



An
Bord
Pleanála

Inspector's Report PL.04.247521

Development	Solar farm development comprising of 20,000 solar panels and associated development.
Location	Farrangalway, Knocknahilan, Mullendunny, Kinsale, Co. Cork.
Planning Authority	Cork County Council
Planning Authority Reg. Ref.	16/4204
Applicant(s)	Green Mills Energy Ltd
Type of Application	Permission
Planning Authority Decision	Grant
Type of Appeal	Third Parties and First Party v Condition no. 2
Appellant(s)	A. Normanton, T. Hemlock, J. O'Brien, C. Kelleher, A. Carlin, S. Tobin, F. Lynch, O. Coakley, E. McCarthy, S. Collins, T. Hemlock-Coyne, Jagoes Mill Action Group, P. & R. Lordon,
Observer(s)	M. Hemlock, J. Barry, J. & T. O'Brien, J. Lawton, I. & C. Ryle, D. Coakley.

Date of Site Inspection

8th & 9th February 2017

Inspector

Kenneth Moloney

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1.0 Site Location and Description

- 1.1. The appeal site is located approximately 3km north of Kinsale in a rural area.
- 1.2. The appeal site and the immediate area is characterised as a quite rural area with rolling countryside and there is a relatively high concentration of rural houses in the immediate vicinity of the appeal site.
- 1.3. The appeal site currently comprises of several green fields and is in use for agricultural purposes.
- 1.4. The appeal site is bounded on four sides by roads. The western, southern and northern side of the appeal site are bounded by local roads and the eastern side is bounded by a regional road, i.e. R607.
- 1.5. The overall size of the appeal site is approximately 13 ha (32 acres) and the shape of the appeal site is irregular.

2.0 Proposed Development

- 2.1. The proposed development comprises of a solar farm development that provides for 20,000 solar panels. It is proposed that the panels will be mounted onto pre erected steel support structures.
- 2.2. The proposed development also includes the following;
 - 1 no. single storey delivery substation
 - 2 no. single storey inverter / transformer units
 - Underground cable ducts
 - Hardstanding area
 - Boundray security fencing
 - Site entrance
 - Access tracks
 - CCTV cameras

2.3. Additional information sought in relation to (a) redesign the cluster of solar panels in the south east corner of the subject site, (b) landscaping, (c) traffic, (d) details of the delivery route, (e) sightline provision, (f) details of drainage proposals, (g) flood risk assessment, (h) contour survey, (i) location of C.C.T.V. cameras, (j) details of site levelling, (k) details of waste generation from the site, (l) decommissioning proposals, (m) details of waste water, (n) details for the protection of private wells, and (o) archaeology.

3.0 Planning Authority Decision

3.1. Cork County Council decided to grant planning permission subject to 20 conditions. The conditions are standard for the nature of the development.

3.2. Planning Authority Reports

3.2.1. The main issues raised in the planner's report are as follows;

- The Council supports and facilitates solar energy (County Development Plan para. 9.4.18).
- Site located within medium value and sensitive landscape.
- Site is minimum distance of 2km from the designated Scenic Routes.
- Proposed development would not harm the wider surrounds such as Kinsale.
- The local visual impact is not fully explored.
- There is concern having regard to the local visual impact and the proximity of the proposed development to established houses.
- Proposal is unlikely to have significant environmental impacts.
- Requirements for AA have been screened out.

3.2.2. Area Engineer; - Additional information sought in relation to (a) sightline provision, (b) surface water drainage.

3.2.3. Archaeologist; - Additional information sought requesting that an Archaeological Impact Assessment is submitted including a geophysical survey and archaeological testing.

3.2.4. Environment; - Additional information sought.

3.2.5. There is a submission from An Taisce which states that a strategic national and regional strategy is required for solar array development that provides guidance in relation to suitability. A submission from the Inland Fisheries Ireland outlines a number of conditions that should be attached to any grant of permission. There is also a submission from the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs which sets out that the Department concurs with the submitted Archaeology Impact Assessment and requests that the Board retain condition no. 3 of the Local Authority permission.

3.3. **Third Party Observations**

There was 33 no. third party submissions and the issues raised have been noted and considered.

4.0 **Planning History**

None.

5.0 **Policy Context**

5.1. **Development Plan**

The operational Development Plan is the Cork County Development Plan, 2014 – 2020.

Section 9.4.13 to Section 9.4.18 provides guidance in relation to solar energy. This guidance generally concludes that large scale electricity generating schemes is not generally available in the County due to climatic conditions. However with technological advances these large scale solar energy developments may become practical in Cork.

The following policy objectives are relevant;

Policy ED 1-1 (Sustainable Development)

Policy ED 6-1 (Electricity Network)

Chapter 13 relates to Green Infrastructure and Environment and sets out policies in relation to landscape.

6.0 National Policy

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

The White Paper is a complete energy policy update, which sets out a framework to guide policy between now and 2030. The vision of the White Paper is to achieve a low carbon energy system that targets greenhouse gas (GHG) emissions from the energy sector that will be reduced by between 80% and 95%, compared to 1990 levels, by 2050, and will fall to zero or below by 2100.

Paragraph 137 of the White Paper states 'solar photovoltaic (PV) technology is rapidly becoming cost competitive for electricity generation, not only compared with other renewables but also compared with conventional forms of generation. The deployment of solar in Ireland has the potential to increase energy security, contribute to our renewable energy targets, and support economic growth and jobs. Solar also brings a number of benefits like relatively quick construction and a range of deployment options, including solar thermal for heat and solar PV for electricity. It can be deployed in roof-mounted or ground-mounted installations. In this way, it can empower Irish citizens and communities to take control of the production and consumption of energy.

The National Spatial Strategy 2002 – 2020

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

7.0 **INTERNATIONL GUIDELINES**

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

This guidance document 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.

8.0 **The Appeal**

8.1. The following is the summary of a third party appeal submitted by **Adrian Normanton**;

- There are currently no guidelines available in Republic Of Ireland.
- The UK guidelines emphasis the importance of public consultation.
- In the absence of any guidelines there is a free for all for solar developments.

- It is submitted that removing solar panels from the south east corner of the appeal site and reducing the number of CCTV masts by 50% is a small scale revision.
- The proposed development will have adverse impacts on established scenic views.
- It is contended that the proposal will have an adverse impact on property valuations.

8.2. The following is the summary of a third party appeal submitted by **Timothy Hemlock**;

- There are 28 no. houses located within 200m of the subject site and many are elevated so the proposal will have an adverse visual impact.
- The proposed landscape screening to the south will be inadequate.
- The properties to the south are elevated and therefore a 2m high fence hedgerow will be ineffective.
- The findings of the submitted flood assessment are questionable.
- The Board are requested, in the absence of guidelines, to apply the fundamentals of planning regulations.
- There is the risk of local contamination to local private wells.
- Glare from the proposed development will impact on established amenities.
- The holding of surface water on site may have health and safety concerns and flood risk implications.

8.3. The following is the summary of a third party appeal submitted by **Jeremiah O'Brien**;

Flawed Economic Viability

- The applicant submits that the capacity factor for the proposed development is 20%. This capacity factor is unconfirmed by the SEAI.

- The most likely capacity factor for the proposed development is approximately 10%.
- It is submitted that a 14% loss factor can be expected which would result in an effective capacity factor of 8.7%.
- It is submitted that using the corrected capacity factor that it is more likely that the proposed development will power 660 homes rather than 1,752 houses as claimed by the applicant.
- It is contended that the optimum incline for solar panels is 40% however the applicant submits that the solar panels will be inclined by 20% - 30%. This claim voids the glint and glare analysis.
- There is genuine concern given that the economic viability of the proposed development is flawed and that the proposed development will be fully built and not operate.

