



An  
Bord  
Pleanála

## Inspector's Report

### ABP-311066-21

---

<b>Development</b>	Planning permission to construct a solar PV energy development.
<b>Location</b>	Mullinam, Paddock & Loughlinstown, Ratoath, Co. Meath.
<b>Planning Authority</b>	Meath County Council
<b>Planning Authority Reg. Ref.</b>	21180
<b>Applicant(s)</b>	Energia Solar Holdings Limited
<b>Type of Application</b>	Permission
<b>Planning Authority Decision</b>	Grant Permission
<b>Type of Appeal</b>	Third Party
<b>Appellants</b>	Eco Advocacy CLG
<b>Observer(s)</b>	None
<b>Date of Site Inspection</b>	22 <sup>nd</sup> April 2022
<b>Inspector</b>	Alaine Clarke

# Contents

1.0 Site Location and Description .....	3
2.0 Proposed Development .....	4
3.0 Planning Authority Decision .....	5
4.0 Planning Authority Reports .....	6
5.0 Planning History.....	13
6.0 Policy Context.....	14
7.0 The Appeal .....	19
8.0 Assessment.....	28
9.0 Appropriate Assessment.....	46
10.0 Recommendation .....	62
11.0 Reasons and Considerations .....	62
12.0 Conditions .....	63

## 1.0 Site Location and Description

- 1.1. The site is located in the townlands of Mullinam, Paddock and Loughlinstown at Ratoath, Co. Meath. The site is c. 2km southeast of Ratoath and 3km southwest of Ashbourne. The site is located c. 1.8km southwest of the M2 and 3.5km northeast of the M3. Fairyhouse Racecourse is located 0.9km to the west, beyond which is the R155 road. The site bounds local road L-1007 (Kilbride Road) along the eastern site boundary and the L-50211 to the west. Utility wires traverse the site including a 110kV line which traverses the site in a north-south direction. The site is c.3.7km northwest of the Fingal County Council administrative boundary.
- 1.2. The site measures an area of 82.5 ha. The land use is agriculture; mainly arable with some of the smaller southwestern fields under pasture with sheep grazing. The site comprises 17 fields (from a larger landholding of 20 fields). Some fields are portions of larger fields not included within the site boundary presumably to give some distance between established residential properties and the proposed solar development – evident along the eastern boundary. Land in the area is generally flat, and within the site, the elevation is stated to vary within the range of 80-90m AOD. There are a number of existing agricultural access points along the L-1007 and L-50211.
- 1.3. Field boundaries generally comprise mature hedgerow. Some of this boundary consists of rear garden hedgerow of adjoining residential properties. Some site boundaries are not demarcated in-situ and would comprise new hedgerow planting.
- 1.4. The Fairyhouse Stream flows in an easterly direction along a portion of part of the north-westerly site boundary and joins with the Broadmeadow River which flows into the Malahide Estuary SPA and SAC, together with a number of streams, c.14km to the east.
- 1.5. There are dwellings in the vicinity of the site, along the road frontage of the L-1007 to the east, along Glascarn Lane to the north and at Loughlinstown and Ballyhack townlands to the west. The site is c.300m to the north-west of a protected structure known as Grange Cottage. Grange Cottage abuts a permitted solar farm (ABP Ref. 301023-18) and site works have commenced in relation to this permission. A small standing stone is located in Field 19 (most south-westerly field). Various field drains run along the field boundaries within the site.

1.6. I note the two letters of consent from landowners submitted with the application.

## 2.0 Proposed Development

2.1. Planning permission is sought for a solar PV development with a total site area of 82.5 hectares with a maximum electricity output of 70 MW and includes:

- solar panels mounted on steel support structures, with a maximum height of c. 3.2m, associated cabling and ducting;
- 21 no. MV power stations, each measuring c.14.7 m<sup>2</sup>, with a maximum height of c. 3.2m;
- 7 no. battery storage containers, each measuring c.29.7 m<sup>2</sup>, with a maximum height of 3.2m;
- 1 no. temporary construction compound, measuring 3,000 m<sup>2</sup>;
- access tracks, c. 14,000sqm; hardstanding area;
- boundary security fencing and security gates;
- 42 CCTV cameras, landscaping and ancillary works.

