

Bord Pleanála

# Inspector's Report PL91.248066

Development	10 year permission for the development of a solar PV farm consisting of up to 35,582msq of solar panels on mounted steel frames, 1 no. substation 3 no. inverter cables, underground cable ducts and all associated works	
Location	Woodstown, Lisnagry, Co. Limerick	
Planning Authority	Limerick City and County Council	
Planning Authority Reg. Ref.	16/957	
Applicant(s)	Terra Solar	
Type of Application	Permission	
Planning Authority Decision	Grant	
Type of Appeal	Third Party	
Appellant(s)	Lisnagry Residents Opposing Solar	
Observer(s)	n/a	
Date of Site Inspection	29 <sup>th</sup> May 2017	
Inspector	Mary Crowley	

## Contents

1.0 Site	e Location and Description	
2.0 Pro	oposed Development	3
3.0 Pla	anning Authority Decision	4
3.1.	Decision	4
3.2.	Planning Authority Reports	4
3.3.	Prescribed Bodies	5
3.4.	Third Party Observations	6
4.0 Pla	anning History	6
5.0 Pol	licy Context	
5.1.	Development Plan	9
5.2.	Natural Heritage Designations	
6.0 The	e Appeal	
6.1.	Grounds of Appeal	
6.2.	Applicant Response	Error! Bookmark not defined.
6.3.	Planning Authority Response	
6.4.	Observations	
6.5.	Further Responses	
7.0 Ass	sessment	
8.0 Re	commendation	
9.0 Reasons and Considerations Error! Bookmark not defined.		
10.0	Conditions	

## 1.0 Site Location and Description

- 1.1. The appeal site with a stated area of 12.04 ha is located in the townland of Woodstown, Lisnagry, Co Limerick and approx. 7km east of Limerick City Centre and c 250m to the south east of the M7 motorway. The Limerick to Dublin railway lines runs in a north-south direction, circa 250 metres to the east of the appeal site. The site is located at the end of a local road which is accessed via the R506. The appeal site comprises a portion of a large agricultural field currently under grass. The topography of the proposed site is relatively flat with a slope to the southwest towards the Mulkear River. The area is characterised as rural agricultural with linear housing development and development associated with agricultural uses.
- 1.2. A set of photographs of the site and its environs taken during the course of the site inspection is attached. I would also refer the Board to the site photographs, aerial photographs and photomontages available to view throughout the appeal file.

## 2.0 **Proposed Development**

- 2.1. The application lodged with Limerick City & County Council on 14<sup>th</sup> October 2016 comprises a ten-year permission for the development of a solar PV farm consisting of up to 35,582sq.m of solar panels on ground mounted steel frames, 1 no. substation, 3 no. inverter cabins, underground cable ducts, a temporary site compound area and ancillary facilities, boundary security fencing, site landscaping, a site entrance and access track, CCTV and all associated site works. It is stated that the proposed solar farm will be connected to the National Grid.
- 2.2. The application was accompanied by the following:
  - Letter of consent from landowner
  - Planning & Environmental Report
  - Appropriate Assessment Screening
- 2.3. The applicant submitted **unsolicited further information** on **23<sup>rd</sup> November 2017** following a review of the observations relating to health and safety impacts, traffic impact, biodiversity, glint and glare, zoning, privacy, consultation process, noise and the decommissioning phase.

2.4. In response to a request for **further information** the applicant submitted further details on **23rd December 2016** pertaining to hydrology including cross sections through the site showing CFRAM flood levels, details pertaining to the temporary site compound indicating inter alia that the temporary compound will be removed following the completion of the construction of the development which is estimated to take 3 months, a preliminary traffic management plan together with solar panels and ground maintenance measures.

## 3.0 **Planning Authority Decision**

#### 3.1. Decision

3.1.1. Limerick City & County Council issued a notification of decision to grant permission subject to 24 conditions relating to inter alia construction activities, traffic management, landscaping, CCTV and lighting, site restoration, archaeology and the standard development contributions.

#### 3.2. Planning Authority Reports

#### 3.2.1. Planning Reports

3.2.2. The Local Authority Planner in their first report recommended that **further information** be sought on matters relating to hydrology, the temporary compound area, traffic / roads, maintenance of the solar panels and the proposed ground maintenance measures. The Case Planner in their second report and having considered the further information submitted recommended that permission be granted subject to conditions. The notification of decision to grant permission issued by Limerick City & County Council reflects this recommendation.

## 3.2.3. Other Technical Reports

3.2.4. The Area Engineer / Transport Section in their first report requested further information relating to the submission of a Traffic Impact Assessment, provision of adequate sightlines at the junction of the L50601 and the R506, relaying of the L50601, suitable widening of the L50601 to facilitate construction traffic, staff numbers, surface water, maintenance of the existing dykes, road opening license and construction management and deliver plan to be agreed. In a further report it is

noted that the application has given an undertaking that during the operational stage of the development trips to / from the site will be limited to 1 or 2 per month and that together with the existing very low traffic movements from the junction has satisfied the section that the operational stage of the development will have little impact on the existing junction of the local road and the R506. Further stated that a suitable Traffic Management Plan must be put in place to facilitate the traffic movements from the R506 onto the local road and from the local road to the R506 and that this must be agreed with the Road Area engineer prior to commencement of any works. The **Area Engineer** having considered the further information submitted noted that there appears to be a considered and competent engineering response wit appropriate undertakings to the request for FI.

- 3.2.5. The **Executive Archaeologist** agrees with the archaeological submission included with the planning applications. There is no objection to the scheme subject to conditions as set out in their report.
- 3.2.6. The **Heritage Officer** agrees with the findings of the AA Screening and states that though the site is close to the SAC site, the Mulkear river channel would not be as attractive to wildfowl as the larger channel of the Shannon so the Danger of wildfowl being attached to the array or mistaking it for a water body would be much reduced. A grant of permission is recommended subject to conditions as set out in their report.
- 3.2.7. The **Environment Section** in their first report requested further information in relation to the cable trenches and flooding. The **Environment Section** having considered the further information stated that the invert of the cable trenches is above the 1 in 100 and 1 in 100-year flood levels predicted by the CFRAM study. It is further state that there is no objection on environmental grounds to the granting of permission.

#### 3.3. **Prescribed Bodies**

3.3.1. The **Office of Public Works** (OPW) recommend that the developers satisfy themselves that adequate protection against flooding is available and that the proposed development would not increase the risk of flooding upstream or downstream.

3.3.2. The **Health Service Executive** (HSE) requests that a construction management plans be submitted and that once the farm is in operation that the site is re-assessed to determine if on site screening us adequate. Further stated that the problem with any flooding of the site should result in a malfunction of the farm rather than cause any detrimental environmental problems.