Sediment Management Plan

- The appellant's private well is located close to the appeal site.
- The submitted conceptual site model in the Flood Risk Assessment (FRA) does not include a source-pathway-receptor. The model assumes that overground flow is not a potential pathway.
- Therefore point no. 14 of the further information response is inadequate.

Storm Water Drainage Assessment

- It is submitted that the storm water drainage contains many errors.
- It is submitted that corrected detention storage volume requirements are 2.75 times greater than that in the FRA's proposed design.
- Such detention storage volume requirements will result in flooding of the R607.
- It is submitted that the run-off coefficient is conservative having regard to the gradient of the site and the presence of clay soils.
- The FRA does not allow for climate change.
- It is argued that solar panels result in greater run-off.

- It is submitted that having regard to 30% climate change allowance, silty clay soils with 0.5% - 5% gradient, a 20% rain-shadow immobilised infiltration factor was simulated, the baseline detection storage volume is 2.75 times greater than that presented in the FRA.

Storm Water Sensitivity Analysis

- It is submitted that due to kinetic compaction that this would result in increased run-off coefficient.

Critique Hydrological Assessment

- The FRA is over reliant on flood sources from the east of the R607.
- There have been significant floodwaters to the appeal sites south-east boundary of the appeal site.
- The source of flooding in this area is caused by incident rainfall on the eastern side of the golf course and the surrounding fields. These fields consist of clay composition.
- These floodwaters are funnelled onto Abbey Lane at the site's western boundary. These floodwaters enter the drainage ditch at the site's southern boundary in and around the southwest corner. This overland pathways were missed during the FRA.
- Given the topography of the site these floodwater do not pond on the site but flow towards the R607.
- It is contended that these storm water flow rates are approximately double that of corrected green-field peak flow rates. Therefore the detention storage design is fundamentally flawed.
- It is submitted that point no. 6 of the additional information response is inaccurate.

Farranamoy River Capacity

- It is contended that the FRA uses a run-off coefficient of 0.3, whereas a factor of 0.44 should be used. Local knowledge would point to a gradient greater than 5% which would result in a coefficient of at least 0.5%.

- A hydraulic flow calculation model submitted indicates a severe overtopping of the FR for not only the 0.1 AEP flood event as noted by the RFA, but also each of the 1%, 10% AEP and SFE adjusted flood events.
- There are regular blockage events at Mullendunny Bridge which impact on the Farranamoy River.
- There are some concerns and these include;
 - The design of the detention pond is unable to prevent peak storm water flows emanating from the site.
 - Surface water flows along the southern drainage ditch and short circuits the detention pond.
 - Regular overtopping of the Farranamoy River Capacity will submerge the sites southeast corner. This will submerge the proposed storm drain inlet and the detention pond.

Conclusion

- It is submitted that the FRA severely underestimates storm peak flood flows.
- Ground water surface flow short circuits the detention pond by flowing along the western drainage ditch.
- The Farranamoy River conveyance capacity is severely underestimated.
- The height of the flood plain will result in flood water submerging the site's southeast corner, including the detention pond and proposed storm drain input.

Housing Density

- The proposed development has not been informed by suitable site selection.
- The proposed development is therefore contrary to paragraph 9.4.17 of the Cork County Development Plan, 2014.
- The submission includes a table that indicates the proximity of houses to permitted solar farm developments.
- The proposed development accounts for 15 houses located within 50 m of the proposed development and 13 houses within 50 – 200m.

8.4. The following is the summary of a third party appeal submitted by **Catherine Kelleher**;

- It is submitted that flooding restricts access to the appellant's property.
- This development will increase the frequency and the levels of flooding.
- It is noted that the Area Engineer was not satisfied with the additional information response in relation to flooding.
- There was insufficient time to consider the suggested 'possible solution'.
- It is submitted that an open holding pond was not part of the original drawings and is a significant change to the original application.
- It is submitted that this pond is a safety issue.
- The site is an inappropriate location due to flooding, density of residential areas in the local area, area of local heritage, visual impacts, ecology and impacts in relation to glare.
- It is submitted that should the proposal go ahead it will put a stop to families moving into the local area.
- There was inadequate levels of public consultation.
- There is the risk of local contamination to local private wells.
- There are no guidelines for site selection etc.

8.5. TPlan Planning Consultants submitted an appeal on behalf of **Aoife Carlin**. The submission refers to policy provisions (national and local), site context and selection, planning history and the grounds of appeal. The following is a summary of the grounds of appeal.

Impacts on Residential Amenity

- There were 33 no. third party objections to the proposed development.
- The SEP planner's report notes the elevated nature of the surrounding houses with direct views across the site.
- The existing agricultural land does not create glint and glare.

- It is submitted that the applicant contends that the glint and glare implications will be negligible. However the pv arrays are fixed on structures that are 2.5m tall and are set at angles of between 20 and 30 degrees. Although the panels absorb light they do create a reflection.
- The applicant does not guarantee that the reflected glare will not affect residents. The revised layout submitted to the local authority is an indication of acceptance that there will be a level of glare.
- Although hedgerows have been removed to create a large field the character of the local area is that of smaller fields.
- The local area is relatively unspoilt.
- The local area has been characterised as 'rolling patchwork farmland' in the 2014 County Development Plan. It is acknowledged that there are many houses located in this rural area.
- The erection of a tall security fence and CCTV cameras will further detract from the rural character of the local area.
- The many adjoining dwellings overlook the site, particularly in winter.
- The proposed new hedging will take time to mature and may not be effective all year round.
- An image is submitted indicating the visual impact of the proposed development from the appellant's property.

Access and Traffic Management

- The proposed access and sightline provision has been raised on a number of occasions.
- There is a lack of information regarding the size and frequency of vehicles visiting the site during the construction period.
- It is submitted that traffic management has been submitted by the applicant in the absence of a solution for the sightline provision.

- No allowance is made for the upgrade of the facility during the 25 year lifespan of the proposed development due to changing technology or efficiencies.
- The lack of agreement of the 90m sightline provision between the planner and the area engineer is indicative of the problem.
- It is noted that the Area Engineer is not satisfied with visibility splays and sightlines. To achieve the appropriate sightline provision it is noted that the removal of hedgerow would be required.

Stormwater / Flood Risk

- Throughout the planning process the drainage proposals were less than satisfactory.
- It is contended that the surface water issues and the potential for stormwater discharge from the site will exacerbate flooding in the area.
- It is submitted the revised surface water drainage proposal contained in the SEP report of 13/10/16 is a significant change to both the original application and the RFI response.
- There was no opportunity for the local community or Inland Fisheries Ireland to respond.

Land Management

- Further clarification is required in relation to the statement that the land can be used as grazing land for sheep in parallel to electricity generation.
- Grazing will need to be maximised to maximise the ecological value of the site and ensure that the land is not lost from agricultural production.
- This will result in a biodiversity benefit and will ensure that the vegetation that grows under the solar panels will be subject to management via grazing rather than mechanical or chemical control.
- This will ensure the return of the land to full agricultural use in the future.
- The landowner / farmer has not submitted satisfactory proposals.

Application Management

- The redesigned proposals in the south-east corner of the subject site were not submitted to Inland Fisheries for comment.
- The redesigned proposal was not available for public comment and was the subject of a condition which is not a very satisfactory outcome for members of the public.
- It is contended that this revision is significant additional information.
- Other details that have not been sufficiently addressed include;
 - Details of source of water to serve portable toilets
 - There are no permanent toilets provided on the site after construction period and this would amount to a lack of health and welfare facilities.
 - There is no detail in relation to the grid connection.