2.2. It is proposed to access the site to the east, via an improved agricultural entrance off the Kilbride Road (L-1007).

2.3. Solar panels will be mounted on metal mounting frames arranged in rows running east to west and fixed to pile driven galvanised steel posts to a depth of up to 1.5m. The total number of pile-driven poles will be approximately 15,048 each having an area of disturbance of 0.008m<sup>2</sup>. Cumulatively, total ground disturbance area for the entirety of the proposed development is c.22,737 m<sup>2</sup>.

2.4. The application is accompanied by the following documents:

### Volume 1

Appropriate Assessment Screening Report

Planning Statement

### Volume 2 - drawings

### Volume 3 – Technical Appendices

Appendix 1 Landscape and visual impact appraisal

Appendix 2 Ecological Impact Assessment

Appendix 3 Archaeological and Architectural Impact Assessment

Appendix 4 Flood Risk and Drainage Impact Assessment

Appendix 5 Construction Traffic Management Plan

Appendix 6 Glint and Glare Assessment

Appendix 7 Noise Impact Assessment

Appendix 8 Outline Construction Environmental Management Plan

Appendix 9 Residential Amenity Assessment

2.5. A request for further information (6 points as set out in the planner's report) issued on 29th March 2021. A response to the further information request was received on 18th June 2021, including:

- Cable plan;
- Fire suppression details;
- Lighting details;
- Updated layout and photomontage including a reduction in the area of the solar panning resulting in an additional set back of c.323 m between the rear of Peacockstown Estate along Kilbride Road, in response to submissions; and
- A letter, detailing responses to each of the 6 items in the request.

2.6. In response to the request for further information, the applicant indicated that the proposed life of the permission is 10 years. The proposed operational life and restoration plans is 35 years.

### **3.0 Planning Authority Decision**

#### **3.1. Decision**

3.1.1. By Order dated 13<sup>th</sup> July 2021 Meath County Council issued a Notification of Decision to grant planning permission, subject to 27 conditions, including:

Condition 2 – development is for a solar farm with an output of 70MW, unless otherwise agreed.

Condition 4 – appropriate measures to reduce negative effects to aircraft shall be implemented if necessary.

Condition 13 – a post-construction survey of the Kilbride Road shall be undertaken by the applicant between the site entrance and the R125. Security of €25,000 or equivalent is required to be lodged, to secure repairs on the road.

Condition 16 – requires that culverts, crossing, or watercourse diversions or amendments shall be the subject of a section 50 consent from the O.P.W. No development shall take place within 10m of watercourses. Fencing in Flood Zones A and B shall be limited to deer fencing or similar; fencing shall not extend into watercourses. Gates at watercourse shall not impact the flow of water in a 1 in 100 year or 1 in 1000 year flood event; details of gates to be agreed prior to commencement.

Condition 19 – requires an archaeological impact assessment to be submitted, to include an archaeological geophysical survey.

Condition 20 – all structures shall be removed not later than 35 years from the date of commencement of development, and the site reinstated unless permission has been granted for their retention prior to that date. A restoration plan shall be submitted for agreement.

Condition 27 – requires payment of €700,000 in development levies, as provided for in the Meath County Council Contribution Scheme.

## **4.0 Planning Authority Reports**

### **4.1. Planning Reports**

- 4.1.1. There are two planning reports on the file, the first recommending a further information request, included a brief site description, reference to planning policy and notes that the site is located in 'The Ward Lowlands' Landscape Character Area. Submissions and reports are noted as is the pre-planning meeting held. The report includes a determination that a Stage 2 AA (NIS) is not required. The report concludes that further information is required to adequately assess the proposal. The following points of Further Information were recommended:

- Clarity in respect of the life of the permission; operational life and site restoration plans;
- On the ducting details, including the number and size of ducting, ducting route and termination point;
- Contact the Fire Service Department of MCC;
- Submit a lighting design, including a lighting contour drawing;
- Respond to the third party submissions.

4.1.2. The second Planning Report considered the applicant's further information response and generally expresses satisfaction with responses, with the exception of that relating to the life of the permission. The planner did not consider it appropriate to change the life of the permission to 10 years, when the permission did not expressly seek permission for a 10 year period. The report concludes that a stage 2 AA (NIS) is not required and states that a development charge based on 70 MW, €1,000 per 0.1MW, €700,000 is applicable.

