

Inspector's Report ABP-306933-20

Development	Construction and operation of solar PV arrays, inclusive of an electrical substation compound. Planning application is accompanied by an environmental report and NIS
Location	Rahelty and Shanballyduff, Thurles, Co. Tipperary.
Planning Authority	Tipperary County Council
Planning Authority Reg. Ref.	19601012
Applicant(s)	Engie Developments Ireland Limited
Type of Application	Permission
Planning Authority Decision	Grant with Conditions
Type of Appeal	Third Party
Appellant(s)	Michael Shanahan
Observer(s)	None
Date of Site Inspection	2 <sup>nd</sup> March 2021
Inspector	Mary Crowley

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## 1.0 Site Location and Description

- 1.1. The appeal site with a stated area of 38.3 ha is located in Rahelty, Thurles, Co. Tipperary c 5km north-east of Thurles town and is accessed off the main N62 via a local road. The site is accessed from an existing entrance, located on the west side of the site, via local roads from the N62 National Secondary Road to the west and the N75 in the south. The site is divided into a number of fields by well established hedgerows and is currently managed agricultural land. The site is bounded by agricultural land to the north, south and east. The west side of the site is bounded by an un-named road, un-named watercourse and agricultural lands. Existing ground levels on site range from 106.19m OD to 112.13m OD.
- 1.2. A set of photographs of the site and its environs taken during the course of my site inspection is attached. I also refer the Board to the photos available to view on the appeal file and accompanying the planning application. These serve to describe the site and location in further detail.

### 2.0 **Proposed Development**

- 2.1. The application submitted on the 12<sup>th</sup> September 2019 sought planning permission for the construction and operation of solar PV arrays mounted on metal frames on a 38.3 ha site, inclusive of an electrical substation compound, up to 10 no indicative inverter units, a temporary construction area and ancillary facilities (inclusive of gross floor space of proposed works up to 248 sq. m). Electricity from the solar panels will be directed to the onsite sub-station via underground cabling. It is anticipated that the array will have an installed generation capacity of up to 18.7 MW to maximise the solar resource at certain times of year.
- 2.2. The main construction tasks will include but will not be limited to:
  - Erection of security fencing / perimeter fencing
  - Setting up temporary construction compound
  - Establishment of drainage system for the site; detailed proposals submitted
  - Install new access tracks
  - Installation of ground mounted structures and frames for Solar PV Modules

- Erection of substation
- Erection of Invertor Stations
- Fencing & CCTV
- Grid Connection
- H&S Management
- 2.3. The modules are ground mounted on galvanised steel support / frames, which are fixed at an angle of 20 to 25 degrees and south facing. The panels will have an indicative height above ground of 2.2 metres with a clearance above ground level of approximately 0.85m. A substation compound is to be located at the entrance to the site and will contain electrical transmission infrastructure and a control room building. The building will be 4.3m in height with a stated floor area of c59sqm.
- 2.4. The perimeter of the site is to be secured by a 2.4m high deer fence with 200mm clearance underneath and CCTV installations to allow for constant monitoring. The perimeter fence will be set back from the overall site boundaries facilitating a substantial buffer between the fence and the river (minimum 8m) and the fence and the existing hedgerows.
- 2.5. The construction phase is expected to take 32 weeks during normal hours 07.30 18.00 Monday to Friday; 08.00 13.00 Saturday with no operations on Sunday or public holidays unless otherwise agreed. Decommissioning will take place during the same hours. It is proposed to operate the solar array for a 30 year period.
- 2.6. While the grid connection is not part of this planning application and is therefore not included in the red line planning boundary it is submitted that a connection will be made to the national grid via the Loughtagalla 38kV substation, located 0.8km west of the Thurles 110kV.
- 2.7. The planning application was accompanied by the following:
  - Cover Letter This planning application is a near replica to Reg Ref 18/601447 which was deemed withdrawn. Under Reg Ref 18/601447 further information and a clarification of further information was requested in relation to traffic concerns, panel heights and decommissioning of the project. Stated that these matters have been clarified as part of this application.
  - Owners Letter of Consent

- Planning & Environmental Report
- AA Screening Report & Natura Impact Statement
- Photomontages
- Construction & Environmental Management Plan
- Landscape & Visual Impact Assessment
- Ecological Impact Assessment
- Flood Risk Assessment
- Glint & Glare Assessment
- Archaeology & Cultural Heritage Assessment
- Traffic & Transport Statement
- 2.8. Unsolicited information was submitted on 31<sup>st</sup> October 2019 addressing matters relating to ecology, visual impact / glint and glare, flood risk, construction phase, traffic and noise. This was later resubmitted by way of further information. Further information was submitted on 18<sup>th</sup> December 2019 and may be summarised as follows:
  - Sightlines and Road Safety The visibility splay in the north eastern direction crosses land in the control of the developer. In this regard the existing hedgerows will be maintained to a height that will not interfere with the required sightlines. The visibility indicated to the south west of the access junction is clear of all obstruction and is located between the existing road edge and the boundary fence hedge.

# 3.0 **Planning Authority Decision**

#### 3.1. Decision

3.1.1. Tipperary County Council issued a notification of decision to grant permission on the 20<sup>th</sup> February 2020 subject to 18 No Conditions summarised as follows:

Compliance with drawings and documentation submitted including the						
contents and	mitigation	measures	set out	in the	Natura Impact	
Assessment,	Noise A	ssessment,	visual	Impact	Assessment,	
Construction	Environm	ental Ma	nagement	Plan	, Biodiversity	
	contents and Assessment,	contents and mitigation Assessment, Noise A	contents and mitigation measures Assessment, Noise Assessment,	contents and mitigation measures set out Assessment, Noise Assessment, visual	contents and mitigation measures set out in the Assessment, Noise Assessment, visual Impact	

	Management Plan, Flood Risk Assessment, Ecological Management						
	Plan on 12 <sup>th</sup> September 2019 as amended by further information submitted on 18 <sup>th</sup> December 2019.						
2)	Permission shall be for a period of 30 years from the date of commissioning. A detailed restoration plan shall be submitted and agreed						
3)	Archaeological monitoring & a suitably qualified archaeologist shall be employed						
4)	A new vehicular access shall be provided circa 50m north of the existing access with details to be agreed						
5)	Bond in the amount of €50,000						
6)	Permission shall not be construed as any form of consent or agreement to a connection to the national grid						
7)	The electricity control unit, inverters and fencing shall be dark green in colour						
8)	No external artificial lighting shall be installed or operated						
9)	Boundary landscaping and additional screening and / or planting to						
	ensure that there is no glint impact on adjoining dwellings						
10)	CCTV cameras shall be fixed and angled to face into the site						
11)	Each fencing panel shall be no less than 200mm from ground level						
12)	Cables shall be underground						
13)	All existing hedgerows and trees within such hedgerows shall be retained						
14)	Solar panels shall be fixed in place						
15)	Construction Management Plan shall be submitted and agreed						
16)	Site development nd building work hours						
17)	Operator shall make the solar farm available for a minimum of 10 no days open says throughout each year for accompanied schools, local groups and local communities.						

#### 3.2. Planning Authority Reports

- 3.2.1. Planning Reports
  - The **Case Planner** in their first report sought further information as follows:
    - 1) Detailed proposals to ensure that the entire access sightline triangle is within the applicants control so as to be maintained free from obstruction at all times.
    - 2) Unsolicited information should be submitted as part of the formal further information process
  - Further information was sought on the **5<sup>th</sup> November 2019**.
  - 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 planning permission issued by Tipperary County Council reflects this recommendation.
- 3.2.2. Other Technical Reports
  - Area Engineer No objection subject to conditions including a requirement that the proposed access be permanently re-located approx. 50m north east of the existing road with details to be agreed.

#### 3.3. Prescribed Bodies

- An Taisce The site survey was conducted in 2018 in late summer when results are less reliable and in light of the strict legal protectors for these species, An Taisce submits that up-to-date surveying is required. Further noted that Section 5.2.2.1 of the Ecological Impact Assessment Report on mitigation of disturbance to fauna does not specify the need to conduct the badger survey during the recommended November to April timeframe and should be updated as such. Provisions should also be included in the CEMP to monitor for otter and badger activity during the construction period.
- HSE In their first report stated inter alia that there should be no direct emissions to ground water of any foul waste water whilst the temporary construction

compound is in use; any water used for drinking or food preparation used at the temporary construction compound should meet the requirements of SI No 122/2014 – European Union (Drinking Water) Regulations 2014. Having considered the further information submitted the Environmental Health Service (EHS) was satisfied that the majority of issues raised were addressed. However, it was reiterated that *any water used for drinking or food preparation used at the temporary construction compound should meet the requirements of SI No 122/2014 – European Union (Drinking Water) regulations 2014.* 

Department of Culture, Heritage and the Gaeltacht – In their first report recommended that a condition be attached requiring archaeological monitoring of the site and that a suitably qualified archaeologist shall be employed. Additional conditions were also recommended relating to pre-cast concrete anchors, equipment to be delivered to site by medium articulated vehicles, higher pressure machines be confined to access tracks and restoration of the soil structure and natural creation of meadow grass. In their second report it was recommended that a 5m setback from the existing boundary hedgerows, hedgerows are to be retained, boundary to be erected with a minimum gap of 200mm and any areas to be reseeded, should be done with mixed native grasses and wildflowers.