Requirements for EIS

- It is contended that an EIS/EIA must be considered once a project gives rise to environmental impacts and this was the case in a previous Board decision under appeal ref. 245862.

Other Considerations

- The proposal will result in the loss of agricultural land.
- It is contended that the temporary period of the permission could last for 30 years.
- There was inadequate community engagement by the developer.
- The viability of the project is questionable.
- Although there are favourable renewable energy reasons to consider the proposed development it is contended that the proposal will have implications in terms of visual impact landscape and the loss of agricultural land.
- Basic criteria for the consideration of a solar panel is set out and it is considered that the proposed development is deficient in respect to all of the above criteria.

8.6. The following is a summary of a third party appeal submitted by **Stephen Tobin**;

- The proposed development will have adverse visual impacts.
- It is unknown why a neighbour was refused permission for a house on design grounds given that the proposed solar development was granted permission.
- There is a history of flooding at Jagoes Mill.
- The proposed security fence and CCTV camera would have an adverse visual impact.

8.7. The following is a summary of a third party appeal submitted by **Florence Lynch**;

- The area adjacent to the proposed site is known for flooding.
- It is unclear how the local authority could grant permission without understanding the full details of stormwater drainage plan for the development.
- Local residents know that the local area has a history of flooding.
- It is submitted that due to the height of the appellant's site and its orientation in relation to the appeal site that the proposed development may give rise to glint and glare as the appellant's vehicle is exiting their vehicular access.
- It is submitted that this glint and glare may affect views while exiting their vehicular access.
- It is submitted that the landscape plan will not mitigate the visual impact due to the deciduous nature of the proposed trees.
- The proposed development, should it be granted, would set a precedent for other such development in the local area.
- It is submitted that solar panels will have an adverse impact on the landscape unless national guidelines are developed to advise on suitable locations.
- It is submitted that the applicant did not adequately address the additional information request in relation to landscaping.

- The Board are requested, should they grant permission, to attach a condition requiring the applicant to install some mature evergreen trees to prevent the solar plant from creating a glint and glare impact.
- In the further information package a number of ground wells in the local area were identified however the appellant contends that the well on her site was not identified.
- There is no mains water in this local area so it is safe to assume that all of the houses in this local area have bore wells.
- The submitted documentation indicated that ground water was 'extreme vulnerability' which is a concern.
- The appellant's house is located downhill side of the proposed development and there is concern that their well could become contaminated.

8.8. The following is the summary of a third party appeal submitted by **Oliver Coakley**;

- It is submitted that there is no national guidance in relation to solar farm development.
- All previous cases that were appealed to the Board it is noted that the Planning Inspector's used UK Guidelines. It is submitted that the Inspector's cherry picked certain sections of these UK guidelines.
- International guidelines are not applicable by law in Ireland.
- In each appeal case the broad strategic statements of support for renewable energy to override solar specific planning concerns.
- There are a significant number of solar developments nationwide.
- It is contended that the planning application needs to take account of grid connection.
- It is contended that solar developments are placing too much weight on the need for Ireland to meet its renewable energy targets.

- The role that finite land plays for agricultural production needs to be taken into account.
- It is submitted that the vast majority of solar farms will not be commercially viable without the introduction of significant REFIT tariffs by government.
- It is estimated that about 20,000 acres of farm land has been optioned under solar farm contracts.
- A vast acreage of farm land has been therefore removed from the stock of agricultural land.
- The land at the appeal site is good agricultural farmland.
- The original application did not contain adequate information in relation to contours and levels.
- Significant additional information was provided by the applicant during the course of the planning application. However no revised notices were submitted.
- It is submitted that a key element of the noise assessment was provided over a week late of the 6-month deadline for the additional information request. The application should therefore be deemed withdrawn.
- There are genuine concerns in relation to flood risk and condition no. 18 is premature without any details.
- It is contended that the 'potential solution' to the stormwater is a very significant alteration to the proposed development and its implementation by condition will bypass any consultation.
- The glint and glare having regard to local topography will be significant and will adversely impact on established residential amenities.
- It is submitted that the proposed DNO control building / customer substation will have an adverse impact on visual amenity.
- There is inadequate detail in relation to proposed lighting and the potential for light pollution.

- It is submitted that the UK guidelines would characterise the site as Grade 2 and therefore in line with UK Guidelines planning policy should not support the development.
- The proposed development will result in population loss in the local area given the industrial scale of the proposed development.
- There is a lack of protection for water quality in the local area.
- The proposal, given the amount of hardsurface, will amount to a greater amount of storm-water run-off.
- The proposed development will have an adverse impact on heritage and tourism in the local area.
- The local consultation or community engagement has been inadequate.
- There are health and safety concerns as the proposal carries risk to local residents.
- No health and safety assessment has been carried out in relation to the grid connection cable which is to exit the site from the western boundary adjacent to the appellant's property. This will result in EMF emitting infrastructure close to a residential dwelling.
- The buildings accommodating transformers and substation contain large pieces of electrical equipment which carry a high level of potential / kinetic energy and it is submitted should not be located close to residential property.
- An Emergency Response Plan has not been developed as part of the application.
- The proposed water detention pond is a health and safety risk.
- It is contended that the cost of decommissioning the proposed development is likely to be substantial and its viability is questioned.
- The submitted decommissioning plan as part of the further information request does not include the replacement of top soil where it has been stripped from access tracks and other areas.

- There is a lack of confidence in the developer and it is questionable whether the developer can deliver this project.

8.9. The following is the summary of a third party appeal submitted by **Ted Cummins**;

- The local area is primarily a residential area.
- The local area is barely capable of dealing with existing flood levels.
- It is contended that further flood risk would be a major traffic and safety hazard.
- It is submitted that solar panels contain chemicals which can be harmful to public health with implications for bored wells.
- The impact of glint and glare is a significant concern.
- Noise will be generated by inverters and cooling fans.
- The proposed development will have safety concerns as it may attract thieves to the area.
- The proposal will result in devaluation of property.
- The proposal would overlook adjoining properties.
- Development would be premature due to the lack of any planning guidance.

8.10. The following is the summary of a third party appeal submitted by **Edward McCarthy**;

- It is submitted that the proposed development would result in flood risk in a flood vulnerable area and the proposed mitigation measures are inadequate.
- It is submitted that the holding pond was not the subject of the original application and its location will have implications for local properties.
- There are 28 houses within 200m of the site and visual impact is a significant issue.
- Given the number off private wells ground water contamination is a significant concern.

- The proposal will reduce the amount of light to the appellant's property.
- The site fencing is located approximately 15m from the appellant's property.
- The noise assessment does not take account of noise impacts that will occur during adverse weather.

8.11. The following is the summary of a third party appeal submitted by **Sandra Collins**;

- The proposal is premature until national guidelines are published.
- The proposed development is not consistent with the BRE guidelines for Cornwall County Council.
- There is a strong history of flooding in the local area.
- Inadequate consideration has been given to health and safety of residents arising from the proposed development.
- There is potential for contamination of private wells.
- There are 28 houses within 200m of the site making the site unsuitable.
- The proposal will have adverse impacts for the local landscape.
- The proposal threatens local heritage and tourism.
- Bird species recorded on the site include red and amber endangered birds, including Meadow Pipit.
- The applicant is inexperienced in developing the solar developments and this raises serious questions regarding its overall competence in developing and operating a power plant.

8.12. The following is the summary of a third party appeal submitted by **Tina Hemlock Coyne**;

- Given the local residential density and the elevated nature of the subject site the proposed development will have a significant visual impact on established residential amenities.
- It is submitted that the screening mitigation measures will be inadequate due to the topographical nature of the site.