#### 4.2. **Other Technical Reports**

Transportation Department (dated 1<sup>st</sup> March and 26<sup>th</sup> March 2021):

- A lighting design is required that mitigates against obtrusive light;
- The visibility splay assessment confirms adequate sightlines (160m x 3m from setback) is achievable from proposed entrance;
- The entrance may have to be widened to facilitate anticipated HGV traffic;
- The Traffic Impact Assessment confirms the access roads and junctions along the haul routes have adequate capacity to accommodate peak HGV trips;
- Traffic arising could result in damage to the local road surface and a pre and post construction survey of Kilbride Road, between site entrance and its junction with the R125, is advised. A security bond is required to ensure satisfactory completion of any defects to the public road caused as a result of the proposed development.
- Traffic from the operational phase is not considered significant.

- Notes that when mitigation measures are taken into account there are no glint and glare impacts to receptors on the road receptors assessed by the applicant. Public roads along the south-western boundary of the site do not appear to be assessed for glint and glare impacts on any receptors. Mitigation measures, to reduce the risk of glare for motorists to none, should be implemented prior to commencement. Remedial works, where glint and glare issues arise shall be agreed, if they arise during the life of the project.

Architectural Conservation Officer (dated 25<sup>th</sup> March 2021): no concerns arising.

Environment Department (dated 22<sup>nd</sup> March 2021):

- the construction of a solar farm is classified as a 'highly vulnerable development';
- part of the site to the northern boundary is partially situated in Flood Zone A (i.e. where the probability of flooding is greater than 1% from fluvial flooding). Notes that the submitted SSFRA determined the site to be entirely in Flood Zone C, and that Fairyhouse Stream that runs across the northern boundary does not pose a flood risk. Notes that there are a number of drainage channels that will require crossing, including OPW arterial drainage channels; a section 50 agreement with the OPW will be required for culverts, crossing, alterations or watercourse diversions.
- No objection to the proposed development subject to conditions, including:
- No development within 10m of watercourses;
- Fencing in Flood Zone A and B shall be limited to deer fencing; fencing shall not extend into the watercourses;
- Any gates at watercourses shall not impact the flow of water in a 1 in 100 year of 1 in 1000 year flood details.

Water Services (dated 25<sup>th</sup> February 2021): development is broadly acceptable with respect to surface water disposal. The following to be addressed prior to commencement:

- Consent from the OPW for proposed culvert;



- Compliance with the Greater Dublin Strategic Drainage Study Regional Drainage Policies Volume 2 for New Developments.

Fire Service Department (dated 1<sup>st</sup> March 2021): applicant should contact the fire authority to review project.

Transportation Department (Public Lighting) (dated 1<sup>st</sup> March 2021 and 5th July 2021):

- A lighting design is required that mitigates against obtrusive light and shall include a lighting contour drawing. It is not clear what external lighting, if any, is proposed.

### 4.3. Prescribed Bodies

#### 4.3.1. Inland Fisheries Ireland (dated 17<sup>th</sup> February 2021)

- The development is adjacent to the Fairyhouse Stream, which flows into the Ratoath Stream/Broadmeadow River, which was classified in 2014 in poor ecological condition. The stream was in moderate status in Q3 in 2017. The EPA noted the river was in poor condition throughout.
- The Broadmeadow River is an important salmonid system with brown trout throughout and salmon in the lower reaches. All works to be completed in line with a Construction Management Plan to ensure good practices are adopted throughout the construction and containing mitigation measures to deal with potential adverse impacts.
- All necessary measures to be undertaken to ensure comprehensive protection of aquatic ecological integrity by complete impact avoidance in the first instance or through mitigation, if necessary.
- Disturbance of riparian habitats should be minimised; a buffer of 10m minimum to river banks should be maintained. Riparian vegetations should be retained in as natural state as possible at all times.
- Short-term storage and removal/disposal of excavated material must be considered and planned to minimise pollution. Drainage from topsoil storage area may need to be directed to a settlement area.

