



An
Bord
Pleanála

Inspector's Report

ABP-309987-21

Development	Construction of a Solar PV development and all associated site works. A Natura Impact Statement was lodged with the planning application.
Location	Grangeford Old, and Friarstown, Co. Carlow
Planning Authority	Carlow County Council
Planning Authority Reg. Ref.	2123
Applicants	Summit Solar Ltd
Type of Application	Permission.
Planning Authority Decision	Refuse Permission
Type of Appeal	First Party
Appellants	Summit Solar Ltd
Date of Site Inspection	15 th September 2021
Inspector	Dolores McCague

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1.0 Site Location and Description

- 1.1.1. The site is located in the townlands of Grangeford Old, and Friarstown, County Carlow in a rural area between the towns of Carlow and Tullow. The site has frontage to both the regional road R725, and a local road L6113. The site is part of a residential farm which includes a farmhouse, yard and outbuildings that front onto the regional road. Another dwelling, fronting onto the local road, shares an access with the subject land. The farm is devoted entirely to arable farming and on the date of inspection the land was either in stubble or maize. The land slopes slightly to the south west. It is an arbitrary division of a larger landholding
- 1.1.2. The regional road is a busy road with no hard shoulder or verge.
- 1.1.3. Former field boundaries, including a townland boundary which crossed the site centrally in a south-west to north-east orientation, have been removed. The lands have been improved for agriculture and, with the exception of external boundaries, there are no field divisions, hedges or open drainage features evident.
- 1.1.4. The site is given as 65.6ha.

2.0 Proposed Development

- 2.1.1. It is proposed to construct of a Solar PV development of 45MW, and all associated site works. The proposed solar farm, which will connect to the national grid on the lands includes:
 - 160,500 photovoltaic panels on ground mounted steel framing,
 - A 38kV substation along with associated ancillary development,
 - 25 power hubs incorporating both the inverters and transformers within the same container,
 - A single storey communications building,
 - A single storey client-side building (20ft container),
 - A single storey equipment storage building (20ft container),

- A single storey client-side substation building, a transformer unit and associated bund,
- A substation road,
- 10 CCTV cameras mounted on 4m high poles,
- 2m high perimeter security fencing, and
- 2.4m high security fencing around the DNO (distribution network operator) substation.

2.1.2. The application is accompanied by an Environmental Report Vol 1 (15 chapters) and Vol 2 appendices, a Stage 2 Appropriate Assessment – Natural Impact Statement, a Decommissioning Plan and a Preliminary Environmental Management Plan together with maps and drawings. Drawing title ‘Site Layout, drawing number A-10’, shows the location of the proposed substation. The substation layout is shown on drawing no 386.101-1-01.2.

2.1.3. A grid connection is not part of this application.

3.0 Planning Authority Decision

3.1. Decision

3.1.1. The planning authority decided to refuse permission for two reasons:

1. The size and scale of the proposed development (65.6ha and an export capacity of up to 45MW) would be contrary to Section 6.5.1 in relation to Solar Energy and to Energy policy 9 of the County Development Plan.
2. The application site adjoins the Ardnehue River which drains to the River Burren which is a tributary of the River Barrow which is part of the River Barrow and River Nore SAC (002162). The planning authority is not satisfied that the proposed development would not give rise to ecological impacts and would not significantly affect the SAC. Accordingly the proposed development would contravene materially heritage objective 5 and heritage policy 2 in relation to

the protection of European sites set out in the Carlow County Development Plan.

3.2. **Planning Authority Reports**

3.3. Planning Reports

3.3.1. The planning report recommending refusal includes:

- Citing national and local policy,
- Citing the reports,
- No observations.
- The assessment includes landscape and visual – the proposal will not adversely impact on the overall visual amenities of the area subject to the mitigation measures outlined; glint and glare – further information recommended in Environment Section report; noise - further information recommended in Environment Section report, electromagnetic fields - further information recommended in Environment Section report; flood risk - further information recommended; archaeology - further information recommended by NMS; biodiversity / ecology - further information recommended in Environment Section report.

3.4. Other Technical Reports

3.4.1. The Environment Department:

- The NIS should be amended – it should identify if invasive species or protected flora were identified on the site. A portion of the site is located within the Aghalona sub-basin and the report should be amended to reflect this. Qualifying interests with potential to be impacted without mitigation should be listed. Project elements which may give rise to potential effects on qualifying interests without mitigation should be listed. The evaluation of likely effects should be expanded, without mitigation, and should include changes in water quality, invasive species introduction, noise and disturbance etc. The screening conclusion should indicate if likely significant effects are expected without mitigation. Environmental control measures, outlined in the CEMP and any other reports relevant to the NIS,

should be final proposals and not subject to post-consent change, thus providing scientific certainty to the AA process.

- The project is not subject to EIA.
- No plant species, protected Flora Protection Order, were identified on the site.
- No invasive species were identified on the site.
- A small area to the west is located within the PFRA flood zone, associated with the Ardnahue River. A small area to the north is associated with pluvial flooding.
- A site-specific flood risk assessment should be submitted. The report should contain additional information on potential impacts to water-quality. A portion of the site is located within the Aghalona sub-basin and the report should be amended to reflect this.
- The noise report indicates that the proposed development presents a low impact to the receptors.
- Clarification of a number of items in the Glint and Glare report is recommended.
- The report on the potential impacts of EMF generated by all elements of the proposed development will comply with Irish and EU law. This is based on the pre-existing 38kV line traversing the site, and the electromagnetic interference report submitted as part of Reg. ref. 16/325.
- Further information should be sought.