#### 3.4. Third Party Observations

3.4.1. There are seven observations recorded on the planning file from (1) Anne O'Keefe, (2) Denis O'Keefe, (3) Patrick & Breda Cregan, (4) Local Residents, (5) Brian O'Mara, (6) Paula O'Reilly & John Cregan and (7) Richard Hough. The issues raised relate to health and safety impacts, traffic impacts, impacts on flora and fauna, glint and glare, privacy and security issues, community consultation, noise impact and decommissioning phase.

## 4.0 **Planning History**

4.1. There is no evidence of any previous planning application or subsequent appeal at this location. Reference is made to the following in the appeal at Annacotty Business Park:

**PL13.232441 (Reg Ref 08/1524)** - Limerick County Council granted permission for 37 industrial buildings at Grange Upper, Annacotty, Co. Limerick in 2009. This decision was appealed by three third parties. An Bord Pleanála refused permission for the following four reasons:

1. The proposed large scale industrial development on unzoned land outside the boundaries of any settlement, close to a junction on the M7 motorway, would represent a haphazard and unsustainable pattern of development that would prejudice the orderly development of the Limerick City region and the policies and objectives to promote industrial development on appropriate zoned and serviced land within it and would compromise the level of service and carrying capacity of the national road network and public investment therein. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

- 2. The development would generate a significant volume of traffic, including a high number of movements by heavy goods vehicles, which the road network in the vicinity of the site is not capable of accommodating safely due to the restricted width and capacity of the R506 Regional Road in the vicinity of the site and the restricted capacity of its junction with the R445 Regional Road. The proposed development would, therefore, give rise to traffic congestion and would endanger public safety by reason of traffic hazard.
- 3. It is considered that, by reason of the scale and design of the proposed industrial buildings and their proximity to the public road, the proposed development would seriously injure the rural character and visual amenity of the area and would, therefore, be contrary to the proper planning and sustainable development of the area.
- 4. Having regard to the size of the site upon which industrial development is proposed, to the thresholds set down in Classes 10 (a) and 13 (a) of Part 2 of Schedule 5 to the Planning and Development Regulations 2001-2009, to the criteria set out in Schedule 7 of those regulations, to the advice in paragraphs 5.8 to 5.12 of the Guidance for Consent Authorities regarding Sub-threshold Development issued by the Department of the Environment, Heritage and Local Government in August, 2003 and to the cumulative impact of the development in conjunction with previous and other proposed development in the area, it is considered that the proposed development would be likely to have significant effects on the environment and should be subject to an environmental impact assessment within the meaning of Part X of the Planning and Development Act, 2000 to 2007. The proposed development would, therefore, require an Environmental Impact Statement which should contain the information set out in Schedule 6 of the said regulations including, inter alia, adequate information to allow the impact of emission from the proposed development on receiving waters and the residential amenities of property in the vicinity to be properly assessed.

## 5.0 Policy Context

#### 5.1. International Guidelines

5.1.1. There is a range of UK Guidance. The main guidance notes are Planning Practice Guidance for Renewables and Low Carbon Energy (DCLG 2013) and Planning Guidance for the development of Largescale Ground mounted Solar PV systems (BRE 2013). Both refer to the desirability of preserving good agricultural lands and set out issues and mitigations. The BRE Guidance provides advisory information on planning application considerations including construction and operational works, landscape / visual impact, ecology, historic environment, glint and glare and duration of the planning permission. The document also provides guidance on the information which should be provided within a Landscape and Visual Impact Assessment. The document also provides guidance on EIA Screening procedures.

#### 5.2. National Guidelines

## 5.2.1. The Government White Paper entitled 'Ireland's Transition to a Low Carbon Energy Future 2015 – 2030', published in December 2015.

- The White Paper is a complete energy policy update, which sets out a framework to guide policy between now and 2030. The vision of the White Paper is to achieve a low carbon energy system that targets greenhouse gas (GHG) emissions from the energy sector that will be reduced by between 80% and 95%, compared to 1990 levels, by 2050, and will fall to zero or below by 2100.
- Paragraph 137 of the White Paper states 'solar photovoltaic (PV) technology is rapidly becoming cost competitive for electricity generation, not only compared with other renewables but also compared with conventional forms of generation. The deployment of solar in Ireland has the potential to increase energy security, contribute to our renewable energy targets, and support economic growth and jobs. Solar also brings a number of benefits like relatively quick construction and a range of deployment options, including solar thermal for heat and solar PV for electricity. It can be deployed in roof-

mounted or ground-mounted installations. In this way, it can empower Irish citizens and communities to take control of the production and consumption of energy. Solar technology is one of the technologies being considered in the context of the new support scheme for renewable electricity generation which will be available in 2016'.

#### 5.2.2. The National Spatial Strategy 2002 - 2020

This document states, "in economic development the environment provides a resource base that supports a wide range of activities that include agriculture, forestry, fishing, aqua-culture, mineral use, energy use, industry, services and tourism. For these activities, the aim should be to ensure that the resources are used in sustainable ways that put as much emphasis as possible on their renewability" (page 114).

#### 5.3. Development Plan

- 5.3.1. The operative plan for the area is the Limerick County Development Plan 2010-2016. Section of the Development Plan and Objectives relevant to this appeal are set out as follows:
- 5.3.2. **Objective EH O24 Renewable Energy Strategy** states that *it is the intention of the Council to produce a strategy for the promotion of all aspects of renewable energy technologies in County Limerick and to work with other Local Authorities and agencies to achieve that end.*

#### 5.3.3. Section 10.13 Renewable Energy Developments

All methods of energy production have impacts on the environment. Notwithstanding this, the need to adopt a more sustainable approach to energy production is acknowledged by the Planning Authority. A favourable approach to applications for renewable energy developments provided they are environmentally sustainable will be adopted. The cumulative effect of such developments on the landscape and the environment will be taken into consideration

#### 5.3.4. Section 10.13.1 Renewable Energy Developments other than wind power

Projects involving other indigenous sources of energy such as hydro-schemes, wave and tidal power, solar, landfill gas, biomass, energy crops, forestry waste,

biogas from sewage sludge and farm slurry, will be assessed in a similar manner with the policy of the Planning Authority of permitting developments which are environmentally sustainable. In assessing any application, the advice of the relevant statutory bodies will be sought and considered by the Planning Authority. It is advised that applicants consult with the Department of the Environment, Heritage and Local Government as well as the Planning Authority in advance of making a planning application

- 5.3.5. **Solar Schemes** information required with a planning application
  - Location design, specifications, orientation, of the development,
  - Location and design of control buildings and on site ancillary works if these apply,
  - For solar panels on existing structures an outline of the possible visual effects of the development to be provided. For larger scale developments this may take the form of a photomontage,
  - Details of grid connections, where applicable, and alterations to existing electricity cables that are open to public view are to be provided. Note, this may not be necessary in the case of stand-alone developments intended to serve individual dwellings.