- An invasive species and biosecurity plan should be included to treat and manage invasive species on site.
- Concerned regarding connection to the distribution grid. Laying of cables that involves crossing of waterbodies should not allow any deleterious material to discharge to any watercourse; such crossings should be trenchless and subject to an agreed method statement with IFI. Any watercourse manipulation works should be the subject of IFI consultation and approval. Notes the closed season for instream works in salmonid river systems from October to June.
- All discharges to comply with the EC Surface Water Regulations 2009 and EC Groundwater Regulations 2010.

4.3.2. DAU (Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media) – archaeology (dated 28<sup>th</sup> January 2021):

- The Department examined the Archaeology and Architectural Impact Assessment report and notes the presence of a standing stone and the townland boundary, both of potential archaeological interest. The Department recommends that an Archaeological Impact Assessment is prepared to assess the impact of potential impact, if any, on archaeological remains in the area where development is proposed to take place to enable an informed archaeological recommendation before commencement of construction.

4.3.3. Irish Water (dated 3<sup>rd</sup> February 2021):

- Submit for approval the proposed ducting details, to include number and size of ducting, ducting route and ducting termination point.

#### 4.4. **Third Party Observations**

4.4.1. 9 no. observations were received on foot of the planning application from local residents. Some of issues raised are covered by the grounds of appeal except for the following:

- Lack of consultation with residents;

- The Blackwater River runs parallel to the proposed development , is part of a Special Area of Conservation. No detail as to how it will be protected. No reports on same from prescribed bodies;
- No reference to an archaeology investigation undertaken in 1983, by a school headmaster;
- Fencing will be an invitation to vandalism;
- Development would be premature pending the adoption of a renewable energy strategy for the county;
- Mitigation measures to counter glint and glare are insufficient;
- Development would set an undesirable precedent;
- The traffic management plan is insufficient; sightlines are inadequate and location of proposed entrance is dangerous. The proposed development together with volume of traffic on local road should be risk assessed. Development would disrupt local residents;
- Insufficient noise assessment on operational phase;
- Glascarn Lane is structurally unsafe;
- The site floods/is a flood plain;
- Inadequate/inaccurate planning application drawings;
- Mitigation measures proposed have not been adequately considered in the appropriate assessment or archaeology assessment;
- Cumulative impact of construction with other projects should be assessed;
- Reference to other decisions in the area where concerns were raised of landscape and visual impacts, impact on the national road network.
- Queries connection to the national grid, including capacity to accommodate development.
- Development will have a negative impact on Grange Cottage, a protected structure.

4.4.2. Responding to submissions, the applicant made the following points to the planning authority:

Loss of agricultural lands – multi-purpose use of the site is encouraged, ground disturbance is only 2.75% of the site; the site can revert to open pasture upon decommissioning.

Grant incentives v. food production – the RESS is critical to facilitate a role out of renewable energy projects. Solar farms are essential to help meet national objectives and targets.

Overconcentration of solar development – The greatest landscape and visual effects will occur with the approved solar farm to the south however hedgerows on the boundaries will help to limit cumulative visibility. The Landscape and Visual Impact Assessment (LVIA) concluded that the proposed development will have a moderate adverse cumulative landscape effect and no change to minor adverse cumulative visual effects with the adjoining solar farm to the south.

Proximity to residential receptors – a new set back provides an additional c.323 metres between the rear of properties to the west (rear of properties 5, 6, 7 & 8 Peacockstown Estate) and solar panels of properties, notwithstanding that all assessments, including a glint and glare assessment concluded there would be no significant impacts to those properties.

Devaluation of property – There is no evidence to indicate that solar farms have a negative impact on the property market.

Issues in relation to Drawings – clarification provided in respect of issues raised.

Substation, Grid connection and requirement for EIAR – the future substation and grid route will be subject to a separate application. The EIA Directive is not applicable to the proposed development.

Local road network – the Construction Traffic Management Plan addressed issues relating to traffic and transportation. Traffic generation is considered to be quite low. The most appropriate means of access is from the existing access. The applicant will be liable to repair any damage (post construction) of the Kilbride Road.

Community engagement – Due to Covid-19 restrictions traditional open-door public information event and door-to-door visits were not undertaken. A mail drop was undertaken. All queries were followed up.

Flooding – A Flood Risk Assessment and Drainage Impact Assessment were undertaken. Only minor surface water ponding is likely. Run off from buildings will drain to ground through infiltration and impact will be negligible. The proposed development will not increase flood risk away from the application site during the construction, operation and decommissioning phases.