3.5. Fire Officer – conditions.

3.6. Transport Section:

- Served by R275 and L6113.
- AADT of the order of 3,500, prevailing speed at or near the default of 80kph. Carriageway 6.0m to 7.0m wide and adequate to sustain the development. Access via an existing farm yard / commercial entrance at a point on the R725 where both the horizontal and vertical alignment are substandard for a road of this class.
- Sightline is limited, stated to be 160m, the line is impacted by the hedgerow/roadside bank on the opposite side of the road, and outside the red line boundary. Removing a section of this hedge line would improve traffic safety for all

road users and afford all users additional visibility at this point. No concerns regarding the impact that the development would have on road capacity. There is adequate area on the access road within the site to park HGVs and wait for off-loading. Traffic impacts will be minimal.

- The main concern relates to right turn movement out from the site back onto the R725. It would be overcome by removal and set-back of roadside hedge on the opposite side of the road. Could condition all construction movements exiting to be from L6113 and all construction movements entering be from left turn only from the R725 and construction management plan be agreed and implemented accordingly. Grid connection is on site and will minimise potential disruption from road openings. A wheel wash, CMP and TMP to be agreed with Roads Section.

3.7. **Prescribed Bodies**

- 3.8. The Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media, (Development Applications Unit) - within an area of known archaeological activity. RMP CW008 -020 – burial ground, is located SSE and RMP CW008 - 032 – castle site (to north) and RMP CW008 - 022 burial ground (across regional road).

Given the largescale nature of the proposal in proximity to known archaeological monument it is possible that previously unrecorded subsurface archaeological features associated with these monuments and / or early settlement of Grangeford Old / Friarstown may be encountered during the course of any required groundworks.

During a review of aerial and digital imagery of the site, a large sub-oval cropmark is visible as a distinctly darker area within the development site, measuring approx. 220m NNW-SSE, which may be of archaeological provenance. Further information is recommended:

Applicant to engage a suitably qualified licenced archaeologist to carry out a geophysical survey. This may inform a programme of archaeological test excavation to be carried out as part of this request for further information. No sub-surface work shall be undertaken in the absence of the archaeologist without his/her express consent. Allow 5-6 weeks to facilitate the processing of a geophysical / archaeological licence. This assessment shall include:

The archaeologist shall summarise the historical and archaeological background of the site as per the Cultural Heritage Assessment dated January 2021 and carry out a geophysical survey of the site in order to establish the location and extent of any subsurface archaeological features that may survive.

The archaeologist shall then conduct a programme of archaeological excavations at locations chosen by the archaeologist, having consulted the results of the geophysical survey and the site plans in liaison with Licensing section of NMS. Test excavations are to take place to the uppermost archaeological horizons only, where they survive. Where archaeological material is shown to be present, the archaeologist shall stop works pending further advice from the NMS. All features / archaeological material within the test trenches shall be hand cleaned and clearly visible for photographic purposes.

Having completed the work, the archaeologist shall submit a written report to the local authority and to the NMS outlining the results of the geophysical survey and the test excavations. The report shall comment on the degree to which the extent, location and levels of all proposed foundations, excavations, service trenches and other sub-surface works required for the development will affect the archaeological remains. This should be illustrated with appropriate plans, sections, etc.

Where archaeological material is shown to be present, further mitigatory measures will be required. These may include refusal (in whole or in part), redesign (in whole or in part) to allow for preservation in situ or full archaeological excavation according to best practice and/or monitoring. The NMS will advise the local authority and the applicant with regard to these matters.

3.9. Transport Infrastructure Ireland - no observations.

3.10. IW - conditions.

3.11. **Third Party Observations**

3.11.1. No third party observations were received.

4.0 Planning History

16/325 – planning permission granted for the development of a solar PV panel array consisting of up to 48,800m² of solar panels on ground mounted steel frames, electricity control room, power inverter unit, underground cable ducts, CCTV and lighting, security fence and all associated works. The site forms part of the northwest section of the current site.

Adjoining to the north – 19/46 - planning permission granted for a solar farm on approx. 27 ha - solar panels on ground mounted steel frames, one on-site 38kV substation. An energy storage system (4 units) 10 no. inverter transformer stations, security fencing, security gate, 2 storage containers, CCTV, temporary wheelwash, 10mW output.

A list of solar farms granted in the county is given in the planner's report.

5.0 Policy Context

5.1. National Policy

- 5.1.1. The National Planning Framework is the spatial plan for the state up to 2040 and includes:

National Strategic Outcome 8 – this recognises the need to harness both on-shore and off-shore potential from energy sources including solar. The following points are noted:

Green Energy

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 – 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.

- 5.1.2. National Renewable Energy Plan 2010

The National Renewable Energy Action Plan (NREAP) sets out the Government's strategic approach and measures to deliver on Ireland's 16% target Directive 2009/28/EC. A target of 40% electricity consumption from renewable sources by 2020 has been set.

5.1.3. Strategy for Renewable Energy 2012-2020

The Strategy states that the Government's overriding energy policy objective is to ensure competitive, secure and sustainable energy for the economy and for society.

5.1.4. Adapting to Climate Change and Low Carbon Act 2015

This Act sets a statutory framework for the adoption of plans to ensure compliance with Ireland's commitments to European and international agreements on climate change. It commits to a carbon neutral situation by 2050 and to also match Ireland's targets with those of the EU. It requires that the Minister for Communications, Climate Action and the Environment make, and submit to Government, a series of successive National Mitigation Plans and National Adaptation Frameworks.

5.1.5. Ireland's Transition to a Low Carbon Energy Future 2015-2030

Accelerate the development and diversification of renewable energy generation to be achieved through a number of means including wind, solar PV and ocean energy.

5.1.6. Draft Renewable Energy Policy and Development Framework 2016

The main principles of the Renewable Electricity Policy and Development Framework include:

- Maximise the sustainable use of renewable electricity resources in order to develop progressively more renewable electricity for the domestic and potential, future export markets.
- Assist in the achievement of targets for renewable energy, enhance security of energy supply and foster economic growth and employment opportunities.