#### 5.4. Natural Heritage Designations

5.4.1. The site is not located within a designated Natura 2000 site. The Mulkear River which forms part of the Lower River Shannon SAC runs proximate to the south of the appeal site.

## 6.0 The Appeal

#### 6.1. Grounds of Appeal

6.1.1. The third party appeal against the decision of Limerick City & County Council to grant permission was prepared and submitted by Seamus McElligott, Planning Consultant on behalf of the Lisnagry Residents Opposing Solar and may be summarised as follows:

#### 6.1.2. Bounding Mulkear River / Special Area of Conservation (SAC)

6.1.3. The Planning Officers assessment that the site is not located adjacent to a SAC is refuted. The Mulkear River is a SAC; a prime wildlife conservation area and its status should not be diminished for the purposes of obtaining planning permission. Whilst the applicants have shown a setback from the river of c 30 metres so not encroach on the 1:100 flood event boundary as shown on the CFRAM mapping, it does not hide the fact that this Solar Farm is on existing agricultural land within the riparian zone of the Mulkear River. An alternative site could have been identified in the vicinity of the National ESB Grid that was not adjacent to an important river. Specific concern is raised with regard to siltation, the Atlantic Salmon and Brown Trout, otter and Daubenton Bat. Submitted that any deterioration in water quality will affect the population of the bat and their habitats.

#### 6.1.4. Further Future Development

6.1.5. Submitted that the landholding has an overall area of 32.76 ha and concern is raised that it may be the developer's intention to further develop this landholding for the same purpose. Queried why the Planning Authority did not request that an appropriate EIA be carried out on the basis of an obvious Phase 2 proposal.

#### 6.1.6. EIA Legislation

6.1.7. Not alone is this proposed site a greenfield site but is one in a location of significant environmental importance. It is considered incomprehensible as to why this site would not at the very least have been subjected to a more rigorous EIA prior to this planning permission being granted.

#### 6.1.8. Flooding

6.1.9. There have been increases in flooding in recent years with unforeseen weather events occurring. The applicant provides insufficient detail regarding the inverts and level of electrical / solar components in the context of a flood event greater than the levels of a 1:100-year prediction. If floodwaters did encroach on the solar arm, it could detrimentally affect the waters of the Mulkear and the ecology that rely on it.

#### 6.1.10. Road Access

6.1.11. Within the County Development Plan there is a policy statement associated wit substandard roads and a curtailment of development uses. Policy IN09 Sub-standard Roads identifies that tar surface of less than 3.0m are substandard. The road proposed for use is 2.7m. The Board are asked to contrast and compare the traffic movements associated with the normal occupation of one more additional dwelling house where precedence has shown that such a proposal would be met with certain refusal on a substandard road, compared to the construction and operation of a Solar Farm including its ongoing maintenance etc. No proposals were made to demonstrate improvement or dealing with third party landowners to improve the sightlines at th junction with the R506. Instead a temporary solution of a Traffic Management Plan was opted for. It is submitted that with such poor visibility at the junction of a dangerous regional road that there is exceptional faith been placed on Traffic Management Plans in the absence of compliance with the basic requirements.

#### 6.1.12. Traffic & Site Access

6.1.13. There will be no Council staff present on the site or on the road during the construction phase to monitor the vehicular activity and the entire project is summed up by the statements that any supply truck assessing the laneway will require man power at the road junction which has the consequences of interfering with the traffic flows.

#### 6.1.14. Residential Amenity

6.1.15. To approve such a solar farm use, including all its associated construction and maintenance processes, the location of same on a cul de sac seeks to destroy the residential amenity of all the dwelling owners along this laneway. The development should be struck out on this fundamental principle alone.

#### 6.1.16. Archaeology

6.1.17. Within the application site there is a Recorded Monument. Based on the reality of a 10-year planning permission, the Planning Authority made no effort to request that the applicant apply for a statutory license and carry out trench testing as is appropriate, prior to the approval of any scale of development. In granting planning permission and attaching planning conditions it seeks to just brush aside the archaeological matters and places such importance on planning condition compliance.

#### 6.1.18. Health & Safety Issues

6.1.19. The residents have individually and collectively raised their concerns regarding the possible health effects of living in such proximity to Solar PV Farms of this scale. As these farms are a relatively new phenomenon there is limited proven research about the effects of this land use on the occupants that reside in and around the confines of the site and beyond the road and river. A greater separation between such farms and the built environment should be imposed.

## 6.1.20. Fire Spread Concerns / Access & Facilities for Fire Services

- 6.1.21. All electrical installations, by their nature will carry some degree of fire risk. Although fires caused by PV panels are rare, any fire involving a building with a PV array can present an increased risk to occupants and firefighters. Submitted that Limerick County Fire Service have confirmed that they have no policy to extinguish a fire on a development of this nature.
- 6.1.22. **Note**: The submission was accompanied by the following:
  - Copy of Lisnagry Residents Opposing Solar original planning objection and associated signatories dated 14<sup>th</sup> November 2016
  - Extract from "All Ireland Daubentons Bat Waterway Monitoring Scheme 2006

     2008" and Conserve Ireland (Daubentons Bat) "A Guide to Irelands
     Protected Habitats and Species"
  - Extract from "The effects of Solar Farms on Local Biodiversity: A comparative Study"
  - Aerial photos

## 6.2. Planning Authority Response

6.2.1. There is no response from Limerick City & County Council recorded on the appeal file.

## 6.3. Observations

6.3.1. There are no observations recorded on the appeal file.

#### 6.4. Further Responses

#### 6.5. First Party

- 6.5.1. The **first party response to the appeal** has been prepared and submitted by McCarthy Keville O'Sullivan Ltd and may be summarised as follows:
- 6.5.2. Bounding Mulkear River/Special Area of Conservation The site of the proposed development is located 28 metres from the Lower River Shannon SAC at its closest point. This is a deliberate setback from the SAC that is designed specifically to provide a buffer. The Report that accompanied the planning application describes all the best practice measures that are proposed to minimise the generation of polluting materials on the site and to manage and control the construction and operation of the development to prevent the occurrence of any effects at all on water quality. There are no streams that provide connectivity between the site of the proposed development and the SAC. The woodland within the SAC will not be impacted by the proposed development and all surrounding hedgerows will be retained.
- 6.5.3. **Potential for water pollution in the Mulkear River** There is no potential for the development as proposed to result in significant effects on the water quality of the Mulkear River that is located approximately 100 metres from the site. There is no surface water or habitat connectivity and a range of best practice measures are in place to prevent any effects during construction, operation or decommissioning of this development.
- 6.5.4. Disturbance to Otter The site of the proposed development is located in agriculturally managed grasslands with no vegetative cover, in a location that is over 100 metres from the Mulkear River. No habitat features that would be suitable for Otter were recorded on or in the vicinity of the site during the extensive ecological surveying that was carried out in respect of this application by a suitably qualified and experienced ecologist. The results of these surveys are provided in Section 7 of the PE Report and in the AA Screening Report.
- 6.5.5. Impact on Bats There is no potential for significant effects on water quality in the Mulkear River as a result of the proposed development and thus, no potential for resultant impacts on Daubenton's Bat. The site of the proposed development offers low quality foraging habitat with no roosting habitat present. The hedgerows and

treelines that surround the site will be retained. There will be no lighting and little disturbance associated with the proposed development. Additional hedging will be planted surrounding the site.