- An Bord Pleanála are requested to consider view of the submitted photomontage from the appeal by 'Jagoes Mills Action Group' which shows the before and after from the appellant's property.
- It is submitted that adequate sightline provision remains unresolved. Access to the site is on a bend.
- The proposed solar panels will be visible from the R607 and may impact on motorists. The south east corner is a significant safety concern for motorists.
- The applicant has not adequately dealt with storm water concerns from the site.
- The lower south-east corner of the site is prone to flooding.
- No entrance verge details have been submitted and no measures to prevent water from the farmyard flowing onto the public road have been included.
- It is contended that the local authority accepted a 'potential solution' for stormwater drainage without exploring the proposal in detail.
- There are serious concerns with surface water discharging onto an open detention pond in the south-east corner of the site and there are safety concerns.
- There are also concerns in relation to compliance with statutory notices as the revised proposals are considered significant.
- No site suitability assessment has been submitted.
- It is contended that the proposed development should not have been granted permission given the site specific issues.
- There was a lack of community consultation concerning the proposed development.
- The proposal is premature until national guidelines are available.
- It is contended that the project is not economically viable.
- The submitted noise assessment report did not indicate the location of noise sensitive receptors.

- It is submitted that the geophysical survey submitted with the Archaeological Assessment is incomplete and this is stated in page 2 of the Archaeological Assessment.
- The screening measures are inadequate to deal with any intended glare.
- The application has not adequately dealt with the serious health and safety concerns associated with glare.
- It is contended that Cork County Council's consideration that the panels in the south-east corner of the site must be removed due to their distracting nature on motorists must also apply to houses.
- There is genuine concern in relation to impacts on ground water and private well contamination.
- The proposed development will have an adverse impact on rural regeneration.

8.13. The following is the summary of a third party appeal submitted by **Jagoes Mills Action Group**;

- It is contended that the submitted application was poor quality and this is evident from the additional information request.
- It is submitted that a review of the file demonstrates that there was time-pressures on the Local Authority and the full detail of all issues was not explored.
- There is a lack of detail on drainage and road access.
- It is submitted that the location of the proposed development is unsuitable given views are uninterrupted, due to the elevated nature of the site and poor boundary treatments with little screening.
- The western boundary of the site has little or no vegetation screening.
- The subject site is located approximately 2km distance from a network of Scenic Routes and approximately 500m from 'High Value Scenic Landscape'.
- The subject lands are located within a designated 'Medium Value and Sensitive Landscape' in the County Development Plan.

- The Cork County Draft Landscape Strategy classifies the local landscape as 'Rolling Patchwork Farmland'.
- The Cork County Draft Landscape Strategy considers the local area to be unsuitable for wind farm development.
- Policies in the County Development Plan for the protection of landscape are relevant to the proposed development.
- Objective GI 6-2 in the County Development Plan is relevant.
- It is submitted that the absence of national guidelines in relation solar developments highlights the lack of clarity within national legislation to guide solar development.
- The assessment by the Planning Inspector of the Coolroe solar farm development in Co. Wexford (L.A. Ref. 14/0392) interpreted the EIA Directive at a level such that an EIA is not required. However the appellant would interpret the regulations that an EIA would be required.
- It is submitted that given the large scale nature of the proposed development and the unresolved flood risk and access issues it is considered that an EIS should be triggered.
- The absence of national guidelines is evident in the wide variance of solar farm assessments across Ireland including some County Council, such as Wexford, requiring a glint and glare assessment.
- It is contended that the proposed site selection is contrary to the County Development Plan guidance and is actually based on the access to the grid connection.
- It is considered that the proposed development will alter the landscape in a significant and adverse way.
- The local area is unsuitable for large scale renewable projects such as windfarms.
- The proximity of existing houses to the proposed development is considerable and this is evident from a submitted table and map.

- It is noted that other County Councils including Wexford and Kilkenny have refused solar farm developments due to unsuitable locations. This is in contrast to Cork County Council.
- It is contended that the subject landscape is not capable of accommodating the proposed development. The comments from the SEP is noted in this regard.
- The contours and the elevated nature of the subject site have not been adequately described. The site cannot be adequately screened.
- Photomontages no. 5 and no. 6 illustrate that the topography also rises to the east and west around the site and the proposal will be materially visible from existing homes in these areas.
- It is submitted that Policy Objective ED 3-5 needs to be considered in relation to visual impact.
- It is submitted that in the absence of policy provisions for solar farm developments it is reasonable to use the principles of wind farm development guidance.
- The proposed landscape plan which includes the provision of a hawthorn hedge to a height of 2m will not adequately screen the proposed development from adjoining houses.
- Wexford County Council has refused planning permission for a number of solar farm developments due to the adverse impacts on local residential amenities.
- The submitted construction management plan has made no provision for the delivery of rock or aggregates. Details of staff numbers and potential vehicle movements are lacking in the submitted application.
- The Area Engineer has submitted that inadequate sightline provision was achieved.
- Trees and hedgerows would need to be cut back to provide for adequate sightline provision and this is contrary to the landscape proposals.

- Adequate sightline provision would necessitate extensive removal of boundary treatment and would be detrimental in terms of bio-diversity preservation and landscape protection.
- The access to the site is inadequate given that the site entrance will generate HGV's during the construction phase.
- It is submitted that condition no. 11 is contrary to the conclusions of the Area Engineer.
- It is a significant concern that the proposal to address flooding were not fully explored prior to a grant of permission. The file outlines the flood concerns in relation to the site and the flood history.
- The Archaeological Assessment did not include a geophysical survey or testing in the northern most field due to an existing crop. The Archaeological Assessment is therefore considered inadequate.
- The submitted Sediment Management Plan did not comprehensively consider the overall impact on private wells as the study only identified 3 no. wells.
- It is submitted that the overall quality of the planning application was substandard.
- An oral hearing is requested to consider all the issues.

8.14. The following is the summary of a third party appeal submitted by **Patrick and Roesia Lordon**;

- The proposed solar development has been permitted in the absence of national guidelines. It is submitted that the grant of permission by Cork County Council is premature.
- The Commission for Energy Regulation states that the level of solar applications is significantly in excess of Government 2020 target requirements and there is significant uncertainty how the projects will be realised.
- The roof spaces in Kinsale would offer a potential location for solar panels as an alternative.

- It is uncertain whether there is adequate recycling facilities to accommodate the end of life of the proposed development.
- There has been inadequate community consultation or engagement.
- It is submitted that the applicant contends that the site will be continued to be used for grazing. However the site has not been used for grazing in the last 15 years.
- It is submitted that the archaeological assessment is incomplete as it refers to details of a Country House CH001. However this structure no longer exists.
- The effect on noise during wind and rain is not adequately considered.
- It is unacceptable to state that the site will contain dust and odour impacts.
- The proposal will have visual and local environmental impacts.
- The proposed security fencing will adversely impact on visual amenities.
- It is contended that there is an asbestos water main in the road and should this be damaged there will be implications for health and water wells.
- It is submitted that should the proposed development be permitted it would set an undesirable precedent.

8.15. **FIRST PARTY APPEAL**

8.16. The following is the summary of an appeal submitted by applicant's agent.

Condition no. 2

- It is submitted that condition no. 2 is inconsistent with previous decisions at local and national level.
- These include the following cases decided by Cork County Council;
 - L.A. 16/4550
 - L.A. 15/06675
- They also include the following cases decided by An Bord Pleanala.
 - PL.04.244539

- PL.04.246527
- PL.04.245862
- It is requested that the Board consider the condition in relation to the above to allow the permission to commence from the date of commissioning rather than from the date of grant of permission.
- This will allow for uncertainty in relation to timescale of grid connection. This delay could last an unknown number of years and will impact on the ability of the project to source finance.
- A permission from the date of commissioning would allow a project function for its intended lifespan.