Impact on the environment – Assessments undertaken concluded that the proposed development (i) will not significantly affect any Natura 2000 site and (ii) is unlikely to have any significant effects on wildlife.

Adjacent solar farm – The application to the south is not in the ownership of Energia Solar Holdings Limited.

## 5.0 Planning History

5.1. There is one planning application associated with the site:

- RA201953 - application declared invalid (for a solar farm development with a site area of 82.5ha).

5.2. Of relevance in the immediate vicinity:

- ABP Ref. 301023-18 / Meath County Council reg. ref. RA10644 – located immediately south of the current appeal site, permission was granted, on appeal, for a 10 year permission for a solar PV development with a maximum output of 51MW on a site of 95.3 ha.
- ABP Ref. 311831-21 / Meath County Council reg. ref. 21837 – located c.200m to the east, permission granted by Meath County Council is subject to an appeal for a 10 year permission for a solar farm with a maximum output of 220MW on a site of 265.8ha.
- ABP Ref. 301151-18 / Meath County Council reg. ref. RA170479 – located c.1km to the east, permission was granted on appeal, for a 10 year permission for a solar farm with an output of 31.5MW on a site of 54.5ha.

- ABP Ref. 313032 / Meath County Council reg. ref. 211918 – located c.2.6km to the north, permission granted by Meath County Council is subject to an appeal for permission for a solar farm with a maximum output of 13.5MW on a site of 23.5ha.
- Meath County Council reg. ref. AA181386 – located c.2.3km to the east, permission granted for a 10 year permission for a solar farm with an output of 34MW on a site of 68.4ha.

5.3. A number of solar farms developments have been permitted in the wider area within the administrative areas of Meath County Council and Fingal County Council.

## 6.0 Policy Context

### 6.1. Climate and Energy Policy Framework 2030

6.1.1. The Climate and Energy Policy Framework 2030 includes EU-wide targets and policy objectives for the period between 2021-2030. It seeks to drive continued progress towards a low-carbon economy and build a competitive and secure energy system that ensures affordable energy for all consumers and increase the security of supply of the EU's energy supply. It sets targets of at least 40% reduction (set to raise to at least 55%) in green-house gas emissions and at least 32% share of renewable energy from all energy consumed in the EU by 2030.

### 6.2. Revised Renewable Energy Directive 2018/2001/EU (December 2018)

6.2.1. It sets out a new target for share of energy from renewable sources in the EU to at least 32% for 2030, with a review for increasing this target through legislation by 2023. A major shift within the revision is the way in which Member States will contribute to the overall EU goal. It requires Member States to set national contributions to meet the binding target as part of their integrated national energy and climate plans.

### 6.3. National Planning Framework (NPF)

6.3.1. The NPF is a high-level strategic plan to shape the future growth and development of the country to 2040. It is focused on delivering 10 National Strategic Outcomes

(NSOs). NSO 8 focuses on the 'Transition to a Low Carbon and Climate Resilient Society' and recognises the need to harness both on-shore and off-shore potential from energy sources including solar and deliver 40% of our electricity needs from renewable sources.

- 6.3.2. Section 5.4, 'Planning and Investment to Support Rural Job Creation', notes that in meeting the challenge of transitioning to a low-carbon economy, the location of future national renewable energy generation will, for the most part, need to be accommodated on large tracts of land that are located in a rural setting, while also continuing to protect the integrity of the environment and respecting the needs of people who live in rural areas.
- 6.3.3. It is a National Policy Objective (NPO 55) 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'.

#### **6.4. Ireland's National Energy and Climate Plan 2021-2030**

- 6.4.1. The National Energy and Climate (NECP) Plan is an integrated document mandated by the European Union to each of its member states in order for the EU to meet its overall greenhouse gases emissions targets. The Energy and Climate Plan addresses all five dimensions of the EU Energy Union: decarbonisation, energy efficiency, energy security, internal energy markets and research, innovation and competitiveness.
- 6.4.2. The plan establishes key measures to address the five dimensions of the EU Energy Union, including:
- To achieve a 34% share of renewable energy in energy consumption by 2030.
  - To increase electricity generated from renewable sources to 70%, indicatively comprised of up to 1.5GW of grid-scale solar energy.

