such as that proposed does not require a mandatory EIA as it does not come within any category in either Part 1 or Part 2 of Schedule 5 of the 2001 Regulations as amended. In addition, I note that the site is not on, or in the close vicinity of, a European site or NHA or other nature reserve or area of ecological interest. There are no other features of particular sensitivity on the site or the immediate vicinity. I therefore conclude that EIA is not mandatory for this proposed development and it does not come within the scope of Article 109 of the Regulations. I conclude that EIA is not required.

### 8.3. Residential amenity

The appeal site is in a predominantly rural area. There are four dwellings adjoining the N72 next to the applicants landholding, although they are at closest 200 metres from the area proposed for solar panels. The dwelling immediately adjoining the proposed entrance (there is currently an existing farm gate at this point) appears to be vacant and is within the landholding. The appellants live in Knockalahara, the townland to the south. This area is served by a cul-de sac minor road, terminating at a farmyard and dwelling – I assume this is the appellant's property. There are a

small number of dwellings further west along this minor road, but none are close to the appeal site. Due to the local topography, which falls gently north to south and north-west to south-east, I would consider that this dwelling is by far the most likely to suffer from any amenity impacts (if any) from the operation of the windfarm.

There are no national standards to assess solar PV proposals for amenity impacts. The UK policy document '*Renewable Energy Planning Guidance Note 2 – The Development of large scale (>50kW) solar PV arrays – Cornwall (UK) 2012*' provides some guidance, but does not provide any recommendations with regard to separation distances. It does identify glint and glare to be the most significant possible source of nuisance to house dwellers. I will address this issue in the relevant subsection below, and construction impacts further below.

I would conclude on the available evidence that the key issue for protecting local amenities is the control of unwanted glint and glare from panels. The individual units are of such a size and scale that I do not consider that there would be any overshadowing or other impact, and they would not generate noise or other forms of nuisance or disturbance beyond what would be typical for agricultural land.

#### **8.4. Glint and glare**

There is no Irish guidance on the potential impact of glint and glare from solar panels, and no practical experience. The UK guidance states (page 26):

*Glint may be produced as a direct reflection of the sun in the surface of the PV solar panel. It may be the source of the visual issues regarding viewer distraction. Glare is the continuous source of brightness, relative to diffused lighting. This is not a direct reflection of the sun, but rather a reflection of the bright sky around the sun. Glare is significantly less intense than glint.*

*Solar panels are designed to absorb, not reflect, irradiation. However the sensitivities associated with glint and glare, and the landscape/visual impact and the potential impact on aircraft safety, should not be underestimated. In some instances it may be necessary to seek a glint and glare assessment as part of a planning application. This may be particularly important if 'tracking' panels are proposed as these may cause differential diurnal and/or seasonal impacts. Discussions are ongoing with airport operators in Cornwall regarding the potential impact of large scale solar PV development.*

*The potential for PV panels, frames and supports to have a combined reflective quality should be assessed. This assessment needs to consider the likely reflective capacity of all the materials used in the construction of the solar farm.*

The application included a glint and glare assessment which concluded that due to its location and the presence of existing vegetative screening, it is 'unlikely to result in any significant glint effects on potentially positive receptors to the north, south, east and west of the site'. It recommends the planting of 3.5 metre high hedges around the site to minimise any possible impacts.

As the general fall of the land is to the south I would concur with the conclusions of the glint and glare study that any impact to the north is highly unlikely. There are relatively few viewpoints from public areas close to the site. The south-facing panels would be facing away from the houses along the N72, or the higher ground further north. There are no aerodromes in the vicinity so I do not consider that there is a need to address potential aircraft safety issues.

I would, however, be concerned about potential impacts on the dwelling immediately south-east of the site. It is, at its closest, 50 metres from the site boundary. Given its location relative to the panels, I would not consider it cannot be ruled out that in the evenings, when the sun would be to the south-west of the site, that there would not be a reflection towards this property. There is already a substantial hedgerow with mature trees next and around this dwelling, so I do not consider than any impact would be particularly serious, but having regard to the absence of firm evidence on possible impacts, as a matter of precaution I would recommend a condition such that no panel be placed within 100 metres of this property, and that the corner of this site be planted with trees to a depth of at least 50 metres.

I note that a precise assessment of possible glint and glimmer is not possible in the absence of details of the panels to be chosen. As the technology is advancing rapidly, I would consider that a requirement should be set by condition such that the final details be approved by the planning authority, and that the proposed final choice of panels be accompanied by a revised glint and glare report.