8.17. Applicant's Response

The following is the summary of a response submitted by the applicant's agent;

- It is submitted that the absence of national guidelines for solar developments is not a reasonable reason to justify not considering solar developments.
- It is submitted that the number of solar farm planning applications has not reached a critical mass to justify the preparation of guidelines.
- It is submitted that the appellant's measurements for the distance of houses from the solar development is inaccurate. This distance reflects the red-line boundary of the appeal site rather than the physical development itself.
- It is estimated that there is a total number of 6 no. dwellings located within 50m of the solar array and a total of 13 no. dwellings located within 50-200m of the closest array.
- In terms of surrounding roads the proposal will only be partially visible from the regional road to the east of the site.
- The visual impacts to the south will only impact on local properties. It is contended that these impacts can be addressed by mitigation.
- The proposed development will not be visible from any of the surrounding Scenic Routes.

- It is submitted that the photomontages submitted by the appellant are poor quality. Details of the site survey undertaken by the appellant are unknown.
- It is also submitted that the appellant's possibly used scanned copies of the applicant's drawings rather than using Auto-Cad prepared drawings.
- In relation to the appellant's VP1 it is contended that this view is taken from the opposite side of the house from the downstairs living room where most of the living would take place. It is considered that had the downstairs living room, which is 15m to the west, been used then it would have been evident that this view of the site would be screened.
- In relation to the submitted VP1 the actual co-ordinates are inaccurate.
- VP3 does not represent a view from the dwelling itself but a location to the rear of the house. This property will be screened by the existing hedgerow and supplemented by planting.
- In relation to VP4 there is again a large discrepancy in relation to co-ordinates.
- There is also an issue with the quality of the photomontage VP4. It is not an accurate impression of the view and the view exacerates the impact of the proposed development.
- There is no evidence that the proposed development will amount to a devaluation of local properties.
- It is submitted in the appeal comments that there is no confidence in the developer however this is not a planning issue.
- The company responsible for lodging the planning application was set up as a Special Purpose Vehicle (SPV) and the consultant preparing the application has vast experience in preparing solar development planning applications.
- In relation to noise associated with the development it is noted from previous Inspector's reports (i.e. appeal ref.s 244351, 246902, 245862) that noise from solar farm development is not considered an issue.
- In relation to grid connection it is advisable to obtain planning prior to obtaining grid connection.

- In relation to ecology the submitted ecology report concluded that the overall the site is not considered to be of ecological value. The AA Screening Report concluded that the proposed solar project will have no adverse impacts on nearby designated Natura 2000 sites.
- The submitted archaeological assessment concluded that there was no above ground archaeology within the site and the potential for buried archaeology at the site is low.
- The consultants responsible for the project have stated that they have no concerns in relation to the economic viability of the proposed development.
- Table 11-1 of the response submission justifies the site selection of the proposed development.
- In relation to Glint and Glare the proposed solar PV panels are designed to absorb light rather than reflect light. Studies have indicated that the impacts on passing motorists is slight.
- In relation to flood risk and runoff surface water it is submitted that the proposed development does not require concrete embedded structures and the amount of concrete required for the proposed development will be limited to the foundation plinths.
- It is submitted that the total area of the site is 129,700 sq. m². and the overall area of the concrete is 70 sq. m².
- The access tracks will be stone chipped and therefore permeable.
- The proposed development will not result in any additional runoff water and the proposed mitigation measures will improve the local environment.
- In relation to access it is not considered sensible to remove screen hedging adjacent to the vehicular entrance during the construction period as it is intended that the construction period will be limited to 12 weeks. In addition this hedging acts as a screen for the existing houses to the south of the appeal site.
- During construction traffic will be controlled by a traffic management plan.
- Operational traffic entering the site will be limited.

- Traffic at the site during construction will be managed by a traffic management plan.
- Livestock grazing is the most effective means of maintaining the site. It also allows for farm diversification.
- In relation to the decommissioning it is submitted that the structures will be recycled across a number of facilities across County Cork. There is only one specialist facility in Ireland, located in Co. Meath, that accepts solar modules for recycling.
- The decommissioning bond will be at the Planning Authority's discretion.
- There is no credible evidence to support the appellant's claim that storms will damage the solar modules and result in subsequent leakage into soil.
- The proposed fencing will comprise for wooden posts with attached wire mesh and this is favoured over paladin fencing.
- The proposed CCTV cameras will be the same height as the fencing and will not be obtrusive.
- There is no lighting associated with the proposed development.
- Theft at solar farm development has not been a notable issue at UK solar operations.
- The applicant has put forward a number of issues to deter theft including fencing and CCTV cameras.
- The proposed HGV movements during the construction period will be confined to the access tracks and the construction compound area. Therefore there are no anticipated impacts such as soil compaction and destruction of vegetation.
- Once construction is completed the temporary construction compound will be returned to its original condition. The applicant is satisfied to accept a condition that would make this a requirement.
- During the construction period portable toilets will be used.

- An on-site wastewater treatment system will not be required during construction.
- A licensed sanitation supplier in relation providing water for portable toilets and greywater methodology will be engaged on the site.
- These facilities will be serviced weekly and a record will be kept by the operator.
- The waste water will be disposed in accordance with the principles of the EPA Regulations, 1991.
- It is submitted that the contours on the site are demonstrated on the submitted drawing no. 5_1500729_GLA_D_025.
- The additional information was submitted on the 16th September 2016. The noise assessment was submitted within this timeframe.
- A construction management plan will be submitted to the Council which will outline details of the working hours.
- It is submitted that recent planning histories in relation to dwelling houses have no precedent for a solar panel array.
- It is submitted that the operational traffic at the facility will be limited to a few maintenance trips per month and a lot less than an existing dwelling house.
- In addition the existing traffic at the site comprising of heavy agricultural traffic is more significant than the anticipated operational traffic.

8.18. **Planning Authority Response**

None.

8.19. **Observations**

The following is the summary of an observation submitted by **Margaret Hemlock**;

- Families will relocate from this area given the industrial nature of the proposed development.

- The observer's house is located on the south side and will be affected by glint and glare.
- Screening measures are inappropriate given the topography of the site.
- Glint and glare was taken into account due to potential impact on motorists. It will have the same impact on residents.
- In appeal ref. 246902 An Bord Pleanála put a condition in place to address proximity of dwellings to solar farm developments.
- The lack of guidelines is a significant issue.

The following is the summary of an observation submitted by **John Barry**;

- The scale of the proposed development is inappropriate given the predominant rural area.
- The local area is prone to flooding.
- The visual impact of the proposed development will result in a distraction for drivers.
- Given the absence of national guidelines the proposed development is inappropriate.
- The proposed development would ruin a scenic area.

The following is the summary of an observation submitted by **John & Theresa O'Brien**;

- No guidelines available to guide development.
- Too close to existing houses.
- There are flooding issues.

The following is the summary of an observation submitted by **Joanna Lawton**;

- The sloping nature of the site and the lack of screening makes the site unsuitable.
- The site will cause a hazard on the R607.
- The flooding issues have not been resolved.
- The proximity of the proposed development to houses is a concern.
- There are no national guidelines to deal with this development.
- There has been a lack of community engagement.

The following is the summary of an observation submitted by **Irene & Cameron Ryle**;

- It is contended that the process has been heavily weighted against the objectors.
- There are other alternatives for producing solar energy and these include roof top solar energy.
- It is questionable whether the company can deliver the project as it was only formed a few days prior to lodging the application.
- It is submitted that given the sensitivities of the site a EIA should be carried out.
- The proposed entrance is unsafe and unsuitable for the necessary heavy vehicular traffic.
- The local area has a flood risk and the planning application has not fully addressed this issue.