- 6.5.6. EIA Legislation Schedule 5 of the Planning and Development Regulations, 2001, as amended, sets out the types of development proposals and thresholds for which it is mandatory to prepare an Environmental Impact Statement (EIS) to accompany a planning application. Solar PV developments are not subject to any requirement to provide an EIS as part of a planning application. A recent planning application of a similar type and scale confirms that Solar PV developments are not subject to any requirement to provide an EIS as part of the planning application assessment process. PL26.244351 relates to a proposal to construct a grid-connected 5MW solar farm in County Wexford.
- 6.5.7. Flooding Hydro-Environmental Services (HES) have undertaken a Flood Risk Assessment (FRA) for a proposed solar array and associated grid route connection at Woodstown, Limerick. The FRA is carried out in accordance with 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DoEHLG, 2009). The FRA finds that CFRAM mapping, which was completed in February, 2015 indicates that the proposed site area is located within Floor Zone C (low risk). Flood Zone A and B are mapped close to the western boundary but are outside the proposed development site. The FRA also states that OPW records indicates there is no history of fluvial or pluvial flooding at the proposed solar array location. The overall risk of flooding posed by the development of a solar array at the proposed site is estimated to be low which relates to the probability of being impacted by a 1,000-year flood and therefore Flood Zone C is relevant for the proposed development site.
- 6.5.8. **Traffic, Road Access and Site Access** As set out in Section 9 of the PE Report, it is estimated that the construction of the solar farm, including site works and the installation and commissioning of the plant, will take 3 months. This scale of development will require approximately 50 HGV visits to the site, with a maximum of 2 HGVs visiting the site during any one day. During the operational stage of the development trips to / from the site will be limited to visits by maintenance staff accessing the site by car or light goods van. These visits will be limited to 1 or 2 per month. It is submitted that during occupation a single dwelling will generate

considerably more traffic than an operational solar farm. A typical dwelling could easily generate on average 2 or 3 two-way trips per day (60 to 90 per month) compared to just 1 or 2 two-way trips per month for the operational solar farm.

- 6.5.9. Sightlines/Junction of L50601 with R506 - The junction of the R506 and L50601 constitutes a public road junction serving a number of residential properties and farm holdings. As there is traffic passing through this junction at present, an assessment of recent collision statistics retained by the Road Safety Authority over the 9-year period between 2005 and 2013 inclusive was undertaken. The report, which is included as Appendix 9.2 of the PE Report indicated that there were no incidents at this location during this period. The land required to provide improvements to the sightline in the direction of Limerick on the R506 at the junction with the L50601 is not in the control of the Applicant. It is therefore proposed that the additional traffic movements that will be generated by the development during the construction stage will be managed by means of a Construction Traffic Management Plan (CTMP), an outline draft of which is attached in Appendix 2. The CTMP sets out criteria that the selected Contractor must agree to with LC&CC, although additional details will be provided by the final CTMP that will be prepared by the Contractor and agreed with LC&CC. The CTMP provides details with respect to the following commitments to LC&CC:
  - Schedule of deliveries to the site;
  - Details of temporary traffic management measures for the R506/L50601 junction (signage and traffic control by a 'flagman');
  - Travel Plan for construction staff; and
  - Repair works to any damage done during site construction.
- 6.5.10. **Residential Amenity** As detailed in the Traffic Assessment previously submitted as part of the PE Report, it is estimated that the construction of the solar farm, including site works and the installation and commissioning of the plant, will take 3 months. This scale of development will generate approximately 50 HGV visits to the site, with a maximum of 2 occurring during any one day. The busiest period on site will be the middle six weeks within the 3-month construction period. Significantly, during the operational stage of the development, trips to/from the site will be limited to visits by maintenance staff accessing the site by car or light goods van. These

visits will be limited to 1 or 2 per month. Therefore, the implementation of the solar farm will not impact on residential amenity.

- 6.5.11. Archaeology The planning application is supported by an Archaeological and Cultural Heritage Impact Assessment, which was based on desktop research and a field survey. The submitted report notes that an enclosure LI0061-060, which is subject to statutory protection by virtue of its listing in the Record of Monuments and Places, is located just to the north-east of the site application boundary. A constraints led approach to the site design ensured that the monument was designed out of the layout for the proposed development so as to negate any potential direct impacts. Mitigation measures to be implemented at the predevelopment stage of the project are recommended including a 30m buffer zone. The archaeological assessment found that no direct impact on the monument is likely if the suggested mitigation measures are put in place prior to the development.
- 6.5.12. Health and Safety Following over 20 years of intensive research into power frequency EMF's, the international scientific consensus is that there is no evidence to prove that EMF's can cause any harm. The consensus of current scientific studies is that research does not confirm any adverse health effects from EMF exposure. This opinion has been recently reconfirmed in the "Overview of Scientific Assessments of Research on ELF EMF and Health, Epidemiologic Studies 2007 2015" by Exponent. A recent planning application confirms that Solar PV developments do not cause health risks to local residents. Planning Application 14/06644 relates to a proposal to construct a 1MW solar farm in County Cork. Paragraph 9.3.7 of the Inspector's Report relates to Health Considerations. It confirms that:

"The applicant has refuted the arguments made in relation to electrical and magnetic fields caused by a development of this nature, particularly in relation to EMFs being similar to those which already exist in houses... The proposed electrical control unit and the inverter control unit are located in excess of 90 metres from the closest house to the west and in excess of 90 metres from the closest house to the east. These separation distances will ensure that there will be no significant impact on occupants of nearby houses".

6.5.13. Fire Spread Concerns/Access and Facilities for Fire Services - The proposed solar farm will be monitored on a 24-hour basis by a closed circuit television (CCTV)

system. The CCTV system will include detection control and recording and will be connected to a remote alert centre where security footage will be monitored. The auto track assessment shows that the junction can accommodate the articulated HGV (which would be of a similar scale to emergency services/fire truck), both accessing and exiting the site. Furthermore, the applicants have adopted a minimum separation distance of 143 metres from the proposed solar farm perimeter fence line to third party site boundaries, as illustrated in Figure 3 above.

6.5.14. **Conclusion** - The location and site characteristics present a number of distinct advantages which make it suitable for a solar energy scheme. The site has been chosen due to its high level of screening from the public road and residential receptors, southern aspect, natural contours and the availability of a convenient National Grid connection via an existing electricity substation nearby. It is considered that the proposed development is in accordance with the proper planning and sustainable development of the area and the relevant planning policy context.