## 8.5. Visual impacts

The application was accompanied by a landscape assessment, which I consider to be reasonable and in accordance with guidelines for such assessments.

The appeal site is in an area of agricultural land which is generally robust and capable of absorbing modest scaled developments. It has no specific landscape designations in the development plan. The road to the south is part of an historic pilgrim route but there is no evidence that it is still used either by religious pilgrims or walkers. The road is a cul de sac, and the southern extension of the old path appears also to be a dead end. But it cannot be ruled out that at some time it could become used again for amenity or religious purposes. The proposed solar farm would be quite visible for anyone on this road, but the existing ditch and hedge is quite thick and so I do not consider that it would be particularly intrusive within a working agricultural landscape.

From the N72 the site is not particularly visible due to the houses, hedges and other buildings along this relatively featureless stretch of main road. The panels would face away from the road, so it would seem that only electrical apparatus near the entrance would be particularly visible. I do not consider that it would be intrusive.

I would consider the most sensitive part of the landscape to be the area around Cappoquin, some 4 km to the north-west. Cappoquin is an attractive town overlooking the Blackwater on an elevated south-facing site. The appeal site would not be visible from the Main Street or other streets, but Cappoquin House and demesne (known sometimes as Belmont), a very fine 18<sup>th</sup> – 19<sup>th</sup> Century house on high ground north of the town has extensive views over the wide landscape. This house and demesne is occasionally open to the public. I could not identify any direct viewpoints from around the entrance near the house, but I could not rule out that the site is directly visible from upper windows of the house. But it is most likely blocked by the fine mature oak trees in the grounds. There is also an orthodox monastery on Barracks Road to the east of Balmont – this is also on high ground and could have views towards the proposed solar farm.

Notwithstanding that the farm could be visible from viewpoints around Cappoquin, due to the orientation of the site and the panels, which would be facing south, I do not consider that they would constitute an intrusive feature on the landscape.



I would recommend a condition such that hedgerows with trees capable of growth to at least 3.5 metres be planted around all the site, including the northern parts where there is no boundary, in order to soften any long distance views.

## 8.6. Cultural heritage

There are no records of recorded ancient monuments or other structures on the site. It would seem that much, if not all the site was used previously for beet growing so there would have been significant ground disturbance. The application included a quite detailed archaeological report outlining existing knowledge about the site and the area – it concluded that there is no evidence of significant remains on the site but recommended archaeological monitoring.

The closest recorded ancient monument is WA029-014 which is the minor road. This is described on earlier OS maps as '*Boreen na Naomh*' and appears to have been an old pilgrim route or possibly part of network of ancient roads between Lismore and Ardmore and various pilgrim points in the area. From the old maps, it would appear to terminate close to a swallow hole (described as a 'cave' on older OS maps) about 500 metres south-east of the appeal site so it would seem possible that this was the point of interest for pilgrims. Notwithstanding this, there are no visible remains of the pilgrim route apart from the third class road itself and the path south, so I do not consider that it would have a direct impact.

As I have outlined above, the site may be visible from a number of important buildings, including Cappoquin House and its gardens, in and around the town. But I am satisfied that any impact on the setting would be very minor.

The DoAHG requested a condition for archaeological monitoring of the works. Having regard to the proximity to the recorded monument (the trackway), I consider this reasonable and recommend that it be set as a condition of permission.

## 8.7. Traffic impacts and safety

The operation of the site is likely to require just ongoing regular maintenance. The applicant has stated that maintenance access will be via both the N72 and the minor road from the south. There are existing agricultural entrances at both these ends. The access onto the N72 is to be widened and improved. The road at this end is

straight, with relatively good visibility in both directions. I consider it acceptable as a construction and maintenance access. While there will be a significant amount of traffic during the construction period, including possibly oversized loads during the operational period it seems unlikely that traffic would be any more than would be normal for an agricultural operation. It may, indeed, be less. While the road to the south is very narrow and substandard, it is used for normal agricultural operations for the farms in the area, so I would not consider its use for occasional maintenance works to be unacceptable.

#### **8.8. Drainage and flooding**

The site is not indicated on any sources as being prone to flooding – there are no watercourses on or near the site. The nearest stream is the Maghada River, about 400 metres to the east. This river disappears into a swallow hole, but I assume it is part of the catchment of the Blackwater.