The following is the summary of an observation submitted by **Daniel Coakley**;

- The breeding bird survey was undertaken in the winter which is an inappropriate time.
- There is an absence of planning guidelines for proposed solar developments.

- The planning inspector in appeal ref. 246902 recommended a condition that no solar panels shall be placed within 100m of a dwelling. The Inspector considered that glint and glare would be a significant issue.
- In the absence of guidelines a full assessment of glint and glare is not possible.

9.0 **Assessment**

9.1. Principle of Development

In considering the principle of a proposed solar farm development I would have regard to local, national and regional policy provisions.

The Government White Paper entitled 'Ireland's Transition to a Low Carbon Energy Future 2015 – 2030', published in December 2015, is relevant. The main objective of this policy document is to reduce carbon emissions and in this regard solar panel developments are considered an integral part of achieving this objective. The National Spatial Strategy, 2002 – 2020, recognizes the importance of renewable energy as it is stated that the aim should be to ensure that resources such as energy is used in sustainable ways.

In terms of regional policy I would refer the Board to the South West Regional Planning Guidelines, 2010 – 2022. Paragraph 5.6.32 of these Guidelines refers to renewable energy and it is stated that it is an objective to ensure that future strategies and plans for the promotion of renewable energy development and associated infrastructure development in the region will promote the development of renewable energy resources in a sustainable development.

There is currently no national guidance in relation to solar panel developments in Ireland however I would note that the UK Guidelines 'Planning Guidance for the development of large scale mounted solar PV systems' recommend that when solar

panels are located in agricultural land there is a preference to locate them in poorer or more marginal agricultural land as opposed to fertile agricultural land.

The Cork County Development Plan, 2014 – 2020, has no strategy or guidance in relation to larger solar panel developments. However the County Development Plan does acknowledge that with advancing technologies that larger solar panel developments may become a feature of the County's' electricity generation. In terms of renewable energy Policy ED 1-1: 'Energy' is relevant to the proposed development. This policy states it is an objective to *'ensure that through sustainable development County Cork fulfils its optimum role in contributing to the diversity and security of energy supply and to harness the potential of the county to assist in meeting renewable energy targets'*. It is interesting to note that the appeal site is located in an area designated 'open for consideration' in the Wind Energy Strategy Map of the County Development Plan. Policy ED 3-5 states that commercial wind energy is open for consideration in these areas where proposals can avoid impacts on;

- residential areas
- green belts
- Natura 2000 sites
- Architectural and Archaeological Heritage
- Visual Quality of the Landscape

In absence of specific planning guidance for solar farm developments I would consider that the above principles could be generally applied to renewable energy development.

Overall I would consider that there is a positive presumption in favour of alternative energy projects including renewable energy and this is acknowledged at National, Regional and County level.

However while such developments may have a positive outcome in terms of national, regional and county objectives I would also consider that locally there are likely to be concerns. Issues such as the visual impact on the landscape taking into account the siting, scale and layout of the proposed solar panel development, impact on local residents and the amenities of the area including noise and glint and glare, environmental issues including impact on the ecology, cultural heritage and accessibility/traffic and drainage issues need to be taken into account.

In conclusion therefore I would consider that there would be a general positive consideration towards solar panel developments in rural marginal agricultural land provided that the proposed development would not adversely impact on the established environmental and residential amenities of the local area.

9.2. Landscape

The appeal site is currently in use a green field and most likely for an agricultural use. The appeal site and the immediate area is characterised as a quite rural area with rolling countryside and relatively high concentration of rural houses in the immediate vicinity of the appeal site. In general the local landscape, based on my visual observation of the area, is best characterised as rolling countryside with field boundaries marking small to medium size fields and given the topographical nature of the local area the appeal site is more visible from some locations as opposed to other locations.

In terms of reviewing the quality of the receiving the landscape the County Development Plan offers guidance in terms of landscape designations. The Cork County Development Plan, 2014 – 2020, designates Scenic Routes and High Value Landscape throughout the County. However neither of these landscape designations are afforded to the appeal site. The nearest Scenic Route to the appeal site is the R605 which is located approximately 3km to the south west of the appeal site. However given the nature of the rolling landscape the proposed development is unlikely to have a significant impact on this Scenic Route.

The scale of the proposal is best indicated by the size of the site. The overall size of the appeal site is approximately 13 ha and the proposal provides for 20,000 solar panels within the vast majority of the appeal site. It is proposed that the panels will be mounted onto pre erected steel support structures. It is anticipated that at its highest point, the PV panel shall be approximately 2.2m above ground level.

A revised Landscaping Plan was submitted as part of the additional information response. A key feature of this Landscaping Plan is that the proposed solar panel development will be enclosed by hedging and will be supplemented by trees planted in selective locations. In addition to the above proposals there is established hedging along the perimeter of the site. The established hedging is generally in good condition however there are some locations where there are gaps in the hedging.

There is no doubt that the proposed development will be a departure from the established landscape and will represent a significant change and the central issue for the Board to consider is whether this significant landscape change will scare the landscape or whether the mitigation measures will be sufficient. In this regard I would note that planning permission sought is for a temporary period. The main impacts that the proposal will have on the established landscape is from a visual perspective and I will examine this further below under the section residential amenity.

9.3. Impact on Residential Amenities

In relation to impacts that the proposed development is likely to have on residential amenities I would note that the appeal submissions have raised a range of issues and these include adverse visual impacts, glint and glare, property devaluation and noise implications. I will consider other issues such as access, flood risk and implications for ground water contamination separately below.

In relation to adverse visual impacts of the proposed solar farm development I would consider that this would depend on the;

- scale of the proposed development
- proximity of the proposed development to established houses
- density of local population
- existing site contours and topography
- established screening and potential mitigation measures

I have outlined the scale of the proposed development above in the landscape assessment. The scale of the proposed development is generally reflective of the size of the appeal site and the overall size of the site is approximately 13 ha (approximately 32 acres). I accept that the proposed development also includes access provision and a small reduction to the south-east corner of the proposed development to address glint and glare for motorists using the regional road. However in general the 13 ha site generally reflects the scale of the proposed development.

The applicant's response submission outlines that there are approximately 6 houses located within 50m of the proposed solar arrays and an appeal submission sets out that there are approximately 15 houses located within 50m of the site boundary. Although the local area is predominately rural in character there is generally a high concentration of rural houses in the immediate vicinity of the appeal site, most likely reflecting the short distance of the appeal site to Kinsale and the accessible distance to Cork City. I noted from my visual observation of the area that there were several houses located within a very short distance of the site boundary and these include houses fronting onto the regional road, houses fronting onto the southern road that bounds the appeal site and some houses located to the immediate west of the proposed development. I would consider that given the proximity of these houses to the appeal site it is likely that the proposed development will impact on their established visual amenities as the proposal will result in severe a landscape modification.

I would note that the revised drawings submitted with Appendix A of the additional information indicate the site contours of the appeal site and I would acknowledge that the general levels of the site fall from the north west corner of the site to the south-east corner of the subject site. These contours are generally consistent with O.S. Discovery Series Map no. 87. I would consider that the implications of the appeal site topography would mean that the houses located immediately east, west and to the south of the appeal site are most likely to be impacted in terms of visual amenities. Furthermore there are some houses located on the eastern side of the regional road and uphill of the proposed development that are also likely to be impacted by the visual impact of the proposed development as the local topography rises steadily to the east of the regional road.

The proposed landscape plan provides a 2m high hedge which will enclose the proposed development. This proposed landscaping will be additional to the established hedging that forms the boundary of the appeal site.