5.1.7. Climate Action Plan, 2019

The plan stresses the importance of decarbonising electricity consumed by harnessing the significant renewable energy resources. Ensuring the building of renewable rather than fossil fuel generation capacity to help meet the projected growth in electricity demand is essential. Ensuring increased levels of renewable

generation will require very substantial new infrastructure, including wind and solar farms, grid reinforcement, storage developments, and interconnection.

To meet the required level of emissions reduction, by 2030 it is required to increase electricity generated from renewable sources to 70% comprising of up to 3.5GW of offshore energy, 1.5 GW of grid-scale solar energy and 8.2GW of onshore wind capacity (indicative figures).

5.2. Regional Policy

5.2.1. The Regional Spatial and Economic Strategy for the Southern Region:

RPO 95 - it is an objective to support implementation of the National Renewable Energy Action Plan (NREAP), and the Offshore Renewable Energy Plan and the implementation of mitigation measures outlined in their respective SEA and AA and leverage the Region as a leader and innovator in sustainable renewable energy generation.

RPO 96 - support the sustainable development, maintenance and upgrading of electricity and gas network grid infrastructure to integrate renewable energy sources and ensure our national and regional energy system remains safe, secure and ready to meet increased demand as the regional economy grows.

RPO 100 - support the integration of indigenous renewable energy production and grid injection.

RPO 219 - it is an objective to support the sustainable reinforcement and provision of new energy infrastructure by infrastructure providers (subject to appropriate environmental assessment and the planning process) to ensure the energy needs of future population and economic expansion within designated growth areas and across the Region can be delivered in a sustainable and timely manner and that capacity is available at local and regional scale to meet future needs.

RPO 221 - Local Authority City and County Development Plans shall support the sustainable development of renewable energy generation and demand centres such as data centres which can be serviced with a renewable energy source (subject to appropriate environmental assessment and the planning process) to spatially suitable locations to ensure efficient use of the existing transmission network.

5.3. **Development Plan**

5.4. **Carlow County Development Plan 2015 – 2021**

- 5.4.1. This is the operative plan. It is due to be replaced in 2022, (the Draft Plan is currently on display, until 1st October 2021).

Relevant provisions include:

Strategic Goals include: To sustain rural communities by supporting agriculture, rural based economic activity, promoting balanced development of rural settlements and maintaining a stable population base.

SDO 4 - Rural Economy - Agriculture has traditionally been the mainstay of rural economies and while it has experienced major change in the past 30 years, it will continue to play an important role in County Carlow. However this sector is now more multifaceted than what it was previously with a number of new emerging non agricultural resource based dependent activities such as Agri food. Small scale artisan producers have also emerged in the County many of whom have developed alternative farm enterprises. The Agri-food industry in the County needs to increase its added value, diversify its markets and increase productivity to remain competitive in the current economic climate. Encouraging food production for local markets is an objective of this plan.

Carlow is a rich agricultural county in which tillage, sheep and dairy farming are all found. Crops grown include barley, wheat, potatoes and soft fruits. Sugar beet was also widely cultivated for many years because of the sugar processing industry in Carlow town. The agriculture sector is a significant source of economic activity throughout the county, it contributes to exports, provides the raw materials for the food processing industry and has potential for providing more added value in the artisan food sector. It is Council policy to capitalise on the potential for the growth in food processing in the county. It is noted however that there will be significant changes to livestock and tillage over the lifetime of this plan. There will be crossover with the Energy Strategy with the growth in the production of energy crops likely including willow over the lifetime of this plan. In the dairy industry the biggest anticipated driver of change is the ending of the milk quota system, this may give rise to a re-organisation of farmholdings. It is anticipated that a new Common Agricultural

Policy will be developed and will be in operation within the lifetime of this plan, this could bring further changes to agricultural practices and bring new development pressures. All of these changes may require changes to existing farmyards and the need for new buildings on Greenfield sites.

Policies include:

E.D.- Policy 14 It is the policy of Carlow County Council to: take a positive approach to applications for agricultural developments generally, subject to the protection of groundwaters, residential amenities, designated habitats and the landscape, rural amenities, conservation areas and scenic views; capitalise on the potential for the growth in food processing in the county; support the redevelopment and reintroduction of the sugar beet and associated industry into County Carlow

Renewable Energy is dealt with in section 6.3 and includes the following policies:

Energy – Policy 4 - encourage the development of renewable energy resources and the maximising of electricity and heat production from renewable sources. In doing so, the Council will implement the recommendations of the Methodology for Local Authorities Renewable Energy Strategies (Sustainable Energy Authority of Ireland April 2013) and any other relevant guidelines.

Energy – Policy 9 - promote commercial scale Photovoltaic Generators up to 10MW subject to compliance with normal planning and environmental criteria and development management standards.

Heritage objective 5 to protect and habitats and species that require strict protection.

Heritage policy 2 to maintain the favourable conservation status and conservation value of designated natural heritage sites.

- 5.5. The SEA - Environmental Report on the plan includes in relation to the solar energy policy:

Positive effects – contribution towards renewable energy targets.

Potential negative effects if unmitigated: Potential impacts on architectural heritage - including the context of this heritage - at micro scale. Potential impacts on habitats and species and micro scale. Large scale installations may have visual impacts - these would depend on perception of the relevant area, however these are unlikely to be provided for.

5.6. Guidelines

5.6.1. No national guidelines have been issued to date. The following are of relevance:

Planning and Development Guidance Recommendations for Utility Scale Solar Photovoltaic Schemes in Ireland (October 2016 report prepared by Future Analytics for the Sustainable Energy Authority Ireland / SEAI).

Planning guidance for the development of large-scale ground mounted solar PV systems (British Research Establishment / BRE – 2016).