There is no detailed modelling for the impact of run-off from solar panels. The site will still be used for sheep grazing, so there will be vegetation under the panels, although inevitably such a large area of coverage will alter storm flow from the site. But as land with a history of mixing arable and pasture, such changes would, I consider, not be out of the usual for agricultural land. As a precaution, I would recommend a condition such that SUDS principles be applied, with swales and ponds constructed if necessary to ensure run-off from the site is minimised.

#### **8.9. EMT**

The appellant has raised concerns about EMT emissions from the solar panels. The evidence submitted with this (and other appeals) indicates that due to the relatively low generating power per hectare, EMT emissions associated with solar farms are low, and would be concentrated around the transformer connecting to the grid. Any emissions would be similar to that associated with household electrical equipment or normal electrical power connections.

#### **8.10. Construction impacts**

The applicant submitted details on construction works, indicating that it would be at most a 16 week period, and that access will be via the N72. The works would involve the construction of foundation slabs for the solar panels, the erection of the panels, and associated works such as the upgrading of internal tracks. The dwelling most likely to be affected is the dwelling within the landholding next to the proposed access. This dwelling appears to be unoccupied. I would consider that any noise, dust, or other issues relating to construction would be similar to that for a mid-sized construction project, and subject to controls would not have amenity impacts beyond normal construction or agricultural operations. I consider that it can be controlled by way of a standard construction condition.

#### **8.11. Grid connection**

The proposed development does not include details of a grid connection, but provides an indicative plan showing a likely connection (this was incorrectly copied in the records supplied by the planning authority, the Board may wish to request this be sent again). There are overhead power lines crossing the northern part of the site, although it is not clear if these are sufficient capacity for the proposed output (12.5MW at most, equivalent to perhaps 3 modern wind turbines), but it seems unlikely that any large scale infrastructure would be required. As EIA is not mandatory and the proposed development does not fall within the requirements of Article 109 of the Regulations, I do not consider that an assessment of any possible grid connection is required. But I would note that having regard to the relatively low output, I would consider it very unlikely that infrastructure requirements for the solar farm would have a significant planning impact.

#### **8.12. Appropriate assessment and ecology**

The applicants provided an ecological report and AA screening assessment, the latter of which concluded that an NIS was not required.

The site is almost entirely grassland, with evidence of a network of hedgerows within the landholding having been removed in the past. The grassland appears to have relatively low ecological value – most value is in the boundary ditches and

hedgerows. The panels will involve some removal of grassland, but there will still be sheep grazing between and below the panels. I would consider that the establishment of new and strengthened hedgerows around the boundary, and the transition to low level sheep grazing would, if anything, improve the ecological value of the lands.

The nearest Natura 2000 site is the Blackwater River SAC, site code 002170. This is the only Natura 2000 site within 15km of the lands. This is an extensive SAC extending right through Cork and Waterford. Its conservation objectives relate to the protection of a range of riverine flora and fauna such as salmon, lamprey, crayfish and freshwater pearl mussel, also including mammals such as the otter and related habitats such as oak, alder, ash and yew woodlands. The site is within the catchment of the river and is close to the River Finisk, a tributary of the Blackwater, the bed and banks of which is part of the designated area. This is 900 metres at closest from the appeal site. The Maghada River, which is underground for part of its length, is closer to the site, but it is not designated – it most likely does connect to designated parts of the catchment via underground channels.

There are no identifiable watercourses on or adjoining the appeal site, but I assume that run-off flows to the Finisk via groundwater and through the local network of drainage ditches. There is therefore a potential pathway for impacts on the designated watercourse. However, I am satisfied from the information provided that subject to conditions and standard construction/operational controls any impacts on either surface or subsurface water, either quantitative or qualitative, will be very minor with no reasonable possibility of measurable impacts on the designated watercourses. Any impacts from normal agricultural practices would likely be significantly greater.

I therefore consider that it is reasonable to conclude that on the basis of 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 no. 002170, or any other European site, in view of the sites conservation objectives, and so a stage 2 AA and submission of an NIS is not therefore required.

### **8.13. Financial contribution**

The proposed development is subject to a S.48 Development Contribution under the adopted Scheme, but I note from the planning report that it was considered that a literal application of the Scheme (which did not anticipate solar farms) would be unnecessarily burdensome upon the applicant. The Scheme allows for discretionary reductions in such circumstances and the planning authority applied this. I consider this to be reasonable, so I would recommend a standard financial contribution condition allowing the planning authority to calculate the required contribution as they see fit.