#### 3.4. Third Party Observations

3.4.1. There are 2 no observation recorded on the planning file from (1) Castlehall Farm Partnership and the (2) Shanahan family. The issues raised relate to impact on wildlife, flooding, traffic impact, health impact, visual impact, loss of privacy, impact on potential for future family houses and impact on tourism.

### 4.0 **Planning History**

- 4.1.1. There is no evidence of any previous appeal on this site. There was a previous planning application on the site that may be summarised as follows:
  - Reg Ref 18601447 Application for the construction and operation of solar PV arrays, inclusive of an electrical substation compound was withdrawn.

# 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 large scale 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. National Planning Framework 2040

- A key element of Ireland 2040 is to support and strengthen more environmentally focused planning at local level. The Framework states that the future planning and development of our communities at local level will be refocused to tackle Ireland's higher than average carbon-intensity per capita and enable a national transition to a competitive low carbon, climate resilient and environmentally sustainable economy by 2050, through harnessing our country's prodigious renewable energy potential.
- National Strategic Outcome 8 states that it is an objective to deliver 40% of our electricity needs from renewable sources by 2020 with a strategic aim to increase renewable deployment in line with EU targets and national policy objectives out to 2030 and beyond. It is expected that this increase in renewable deployment will lead to a greater diversity of renewable technologies in the mix.
- National Policy Objective 55 seeks to promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050.
- 5.2.2. National Development Plan 2018 2027

 Published in tandem with the National Planning Framework recognises that in order to ensure the integrity of the state in achieving renewable energy resilience, a fundamental shift is required to shape the ways in which energy is produced.

# 5.2.3. 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. However, it does not supersede the NREAP (National Renewable Energy Action Plan), which set out Ireland's approach to achieving its (legally binding) targets, with a target of 40% of electricity consumption to be from renewable sources by 2020.
- 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'.
- The White Paper also sought to publish a Renewable Electricity Policy and Development Framework (with a spatial dimension) to underpin the proper planning and development of larger scale renewable electricity generation development on land. It is envisaged that such a plan will give guidance to those seeking development consent and to planning authorities in relation to larger-scale onshore renewable electricity projects.

#### 5.2.4. National Climate Change Strategy 2007-2012

5.2.5. Under the Kyoto Protocol and as part of its contribution to the overall EU target, Ireland agreed to a target limiting its greenhouse gas emissions to 13% above 1990 levels over the period 2008-2012. The National Climate Change Strategy 2007-2012 sets out a range of measures, building on those already in place under the first National Climate Change Strategy (2000), to ensure Ireland reaches its target under the Kyoto Protocol. The Strategy provides a framework for action to reduce Ireland's greenhouse gas emissions in the areas of energy, transport, housing, industry, agriculture and waste as well as cross-sectoral actions. Local authorities are key agents for change at the local level in achieving target reductions.

# 5.2.6. Strategy for Renewable Energy: 2012-2020 - Department of Communications, Energy and Natural Resources (DCENR) (2012)

- The Government's overriding energy policy objective is to ensure competitive, secure and sustainable energy for the economy and for society.
- The development of renewable energy is central to overall energy policy in Ireland. Renewable energy reduces dependence on fossil fuels, improves security of supply, and reduces greenhouse gas emissions creating environmental benefits while delivering green jobs to the economy, thus contributing to national competitiveness and the jobs and growth agenda.
- Climate change, energy security and competitiveness are inter-related challenges that will be addressed through the transforming of Ireland's economy from one based on a predominantly import based fossil fuel dependence to a more indigenous low carbon economy based around energy efficiency, renewable energy and smart networks.
- The Government's overarching strategic objective is to make renewable energy an increasingly significant component of Ireland's energy supply by 2020, so that at a minimum we achieve our legally binding 2020 target in the most cost efficient manner for consumers.

#### 5.2.7. National Renewable Energy Action Plan (NREAP)

5.2.8. The EU Renewables Directive 2009/28/EC promotes the use of energy from renewable sources and set the EU's 20% renewable energy target by 2020. Ireland was set a renewable energy target of 16% target by 2020. The National Renewable

Energy Action Plan sets out the Government's strategic approach and concrete measures to deliver this target which includes:

- 40% of electricity consumption from renewable sources by 2020.
- 10% electric vehicles by 2020
- 12% of renewable heat by 2020
- 5.2.9. The Government is also looking beyond 2020 in terms of the significant opportunities to develop Ireland's abundant offshore renewable energy resources, including offshore wind, wave and tidal energy.
- 5.2.10. Draft Methodology for Local Authority Renewable Energy Strategies (Sustainable Energy Authority of Ireland, 2011)
- 5.2.11. There is a growing trend and need to prepare strategies for the co-ordinated development of renewable energy sources. These strategies will allow Local Authorities to maximise the renewable energy resource and potential of its area and assist in the transition to a low carbon economy. The Sustainable Energy Authority of Ireland (SEAI) has produced draft methodology guidelines for Local Authorities when preparing Renewable Energy Strategies.

#### 5.3. Regional Planning Guidelines

#### 5.3.1. Regional Planning Guidelines for the Mid-West Region 2010 – 2022

- The Guidelines relate to the counties of Clare, Limerick and Tipperary. The Guidelines have not been updated since the merger of North and South Tipperary County Councils.
- Section 2.2.3 relates to Energy and Government Policy. The region is recognised as having a high potential for the provision of renewable energy. The guidelines support new uses of agricultural lands which includes alternative energy. Renewable energy is acknowledged as having major potential for rural areas. A need for planning authorities to adopt a strong and cohesive approach to renewable energy is also recognised.
- A development vision for the region is set out in Section 3. This includes the promotion of alternative agricultural enterprise including renewable energy.

- Section 4.1.8 relates to renewable and sustainable energy. The need for the development of a co-ordinated strategy across the region for the provision of renewable energy is recognised. The potential for the region to become a leader in the provision of renewable energy is acknowledged.
- Section 6 relates to transport and infrastructure with Section 6.6.1 relating to renewable, energy in particular. This section focuses on wind energy and does not mention solar energy. Solar energy is not directly referenced in the Guidelines.

### 5.4. **Development Plan**

- 5.4.1. The operative plan for the area is the **North Tipperary Development Plan 2010- 2016** (as varied). The Plan sets out the overall development strategy for the region in accordance with the principles of proper planning and sustainable development. The plans sets out a series of strategies, policies and objectives for the plan period. Environmental protection is a key component of the plan.
- 5.4.2. Section 8.3 Tipperary Renewable Energy Strategy 2016 In 2016, the Council prepared a Renewable Energy Strategy to provide a detailed planning framework for the development of renewable energy in the County. The Renewable Energy Strategy is set out in two volumes. Volume 1 sets out the main text of the Renewable Energy Strategy and contains out a revised Wind Energy Strategy in Appendix 1. Volume 2 sets out the Strategic Environmental Assessment and Appropriate Assessment. The Tipperary Renewable Energy Strategy 2016 sets out planning policy and objectives for the development of renewable energy and should be read in conjunction with the County Development Plan (as varied). The Renewable Energy Strategy is set out as Appendix 6 of the Development Plan.
- 5.4.3. Tipperary Renewable Energy Strategy 2016
- 5.4.4. **Policy RE10: Ground Mounted for Solar PV Installations** It is the policy of the Council to facilitate solar energy installations where it is demonstrated to the satisfaction of the Council that there will be no significant adverse impact on the built and natural environment, the visual character of the landscape or on residential amenity.
- 5.4.5. Section 6.8 Solar Energy Strategy The Council will facilitate proposals for solar PV installations; subject the demonstration by the applicant that the proposal will not have

a significant adverse impact on the built and natural environment, the visual character of the landscape or on residential amenity. Particular care must be taken in respect to proposals for commercial PV in Primary and Secondary Amenity Areas, where the Council may require a Visual Impact Assessment (VIA) in support of the proposal, particularly where there is potential for cumulative visual impact as a result on existing and permitted solar development in the area. Key considerations are:

- a) Site aspect, area and topography,
- b) Availability and method of grid connection,
- c) Impact on sensitive receptors including roads, residential development, areas of tourism and landscape amenity value, airfields and ecology,
- d) The visual impact of the proposal and other permitted large-scale solar PV developments on the visual character of the area having regard to the provisions of the LCA 2016,
- e) Management, fencing and upkeep of the site,
- f) Construction phase activities and impacts,
- g) Proposed lifespan of the development,
- h) Decommissioning and reinstatement of site subject to the satisfaction of the council.
- 5.4.6. These issues should be addressed in detail at planning stage and consideration should be given to the need for EIA in support of large scale proposals or proposals in sensitive areas. Where it has been determined that EIA is not required for sub-threshold development the applicant shall submit an environmental assessment with the planning proposal.
- 5.4.7. It is stated that Solar PV will normally be regarded as a temporary use of land. Therefore conditions will be attached to planning permissions to limit the duration for which the system can remain in place and to manage site remediation after cessation, in this respect a bond will be required.
- 5.4.8. In the absence of Irish guidelines, the provisions of 'Planning guidance for the development of large-scale ground mounted solar PV systems' BRE 2013, may be consulted.