The file documentation includes photomontages submitted by the applicant from six locations. I have reviewed the documentation and also visited the exact location of these viewpoints. I would be concerned with photomontage no. 2 as having visited this location I would consider that the proposed development would have a more immediate visual impact than that portrayed in the submitted photomontage. The proposed visual impact from this location would generally be significant relative to the current situation. I would also be concerned with photomontage no. 4 as this public road, which is the location of this viewpoint, generally overlooks the appeal site having regard to the local topography. Although I accept that the views of the proposed development will be limited from the public road due to existing hedgerow and the proposed planting and the falling levels of the site. However the proposed development will impact on established houses located on the opposite side of the public road, as these houses and their respective sites are elevated above the public road. It is notable that any upstairs rooms are likely to experience significant visual impact.

In relation to photomontage no. 3 I would consider that the same rationale would apply to the existing houses on the southern public road that adjoins the appeal site as those houses on the western road adjacent to photomontage no. 4. I would accept that the visual impact from the public road would be limited due to the existing landscaping and the proposed landscape plan however the houses located on the opposite side of the road would be impacted visually by the proposed development. These houses are located on sites that rise gently above the public road and the proposed mitigation measures would be limited.

I have assessed the views from photomontages no. 1, 5 and 6 and I would consider based on a visual observation of area and the submitted photomontages that the visual impacts of the proposed development from these locations would not be significant.

Overall and having regard to the above analysis I would consider, given the close proximity of established houses to the subject site, the local topography and the established pattern of development in the local area that the proposed development would have a material impact on the established residential amenities, in terms of visual impact, and in my view, the proposed development would seriously injure established residential amenities in the local area.

In considering the noise implications of the proposed development I have considered the Noise Impact Assessment which forms part of the file documentation.

I have reviewed the EPA 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4), 2016, and this guidance advises that while BAT must be applied on a case by case basis, noise attributable solely to on-site activities, expressed at any Noise Sensitive Location should generally not exceed the values below;

Daytime (07:00 to 19:00 hrs) – 55 dB AR, T (rated noise level)

Evening (19:00 to 23:00 hrs) – 50 dB AR, T (rated noise level)

Night-time (23:00 to 07:00 hrs) – 45dB LAeq T (over a sample period)

This guidance document also refers to quiet areas. Quiet areas, such as remote or rural settings, where the background noise levels are very low (e.g. below approximately 35 dB measured as L90) lower noise limit may be more appropriate and this may be reflected in more stringent noise conditions. The EPA publication also provides guidance on tonal noise and essentially any noise that it identified as a tonal noise source carries a 5dB penalty. I would consider that in the absence of any planning guidance with regards to noise that the above guidelines would provide a reasonable level to assess noise output.

Having reviewed the submitted NIA I will proceed to measure the noise impact of the Inverter 1/ Transformer 1 which has a sound pressure level of 70 dB (A) at 1m and its actual noise value at the nearest noise sensitive location. In accordance with Table 1-2 of the submitted NIA the nearest noise sensitive location to the Inverter 1/ Transformer 1 is receiver no. 3 which is situated 156 metres from the proposed Inverter / Transformer.

In general terms noise (or sound pressure level) reduces with distance and noise prediction assessments commonly use the acoustic rule that double the distance results in a 6 dB reduction. It is possible to calculate or at least estimate the Sound Pressure Level (L2) at the noise sensitive location (receiver no. 3) referred to above using the following formulae;

$$L2 = L1 - 20 \text{ Log } (r2 / r1)$$

L1 = Sound Pressure Level no. 1

L2 = Sound Pressure Level no. 2

R1 = First distance from source

R2 = Second distance from source

$$L2 = 70 - 20 \text{ Log } (156/ 1) = \underline{\underline{26.1 \text{ dB}}}$$

Overall I would consider that this noise level, although accepted is an estimate, would not be significant in the local noise scape having regard to the EPA Guidance outlined above.

In addition to my assessment I would also note the submitted NIA demonstrates, by using BS4142:2014, that the noise impacts of the proposed development will not be significant. I would conclude overall that the noise impacts of the proposed development would not be significant.

In relation to property devaluation I would acknowledge that some appellants argue that the proposed development will devalue their property. However these claims are not substantiated with any evidence or studies. I would consider that the site in question, although not zoned for development, is subject to development potential and there is no basis that the proposed development would devalue property in the local area more so than any other development that maybe permitted on the subject site.

In relation to glint and glare the applicant's original report that accompanied the planning application claims that studies have demonstrated that modern solar panels reflect as little as 2% of incoming sunlight. It is stated that solar panels will be installed in a south facing direction at an angle of between 20° – 30° relative to the ground. The applicant concludes that modern solar panel developments are more efficient in absorbing and converting solar energy and that reflectivity of the surface of the panels is significantly lower than other commonly occurring features in the landscape. In general solar panels can be very dark in colour as they are designed

to absorb light rather than reflect light. I would acknowledge that the surface may be further treated with anti-reflective coating to scatter any reflected light rather than cause specular reflections.

Glare is a continuous source of brightness, relative to diffused lighting. Glare is usually not a significant issue with solar farm development.

Overall I would consider that there is a low potential occurrence of glint from the proposed development and would not result in any significant adverse impacts on established amenities.

9.4. Access

In the relation to access to serve the proposed development I would note that the Area Engineer has outlined concerns in relation to vehicular sightlines. The Area Engineer requests that the sightline provision should be 90 metres in both directions at a distance of 3m from the road edge. The Area Engineer also advises that HGV's during the delivery stage should use the regional road and the national routes in favour of local roads.

In the additional information response the applicant has addressed the issue of the delivery route as it is confirmed that deliveries will travel along national and regional roads from Ringaskiddy to the appeal site. I would consider that this issue has been adequately addressed.

In relation to the sightline provision the applicant has submitted that they are unable to achieve a sightline provision of 90 metres in both directions at a distance of 3m from the road edge. The applicant outlines that in order to achieve this sightline it would require the removal of established hedging which will function as screen for the adjacent dwellings. The removal of the established hedging would have an adverse impact on the established visual amenities. I would accept that this would be case. As an alternative the applicant proposes retaining the existing hedgerows as

the construction period will only last an estimated 12 weeks and it is submitted that the construction traffic can be safely managed by a Construction Management Plan which will be prepared by the contractor prior to the commencement of development. I would consider given that the operational vehicular traffic to the site is relatively low that this would be reasonable approach and therefore I consider this traffic management plan as acceptable.

9.5. Flood Risk

I would note from the Area Engineer's report that the applicant originally proposed to maintain the existing drainage regime of the site and proposed no new measures to prevent water from the site flowing onto the public road. The Area Engineer noted that the south-east corner of the appeal site is prone to flooding and the subject site is upgradient of Jagoes Mill public house which is a flood risk area. The applicant was requested to submit additional information to address these concerns. The cause of the floods at Jagoes Mill was primarily due to the Farranamoy River overtopping its bank and this is potentially caused by blockage at Mullendunny Bridge which is located upstream of Jagoes Mill.

The applicant responded with a flood risk assessment (FRA) for the site and the proposed development. The FRA confirms that there is no history of flooding on the appeal site. However many of the appeal submissions state that the south-east corner of the appeal site floods due to surface water build-up as a result of incessant rainfall. The topography of the site would support this argument. The topography is an important consideration when assessing flood risk of the site, as the subject site essentially falls in level from the north-west to the south, effectively towards the Farranamoy River, which is located to the east of the subject site. It is a genuine concern that should the proposed development increase the level of surface water run-off on the site that this may have an impact on the nearby Farranaboy River and therefore potentially exacerbate the flood risk at Jagoes Mills public house and the adjoining regional road.

The submitted flood risk assessment concluded that, based on available sources of flooding, the subject site resides in a Flood Zone C and therefore there is a low risk flooding.