5.7. Natural Heritage Designations

5.7.1. The nearest Natura site is the River Barrow and River Nore SAC (site code 002162) located c8.3km straight line distance and 14km downstream from the subject site; and the River Slaney Valley SAC (site code 000781) located c2.2km straight line distance from the subject site.

5.8. EIA Screening

5.8.1. The proposed development is not of a class of development to which Schedule 5 of the Planning and Development Regulations refer and therefore an EIAR and EIA are not required.

6.0 The Appeal

6.1. Grounds of Appeal

6.1.1. The first party appeal has been submitted by Malone O'Regan Environmental. The issues raised include:

- The policy context is cited.
- A list of Board decisions are cited.
- Re. refusal reason No. 1 the policy is outdated and is no longer consistent with National, European or International policies The RSES that has been implemented since January 2020 supercedes the 2014-2020 development plan and will underpin the new development plan.

- Re. refusal reason No. 2 the NIS adequately demonstrates that the proposed development would not significantly affect the River Barrow and River Nore SAC.
- A comprehensive habitat survey was undertaken for the site in preparation of the Environmental Report and NIS. No invasive species or protected flora were identified on the site.
- No open watercourses were identified within the site, however, there are two hydrological features of note in the vicinity. Ardnegue River and Aghalona River. The watercourses and the proposed development are located within the Barrow catchment.
- The Natura Impact Statement undertaken concluded that activities associated with the proposed development either alone, or in-combination with other projects or land uses, will not have any direct or indirect adverse impacts on the conservation objectives of any Natura 2000 sites.
- The development will not contravene heritage objective 5 or heritage policy 2 of Carlow County Development Plan 2015-2021.
- It was concluded that the proposed development and all associated site works, alone and in-combination with other projects, will not adversely affect the integrity, and conservation status of any of the qualifying interests of the conservation objectives of the River Barrow and River Nore SAC or any other Natura 2000 sites.
- A detailed Construction Environmental Management Plan (CEMP) will be submitted to Carlow County Council in advance of any construction works commencing and will be fully implemented during the construction of the proposed development.

6.2. Planning Authority Response

- No further comment to make.

7.0 Assessment

7.1.1. The issues which arise in relation to this appeal are: the principle of the development, material contravention, appropriate assessment, traffic safety, archaeology, flood risk and other issues, and the following assessment is dealt with under those headings.

7.2. The Principle of the Development / Material Contravention

7.2.1. There is in-principle support for renewable energy schemes at a national, regional and local policy level, which collectively support a move to a low carbon future and the need to encourage the use of renewable energy resources to reduce greenhouse gas emissions. No locational policy guidance is set out for such development vis a vis agricultural land.

7.2.2. The first refusal reason states that the proposed development would be contrary to policy 9 of the Carlow County Development Plan 2015-2021 which supports solar energy projects up to an output of 10MW and that it would contravene the policy set out at 6.5.1 of the Plan (ie.e policy 9). It is worth noting that the Draft plan, currently on display and open for consultation/observation, does not include such a cap.

7.2.3. General policy support for solar power as part of a move to renewable energy supplies sets out in the plan. No basis is given for the output limit of 10MW, which seems to be at variance with the other provisions of the plan in relation to renewable energy.

7.2.4. Section 37(2) of the Planning and Development Act 2000, as amended, empowers the Board to grant permission even if a proposed development contravenes materially the development plan. Section 37(2)(b) states that where the planning authority has decided to refuse permission on the grounds that a proposed development materially contravenes the development plan, the Board may only grant permission, where it considers that:

- (i) the proposed development is of strategic or national importance, or
- (ii) there are conflicting objectives in the development plan or the objectives are not clearly stated, insofar as the proposed development is concerned,
or

- (iii) permission should be granted having regard to regional guidelines, guidelines under Section 28, directives under section 29, statutory obligations of any local authority in the area, and any relevant policy of the government or a Minister, or
- (iv) having regard to the pattern of development and permissions granted in the area since the making of the development.

7.2.5. The reason for refusal does not use the term 'material contravention' and therefore the view could be taken that Section 37(2) of the Planning and Development Act 2000, as amended, does not apply.

7.2.6. Although not specifically stated it appears that the reason is based on the development materially contravening the development plan.

7.2.7. Further to Section 37(2) 9(b):

the proposed development is not of strategic or national importance;

there are conflicting objectives in the development plan with regard to renewable energy – on the one hand in encouraging it and on the other in placing an arbitrary cap, without explanation, on the size of any one development;

there is policy support at:

national level – NDP - National Policy Objective 55 - it is national policy 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,

regional level – RSES for the Southern Region. RPO95, 'it is an objective to support implementation of the National Renewable Energy Action Plan (NREAP), and the Offshore Renewable Energy Plan and the implementation of mitigation measures outlined in their respective SEA and AA and leverage the Region as a leader and innovator in sustainable renewable energy generation' and

relevant policies of the government, and of several ministries, which support solar energy production,

I am not aware of any proposal to cap output in a single development in any of the foregoing policies.

Therefore, in accordance with Section 37(2)(b), it is open to the Board to consider a grant of permission in this case.

- 7.2.8. Refusal reason No. 2 states that the proposed development would contravene materially heritage objective 5 and heritage policy 2 in relation to the protection of European sites set out in the Carlow County Development Plan because the site drains the River Barrow and River Nore SAC.
- 7.2.9. The NIS adequately demonstrates that the proposed development would not significantly affect the River Barrow and River Nore SAC. The development will not contravene heritage objective 5 or heritage policy 2 of Carlow County Development Plan 2015-2021, and therefore material contravention of these provisions does not arise.
- 7.2.10. I am satisfied that the development is acceptable in principle.

7.3. Appropriate Assessment

- 7.3.1. In accordance with obligations under the Habitats Directives and implementing legislation, to take into consideration the possible effects a project may have, either on its own or in combination with other plans and projects, on a Natura 2000 site, there is a requirement on the Board, as the competent authority in this case, to consider the possible nature conservation implications of the proposed development on the Natura 2000 network, before making a decision, by carrying out appropriate assessment.