#### 5.5. Natural Heritage Designations

- 5.5.1. The site is not located within a designated Natura 2000 site. There are 3 no European sites proximate to the appeal site as follows:
  - Lower River Suir SAC
  - The Loughans SAC
  - Spahill & Clomantagh Hill SAC

#### 5.6. EIA Screening

- 5.6.1. Under the Planning and Development Regulations 2001 (as amended), current government and EU guidance, the Planning Authority must screen the proposed development for Environmental Impact Assessment (EIA) and decide if the planning application for the proposed development does or does not require the preparation of an Environmental Impact Assessment Report (EIAR).
- 5.6.2. The current requirements for EIA are outlined in Part X of the Planning and Development Act, 2000, as amended and Part 10 of the Planning and Development Regulation 2001, as amended. The prescribed classes of development and thresholds that trigger a mandatory EIS are set out in Schedule 5 of the Planning and Development Regulations 2001, as amended.
- 5.6.3. The proposed development does not fall into a class of development contained in Schedule 5, Parts 1 or 2 and therefore the requirements for an EIA can be screened out. Class 15 of the Schedule 5 states that EIA can be required in the case of subthreshold development that would be likely to have significant effects on the environment having regard to the criteria set out in Schedule 7 of the Planning and Development Regulations 2001 (as amended).
- 5.6.4. In considering the criteria for determining whether a development would or would not be likely to have significant effects on the environment, I consider that having regard to the characteristics of the proposed development and the location of the development and the characteristics of potential impacts there is no real likelihood of significant effects on the environment arising from the proposed development.

5.6.5. Accordingly I am satisfied that the proposed development would not be likely to have significant effects on the environment such that an Environmental Impact Assessment is required.

## 6.0 The Appeal

#### 6.1. Grounds of Appeal

- 6.1.1. The third-party appeal has been prepared and submitted by Michael Shanahan, Castlehall Farm Partnership, Rahealty, Thurles, Co Tipperary. The issues may be summarised as follows:
  - Flooding The appellants adjoining land drains through the appeal site and is lower in elevation. This land experiences flash flooding. A 38.3ha solar panel "umbrella" will in all likelihood add further to the problem of flooding. Further the appellants dwelling and farmyard is also on lower ground that drains through the proposed site and there is also potential to flood the appellants dwelling house and farmyard.
  - Road Access Access to the site is via routes that are already narrow and treacherous. The proposed access to the site is situated on a marshy narrow bog road that drops sharply on either side. This road is clearly not suitable for any additional traffic volume and is only ever used for local access. The proposed site has 1km of access on the "Shanballyduff" Road and this road is far more suitable for heavy traffic.
  - Badger Sett There is a badger sett located beneath the road on the raised bog platform and located on the boundary ditch. Concern that the heavy traffic would collapse the badger sett and that together with the overall development would cause the badgers to move spreading TB.
  - Health Impact The WHO (2004) has identified non-specific multi system illness resulting from electromagnetic exposure as "electromagnetic hypersensitivity". The proposed solar farm would emit "94.6 acres" of electromagnetic energy in a distance less than 5 metres away from the appellants dairy stock and 300m from their home. The appellant states that with a young family there are no words that sufficiently express their anxiety around this proposal.

- Environmental Impact The site is sandwiched between two green, low-carbon, agri-environmental scheme (GLAS) farms. This land is teeming with wildlife including bees and insects. The potential solar farm would destroy the bees and insects' diet of native plants and flowers as well as devastate their ground cover. Stated that there is a rare breeding pair of peregrine falcons (endangered species) residing in the Butler Tower (located on the farm) less than 500m from the proposed development.
- End of Life The potential environmental impact of photovoltaic panel life cycle can generate emissions, especially metals in the environment if they are not correctly handled. In addition the PV panels can be vulnerable to accidental damages due to fires, thermal shock or atmospheric agents whereby the damaged modules are exposed to rain and therefore resulting leachates could easily reach adjoining aquatic and terrestrial land. This is an unacceptable risk to the appellants dairy stock grazing 5 metres away.
- Aesthetic Impact The appellant objects on the aesthetic perception of colour, glare, fractality, visibility and integration degree. The proposed site is level with the lands in which the appellants farm. There will be 96.4 acres of black panelling, metal fences, cameras and substation a scar on the countryside. This will impact upon nearby areas of outstanding natural beauty such as Castle Tower House (Archaeological Inventory of County Tipperary).
- Privacy The solar panels are so close to the appellants property and therefore privacy will be affected. The panels will need maintaining that will mean security personnel and workmen / workwomen regularly on site looking onto the appellants gardens / houses.
- Sites for Family The site is in an area where the appellants family have farmed for generations and where their children whose potential properties will be affected (via the issues listed above) directly by the development.
- Tourism The development will destroy the amenity value of the area which has come to be a haven for walkers, cyclists, mountain bikers, runners and others interested in the beautiful scenery.

#### 6.2. Applicant Response

- 6.2.1. The first party response to the appeal has been prepared and submitted by MKO Consultants and may be summarised as follows:
  - The County Development Plan is supportive of the development of renewable energy technology particularly in the context of reducing the carbon emissions of the county and meeting renewable energy production targets.
  - Flood Risk The issues raised in respect of flooding / surface water ponding have been taken into consideration by the applicant. The applicant reviewed the existing surface water regime on the site and to ensure that the proposed development would not cause to exacerbate surface water ponding within the site itself or on adjoining lands. A detailed Stromwater Drainage Design has been prepared for the proposed development. This design and the associated report are included in Appendix 2 of the appeal response.
  - Access As part of the grant of planning permission Tipperary County Council (TCC) included a planning condition (Condition No 4) requiring that the proposed access point be moved 50m of the location proposed. Details of this access point are required to the agreed with the Planning Authority prior to the commencement of the development. While it is the applicants considered opinion that the original access location was appropriate, the applicant does not have any objection to the relocation of the access point as directed by TCC. The applicant states that a revised site layout plan was provided with the appeal (Appendix 3 refers). However, no plans were made available with the appeal response.
  - Public Health Electromagnetic fields are produced both through natural and man-made means. The earth is the largest single source of static magnetic fields. Electricity also produces magnetic fields. Known as electromagnetic fields (EMFs) these can be shielded by materials such as wood, metal, trees or shrubs. Noted that the proposed development is located approximately 380 meters from the appellants residence. On this basis it is considered reasonable to conclude that there will be no adverse impacts arsing as they relate to EMF. Further to this, following over 20 years of intensive research into power frequency EMFs, the international scientific consensus is that there is no evidence to prove that EMFs cause any harm. Inverters at a solar farm emits such low levels of EMR that it

does not cause damage to health and does not cause any problems or interfere in any way with mobile phones, heart monitors, pacemakers, hearing aids or TV reception. In a static magnetic field such as caused by an inverter, emissions at approximately 1 metre from an installation would be only 0.05% of the International Commission on Non-Ionising Radiation Protection (ICNIRP) exposure guidelines. It is considered reasonable to conclude that the proposed development will not result in the emission of EMF at a level that would have any impact on public health.

- Glint & Glare The planning application was accompanied by a comprehensive Glint and Glare Assessment that specifically considered and assessed the potential for impact on the local road network arising from glint and glare. The report concluded that impact on relevant receptors on the public road network in the vicinity of the site would be negligible
- Environmental / Ecological Impact The planning appclaiton was accompanied by a comprehensive Ecological Impact Assessment. This assessment quantified any potential impacts realign to flora / fauna and identified the mitigation or design measures required to avoid, reduce and mitigate any potential impacts. This Assessment includes the following:

"Taking the above information into consideration and having regard to the precautionary principle, it is considered that the proposed development will not result in the loss of habitats and species of high ecological significance and will not have any significant impacts on the ecology of the wider area."

In addition to the above the Board is directed to Section 2.2.1.1 - 2.2.1.3 of the enclosed Further Information Response as these sections address biodiversity matters.