#### 6.6. Third Party

- 6.6.1. A **third party response** to the first party response to the appeal has been prepared and submitted by the Lisnagry Residents Opposing Solar and may be summarised as follows:
- 6.6.2. Local Community's Confidence in Terra Solar Limited The local community state they have no confidence in Terra Solar Limited developing and managing this project.
- 6.6.3. **Consultation between Terra Solar Limited and Local Community** The Lisnagry Residents Opposing Solar, including the residents of road L50601 are very annoyed because they have never been consulted by Terra Solar Limited in relation to the proposed development.
- 6.6.4. Bounding Mulkear River/Special Area of Conservation The proposed site slopes towards the Mulkear River itself and also to a channel which connects to the Mulkear River. Secondly, the slope between the proposed site and the Mulkear River is significant, aerial photos refer. This photograph taken after light rainfall shows the waterlogging on the field of the proposed development. Given this slope both the river and the surrounding bank land will be severely affected the

groundwater will be affected in dry spells and the slope between the propose solar farm and the Mulkear River will have significant impact on the Mulkear River and SAC during wet weather where soil erosion and siltation will accumulate and flow towards the SAC area.

- 6.6.5. Wildlife Effects The research done by the community contradicts the evidence provided by Terra Solar Limited. The otter is protected under the Wildlife Act 1976 and Wildlife (Amendment) Act 2000. As per our previous submission the European Otter is known to reside within the Mulkear Catchment Area.
- 6.6.6. Summary of Impact on Special Area of Conservation Mulkear River - Over the last fifteen years there have been significant infrastructural and building developments in the adjoining hinterland (and particularly to the south-west of the proposed solar farm). These developments include significant expansion of the Plassey Technological Park which is further down river or south-west from the site, significant residential and commercial expansion in Annacotty village which is also down river and south-west from the site, the development of the Annacotty to Adare bypass (which is part of the Limerick to Dublin Motorway). IN addition, there is a proposed new distributor road that will cross the Mulkear River linking Annacotty to Coonagh (which will be the eastern link for Limerick City between the Limerick -Dublin Motorway and the Limerick – Galway Motorway). This proposed road is also south-west and within a short distance of the proposed solar farm. All the above actual and proposed developments are contiguous to the Mulkear River and have the effect of expanding Limerick City and Annacotty along the river bank directly south-west of the proposed solar farm. The net effects of these developments in terms of wildlife (the Otter, Daubenton Bat, Sea Lamprey, Brown Trout) are that both their habitats and where applicable their area of prey and food source have been moved continually north-west of Annacotty along the Mulkear River.
- 6.6.7. **Road Access** Approximately half the length of the road to the proposed site will not be wide enough for a car and HGV to pass. Fifteen cars belonging to the residents use the road regularly each day in addition to visitors and farmers checking their land/livestock on the road. The building phase of the proposed project is going to create difficulties for the local residents. Terra Solar have stated they intend to transport 60 workers on a 15-seater mini-bus which would necessitate four trips in the morning, four trips in the evening and if required the same at lunch time. This

results in eight mini-bus trips plus two HGV's per day and also on-going LGV's deliveries to the site. Ultimately this will mean over twenty vehicular movements daily along this narrow cul-de-sac L50601 leading to and from the dangerous junction at the R506.

- 6.6.8. **Sightlines/Junction of L50601 with R506** There were a number of unreported accidents at this junction in recent years. There was a serious reported accident close to this junction in mid-November, 2016. Terra Solar's submission does not address any of these substantive points and instead requires of the local community that they place their trust in a traffic management plan.
- 6.6.9. **Residential Amenity** A number of the trees on the L50601 cul-de-sac are protected by a preservation order. Unfortunately, the developer has made no reference to this and has no plan to protect these trees from root and branch damage by heavy goods vehicles.
- 6.6.10. **Archaeology** Terra Solar Limited has not addressed these concerns in their submissions to An Bord Pleanála.
- 6.6.11. Fire Spread Concerns/Access and Facilities for Fire Service The CCTV will only detect a fire when it has started but will not aid in the prevention of a fire. A fire extending over 12 hectares where the prevailing winds are south-westerly, and given both the elevated site of the proposed solar farm and the lack of vegetative cover to the south-west, means that there is a substantive risk that the fire would extend to a number of protected old trees which lie to the north-east of the site.

## 7.0 Assessment

7.1.1. Limerick City and County Council granted planning permission for this development subject to 24 conditions. This decision was appealed by a third party; Lisnagry Residents Opposing Solar. The development comprises a 10-year planning application for a solar PV panel array consisting of up to 35,582 sqm of solar panels on ground mounted steel frames on a site extending to 12 ha. The project has an operational lifespan of 25 years from commissioning with an option to extend the lease for a further 15 years. The main elements of the proposed development comprise the following:

- Solar PV modules / panels
- Ground mounted support structure frames
- Boundary security fencing (mammal friendly)
- Site entrance and access track
- Temporary site compound and ancillary infrastructure (approx. 2,500 sqm) positioned adjacent to the private road which comprises the north eastern boundary of the site
- 1 no substation (approx. 53.47 sqm) to be located in the eastern portion of the site and accessed via the proposed access track
- 3 no inverter cabins
- Underground cable ducts
- CCTV and ancillary equipment
- Grid connection
- Site landscaping
- 7.1.2. The application was submitted to Limerick city and County Council on 14<sup>th</sup> October 2016. The applicant submitted unsolicited information on 23<sup>rd</sup> November 2016 together with further information on 23<sup>rd</sup> December 2016. Accordingly, this assessment is based on the plans and details submitted on 4<sup>th</sup> October 2016, as amended on 23<sup>rd</sup> November 2016 and 23<sup>rd</sup> December 2016.
- 7.1.3. The primary grounds of appeal relate to proximity to the SAC, flooding, traffic impact and site access, impacts on residential amenity, health/safety and fire risk concerns and the adequacy of the planning assessment. With reference to concerns raised regarding the assessment of the planning scheme I would point out for the purpose of clarity that the current development before the Board is considered "de novo". That is to say that the Board considers the proposal having regard to the same planning matters to which a planning authority is required to have regard when making a decision on a planning application in the first instance and this includes consideration of all submissions and inter departmental reports on file together with the relevant development plan and statutory guidelines, any revised details accompanying appeal submissions and any relevant planning history relating to the application.