- 7.3.2. A Natura Impact Statement (NIS) was submitted with the application.

Description of the Development

- 7.3.3. A description of the proposed development has been set out earlier in section 2 of this report.

- 7.3.4. The protected sites which require to be considered are those listed in the planning authority's appropriate assessment:

River Barrow and River Nore SAC,

Holdenstown Bog SAC, and

Slaney River Valley SAC

Table 1 Screening summary

European Site	Site Code	Relevant QI & SCI	Distance and ecological connection	Potential for significant effects on conservation objectives
River Barrow and River Nore SAC	002162	Desmoulin's whorl snail Freshwater pearl mussel White-clawed crayfish Sea lamprey Brook lamprey River lamprey Twaite shad Atlantic salmon (only in fresh water) Estuaries Mudflats and sandflats not covered by seawater at low tide Salicornia and other annuals colonizing mud and sand Atlantic salt meadows Otter Mediterranean salt meadows Killarney fern Nore freshwater pearl mussel Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation European dry heaths Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	hydraulically connected c14km km downstream from site c8.3km straight line distance	Yes A number of QI features are dependent on high water quality and are sensitive to sediment ingress and any construction related pollutants in an uncontrolled situation. Protective measures are required to avoid the potential for significant effects

		<p>Petrifying springs with tufa formation</p> <p>Old sessile oak woods with Ilex and Blechnum in the British Isles</p> <p>Alluvial forests with Alnus glutinosa and Fraxinus excelsior.</p>		
Slaney River Valley SAC	000781	<p>Freshwater Pearl Mussel</p> <p>Sea Lamprey</p> <p>Brook Lamprey</p> <p>River Lamprey</p> <p>Twaite Shad</p> <p>Atlantic Salmon (only in fresh water)</p> <p>Estuaries</p> <p>Mudflats and sandflats not covered by seawater at low tide</p> <p>Otter</p> <p>Harbour Seal</p> <p>Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation</p> <p>Old sessile oak woods with Ilex and Blechnum in the British Isles,</p> <p>Alluvial forests with Alnus glutinosa and Fraxinus excelsior</p>	<p>Not hydraulically connected</p> <p>2.2km straight line distance</p>	No
Holdenstown Bog SAC	001757	<p>Transition mires and quaking bogs</p>	<p>Not hydraulically connected</p> <p>8.5km straight line distance.</p>	No

- 7.3.26. The River Barrow and River Nore SAC (site code 002162) is located c8.3km straight line distance and 14km downstream from the subject site; having regard to the nature of the protected site and the hydrological connection, stage 2 appropriate assessment is required.
- 7.3.27. Holdenstown Bog SAC (site code 001757) is located c8.5km straight line distance from the subject site (between Baltinglass and Rathvilly in Co Wicklow) and not hydraulically connected thereto and therefore there is no potential for impact.
- 7.3.28. Slaney River Valley SAC (site code 000781) is located c2.2km straight line distance from the subject site and not hydraulically connected thereto and having regard to the qualifying interests of the protected site there is no potential for impact.

7.4. Screening Conclusion

- 7.4.1. Having carried out AA Screening I am satisfied that in the absence of mitigation the potential for significant effects cannot be excluded for River Barrow and River Nore SAC and that AA is required in respect of this site, no additional sites need to be brought forward for inclusion in the AA.

7.5. Appropriate Assessment of implications of the proposed development

7.6. Appropriate Assessment: integrity test

- 7.6.1. The qualifying interests of the River Barrow and River Nore SAC are dependent on water quality, other aspects of the proposed development are not likely to have any impact on the conservation objectives of the SAC.

Consequently the main issue as identified through AA screening is that construction related activities, and similar activities during decommissioning stage, within the site may result in decreased water quality including siltation. Protective measures are required to ensure that the risk of adverse effects on the conservation objectives of River Barrow and River Nore SAC are excluded.

7.6.2. Proposed Mitigation

- 7.6.3. Proposed mitigation of potential adverse effects is set out at section 7 of the AA. Under the heading 'the potential impairment of water quality' it is stated that potential pollutants resulting from the construction works could include suspended solids / silt / or diesel leaks or spills. It is considered highly unlikely that pollutants could impact on the water quality of the River Barrow and River Nore SAC based on:

- The nature of the proposed development works,
- There will be no direct discharges to surface water or groundwater during the construction or operational phase of the development, and
- The distance separating the site from all Natura sites.

7.6.4. Nonetheless all construction works will be undertaken in accordance with best practice as outlined in the report. The following, which are based on IFI and NRA guidance documents, will be followed:

- Construction stage works will be undertaken in accordance with an approved CEMP.
- All plant and machinery will be serviced before being mobilised on the site.
- Preventative maintenance and relevant maintenance logs will be kept for all on-site plant and equipment.
- All materials will be stored at the main contractor compound and transported to the works zone immediately prior to construction.
- Any chemical / oils to be stored will be placed within a bund on an area of hardstanding to ensure that there is no seepage of pollutants into groundwater or surface water.
- Any pouring of concrete will be only carried out in dry weather. Washout of concrete trucks will not be permitted on the site
- Any spillage of cementitious materials will be cleaned-up immediately.
- All drainage from bund areas will be directed to secure containment prior to suitable disposal,
- Fuel will be delivered on site by a dedicated tanker or in a delivery bowser dedicated to that purpose,
- The appointed contractor will put in place a specific, step-by-step refuelling procedure, which will be communicated to all relevant employees on-site.
- Fuels, lubricants and hydraulic fluids for equipment used in the construction site will be carefully handled to avoid spillage, properly secured against unauthorised

access or vandalism, and provided with spill containment according to current best practice,

- No vehicle or equipment maintenance work will be carried out on site.
- Prior to any works commencing, all construction equipment will be checked to ensure that they are mechanically sound, to avoid leaks of oil, fuel, hydraulic fluids and grease.
- Measures will be implemented to minimise waste and ensure correct handling, storage and disposal of waste.