Notwithstanding the low risk of flooding the applicant proposes a surface water detention pond located in the south east corner of the appeal site. The proposed stormwater discharge from the site will be restricted to its greenfield equivalent therefore ensuring no increased risk of flooding downstream of the site and particularly at the Jagoes Mill area.

The outfall from the storm water detention pond will be piped to a location beyond the Jagoes Mill. This would essentially eliminate any potential for the proposed development to cause a risk of flooding at Jagoes Mills. I would consider that these proposals would satisfactorily address concerns in relation to flood risk associated with the proposed development.

9.6. Ground Water Contamination

A number of appellants have submitted concerns in relation to ground water contamination from the proposed development and the potential for adverse impacts on private wells.

In order to address these concerns the applicant submitted a sediment management plan (SMP). In general the SMP puts forward a range of a mitigation measures and also includes a conceptual site model which demonstrates the flow of ground water from the north east of the site to the south of the site and therefore following the local topography.

I would consider that the submitted SMP is effectively a management plan during construction and operational phase of the proposed development and I would consider that should the Board favour granting permission that this SMP can be

implemented by a condition in which the applicant must comply with to protect local ground water sources.

9.7. EIS Screening

Schedule 5 of the Planning and Development Regulations, 2001 (as amended), sets out Annex I and Annex II projects which mandatorily require an EIS. Part 1, Schedule 5 outlines classes of development that require EIS and Part 2, Schedule 5 outlines classes of developments that require EIS but are subject to thresholds.

I have examined the Part 1, Schedule 5 projects and I would not consider that a solar farm is included in any of these project descriptions. I have also examined the Part 2, Schedule 5 projects and although I would note that there are some projects under Paragraph 3 'Energy Projects' which relate to energy production I would consider that none of these projects would be applicable to a solar farm as proposed. There are established precedents in Board's Orders confirming this conclusion, e.g. appeal ref. 244539.

In accordance with the 'EIA Guidance for Consent Authorities regarding Sub-threshold Development', 2003, the following is stated "there is a requirement to carry EIA where competent/consent authority considers that a development would be likely to have significant effects on the environment". The guidelines advise the criteria to be considered for the need for sub-threshold E.I.S. and this includes (i) characteristics of the proposed development, (ii) location of the proposed development, and (iii) characteristics of potential impacts.

Schedule 7 of the Planning and Development Regulations, 2001 (as amended), sets out criteria for determining whether a sub-threshold development is likely to have significant effects on the environment and therefore would require an EIS.

However an important issue before considering sub-threshold development is Article 92 of the Planning and Development Regulations, 2001, (as amended). Article 92 defines sub-threshold development, i.e. 'development of a type set out in Schedule 5 which does not exceed a quantity, area or other limit specified in that Schedule in respect of the relevant class of development'. As I have considered above that the solar panel development is not a development set out in Schedule 5 then I would not consider that the subject development is a 'sub-threshold development' for the purpose of EIS.

9.8. Appropriate Assessment

The purpose of the Appropriate Assessment Screening is to determine, on the basis of a preliminary assessment and objective criteria, whether a plan or project, alone or in combination with other plans or projects, could have significant effects on a Natura 2000 site in view of the site's conservation objectives. The 'Appropriate Assessment of Plans and Projects in Ireland Guidelines, 2009,' recommend that if the effects of the screening process are 'significant, potentially significant, or uncertain' then an appropriate assessment must be undertaken.

I would note that there are four designated Natura 2000 located within 15km of the appeal site. These Natura 2000 sites include
Sovereign Islands SPA (8km to the south east)
Courtmacsherry Bay SPA (13km to the south-west)
Cork Harbour SPA (13km to the north-east)
Courtmacsherry Estuary SAC (13 km to the south west).

In relation to the SAC the most significant issue from a screening perspective is the hydrological pathway from the appeal site to the SAC. In this instance there is no demonstrated hydrological pathway. The appeal site is also located some distance from the designated SPA's above and as such there is no evidence to conclude that

the proposed development will have any impact on these SPA's. I would acknowledge the conclusion of the applicant's AA Screening determined that the proposed development will not cause adverse direct impacts on the conservation objectives and qualifying interests of any SPA's and SAC listed above given the nature of the proposed development and the separation distances involved. I would concur with this conclusion.

Having regard to the nature and scale of the development proposed, to the nature of the receiving environment and the likely effluents arising from the proposed development I recommend that no appropriate assessment issues arise.

It is reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on any European Sites, i.e. site code 004142, site code 004219, site code 004030 and site code 001230, in view of the sites conservation objectives and a stage 2 AA is therefore not required.

9.9. Ecology

In relation to ecology I would note the Ecology Report, submitted with the application, concluded that the subject site is not considered to be of significant ecological value in terms of habitats, birds and mammals. However the Ecology Report recommends that to minimise disturbance to breeding birds and mammals it is recommended that any habitat removal should be conducted outside the main breeding season (March – August), in line with restrictions on hedge cutting. It is further stated that if any hedgerow is removed due to the construction process that it should be reinstated following construction using appropriate local, native species.

9.10. Condition no. 2

The first party has appealed condition no. 2 and principally the duration of the permission. Condition no. 2 restricts the life of the permission to 25 years and the applicant has no issue with its duration. However the issue is when the 25 years shall commence. Condition no. 2 states that the 25 years shall commence from the date of the permission whereas the applicant argues that it is more reasonable that the 25 years would commence from the date of commissioning the development.

In order to consider this further I examined two solar farm developments that the Board has permitted recently. In appeal ref. 244351 the Board granted permission for a solar farm development in Co. Wexford and the duration of the permission was for 25 years from the date of commencement of development. In appeal ref. 244539 the Board granted permission for a solar farm development in Co. Cork for a period of 25 years from the date of commissioning the development. In addition to the above cases I would note appeal ref. 245862 in which case the Board granted permission for a solar farm development for a period of 25 years from the date of the commissioning the solar array. In addition to the above selected cases I would note the applicant has submitted 3 no. cases which the Board granted permission and confirmed the duration of the permission is for a period of 25 years from the date of commissioning the development.

I would consider that the applicant has made a reasonable argument that given the length of time from obtaining planning permission to obtaining the grid connection it is likely that the 25 year period would be eroded. I would recommend to the Board, should they favour granting permission, that condition no. 2 is modified to allow the 25 year period commence from the date of commissioning.

9.11. Archaeology

In relation to archaeology the submitted AIA concludes that there are no evidence of archaeological remains on the site however it is acknowledged that previously undiscovered archaeological remains may be uncovered during construction phase.

The Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs which sets out that the Department concurs with the submitted Archaeology Impact Assessment and requests that the Board retain condition no. 3 of the Local Authority permission.

I would consider having regard to the submitted findings of the AIA that it would be reasonable to apply condition no. 3 of the local authority permission.

10.0 Recommendation

10.1. I have read the submissions on the file, visited the site, had due regard to the Town Development Plan and the County Development Plan, and all other matters arising. I recommend that planning permission be refused for the reason set out below.

11.0 Reasons and Considerations

The proposed solar power development is a significant scale having regard to the established pattern of development in the local area which is primarily agricultural in use and also consists of a high concentration of rural houses in close proximity to the proposed development. There is a lack of guidance at national, regional and local level in relation to the appropriate location, scale and distribution of future proposals for solar power. Having regard to the scale of the proposed development and its potential impacts on the rural character of the area, the visual amenity of the landscape, and the amenities, including visual impact, of residential property, the Board is not satisfied that the proposed development would not seriously injure the amenities of the area or of property in the vicinity, or that the proposed development would not be premature pending the adoption of national, regional or local guidance or strategy for solar power. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

Kenneth Moloney
Planning Inspector

21st February 2017