- End of Life Condition No 2(b) requires the submission of a detailed Restoration Plan in respect of the decommissioning of the proposed development. The solar panels will be disposed of in a safe manner using best practise decommissioning mitigation measures. Panels will be removed from the site by a licensed contractor and disposed of at an appropriate licensed facility.
- Visual Impact This planning application was accompanied by a Landscape and Visual Impact Assessment (LVIA) that addresses the landscape and potential visual impacts of the proposed solar array. The site is considered modified due to its agricultural use and many other very similar examples of its kind exist in the

wider landscape. On the grounds of these points and taking the landscape policies and Landscape Character Assessment the County Development Plan into account the landscape value is considered low. While the solar panels represent new landscape element, they are in keeping with the landscape character in terms of height and scale. The proposed project can only be seen from a very limited area outside the site. The level of screening provided by vegetation both on site and the surrounding area is a significant mitigating factor in reducing any potential visual effects the proposed development might have. Overall the predicted landscape impact is considered low and the overall landscape character of the area will not be affected.

- Privacy The proposed development will not be permanently manned post construction. Sporadic access to the site will be required for maintenance and security purposes. It is therefore not envisioned that there would not be any loss of privacy on adjoining lands or residences.
- Impact on Development Potential While it is difficult to assess the impact of the proposed development on notional development proposals in the locality it is considered that there are no impacts associated with the proposed development (i.e. noise, dust, glint and glare etc) that would adversely affect the development potential of the lands which surround it.
- Impact on Tourism Respectfully submitted that the proposed development is not of a type or scale that would result in any impact on tourism or visitor numbers to the local area. As outlined in Visual Impact Section above the impact of the proposed development on general landscape and visual amenity in the area will be negligible.
- 6.2.2. The appeal response was accompanied by the following:
  - TCC Further Information Submission
  - Amended Site Layout
  - Glint & Glare Assessment
  - Ecological Impact Assessment
  - Landscape and Visual Impact Assessment

#### 6.3. Planning Authority Response

6.3.1. None

#### 6.4. **Observations**

6.4.1. None

#### 6.5. Further Responses

6.5.1. None

#### 7.0 Assessment

- 7.1. This assessment is based on plans and particular submitted to Tipperary County Council on 12<sup>th</sup> September 2019 as amended by further plans and particulars submitted by way of further information on 18<sup>th</sup> December 2019.
- 7.2. 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
  - Access
  - Flood Risk
  - Health Impact
  - Ecological Impact
  - Visual Impact
  - End of Life
  - Privacy
  - Development Potential
  - Impact on Tourism
  - Other Issues
  - Appropriate Assessment

#### 7.3. Principle / Policy Considerations

- 7.4. This is an application for permission for the construction and operation of solar PV arrays mounted on metal frames on a 38.3 ha site, inclusive of an electrical substation compound, up to 10 no indicative inverter units, a temporary construction area and ancillary facilities (inclusive of gross floor space of proposed works up to 248 sq. m). Electricity from the solar panels will be directed to the onsite sub-station via underground cabling. It is anticipated that the array will have an installed generation capacity of up to 18.7 MW to maximise the solar resource at certain times of year. This planning does not include the grid connection.
- 7.5. The need to urgently and strenuously combat climate change is consistent with the identified need for additional renewable energy development and is supported by national and local policy objectives. The National Spatial Strategy, National Renewable Energy Action Plan (NREAP), Regional Planning Guidelines and the current Wexford 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 national objective, contained in NREAP, of achieving 40% of electricity generation from renewable sources by 2020 forms part of the national strategy for meeting our legally binding targets in this respect. Thus the contribution of renewable energy projects, such as that proposed, to achieving the transition to a low carbon future is well established. Solar power is also acknowledged as being capable of being delivered relatively quickly and efficiently without the need for large scale transmission grid infrastructure.
- 7.6. The proposed development is therefore supported by national, regional and local policies in terms of renewable energy. Accordingly, I consider the proposal to be acceptable in principle and that it would contribute to the diversity of sources of energy supply and hence the security of supply. The acceptability of the proposal is contingent on other issues addressed below.
- 7.7. An operational period of 30 years is requested for the development. I would draw the Boards attention to Appeal Case 306129 where the applicant sought permission to amend the permitted life of the solar farm from 25 years to 35 years. The Board refused permission in order to enable the planning authority to consider the impact of

the development over this period, having regard to the circumstances then prevailing, and in the interest of orderly development. Taken together with the possibility that technology may have advanced and energy may be developed from other methods or efficiency in solar farms may have advanced to the extent that a reduced area of land could produce sufficient energy it is considered that an operational life of 25 years is reasonable having regard to the scale and nature of the scheme. It is recommended that a suitably worded condition be attached in this regard.

#### 7.8. Access

- 7.8.1. The appellant raises concerns that access to the site is via routes that are already narrow and treacherous and are not suitable for any additional traffic volume. It is submitted that the proposed site has 1km of access on the "Shanballyduff" Road and this road is far more suitable for heavy traffic.
- 7.8.2. The Area Engineer having considered the scheme raised no objection subject to conditions including a requirement that the proposed access be re-located approx. 50m north east of the existing road with details to be agreed. Condition No 4 of the notification of decision to grant permission reflects this requirement. In response to the appeal the applicant indicates that they have amended the access point accordingly and that a revised site layout plan which includes the new access location (i.e. 50m to the north of the proposed access point) accompanied the submission (Appendix 3 refers). However, no plans and particulars in this regard have been made available with the appeal response. Overall, I agree with the Area Engineer and consider this revised access point further north to be an appropriate location for access to the site and that the relevant standards can be met as they relate to sightlines. It is recommended that should the Board be minded to grant permission that a condition be attached, similar to Condition No 4 requiring the submission of revised drawings relocating the vehicular access circa 50m north of the existing proposed access.
- 7.8.3. The construction of the proposed solar farm will lead to additional construction traffic, including HGVs, during the construction phase. The construction programme will take place over 3 6 months. It is expected that the negative impact construction related traffic will have on the local road network will be temporary to short term in duration and possibly slight to moderate in significance unless properly mitigated against

through adequate construction stage planning and implementation measures. By adopting appropriate mitigation measures and through the implementation of an adequately designed Traffic Management Plan, I am satisfied that the negative impact of construction related traffic will have on the local road network will be temporary and short term in duration, and only slight in significance.

- 7.8.4. It is recommended that should the Board be minded to grant permission that a condition be attached requiring that the construction of the development 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 and that this plan include 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. It is also recommended that a condition be attached requiring that all road surfaces, culverts, watercourses, verges and public lands be protected during construction and be reinstated to the satisfaction of the planning authority where necessary. In addition a road condition survey is to be taken to provide a basis for reinstatement works.
- 7.9. Having regard to the location of the appeal site together with the amended access for the scheme I am satisfied that any negative impacts as a result of the construction and decommissioning phase of this scheme would be temporary in nature and matters of particular concern such as construction traffic management and decommissioning can be dealt with by condition.

#### 7.10. Flood Risk

- 7.10.1. The appellant states that their land drains through the appeal site which is lower in elevation and that this land experiences flash flooding. Concern is raised that the 38.3ha solar panel "umbrella" will exacerbate the problem and that the disruption in the water table is an unacceptable risk.
- 7.10.2. I refer to the Flood Risk Assessment submitted with the application. The report indicates that the majority of the development site is within Flood Zone C and that the proposed development is considered appropriate for this flood zone classification. A small section of the solar farm site, in the vicinity of the Ballygammane Stream is located in Flood Zone B. However, the Flood Risk Assessment concluded that the

layout and design of the development may be optimised to justify the use of Zone B areas. In this regard, the installation of elements of the solar farm that are not especially vulnerable to the adverse impacts of flooding have been located in Zone B. The solar panels to be located in Zone B will be mounted on frames at an appropriate height above ground level so there is no alteration to the local surface water hydrology. In addition, the proposal has been designed to maintain a minimum separation distance of 10m from the River Ballygammane.

- 7.10.3. With regard to the specific issues raised in respect of flooding / surface water ponding the applicant reviewed the existing surface water treatment on the site and recommended the implementation of a detailed Stromwater Drainage Design to ensure that the proposed development would not cause to exacerbate surface water ponding within the site itself or on adjoining lands. Appendix 2 of the appeal response refers. The Report notes that historical ponding has occurred to the north of the site during extreme rainfall event due to lack of channel maintenance and poor soil drainage characteristics. Currently stormwater run-off from the proposed development discharges directly to minor agricultural drains, adjacent to the unnamed minor watercourse and / or infiltrates to ground.
- 7.10.4. The report identifies an unnamed watercourse which traverses the site. It is considered that this watercourse is potentially a source of surface water ponding on the northern portion of the site and the neighbouring lands to the north (appellants lands). The report and site visit notes that flow in this watercourse is restricted by vegetation and subsoils within the channel and that the conveyancing capacity at Bridge No 2 and 3 (Figure 2 refers) is restricting drainage in the vicinity of the site. As part of the proposal it is intended to undertake regular channel maintenance within the bounds of the planning application site. In addition, the report has identified a comprehensive network of vegetated swales to improve the drainage capability of the site. The report provides further detail in respect of these proposals.
- 7.10.5. It is considered that the implementation of the channel maintenance regime, coupled with the proposed new drainage design, will alleviate surface water ponding issue on the site and lands in the immediate vicinity.