7.6.5. Emergency procedures are set out.

7.6.6. An Ecological Clerk of Works (ECoW) will be appointed to the project to ensure that the mitigation and best practice measures will be implemented.

7.6.7. In the environmental report, operational procedures are set out which state that the transformer unit will contain oil that will be banded. Under normal operation, this oil is maintained within the system and no emissions will occur. To prevent unforeseen impact on the environment the transformer and step-up transformer units will be regularly monitored and maintained. No welfare provisions are proposed.

7.6.8. A decommissioning plan has been submitted which includes use of erosion and sediment control measures.

7.6.9. In-combination Effects

7.6.10. Planning consent has been granted for two separate PV developments in the vicinity of the site, which have yet to be developed. One adjoins the site, the other is 1.7km away. There is potential for in-combination effects on the River Barrow and River Nore SAC. As part of the PV development reg. ref. no. 1946 (adjoining) the project was subjected to an AA and was found not to result in adverse effect on the integrity of any European site. In relation to planning reg. ref. no. 16342, the planning authority carried out appropriate assessment of that project and concluded that adverse impact on protected sites would not arise.

7.7. Conclusion and Appropriate Assessment Determination in relation to Site Integrity

7.7.1. The proposed development has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act 2000

as amended. I consider that the Board can be confident that the information and assessment before them is complete, precise and definitive for the purpose of Appropriate Assessment.

- 7.7.2. Having carried out screening for Appropriate Assessment of the project, it was concluded that in the absence of mitigation the development may have a significant effect on the European site: River Barrow and River Nore SAC only. Appropriate Assessment of the implications of the proposed development on the qualifying features of this site in light of its conservation objectives, was required.
- 7.7.3. Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the European site No 002162, River Barrow and River Nore SAC, or any other European site, in view of the sites' Conservation Objectives.
- 7.7.4. This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.
- 7.7.5. This conclusion is based on:
- the location outside of a European site,
 - a full and detailed assessment of all aspects of the proposed project including proposed mitigation measures,
 - detailed assessment of in-combination effects with other plans and projects,
 - no reasonable scientific doubt as to the absence of adverse effects on the integrity of River Barrow and River Nore SAC.

7.8. **Traffic Safety**

- 7.8.1. The site has frontage to both the regional road, R725 and a local road, L6113.
- 7.8.2. It is proposed to access the development from the regional road. The entrance is shown on drawing no. P700 in volume 2 of the Environmental Report, where sightlines of 160m are indicated. Sightlines at the alternative access, to the local road, are shown as 90m in each direction, in drawing no P701 (volume 2 of the Environmental Report).

- 7.8.3. The report of the Transport Section notes that there is an existing farm yard / commercial entrance to the R725. Thus it appears that the existing farm would generate substantial usage of the entrance and would include its use by heavy goods vehicles.
- 7.8.4. The proposed development will give rise to a significant amount of construction traffic. During the operational phase the limited traffic generated is likely to represent a significant reduction on existing usage.
- 7.8.5. The report of the Transport Section confirms the adequacy of the R725 to sustain the development, however, the details provided in relation to the access via an existing regional road entrance are challenged. The proposed access is at a point on the R725 where both the horizontal and vertical alignment are substandard for a road of this class. The sightline is impacted by the hedgerow / roadside bank on the opposite side of the road, which is outside the red line boundary. The main concern relates to right turn movement out from the site back onto the R725. The difficulty would be overcome by removal and set-back of roadside hedge on the opposite side of the road. The suggested solution is that all construction movements should enter left turn only from the R725 and all construction movements exiting should be from L6113; and that this be subject to a construction management plan to be agreed and then implemented accordingly.
- 7.8.6. The grounds of appeal does not address this issue, beyond referring to the hosting of the world ploughing championship which demonstrates that the site access would readily be able to cater for construction traffic. The Board will note that detailed traffic management would have been in place for the duration of traffic impact associated with the world ploughing championship.
- 7.8.7. In my opinion a condition along the lines referred to in the Transport Section report would deal adequately with the issue of traffic safety.

7.9. **Archaeology**

- 7.9.1. Archaeology is referred to in the Environmental Report in chapter 11, under cultural heritage. The monuments in the vicinity of the site are listed in table 11-1 and include a burial ground immediately adjoining the site to the north of the farmhouse / farm yard. There are several more in the immediate vicinity to the north and south. The

proposed mitigation is to exclude an area 61m x 80m on the northern side of the monument from any element of the development. Risk of inadvertent impact on hitherto unknown buried archaeological material can be mitigated by archaeological monitoring of any significant areas of ground disturbance, in particular any new trackways / road-surface, as well as soil removal for the proposed buildings, and cable trenches, it is stated.