- 7.1.4. Having regard to the information presented by the parties to the appeal and in the course of the planning application and to my site inspection of the appeal site, I consider the key planning issues relating to the assessment of the appeal can be addressed under the following general headings:
  - Principle / Policy Considerations
  - Site Access & Traffic Impact
  - Mulkear River
  - Residential Impact
  - Archaeology
  - Flooding
  - Screening for Appropriate Assessment
  - Environmental Impact Assessment
  - Health & Safety
  - Further Development
  - Development Contributions

## 7.2. Principle / Policy Considerations

- 7.2.1. The applicant states that the location and characteristics of the appeal site present a number of distinct advantages which make it suitable for a solar energy scheme. It is stated that the site has been chosen due to its high level of screening from the public road and residential receptors, southern aspect, natural contours and the availability of a convenient National Grid connection via an existing electricity substation nearby. It is anticipated that the proposed solar farm will have a maximum export capacity of circa 4MW but would have an installed generation capacity of up to 5.89MW to maximise the solar resource at certain times of the year. It is stated that this is enough to power approx. 1,200 households and will result in a significant benefit in terms of carbon emissions and climate change.
- 7.2.2. The nearest grid connection point is the Ahane ESB Substation, located in Annacotty Business Park approx. 850m north east of the site. An indicative Grid connection route is illustrated on Drawings and it is submitted that this connection is considered to be exempted development under the provision of Classes 26 and 27 of the

Planning and Development Regulations (as amended) as this component does not form part of the planning application.

- 7.2.3. The National Spatial Strategy, Draft National Policy Framework (A Roadmap for the delivery of the National Planning Framework 2016), Regional Planning Guidelines and the County Development Plan are considered to be supportive of the development of renewable energy technology particularly in the context of reducing the carbon emission of the country and meeting renewable energy production targets. The proposed development is therefore supported by national, regional and local policies in terms of renewable energy. Accordingly, I consider that the proposal together with layout and design to be acceptable in principle and would contribute to the diversity of sources of energy supply and hence the security of supply. I would note that the acceptability of the proposal is contingent on other issues including impacts on inter alia the Mulkear River and Traffic Impact.
- 7.2.4. Notwithstanding the information submitted by way of further information on 23rd December 2016 I note from the Planning and Environmental Report submitted with the application that the detailing of the proposed substation may be subject to change depending on site specific issues and that this may require the use of cabins which have slightly different dimension or a slightly different external appearance than those included in the application. It is recommended that should the Board be minded to grant permission that a condition be attached requiring that the details of the substation be submitted to and agreed in writing with the Planning Authority.

## 7.3. Site Access & Traffic Impact

7.3.1. It is submitted that the existing road proposed for access use to the site is 2.7m and that the traffic movements associated with the normal occupation of one more additional dwelling house on the laneway, where precedence has shown that such a proposal would be met with certain refusal on a substandard road, compared to the construction and operation of a Solar Farm including its ongoing maintenance etc is unacceptable. Further submitted that no proposals were made to improve the poor visibility sightlines at the junction with the R506. Instead a temporary solution of a Traffic Management Plan was opted for which is also considered to be unacceptable.

- 7.3.2. A Traffic & Transportation Assessment was submitted with the Planning and Environment Report that accompanied the application. Section 9 Traffic & Transportation of this report estimated that the construction of the solar farm, including site works and the installation and commissioning of the plant, will take 3 months and that this scale of development will require approximately 50 HGV visits to the site, with a maximum of 2 HGVs visiting the site during any one day. As set out in the response to the Further Information request raised by the Planning Authority with respect to the width of the local access road L50601, it is acknowledged that approximately 170 metres of the 340 metres length of the L50601 leading to the site is 2.7 metres wide, with the remaining 170 metres including setback boundary walls at residential properties, wide enough for 2 vehicles to pass. As stated previously, the construction period will require 50 HGV visits to the site during the three-month construction period. The auto track assessment provided in the Planning and Environment Report demonstrates that a HGV with a maximum width of 2.5 metres can be accommodated on the L50601.
- 7.3.3. The applicant states that a maximum of 60 construction workers will be on site at one time, with a commitment that they will be transported to and from the site by mini-bus. Based on a mini-bus with a capacity of 15 seats this will require a maximum of 4 trips to the site in the morning and 4 trips from the site in the evening, and if required, the same at lunchtime. It is stated that the optimum pick-up/drop-off point for the mini-bus will depend on the direction of which the majority of workers travel from and the locations available and that this will be included in the Construction Traffic Management Plan (CTMP) agreed between the contractor and LC&CC prior to commencement of construction.
- 7.3.4. Owing to the nature of Solar PV developments it is submitted that there is very little maintenance required once the equipment has been installed. This means that there is no need for permanent staff presence on site once the development has been constructed. Therefore during the operational stage of the development trips to / from the site will be limited to visits by maintenance staff accessing the site by car or light goods van and that these visits will be limited to 1 or 2 per month. Based on the foregoing I agree with the applicant that that during occupation a single dwelling will in all likelihood generate considerably more traffic than an operational solar farm. For example, a typical dwelling could generate on average 2 or 3 two-way trips per

day (60 to 90 per month) compared to just 1 or 2 two-way trips per month for the operational solar farm.

- 7.3.5. As set out previously the junction of the R506 and L50601 constitutes a public road junction serving a number of residential properties and farm holdings. As illustrated shown in Figure 9.5 of the Planning and Environmental Report and as observed on day of site inspection the visibility splays along the R506 taken from a 2.4 metre setback on the L50601 approach to the junction is restricted due to the site boundary wall/hedge of the dwelling on the north-western corner of the junction. Visibility to the north-west is measured at 24 metres to the centre line (there is a solid white centre line on the R506, so overtaking is not permitted). It is acknowledged that visibility at the junction is restricted. However the land required to provide improvements to the sightline in the direction of Limerick on the R506 at the junction with the L50601 is not in the control of the Applicant. It is therefore proposed that the additional traffic movements that will be generated by the development during the construction stage will be managed by means of a Construction Traffic Management Plan (CTMP), an outline draft is provided in submissions and sets out criteria that the selected Contractor must agree to with Planning Authority, although additional details will be provided by the final CTMP that will be prepared by the Contractor and agreed with Planning Authority. It is noted that the CTMP provides details with respect to the following:
  - Schedule of deliveries to the site;
  - Details of temporary traffic management measures for the R506/L50601 junction (signage and traffic control by a 'flagman');
  - Travel Plan for construction staff; and
  - Repair works to any damage done during site construction.
- 7.3.6. For developments this nature the construction phase is the busiest period with respect of the traffic impact experienced on the surrounding road network in terms of both additional traffic volumes generated on the network and the geometric requirements of the heavy goods vehicles that will be used to deliver material to and from the site. During the operational phase of the solar farm the impact on the surrounding local road network will be negligible save for the occasional visit by maintenance staff to the site. The effects of construction traffic on the operation of

the adjoining road network would be acceptable in light of the likely temporary duration involved. Given the location of the appeal site, the nature and layout of the proposed scheme together with the requirement for a Construction Traffic Management Plan to be submitted and agreed in writing with the Planning Authority prior to commencement of work on site I am satisfied that the vehicular movements generated by the scheme would not have a significant material impact on the current capacity of the road network in the vicinity of the site or conflict with traffic or pedestrian movements in the immediate area.