#### 7.11. Health Impact

- 7.11.1. The appellant raises concerns that there is a potential for negative impacts on human health arising from electromagnetic emissions from the proposed development.
- 7.11.2. I refer to Section 11 of the Planning & Environmental Report submitted with the application. The applicant submits that 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.
- 7.11.3. The proposed development is located approximately 380 meters from the appellants residence. EMFs reduce sharply over distance and therefore no risk to health is envisaged. On this basis it is considered reasonable to conclude that there will be no adverse impacts arsing as they relate to EMF.

#### 7.12. Ecological Impact

- 7.12.1. The appellant notes that this land is teeming with wildlife including bees and insects and that the development would destroy their diet of native plants and flowers as well as devastate their ground cover. It is further stated that there is a badger sett located beneath the road on the boundary ditch and that the heavy traffic would collapse the sett and cause the badgers to move spreading PTB.
- 7.12.2. I refer to the Ecological Impact Assessment accompanying the application. This assessment quantified any potential impacts relating to flora / fauna and identified the mitigation or design measures required to avoid, reduce and mitigate any potential impacts. Section 3.3 of the Report described surveys of the proposed development site that were undertaken for mammal species including both otter and badger on the 30th August 2018. Section 4.2.4 described signs of both otter and badger within the development site. However, no records of any badger sett or otter holt were recorded within the site. It is stated that surveys were undertaken in accordance with standard best practise methodologies and that these standard best practice measures state that "surveys to identify setts and field signs can be undertaken at any time of the year, but

are most effective between November and April when vegetation cover is reduced." It is further stated that surveys on site were not constrained by vegetation cover and there were no access constraints to any parts of the site and that a comprehensive baseline assessment of the site was achieved for these species.

- 7.12.3. The proposed development will result in temporary disturbance related impacts during the construction phases of the proposed development. The development has been designed to avoid impacts on the potential otter habitat, the River Ballygammane and associated river banks and has been set back a minimum of 10m from the watercourse. This will minimise any potential for disturbance related impact on the species. The construction period for this development will be short term (approx. 3 6 months) and the majority of works are unlikely to differ significantly from agricultural activity in terms of disturbance.
- 7.12.4. In addition, and taking a precautionary approach Section 5.2.2 of the Ecological Impact Assessment report recommends the undertaking a pre-construction mammal surveys, following best practise, in advance of any future construction works should the proposed project be granted. This will ensure that these protected species can be adequately protected should they migrate into the site in the intervening period. I agree with this recommendation.
- 7.12.5. The Ecological Impact Assessment acknowledges the biodiversity value of the site. Section 5.2.1 states the hedgerows and treelines on the site and along the grid connection route will be retained and are of local importance (higher value) as they comprise semi natural habitat and provide commuting and foraging corridors for a variety of species. The proposal will not result in the loss of hedgerow habitat given the design layout. Further there will be no significant loss of grassland habitat and following construction, the grassland beneath the solar array infrastructure will be less intensively managed thereby resulting in a biodiversity net gain.
- 7.12.6. I am satisfied that the proposed project has been designed to avoid impacts on the receiving ecological receptors on site.
- 7.12.7. With regards to the Peregrine Falcon the report states that "the site does not provide suitable habitat for wintering wildfowl, or protected breeding bird species". No suitable nesting habitat for peregrine falcon was recorded within or immediately adjacent to the site i.e. large cliffs or tall built structures such as castles. Although the submission

suggests that the species is known to nest on the "Butler Tower" this is located in excess of 500 metres to the north of the site boundary. Given the separation in distance between the proposed project and the Butler Tower separated by a main road, treelines and agricultural grassland and the short term nature of the construction phase of the proposed development (3 - 6 months) there is no potential for significant effect on Peregrine Falcon as a result of the proposed project. It should also be noted that the Butler Tower is not designated as a Special Protection Area (SPA).

#### 7.13. Visual Impact

- 7.13.1. The appellant objects to the scheme on the aesthetic perception of colour, glare, fractality, visibility and integration degree and that it will have an adverse impact landscape and general visual amenity.
- 7.13.2. I refer to the Landscape and Visual Impact Assessment (LVIA) submitted with the application. This Report and associated photomontages considered landscape character, value and sensitivity; magnitude of likely impacts and significance of landscape effects in assessing the potential impacts of the scheme on the landscape resulting from the proposed development. Having regard to the North Tipperary County Development Plan 2010-2016 (as varied) there are no designated scenic landscape areas within the environs of the site and no designated scenic routes or prospects proximate to the appeal site. As result no designated views will be influenced by the proposed development.
- 7.13.3. The site is considered modified due to its agricultural use and that many other very similar examples of its kind exist in the wider landscape. The dominant landscape characteristics of this area and indeed the site are the field pattern as defined by the hedgerows. On these grounds and taking the landscape policies and Landscape Character Assessment from the County Development Plan into account the landscape value is considered low. It is stated that the changes to the physical landscape as a result of the proposed development will be very minor in nature, as the proposed development has been designed to fit into this pattern with no changes to the existing hedgerows or trees. The report concludes that changes to the landscape are very localised.

- 7.13.4. While the solar panels represent a new landscape element, they are in keeping with the landscape character in terms of height and scale, as the approximate height of the panels is up to 2.2 meters. It would also appear that the proposed project can only be seen from a very limited area outside the site with views of panels restricted to the immediate area. The level of screening provided by vegetation both on site and the surrounding area is a significant mitigating factor in reducing any potential visual effects the proposed development might have.
- 7.13.5. There is no doubt that there will be an impact on landscape character as a result of the development, due to the introduction of a new and relatively intense form of built development within a landscape that can be generally characterised as flat agricultural farmland. However in terms of landscape impacts the proposed scheme is considered to have only a minor physical impact on the site as it is contained within the existing dense hedgerow network and will not require significant excavation works to construct either the solar panels or the access and maintenance tracks. Any changes in landscape character brought about by the proposed solar farm will be very difficult to perceive (visually) as the development will be substantially screened from view.
- 7.13.6. Having regard to the information available together with my site inspection I am satisfied that the overall design of the development has had due regard to its setting within the confines of these agricultural lands and wider rural landscape to ensure it limits its effects upon landscape and visual receptors. Based on the landscape and visual impact judgements provided throughout the LVIA, the proposed solar development is not considered to give rise to any significant residual impacts. Having regard to the flat nature of the terrain, the setback of the site from local receptors and the degree of screening afforded by surrounding hedgerows the significance of landscape and visual impacts is considered "slight" at worst and generally "imperceptible". Accordingly, I have no objection to the proposed scheme in terms of visual impact.

#### 7.14. End of Life

7.14.1. The appellant raises concerns in relation to the safe and appropriate decommissioning and removal of solar panels at the end of life stage of the development.

- 7.14.2. Condition No 2(b) of the notification of decision to grant permission requires the submission of a detailed Restoration Plan in respect of the decommissioning of the proposed development. This Plan must be submitted prior to the commencement of the development. Further to this the applicant submits that the solar panels will be disposed of in a safe manner using best practise decommissioning mitigation measures and that panels will be removed from the site by a licensed contractor and disposed of at an appropriate licensed faciality.
- 7.14.3. While I consider that the scheme would have benefited from the submission of a Decommissioning Statement or similar I am satisfied that the matter can be dealt with by way of suitably worded condition requiring the submission of a detailed restoration plan, including a timescale for its implementation, providing for the removal of the solar arrays, including all foundations, anchors, inverter/transformer stations, substation, CCTV cameras, fencing and site access to a specific timescale, to be submitted to, and agreed in writing with, the planning authority.

#### 7.15. Privacy

- 7.15.1. The appellant raises concern that the proposed development will affect their privacy by reason of proximity and that security and work personnel regularly on site will look onto the appellants gardens / houses.
- 7.15.2. While there will be multiple personnel on site throughout the construction phase resulting in general disturbance the work will be restricted to specific hours by way of condition and will be short term. During the operational phase sporadic access to the site will be required for maintenance and security purposes. With regard to any proposed additional artificial lighting it is recommended that a condition be attached requiring that no additional artificial lighting shall be installed or operated on site unless authorised by a prior grant of planning permission. It is further recommended that a condition be required that CCTV cameras be fixed and angled to face into the site and shall not be directed towards adjoining property or the road.
- 7.15.3. Taken together with the distance to adjoining residential properties, the established hedgerows and natural vegetation located along the sites boundaries and the nature of the proposed scheme I am satisfied that any potential impact to adjoining residential properties would not be so significant as to merit a refusal in this instance.