- 7.9.2. The submission from the Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media, (Development Applications Unit) in relation to archaeology, is that having regard to the sensitivity of the site and the extensive nature of the development, the site should be subject to geophysical survey and follow-on archaeological investigation as necessary, prior to decision. They also informed the planning authority that a review of aerial and digital imagery of the site, revealed a large sub-oval cropmark, visible as a distinctly darker area within the development site, measuring approx. 220m NNW-SSE, which may be of archaeological provenance.
- 7.9.3. Since the planning authority decided to refuse permission for unrelated issues, further information regarding the issue of the archaeological potential of the site was not sought or obtained.
- 7.9.4. In the grounds of appeal the response to the Department's submission is that this farm has been primarily used for arable crops where significant ground disturbance occurs on a regular basis; the agricultural practice has included the historic removal of a lot of hedgerows within the site; both the national and world ploughing championships have been held on this farm with large numbers of visitors attending; major ground disturbance occurred from the ploughing and as a result of ancillary works; the response from an archaeological consultancy to a county council letter on a similar issue, in respect of file reg ref no 16325 is referred to which states: *'considering the absence of specific indications of archaeological potential within the site it is proposed that archaeological monitoring of ground works and minimisation of ground disturbance during the construction phase may be appropriate and in line with recent internal guidance documents issued by the National Monuments Service.'* The grounds of appeal also states that the report which accompanied the planning application was the result of a comprehensive Archaeological Assessment by Dr Maurice F Hurley and was undertaken in accordance with the requirements specified by the Department of Culture, Heritage and Gaeltacht, National

Monuments Service. Following the Department's submission referred to above, Dr Hurley sought information on the location of the crop mark, but the information was not forthcoming. Previous archaeological reports prepared for developments on this land and adjoining land have not noted the cropmark. The National Monuments Service has given advice in relation to the level of information which is required for solar farm developments, which is quoted in the grounds:

'FI request should not take the form of blanket requests for geo-physical survey across the whole development area or request testing across the whole development on the sole grounds that the development is large-scale. Any request for FI by way of geo-physical survey or archaeological testing should be based on specific and verifiable indicators of archaeological potential (e.g. close proximity to known archaeological monuments, presence in the area proposed to be developed of potential archaeological features identified from aerial photographs or potential features identified in the course of field walking).'

- 7.9.5. They refer to the proposed mitigation of risk of inadvertent impact on hitherto unknown buried archaeological material, by archaeological monitoring of any significant areas of ground disturbance, which they suggest may be conditioned.
- 7.9.6. In my opinion an appropriate condition can adequately address this issue.

7.10. Flood Risk

- 7.10.1. The issue of flood risk is referred to in section 7 of the Environmental Report and includes a flood risk assessment, which identified fluvial risk associated with the Ardnehue river and the Aghalona river and pluvial risk posed by heavy rainfall and associated surface water ponding. It is stated that the solar panels are a water-compatible development and would continue to operate as normal, up to a flood depth of 800mm. The proposed development is within flood zone C. No mitigation measures are envisaged.
- 7.10.2. The report of the Environment Department states that a small area to the west is located within the PFRA flood zone, associated with the Ardnahue River, and a small area to the north is associated with pluvial flooding; and that a site-specific flood risk assessment should be submitted.

7.10.3. As pointed out in the Environmental Report solar panels are not vulnerable development and whereas these are the extensive development, the proposed siting of the substation, and associated buildings at an elevated point on the site, appears to address the flood risk vulnerability of that part of the proposed development. In my opinion the proposed development does not give rise to flood risk concerns, either for the development itself or for adjoining properties.

7.11. **Glint and Glare**

7.11.1. The Environment Department report recommended that clarification of a number of items in the Glint and Glare report be requested, including a map showing the 7 road receptors stated as having the potential for glint and glare without mitigation. Volume 2 of the Environmental Report provides details, in appendix G, of the glint and glare effects. The locations of the road receptors which may experience glint and glare effects are shown in Appendix G4. The 13 road receptors with potential glint and glare effects, after existing screening has been accounted for, including glare periods where the glaring panels are within 10 degrees of the shining sun, are shown for the following conditions: theoretical glare – no screening; actual glare – existing screening only; and actual glare - existing screening plus added mitigation screening. It can be seen that with the added mitigation screening glare is eliminated in 9 cases; but glare remains in the case of 4 road points which relate to the local road L6113 to the east of the site and the local road further east, points R12, R72, R73 and R74, where glare may be experienced for an average of up to 9.5 minutes per day. It is worth noting that these details do not entirely match the analysis set out in section 10 of the Environmental Report (Volume 1). However, in my opinion the limited glint and glare impact indicated post mitigation, in particular at points on local roads can if necessary be addressed by further mitigation. A condition to this effect should be included.

7.12. **Noise**

7.12.1. The Environment Department report recommended that clarification of the noise report be requested regarding whether or not the construction stage noise predictions in table 8-12 included total noise level including construction. Table 8-12 indicates that the nearest noise sensitive receptors (9 are considered) will

experience noise levels of between 41 dB LAeq,T and 64 dB LAeq,T, at the façade of the dwelling. The latter level being experienced at the façade of the dwelling of the involved party. In my opinion noise during construction will not be significant. Operational noise is given in tables 8-11, at source, 8-13 for daytime receptors and 8-14 night time for the three nearest noise sensitive receptors. The assessment is that noise will be lower than typical criteria and in particular, for night time that receptors will experience site specific emissions below existing background levels LA90,T. In my opinion operational noise will not be significant.

7.13. Other Issues

- 7.13.1. Electromagnetic fields – the Environment Department report recommended clarification on this issue. Department of the Environment, Climate and Communications (DECC) is responsible for setting policy relating to the health effects of Non-Ionising Radiation (NIR) including electromagnetic fields. In my opinion no issues of concern arise under this heading.
- 7.13.2. Biodiversity / ecology - the Environment Department report recommended clarification on this issue including in relation to whether or not invasive species were identified on the site; also noting that no invasive species were identified on the site; and that the CEMP should be a final document. A Preliminary Environmental Management Plan was submitted as part of the application. The conclusion section states that it outlines the management procedures to enable the contractor to respond to potential environmental risks from construction activities, and that the final CEMP will cover all aspects of the construction development; the appointed contractor will be required to develop an updated CEMP prior to the commencement of any construction works and this will be submitted to Carlow County Council for approval. In my opinion this is satisfactory.
- 7.13.3. The planning report dated 24th March 2021 deals in a comprehensive manner with all other issues arising and no concerns remain under the heading landscape and visual.