#### 7.4. Mulkear River

- 7.4.1. The appellant raises concern regarding the proximity of the scheme to the Mulkear River SAC and that its status should not be diminished for the purposes of obtaining planning permission.
- 7.4.2. The appeal site is located 28 metres from the Lower River Shannon SAC at its closest point; according to the applicant this was a deliberate setback from the SAC that is designed specifically to provide a buffer. The scheme is 30 metres from woodland that surrounds the river but approximately 100 metres from the Mulkear River at its closest point and over 90 meters from the SAC along most of the boundary. There are no streams that provide connectivity between the site of the proposed development and the SAC. The woodland within the SAC will not be impacted by the proposed development and all surrounding hedgerows will be retained. Additional hedgerows of native species will be planted at the development boundary thus creating physical screening between the site of the proposed development and the SAC.
- 7.4.3. The habitats in close proximity to the proposed development site which fall within the Lower River Shannon SAC boundaries, i.e. Wet Grassland, Mixed Broadleaf Woodland and Treelines, are categorised as Local Importance (higher value) and are not qualifying interests of the SAC. The Report that accompanied the planning application describes all the best practice measures that are proposed to minimise the generation of polluting materials on the site and to manage and control the construction and operation of the development to prevent the occurrence of any effects at all on water quality.

- 7.4.4. I agree with the applicant's findings that the habitats recorded at the site of the proposed development area intensively managed for agriculture and highly modified from their natural state. They are outside the 1 in 100-year flood zone and approximately 100 metres form the river. These lands are not part of a river habitat corridor, support none of the vegetation that is associated with river edge or wetlands and are not within any riparian zone. Overall I am satisfied, based on the information available that this habitat will not be impacted upon as a result of the proposed development based on the size and scale of the proposed works and the passive nature of the operational phase.
- 7.4.5. The appellant raises concern for the potential for water pollution in the Mulkear River. There is a buffer of approximately 100 metres between the site boundary and the river in which no works will take place. There is no surface water linkage between the site of the proposed development and the Mulkear River and the site is not at risk of flooding. There are no steep slopes from the site towards the river that may act as conduits for the run off of pollutants. Overall I agree with the applicant that there is no potential for the development as proposed to result in significant effects on the water quality of the Mulkear River that is located approximately 100 metres from the site and that a range of best practice measures are in place to prevent any effects during construction, operation or decommissioning of this development.
- 7.4.6. The appellant raises concern with regard to disturbance to Otter Holts in the Mulkear River. I agree with the applicant's findings in this regard that the site specific conservation objectives document for the Lower River Shannon SAC identifies a 10 metre buffer along river banks as potential terrestrial Otter habitat. As documented the proposed development is located over 100 metres from any watercourse and it is unlikely that an Otter holt would extend to 10 metres from the entrance and even more unlikely that it would extend 100 metres or that the proposed works would result in disturbance to this species.
- 7.4.7. The applicant is concerned that there is potential for the proposed development to impact on Daubentons Bat population in the area. The applicant states that there is no potential for significant effects on water quality in the Mulkear River as a result of the proposed development and thus, no potential for resultant impacts on Daubentons Bat. Overall I agree with the applicant's findings that the development

is highly unlikely to result in a significant impact on bat species as the site of the proposed development offers low quality foraging habitat with no roosting habitat present.; the hedgerows and treelines that surround the site will be retained and that there will be no lighting and little disturbance associated with the proposed development. Further additional hedging will be planted surrounding the site.

#### 7.5. Residential Impact

- 7.5.1. The applicants have adopted a minimum separation distance of 143 metres from the fence line to third party site boundaries. In addition, the location of the proposed access track has been modified since preliminary design stage to move it further away from the nearest residential receptor located north of the proposed site. Having regard to the nature and layout of the proposed development I am satisfied that there will no significant nuisance effects to surrounding dwellings or along surrounding roads from by the proposed solar farm.
- 7.5.2. As set out previously it is estimated that the construction of the solar farm, including site works and the installation and commissioning of the plant, will take 3 months. Significantly during the operational stage trips to / from the site will be limited to visits by maintenance staff accessing the site by car or light goods van. It is inevitable that during the construction phase potential temporary nuisance to the local population during project works may occur particularly in terms of noise and traffic. However, I am satisfied that the negative impact on traffic and amenity as a result of the construction phase this scheme would be temporary in nature and matters of particular concern such as construction traffic management can be dealt with by condition.

#### 7.6. Archaeology

- 7.6.1. I note the concerns raised in the appeal that no effort was made to request the applicant apply for a statutory license and carry out trench testing as is appropriate, prior to the approval of any scale of development.
- 7.6.2. I refer to the Archaeology and Cultural Heritage Report submitted with the application together with the applicant's response to the appeal. The planning application was supported by an Archaeological and Cultural Heritage Impact

Assessment, which was based on desktop research and a field survey. The submitted report notes that an enclosure LI0061-060, which is subject to statutory protection by virtue of its listing in the Record of Monuments and Places, is located just to the north-east of the site application boundary. A constraints led approach to the site design ensured that the monument was designed out of the layout for the proposed development so as to negate any potential direct impacts. Mitigation measures to be implemented at the pre-development stage of the project are recommended including a 30m buffer zone. The archaeological assessment found that no direct impact on the monument is likely if the suggested mitigation measures are put in place prior to the development. In a report dated 7th December 2016, the County Archaeologist states that she agrees with the recommendations of the submitted archaeology report and recommends appropriate conditions are attached to a grant of permission. Attention is drawn to Condition No. 23 of the notification of decision to grant permission.

7.6.3. I have considered the Archaeological Impact Assessment submitted with the application together with the reports on file and in my view I am satisfied that this matter can be dealt with by suitable worded condition whereby the applicant employ a suitably qualified archaeologist in advance of development and that any material found is notified to the Department and that recording of any such material found shall be facilitated.

#### 7.7. Flooding

7.7.1. I refer to the Flood Risk Assessment (see Planning & Environmental Report) that accompanied the application. The FRA finds that CFRAM mapping, which was completed in February, 2015 indicates that the proposed site area is located within Floor Zone C (low risk). Flood Zone A and B are mapped close to the western boundary but are outside the proposed development site. The FRA also states that OPW records indicates there is no history of fluvial or pluvial flooding at the proposed solar array location. The overall risk of flooding posed by the development of a solar array at the proposed site is estimated to be low which relates to the probability of being impacted by a 1,000-year flood and therefore Flood Zone C is relevant for the proposed development site. Based on the detailed studies referenced there is no flood risk for the site from any flood events smaller than a

1,000-year flood. In the event that the 1,000-year flood is exceeded it is not expected that there will be any impact on the local ecology as a result of any such flood event as a direct result of the proposed development.