#### 7.16. Development Potential

- 7.16.1. The appellant raises concern that the development will potentially impact on future family members properties in the vicinity of the site. The proposal before the Board is for a solar farm on lands where such developments is considered a permissible use and where it is reasonable to expect developments of this kind would normally be located subject to compliance with relevant wider policies and objectives.
- 7.16.2. The proposed development in terms of design, scale, layout and location is not considered to be a bad neighbour in this context. Similar to the scheme now before the Board all planning applications are considered on their own merits and the prevailing policies and objectives appliable at that time. Accordingly, I am satisfied that this matter is not material to the consideration of this appeal in this instance.

#### 7.17. Impact on Tourism

7.17.1. The appellant raises concerns that the development will destroy the amenity value of the area which has come to be a haven for walkers, cyclists, mountain bikers and runners. While the suitability and attractiveness of the area for such recreational pursuits is acknowledged there were no obvious marked routes either through the appeal site or proximate to the site. I refer to the Landscape & Visual Impact Assessment submitted with the application and the conclusions therein where the impact of the proposed scheme on the general landscape will be negligible. I do not consider that to permit the proposed scheme would have a significant impact on the tourism and visitor numbers to the area. Accordingly, I am satisfied that this matter is not material to the consideration of this appeal in this instance.

#### 7.18. Other Issues

7.18.1. Development Contribution – Tipperary County Council has adopted a Development Contribution scheme; Tipperary County Council Development Contribution Scheme 2015 - 2019, under Section 48 of the Planning and Development Act 2000 (as amended). The proposed development does not fall under the exemptions / incentives listed in this 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.

7.18.2. Condition No 17 – The notification of decision to grant permission issued by Tipperary County Council attached a condition requiring the operator to make the solar farm available for a minimum of 10 no open days each year and that the nature trail and interpretation board illustrating the wildlife sanctuary on site, the biodiversity measures and species shall be available for accompanied schools, local groups and local communities to visit. No party to the appeal has raised any issues in relation to this condition. I support this proposal and recommend that should the Board be minded to grant permission that a similar condition be attached.

# 8.0 Appropriate Assessment

8.1. I refer to the Appropriate Assessment Screening Report and Natura Impact Statement submitted with the application. I also refer to the Surface Water Drainage Report submitted with the appeal that identifies an unnamed watercourse which traverses the site which is potentially a source of surface water ponding on the northern portion of the site and the neighbouring lands to the north due to vegetation and subsoils within the channel and that the conveyancing capacity at Bridge No 2 and 3 (Figure 2 refers) is restricting drainage in the vicinity of the site. As part of the proposal, it is intended to undertake regular channel maintenance within the bounds of the planning application site. In addition, the report has identified a comprehensive network of vegetated swales to improve the drainage capability of the site. The report provides further detail in respect of these proposals.

#### 8.2. Stage 1 Screening for Appropriate Assessment

8.3. Following desk studies and ecological / ornithological walkover surveys, likely Zones of Impact (ZOI) for individual ecological receptors were assigned. The project area does not extend into any European site and there are no proposals for works to any European Site. The applicant identifies 3 no Special Areas of Conservation that occur within a 15km radius of the proposed development site. While 15km is not a statutory requirement I am satisfied that it is a reasonable parameter and that the sites identified in report are acceptable. Sites considered relevant to this appeal site are set out below:

### Lower River Suir SAC (Site Code 002137)

7.5km south west of the site / 9.4km south-west of the site via surface water connectivity

Qualifying Interest		Conservation	Likely Zone of Impact		
		Objectives			
	Atlantic salt meadows Mediterranean salt meadows Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels Old sessile oak woods with llex and Blechnum in the British Isles Alluvial forests with Alnus glutinosa and Fraxinus excelsior Taxus baccata woods of the British Isles Freshwater Pearl Mussel White-clawed Crayfish Sea Lamprey Brook Lamprey	The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. The site has detailed site specific conservation objectives that aim to define favourable conservation condition for a particular habitat or species at that site.	The proposed development site is located 7.5km south west of the this SAC, with surface water connectivity via the River Suir, which flows along the northern and western boundary of the site. Screened in due to potential hydrological connection by reason of surface water flow and the source- pathway-receptor model		

<ul> <li>Twaite Shad</li> </ul>							
<ul> <li>Salmon</li> </ul>							
Otter							
The Loughans SAC (Site Code 000407)							
13km north west of the proposed development							
Qualifying Interest	Conservation	Likely Zone of Impact					
	Objectives						
Turloughs	To restore the favourable conservation condition of Turloughs in The Loughans SAC.	No complete impact source-pathway- receptor chain for impact was identified. Based on the nature and scale of works and the distance from this SAC; potential for indirect impact on the European Site can be excluded. Screened out. No hydrological impact and distance sufficient for no impacts due to works					
		works.					
Spahill & Clomantagh Hill SA	AC (Site Code 000849)						
14.9km north west of the devel	lopment site						
Qualifying Interest	Conservation Objectives	Likely Zone of Impact					
<ul> <li>Semi natural dry</li> </ul>	To maintain or restore	No complete impact					
grasslands and scrubland	the favourable	source-pathway-					
facies on calcareous	conservation condition	receptor chain for					
substrates	of the Annex I habitat(s)	impact was identified.					

and/or t	the	Annex	C II	Based on the I	nature and
species	for	which	the	scale of work	s and the
SAC has been selected.			distance from	this SAC;	
				potential for	indirect
				impact on the	European
				Site can be excluded.	
				Screened o	ut. No
				hydrological	impact
				and distance	sufficient
				for no impac	ts due to
				works.	
				pecies for which the AC has been selected.	AC has been selected. distance from potential for impact on the Site can be ex Screened o hydrological and distance for no impac

- 8.4. With the exception of Lower River Suir SAC (Site Code 002137) there are no hydrological connections with the other 2 no Natura 2000 sites listed above and are therefore screened out from further consideration.
- 8.5. As stated, the project is not directly connected with or necessary to the management of any European Site. However, the proposed development site has connectivity to the downstream River Suir SAC, via the River Ballygammane. The River Ballygammane delineates the northern, north-eastern and western boundary of the site flowing in a south-westerly direction and discharging to the River Drish 1.2km south-west of the site. The River Drish has connectivity to the Lower River Suir SAC which is located 9.4km (surface water distance) downstream of the proposed site. In the absence of incorporated mitigation / best practise, potential for deterioration of water quality within the downstream Lower River Suir SAC, has been identified. For this reason, there is a requirement for further assessment.

#### 8.6. Stage 2 Appropriate Assessment

8.7. The conservation objectives and qualifying interests for the Lower River Suir SAC are set out above. The AA Screening Report "screens in" the potential for significant effects on Lower River Suir SAC as a result of potential indirect effects on water quality, via the River Ballygammane. The NIS presents the data and information on the project and provides an analysis of the potential adverse effects on the above listed European Site. Potential adverse effects are assessed in view of best scientific

knowledge, based on objective information in relation to the project including the proposed avoidance, reduction and preventive measures. Any likely direct or indirect of the proposed development, both alone and in combination with other plans and projects, on European Sites by virtue of the following criteria: size and scale, land-take, distance from the European Site or key features of the site, resource requirements, emissions, excavation requirements, transportation requirements and duration of construction and operation were considered in the NIS.

### 8.8. Identification of Potential Effect Pathways

- 8.9. The Screening Assessment has identified potential for the proposed project to affect the Lower River Suir SAC as a result of deterioration in surface water quality and potential flood risk during the construction, operation and decommissioning phases of the proposal. The Lower River Suir SAC is located 9.4km (surface water distance), downstream of the proposed development via River Ballygammane. Given the nature and scale of the proposed construction, operational and decommissioning phases of the works, within an area of improved agricultural grassland, potential for effects on surface water quality as a result of suspended solids discharge and potential flooding risk has been identified in the absence of mitigation.
- 8.10. Assessment of pathways for potential adverse effects on the integrity of the individual Qualifying Interests (Qis) of Lower River Suir SAC are set out as follows:

Qualifying Interest	Assessment of Pathways for Effect
Atlantic salt meadows	These habitats do not occur within the boundary
Mediterranean salt meadows	of the proposed development. There will be no direct effects on these habitats due to the separation in distance between the proposal and the mapped distribution of the Qualifying Interest within the Designated Site. A review of the Conservation Objectives supporting document indicates that the nearest mapped distribution of this feature within the SAC occurs in excess of 100km (surface water distance) downstream of the proposal.

Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels Alluvial forests with Alnus glutinosa and Fraxinus excelsior Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	The nature and scale of the developments is such that there is no potential for a large-scale pollution event at the development site. In addition, pollution from the proposed development site would have to travel a significant distance downstream prior to reaching any of these Qualifying Interests. The buffering and dilution effect of the intervening watercourses, lakes and sea will ensure no adverse effects on those Qualifying Interests. Direct or indirect effects are not anticipated. The potential for significant effects on these habitats is therefore not considered further. There will be no direct effects on these habitats within the SAC as a result of the proposed development as the proposal is located entirely outside of the SAC. At its closest point the proposed development is located 9.4km (surface water distance) upstream of the SAC boundary. Pathways for deterioration on water quality have been identified via the adjacent River Suir providing connectivity to downstream these Qualifying Interests within the SAC. These include potential surface water runoff potentially containing suspended solids. The potential for significant effects on these habitats is therefore considered further.
Old sessile oak woods with Ilex and Blechnum in the British Isles Taxus baccata woods of the British Isles	There will be no direct effects on these habitats due to the separation in distance between the proposal and the Qualifying Interests within the Designated Site

	There will be no potential for indirect effects on
	these habitat as they are terrestrial and not
	dependent on water quality within the River Suir
	Potential for effects is therefore not
	considered further.
White-clawed Crayfish	There will be no direct effects on these species,
Otter	where they occur within the SAC, due to the
	separation in distance between the proposal and
	the Designated Site. However, the species have
	the potential to occur outside the EU Designated
	Site in suitable habitat occurring downstream to
	the south of the proposal boundary.
	The impact assessment of the proposed
	development has identified potential indirect
	pathways for water pollution associated with the
	development. These include potential surface
	water runoff and pollution of surface waters.
	In addition, potential pathways for disturbance and
	potential habitat fragmentation has been identified
	in relation to otter.
	The potential for significant effects on these
	species is therefore considered further.
Freshwater Pearl Mussel	The conservation objective applies to the
	Clodiagh freshwater pearl mussel population.
	There will be no direct or indirect effects on the
	Qualifying Interests population for which the SAC
	has been designated as the population is located
	within a separate sub catchment.
	Potential for impacts on the Qualifying
	Interests is therefore not considered further.
Sea Lamprey	

Brook Lamprey	There will be no direct effects on these species
River Lamprey	within the SAC due to the separation in distance
Twaite Shad	between the proposal and the Designated Site. Pathways for deterioration on water quality have
Salmon	been identified via the adjacent River Suir,
	providing connectivity to downstream these
	Qualifying Interests within the SAC. These
	include potential surface water runoff during
	construction, flooding risk and subsequent
	potential for pollution of surface waters.
	The potential for significant effects on these
	species is therefore considered further.

- 8.11. There will be no direct effects as the proposed development is located entirely outside the designated site. Potential pathways for indirect effects on the Qualifying Interests were identified and are listed as following:
  - Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
  - Alluvial forests with Alnus glutinosa and Fraxinus excelsior
  - Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation
  - White-clawed Crayfish
  - Otter
  - Sea Lamprey
  - Brook Lamprey
  - River Lamprey
  - Twaite Shad
  - Salmon
- 8.12. Potentially effected species outside the boundary of the European Site include:
  - Otter

### 8.13. Preventative Measures to Avoid Identified Effects / Pathways

#### 8.14. Construction Phase

- It is noted that only minor intrusive works will be required for the installation of the solar panels. The frame legs will be pile driven into the ground and therefore no intrusive foundations are required as part of the sub-structure works. This also removes the need for soil / overburden stripping for construction of the solar farm.
- A detailed Construction Environmental Management Plan (CEMP) has been prepared for the site and was submitted as part of the planning application documentation. It sets out the environmental management framework to be adhered to during the pre-commencement, construction and operational phases of the development. It incorporates the mitigating principles to ensure that the work is carried out in a way that minimises the potential for any environmental effects to occur. Minimum setback distances have also been implemented into the project design phase for the protection of watercourses (e.g 10 metre setback form watercourses). The implementation of these measures on site will avoid potential for significant impacts on downstream Designated Sites and sensitive ecological receptors. The CEMP also describes the implementation of the CEMP Best Practise Environmental Control Measures through specific "Roles and Responsibilities" to be attributed to site staff and appropriately qualified personal.
- As documented a small section of the solar farm in the vicinity of the Ballygammane Stream is located in Flood Zone B. However, the Flood Risk Assessment concluded that the layout and design of the development may be optimised to justify the use of Zone B areas. Panels will be mounted on frames at an appropriate height above ground level so there is no alteration to the local surface water hydrology.
- The solar panels are raised above the ground and as such any rainfall that is intercepted by the panels will run off and will spread out and infiltrate into the "rain shadow" beneath the panels. Given that the site is to remain grassed, it is not anticipated that the proposed development will result in any additional run off or potential for impact on surface water. Furthermore, the solar panels will be mounted on frames at an appropriate height above ground level so there is no

alteration to the local surface water hydrology. In consideration of the above, it is not proposed to install any additional drainage infrastructure beneath the panels.

- Drainage water from any works area of the site will not be directed to any natural watercourses. A level spreader may be constructed at the end of interceptor drains where the drain is not discharging into an existing drainage ditch, to convert concentrated flows in the drain, into diffuse sheet flow on areas of vegetated ground.
- It is proposed to install interceptor and collector drains either side of all access tracks to the site. These drains will be supported by attenuation an settlement systems such as level spreaders and stilling ponds which are detailed below.
   Where required water from the stilling ponds will be pumped into silt bags prior to discharge to ground via percolation. A preliminary drainage design is included in the CEMP submitted with the application.
- It is also proposed to adopt the following pollution prevention measures for the protection of watercourses:
  - 1) No in-stream works are proposed as part of the development
  - 2) Maintaining a 10m buffer from Ballygammane Stream all other drainage features within the site boundary
  - No construction vehicular access, with the exception of the pile driving equipment, will be permitted within 20m of the Ballygammane Stream
  - 4) Works shall not take place at periods of high rainfall and shall be scaled back or suspended if heavy rain is forecast.
  - 5) A limited area of soils will be stripped at any one time to avoid exposing large areas of the proposed development area, thereby limiting rainfall infiltration and preventing run off onto exposed soil surfaces. Following reinstatement of each section, the area will be reseeded to facilitate immediate revegetation of the site and prevent suspended solids runoff.
  - Any excavated topsoil that is to be reused will be stored on the site outside of a minimum 20m buffer zone from all watercourses
  - 7) Stockpiles of excavated materials will be sealed with a digger bucket to reduce the potential for sediment runoff. These areas will be surrounded with silt

fencing t prevent any pathway to any sensitive receptor. Polyethylene sheeting will also be placed over stock piles if required.

- 8) Whilst no significant silt laden run off is anticipated, the site will be regularly monitored by the SCECO for signs of run off such as silt in surrounding vegetation and measures will be put in place to prevent this where necessary. This may include the provision of an additional layer of silt fence.
- Excavations will be carried out using a suitably sized excavator and, in all circumstances, excavation depths and columns will be minimised.
- 10)Heavy plant and equipment will travel slowly across bare ground at a maximum of 5km/hr
- 11)Any construction materials, prior to use, will be stored at designated locations. Suitably far away form the watercourse to avoid excessive sediment run-off or wind-blow.
- 12)Any excess construction material shall be immediately removed form the area and sent to an authorised waste recovery facility.
- 13)Silt fencing will be installed between all proposed infrastructure and drainage ditches and watercourses on site during the construction phase of the proposal.
- The construction period for this development will be short term (approximately 3-6 months) and is likely to result in some noise disturbance. However, the majority of works are unlikely to differ significantly from agricultural activity in terms of disturbance, with the exception of pile driving for the installation of solar panel support structures. Disturbance to otter is therefore considered to be temporary and short term in nature and will not result in significant adverse effect.
- The proposed set back distance in combination with other measures to protect water quality incorporated in the project design including the use of silt fences, storage of excavated material away from watercourse and storage of hydrocarbons and other potential pollutants in bunded containers away form waterbodies, will ensure that no deleterious material enters waterbodies in close proximity to the development site.
- Based on the information available it can be concluded that the proposed development will not adversely affect the identified Qualifying Interests of the

Lower River Suir SAC through deterioration of water quality and in separation in distance.

### 8.15. Operational Phase

 The drainage design for the proposal has been designed to prevent any surface water runoff to the adjacent Ballygammane Stream and the downstream River Suir.
 Full details are included in the CEMP.