8.0 Recommendation

- 8.1.1. In accordance with the foregoing I recommend that permission should be granted, for the following reasons and considerations and in accordance with the following conditions.

9.0 Reasons and Considerations

Having regard to:

- (a) the nature, scale and extent of the proposed development,
- (b) the national targets for a renewable energy contribution of 40% to gross electricity consumption by 2020,
- (c) national and local policy support for developing renewable energy, in particular the:

Government's Strategy for Renewable Energy, 2012-2020,

National Planning Framework, 2018,

Delivering a Sustainable Energy Future for Ireland - the Energy Policy Framework, 2007-2020,

Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure 2012,

Eastern and Midlands Region Regional Spatial & Economic Strategy,

Carlow County Development Plan 2015 2021,

- (d) the distance to dwellings or other sensitive receptors from the proposed development,

- (e) the submissions on file,

- (f) the documentation submitted with the application, including the Natura Impact Statement and the Environmental Report,

I consider that the proposed development, would

- (a) not have an unacceptable impact on the character of the landscape or on the cultural or archaeological heritage,
- (b) not seriously injure the visual and residential amenities of the area,
- (c) be acceptable in terms of public health, traffic safety and convenience,

- (d) not have an unacceptable impact on ecology,
- (e) make a positive contribution to Ireland's requirements for renewable energy, and
- (f) be in accordance with:-
 - (i) Government's Strategy for Renewable Energy, 2012-2020,
 - (ii) the National Planning Framework, 2018,
 - (iii) the Climate Action Plan, 2019 and
 - (iii) the Regional Spatial and Economic Strategy for the Southern Region.

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

10.0 Conditions

1.	<p>The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, 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.</p> <p>Reason: In the interest of clarity.</p>
2.	<p>The period during which this permission may be implemented shall be 10 years from the date of this Order.</p> <p>Reason: In the interest of clarity.</p>
3.	<p>The permission shall be for a period of 30 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.</p>

	<p>Reason: To enable the Planning Authority to review the operation of the solar array in the light of the circumstances then prevailing.</p>
4.	<p>This permission shall not be construed as any form of consent or agreement to a connection to the national grid.</p> <p>Reason: In the interest of clarity.</p>
5.	<p>The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall -</p> <p>(a) Engage the services of a suitably qualified, licenced, archaeologist.</p> <p>(b) The archaeologist is required to notify the planning authority and the Department of Housing, Local Government and Heritage, National Monuments Service, in writing at least four weeks prior to the commencement of site preparations.</p> <p>(c)The archaeologist shall carry out any relevant documentary research and may excavate trenches at locations chosen by the archaeologist.</p> <p>(d) Having completed the work, the archaeologist shall submit a written report to the Planning Authority and the Department of Housing, Local Government and Heritage for consideration.</p> <p>(e) Where archaeological material is shown to be present, avoidance, preservation in situ, preservation by record (excavation) and/or monitoring may be required, and the Department of Housing, Local Government and Heritage will advise the Developer with regard to these matters.</p> <p>(f) No site preparation or construction work shall be carried out until after the archaeologist's report has been submitted and permission to proceed has been received in writing from the Planning Authority in consultation with the Department of Housing, Local Government and Heritage.</p> <p>Reason: To ensure the continued preservation (either <i>in situ</i> or by record) of places, caves, sites, features or other objects of archaeological interest.</p>

6.	<p>The proposed development shall be undertaken in compliance with all environmental commitments made in the documentation supporting the application, in particular all of the relevant measures to protect surface water.</p> <p>Reason: To protect the environment.</p>
7.	<p>The construction of the development shall be managed in accordance with the Construction Environmental Management Plan (CEMP) which shall be submitted to, and agreed in writing with the planning authority prior to commencement of the development. This plan shall provide details of intended construction practice for the development, including hours of working, details of traffic and environmental management measures proposed including but not limited to operational controls for dust, noise and vibration, and protection of groundwater.</p> <p>Included shall be a traffic management plan showing that all construction movements entering the site shall be from the R725 and shall be left turn only movements from this road; and that all construction movements exiting shall be to the L6113.</p> <p>Any necessary measures to prevent spillage or deposit of clay, rubble or other debris on the public road, including the provision of a wheel wash, and to maintain the public road by removing material shall be implemented with full costs to be borne by the developer</p> <p>Reason: In the interests of public safety, residential amenity and protection of the environment.</p>
8.	<p>Details of materials, colours, textures and finishes to the ancillary structures shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.</p> <p>Reason: In the interest of the visual amenity of the area.</p>

9.	<p>CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property or the public road.</p> <p>Reason: In the interest of the amenities of the area and of property in the vicinity.</p>
10.	<p>Cables within the site shall be located underground.</p> <p>Reason: In the interest of visual amenity.</p>
11.	<p>Upon commissioning of the development and for a period of two years following first operation, the developer/operator shall provide detailed glint and glare surveys on an annual basis to the Planning Authority to confirm that no significant impact has occurred, and shall undertake such further mitigation measures as the Planning Authority may specify in writing, to ensure the the absence of significant impact from glint and glare is achieved.</p> <p>Reason: To mitigate against any glint impact.</p>
12.	<p>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 within five years from planting shall be replaced within the next planting season by trees or hedging of similar size and species, unless otherwise agreed in writing with the Planning Authority.</p> <p>Reason: In the interest of biodiversity and the visual amenities of the area.</p>
13.	<p>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</p>

	<p>secure the reinstatement of public roads that may be damaged by construction transport 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.</p> <p>Reason: To ensure the reinstatement of public roads that may be damaged by construction transport.</p>
14.	<p>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.</p> <p>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</p>

Planning Inspector

7 October 2021

Appendices

Appendix 1 Photographs

Appendix 2 Carlow County Development Plan 2015 2021 – extracts

Appendix 3 Regional Spatial and Economic Strategy for the Southern Region–
extracts