7.7.2. Having regard to the information available on file I am satisfied that the potential impacts of the proposed development in terms of flooding have been established and that the type of development proposed is appropriate for this flood zone. I do not consider that the proposed development would exacerbate the risk of flooding in the area.

#### 7.8. Appropriate Assessment Screening

7.8.1. The application was accompanied by a Screening Assessment the contents of which have been noted. The site is not located within a designated Natura 2000 site. The Mulkear River which forms part of the Lower River Shannon SAC runs proximate to the south of the proposed appeal site. Having regard to the nature and scale of the proposed development, the nature of the receiving environment and proximity to the nearest European site (Lower River Shannon SAC) no appropriate assessment issues arise and it is not considered that the proposed development would be likely to have a significant effect individually or in combination with other plans or projects on a European site.

#### 7.9. Environmental Impact Assessment

7.9.1. The proposed development falls below the threshold levels in Schedule 5 of the Regulations in relation to EIA, and does not involve potential impacts on any sites or areas of specific environmental sensitivity. Having regard to the limited nature of the development, the absence of any nature conservation designation in the immediate area, the absence of any emission from the development and the absence of any connection to watercourses, it must be concluded that the development will not have a significant impact on the environment. Overall it is considered that the proposed development does not come within the scope of the classes of development requiring the submission of an EIS as set out in Schedule 5 of the Planning and Development Regulations 2001-2011. The submission of an environmental impact statement is not required.

#### 7.10. Health & Safety

- 7.10.1. I note the concerns raised the possible health effects of living in such proximity to Solar PV Farms of this scale.
- 7.10.2. According to the applicant, in solar farm development, it is the inverter units where electromagnetic fields (EMFs) are at their highest. It is stated that there is a minimum separation distance of 208 metre between the proposed inverter unit locations and the nearest residential dwelling to the north of the proposed site. Further there is a minimum separation distance of 424 metres and 613 metres respectively between the proposed inverter unit locations and the N7 motorway and the local road leading to the site. The application states that EMFs reduce sharply over distance and that no risk to health is envisaged. Having regard to the information available I am satisfied that these separation distances will in all likelihood ensure that there will be no significant impact on occupants of nearby houses.
- 7.10.3. With regard to the concerns raised in relation to fire risk I am satisfied that the minimum separation distance of 143 metres adopted by the applicant from the proposed solar farm perimeter fence line to third party site boundaries together 24-hour monitoring by a closed circuit television (CCTV) system and proper routine testing, servicing and maintenance will in in all likelihood ensure that there will be no significant additional increase of fire at this location.

## 7.11. Further Development

7.11.1. I note the concerns raised by the appellant regarding developer's possible intention to further develop this overall 32.76 ha landholding. It is my view that the appellant raises valid planning concerns with the regard to the future development of said lands. However as pointed out by the applicant any future development proposals at this location will be subject to a separate planning application and will be considered on its own merits unless otherwise exempted. And will be subject to the full rigours of the planning process.

#### 7.12. Development Contribution

7.12.1. Condition No 4 of the notification of decision to grant permission requested the developer pay the Local Authority a S.48 financial contribution in the amount of €79,200.00. Limerick City and County Council has adopted a Development Contribution scheme under Section 48 of the Planning and Development Act 2000 (as amended). Limerick City and County Council Development Contribution Scheme 2017 – 2021 refers. Section 8 sets out the categories of development which will be exempted from the requirement to pay a development contribution under the scheme. The proposed development does not fall under the exemptions listed in the scheme. Accordingly, it is recommended that should the Board be minded to grant permission that a suitably worded condition be attached requiring the payment of a Section 48 Development Contribution in accordance with the Planning and Development Act 2000.

## 8.0 **Recommendation**

8.1. Having considered the contents of the application, the provision of the Limerick County Development Plan 2010 - 2016, the grounds of appeal and the responses thereto, my site inspection and my assessment of the planning issues, I recommend that permission be **GRANTED** for the reasons and considerations set out below.

## 9.0 **Reasons and Considerations**

9.1. Having regard to the scale, extent and layout of the proposed development and to the current Limerick County Development Plan 2010 - 2016, it is considered that, subject to compliance with the conditions set out below, the proposed solar farm would not seriously injure the visual and residential amenities of the area, would not endanger human health or the environment and would be acceptable in terms of landscape impacts and of traffic safety and convenience. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

## 10.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application on 4<sup>th</sup> October 2016, as amended by the further plans and particulars submitted on the 23<sup>rd</sup> November 2016 and 23<sup>rd</sup> December 2016 and by the further plans and particulars received by An Bord Pleanála, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity

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

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

3. The permission shall be for a period of 25 years from the date of the commissioning of the solar 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<sup>1</sup>.

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

4. 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 interest of public health.

<sup>&</sup>lt;sup>1</sup> Condition No 3 of the notification of decision to grant planning permission issued b Limerick City and County Council required all structures including foundations to be removed not later than **25 years** from the date of commencement.

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

Reason: To protect the environment.

6. 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 development. Any trees or hedgerow that are removed, die or become seriously damaged or diseased within five years from planting shall be replaced within the next planting season by trees or hedging of similar size and species, unless otherwise agreed in writing with the planning authority. Existing field boundaries including hedgerows and trees shall be retained.

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

- 7. (a) The inverter/transformer stations shall be dark green in colour.
  - (b) The external walls of the proposed substation shall be finished in a neutral colour such as light grey or off-white and the roof shall be of black tiles.
  - (c) The detailing of the substation shall be agreed in writing with the Planning Authority prior to commencement of work on site.

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

- 8. i. No artificial lighting shall be installed or operated on site unless authorised by a prior grant of planning 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 300 millimetres of its length, its bottom edge is no less than 150 millimetres from ground level.
  - iv. The solar panels 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 interest of clarity, of visual and residential amenity, traffic safety, and to allow wildlife to continue to have access to and through the site.

- 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, including access road, 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.

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

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 area and to secure the preservation (in-situ or by record) and protection of any archaeological remains that may exist within the site.

- 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:
  - a) Construction Traffic Management Plan to be put in place to facilitate the traffic movements from the R506 onto the local road (L50601) and from the local road to the R506.
  - b) details of site security fencing and hoardings,
  - c) 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,
  - measures to obviate queuing of construction traffic on the adjoining road network,
  - e) measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network,
  - f) details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels,
  - g) containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained; such bunds shall be roofed to exclude rainwater,
  - h) details of on-site re-fuelling arrangements, including use of drip trays,

- i) details of how it is proposed to manage excavated soil, and
- j) 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 interest of environmental protection, amenities, public health and safety.

12. 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 in condition number 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 completion and maintenance of the development until taken in charge.

13. 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.

Mary Crowley Senior Planning Inspector 19<sup>th</sup> June 2017