### **8.14. Conclusions**

I conclude that a 10-year permission for a solar farm on agricultural is a use consistent with national and local guidelines and plans and the site is suitable for such a use subject to conditions. The only significant alteration I would recommend is that a condition is set such that no panels be permitted within 100 metres of a dwelling, and that the south-eastern corner of the site (which adjoins a farmhouse and buildings) be vegetated with native trees to a depth of at least 50 metres to ensure there is no possible impact by way of glint or glare on this dwelling.

## **9.0 Recommendation**

I recommend that planning permission for the proposed solar farm be granted for the reasons and considerations set out below, subject to the conditions set out in the final schedule.

## **10.0 Reasons and Considerations**

Having regard to the provisions of the current development plan for the area (including the Waterford City and County Renewable Energy Strategy 2016-2030) and to the regional and national policy, it is considered that, subject to compliance with the conditions set out below, the proposed construction of a solar farm would not seriously injure the visual amenities of the area, the residential amenities of the

area, or the ecology of the area. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

## 11.0 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 1<sup>st</sup> of March 2016, as amended by additional plans and specifications submitted on the 4<sup>th</sup> April 2016 and the 13<sup>th</sup> June 2016, 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. No works shall commence without the submission for the approval of the planning authority final details for the chosen solar panels.

**Reason:** In the interest of clarity.

3. No solar panels shall be erected within 100 metres of a dwelling. All land within the applicants control within 100 metres of the dwelling to the south-east of the site shall be planted with native forest trees and shrubs.

**Reason:** In the interest of ensuring an adequate depth of vegetation to prevent any glint or glare or other impacts on residential amenity.

4. All structures including foundations hereby authorised shall be removed not later than 25 years from the date of commencement of the development, and the site reinstated unless planning permission has been granted for their retention for a further period prior to that date.

(b) Prior to commencement of development, a detailed restoration plan,

providing for removal of foundations and access roads to a specific timescale shall be submitted to the planning authority for written agreement. On full or partial decommissioning of the solar farm, or if the solar farm ceases operation for a period of more than one year, the solar arrays, including foundations, shall be dismantled and removed from the site. The site (including all access roads) shall be restored in accordance with the said plan and all decommissioned structures shall be removed within three months of decommissioning.

**Reason:** To enable the planning authority to consider the impact of the development over the stated time period, to enable the planning authority to review the operation of the solar farm having regard to the circumstances then prevailing, and in the interest of orderly development.

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

**Reason:** In the interest of visual and residential amenity.

6. 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 residential amenity and traffic safety.

7. The solar panels shall be fixed in place by way of driven pile or screw pile foundations only, unless otherwise authorised by a prior grant of planning permission.

**Reason:** In the interest of the long term viability of this agricultural land, and in order to minimise impacts on drainage patterns

8. All boundaries of the area identified for solar panels shall be bounded by a continuous hedgerow (except at permitted site accesses) consisting of native trees and hedging plants with species chosen that will grow to a minimum of 3.5 metres in height. Newly planted hedgerows shall be at

least 3 metres in depth.

**Reason:** In the interest of providing adequate screening to protect the rural amenities of the area.

9. All landscaping shall take place in the first planting season upon commencement of development and shall be in accordance with the scheme as submitted to the planning authority by way of further information. The landscaping and screening shall be maintained at regular intervals. Any trees or shrubs planted in accordance with this condition which are removed, die, become seriously damaged or diseased within two years of planting shall be replaced by trees or shrubs of similar size and species to those originally required to be planted.

**Reason:** In the interest of the amenities of this rural area.

10. Prior to the commencement of development, the developer shall submit for the agreement of the planning authority details for a SUDS drainage management system, including ponds and swales if necessary, to ensure that stormwater runoff does not exceed that normal for grassed agricultural lands.

**Reason:** In the interest of preventing flooding.

11. 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 noise management measures and off-site disposal of construction/demolition waste.

**Reason:** In the interest of public safety and residential amenity.

12. Site development and building works shall be carried out only between the hours of 0800 to 1900 Mondays to Fridays inclusive, between 0800 to



1400 hours on Saturdays and not at all on Sundays and public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.

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

- . 13. Cables from the solar arrays to the compound shall be located underground.

**Reason:** In the interest of visual amenity

14. 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.

15. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that 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 who shall monitor all site investigations and other excavation works, and

(c) provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove.

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 and protection of any remains that may exist

within the site.

16. 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 upon 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.

17. 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.

---

. Philip Davis

. Planning Inspector

7<sup>th</sup> November 2016