### 8.16. <u>Decommissioning Phase</u>

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

### 8.17. In-combination / Cumulative Assessment

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

### 8.18. Conclusion

- 8.19. I am satisfied that an examination of the potential impacts has been analysed and evaluated using the best scientific knowledge. Significant effects on Natura 2000 sites were identified. Where potential adverse effects were identified, key design features are prescribed to remove risks to the integrity of the European sites. Taking into consideration the extensive mitigation measures detailed in the planning application, based on best scientific evidence, there is no predicted in-combination impact on Lower River Suir SAC (Site Code 002137).
- 8.20. I consider it reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans or projects

would not adversely affect the integrity of the Lower River Suir SAC (Site Code 002137) or any other European site, in view of the site's Conservation Objectives.

## 9.0 **Recommendation**

9.1. Having considered the contents of the application (as amended), the provision of the Development Plan, 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.

# 10.0 Reasons and Considerations

### 10.1. Having regard to:

- the nature, scale and extent of the proposed development,
- the decisions made in respect of an appropriate assessment,
- the national targets for renewable energy contribution of 40% gross electricity consumption by 2020
- national and local policy support for developing renewable energy, in particular the:-
  - Government's Strategy for Renewable Energy, 2012-2020,
  - National Planning Framework, 2018,
  - North Tipperary Development Plan 2010- 2016 (as varied) and
  - Tipperary Renewable Energy Strategy
- the location of the proposed development,
- the distance to dwellings or other sensitive receptors from the proposed development
- the submissions made in connection with the planning application and appeal
- the likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely significant effects of the proposed development on European Sites.

The Board considered that the proposed development, subject to compliance with the conditions set out below, would:

- not have an unacceptable impact on the character of the landscape or on the cultural or archaeological heritage,
- not seriously injure the visual and residential amenities of the area,
- be acceptable in terms of public health, flooding, traffic safety and convenience,
- not have an unacceptable impact on the ecology,
- make a positive contribution to Ireland's requirements for renewable energy,
- be in accordance with:-
  - Government's Strategy for Renewable Energy, 2012-2020,
  - the National Planning Framework, 2018
  - North Tipperary Development Plan 2010- 2016 (as varied) and
  - Tipperary Renewable Energy Strategy

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

### 10.2. Appropriate Assessment Stage 1

- 10.3. The Board considered the Screening Report for Appropriate Assessment, the Natura Impact Statement and all other relevant submissions and carried out an appropriate assessment screening exercise and an appropriate assessment in relation to the potential effects of the proposed development on designated European sites. The Board noted that the proposed development is not directly connected with or necessary for the management of a European Site and considered the nature, scale and location of the proposed development, as well as the report of the Inspector.
- 10.4. The Board agreed with the screening report submitted with the application and with the screening exercise carried out by the Inspector. The Board concluded that, having regard to the qualifying interests for which the sites were designated and in the absence of a hydrological connection between the application site and the European Sites that The Loughans SAC (Site Code 000407) and Spahill & Clomantagh Hill SAC (Site Code 000849) could be screened out from the further consideration and that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effects on these European Sites or any other

European Sites in views of the sites conservation objectives and that a Stage 2 appropriate assessment is therefore not required in relation to these European Sites.

### 10.5. Appropriate Assessment Stage 2

- 10.6. The Board considered the Natura Impact Statement and all other relevant submission and carried out an appropriate assessment of the implications of the proposed development for Lower River Suir SAC (Site Code 002137) in view of the sites conservation objectives. The Board considered that the information before it was adequate to allow the carrying out of an Appropriate Assessment.
- 10.7. In completing the assessment, the Board considered the likely direct and indirect impacts arising from the proposed development both individually or in combination with other plans or projects, the mitigation measures which are included as part of the current proposal and the Conservation Objectives for this European Site. In completing the Appropriate Assessment, the Board accepted and adopted the Appropriate Assessment carried out in the Inspectors report in respect of the potential effects of the proposed development on the aforementioned European Site, having regard to the sites' Conservation Objectives.
- 10.8. In overall conclusion, the Board was satisfied that the proposed development would not adversely affect the integrity of the Lower River Suir SAC (Site Code 002137) or any other European Site in view of the sites Conservation Objectives.

# 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 31<sup>st</sup> October 2019 and by the further plans and particulars received by An Bord Pleanála on the 8<sup>th</sup> May 2020, 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 proposed development shall be amended as follows:
  - a) The existing agricultural access shall not be used for the proposed development. A new vehicular access shall be provided circa 50m north of the existing proposed access.

Revised drawings showing compliance with these requirements shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

**Reason**: In the interest of traffic safety.

3. All of the environmental, construction and ecological mitigation measures set out in the Planning and Environmental Report including the Natura Impact Statement, and other particulars submitted with the application shall be implemented by the developer in conjunction with the timelines set out therein, except as may otherwise be required in order to comply with the conditions of this order.

**Reason**: In the interest of clarity and the protection of the environment during the construction and operational phases of the development.

- 4. a) 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.
  - b) Prior to commencement of development, a detailed restoration plan, including a timescale for its implementation, providing for the removal of the solar arrays, including all foundations, anchors, inverter/transformer stations, substation, CCTV cameras, fencing and site access to a specific timescale, shall be submitted to, and agreed in writing with, the planning authority.
  - c) 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/anchors, and all associated equipment, shall be

dismantled and removed permanently from the site. The site shall be restored in accordance with this plan and all decommissioned structures shall be removed within three months of decommissioning.

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

5. The operator shall make the solar farm available for a minimum of 10 no open days throughout each year during the operation of the solar farm. The nature trail and interpretation board illustrating the wildlife sanctuary on site, the biodiversity measures and species shall be available for accompanied schools, local groups and local communities to visit, view and learn more about solar projects, biodiversity, etc as submitted in the project assessment reports, plans and proposals provided with the application

**Reason**: In the interest of proper planning and sustainable development, to clarify the terms of the permission and in the interests of protecting the visual amenities of the area and the environment.

- a) No additional artificial lighting shall be installed or operated on site unless authorised by a prior grant of planning permission.
  - b) CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property or the road.
  - c) Cables within the site shall be located underground.
  - d) The inverter/transformer stations shall be dark green in colour. The external walls of the storage containers shall be finished in a neutral colour such as light grey or off-white and the roof shall be of black slate or tiles.

Reason: In the interests of clarity, and of visual and residential amenity

7. Before construction commences on site, details of the structures of the security fence showing provision for the movement of mammals at regular intervals along the perimeter of the site shall be submitted for prior approval to the Planning Authority. This shall be facilitated through the provision of

mammal access gates designed generally in accordance with standard guidelines for provision of mammal access (NRA 2008).

**Reason**: To allow wildlife to continue to have access across the site, in the interest of biodiversity protection

- 8. 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:

- a) the nature and location of archaeological material on the site, and
- b) 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.

 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.

- a) Existing field boundaries shall be retained, notwithstanding any exemptions available. New planting shall be undertaken in accordance with the plans to be submitted and agreed in writing with the Planning Authority.
  - b) All landscaping 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 during the operative period of the solar farm as set out by this permission, shall be replaced within the next planting season by trees or hedging of similar size and species, unless otherwise agreed in writing with the planning authority.

**Reason**: In the interests of biodiversity, the visual amenities of the area, and the residential amenities of property in the vicinity.

- 11. The applicant shall appoint a suitably qualified ecologist to monitor and ensure that all avoidance/mitigation measures relating to the protection of flora and fauna are carried out in accordance with best ecological practice. A report on the implementation of these measures shall be submitted to the planning authority and retained on file as a matter of public record. Reason: To protect the environmental and natural heritage of the area.
- 12. The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including:
  - a) location of the site and materials compound(s) including area(s) identified for the storage of construction refuse
  - b) location of areas for construction site offices and staff facilities
  - c) details of site security fencing and hoardings
  - d) details of on-site car parking facilities for site workers during the course of construction

- e) 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,
- f) measures to obviate queuing of construction traffic on the adjoining road network,
- g) measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network,
- h) details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels,
- i) 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,
- off-site disposal of construction / demolition waste and details of how it is proposed to manage excavated soil
- k) details of on-site re-fuelling arrangements, including use of drip trays,
- I) details of how it is proposed to manage excavated soil,
- m) 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.

- a) During the operational phase of the proposed development, the noise level arising from the development, as measured at the nearest noise sensitive location shall not exceed:
  - i. An LAeqT value of 55 dB(A) during the period 0800 to 2200 hours from Monday to Saturday inclusive. [The T value shall be one hour.]

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

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

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

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

14. All road surfaces, culverts, watercourses, verges and public lands shall be protected during construction and, in the case of any damage occurring, shall be reinstated to the satisfaction of the planning authority. Prior to commencement of development, a road condition survey shall be taken to provide a basis for reinstatement works. Details in this regard shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

Reason: In order to ensure a satisfactory standard of development.

15. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site on cessation of the project coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure satisfactory reinstatement of the site

16. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or Intended to be provided by

or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the 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> March 2021