#### **6.5. Climate Action Plan 2021 – Securing our Future**

- 6.5.1. This plan sets out a road map for taking decisive action to halve our greenhouse gas emissions by 2030 and reach net zero emissions by 2050. Among the most important measures in the plan is to increase the proportion of renewable electricity,

up to 80% of all electricity generation by 2030. The government seeks to annually update the new climate action plan and the road map of actions to reflect developments of the previous year so as to ensure that required emission reductions are achieved.

6.5.2. In line with EU targets, the Programme for Government commits to achieving a 51% reduction in Ireland's overall greenhouse gas emissions by 2030. These legally binding objectives are set out in the Climate Action and Low Carbon Development (Amendment) Act 2021. This Act established legally binding frameworks and commitments to achieve targets.

6.5.3. The plan notes that there is a requirement for a significant step up in ambition and delivery in order to meet the new 2030 target, including increasing the share of electricity demand generated from renewable sources to up to 80%. At least 500 megawatts of renewable energy will be delivered through such local community-based projects. Action No. 100 seeks to ensure a supportive spatial planning framework for onshore renewable electricity generation development.

## **6.6. Regional Spatial Economic Strategy, 2019-2031**

6.6.1. The regional strategy (RSES) for the Eastern and Midlands Region supports harnessing on-shore and off-shore potential from wind, wave and solar and connecting the richest sources of that energy to major sources of demand. There are 16 no. Regional Strategic Outcomes (RSOs). RSO 8 is to build climate resilience. RSO 9 is to support the transition to low carbon and clean energy economy.

6.6.2. Section 4.8, 'Rural Places: Towns, Villages and the Countryside' notes the location of future renewable energy production is likely to be met in rural areas and at section 7.9, 'Climate Change' supports an increase in the amount of new renewable energy sources in the Region, including the use of solar photovoltaics.

## **6.7. Development Plan**

6.7.1. The Meath County Development Plan 2021-2027 is the operative plan and came into force on 3<sup>rd</sup> November 2021. While it is noted that a Ministerial Direction has issued (under section 31 of the Planning and Development Act, 2000, as amended) in respect of the Plan, I am satisfied that the issues raised in the Direction do not relate



to renewable energy policy or the site the subject of this appeal. In my opinion, the Direction has no material bearing on the development proposal the subject of this appeal.

- 6.7.2. It is the policy of the Council, as set out in ED POL 19 'To support and facilitate sustainable agriculture ... renewable energy and other rural enterprises at suitable locations in the County'. Policy INF POI 34 promotes sustainable energy sources and locally based renewable energy alternatives where it does not have a negative impact on the surrounding environment. Policies INF POL 35 and INF POL 36 seek to reduce greenhouse gases through the development of renewable energy sources and support the implementation of the National Climate Change Strategy. It is an objective of the Council, INF OBJ 39, to support Ireland's renewable energy commitments outlined in national policy by facilitating the development and exploitation of renewable energy sources such as solar where it does not have a negative environmental impact.
- 6.7.3. It is the policy of the Council, as set out in DM POL 27, 'to encourage renewable development proposals which contribute positively to reducing energy consumption and carbon footprint'. DM OBJ 76 outlines the criteria to be considered in individual energy development proposals e.g., environment, traffic, landscape etc. Section 11.8.2 relates to the development management standards in respect of solar farms. Objective DM OBJ 77 lists a range of reports/documents to be included with an application for solar energy.
- 6.7.4. It is an objective of the plan, INF OBJ 28, to ensure that proposals for the development of solar farms located within areas identified as being within Flood zones A or B are subject to a Site-Specific Flood Risk Assessment.
- 6.7.5. It is a policy of the Council, INF POL 43, to require that development proposals in respect of solar panel photovoltaic (PV) arrays in the vicinity of Dublin Airport shall be accompanied by a full glint and glare study.
- 6.7.6. Chapter 8 deals with Cultural and Natural Heritage Strategy. Policies HER POL 2, HER POL 3 and HER POL 4 aim to protect sites and features of archaeological interest and seeks archaeological impact assessments, geophysical survey, test excavations or monitoring as appropriate, for development in the vicinity of

monuments or in areas of archaeological potential or where development proposals involve ground clearance over a certain area/length.

- 6.7.7. Objectives HER OBJ 33 and HER OBJ 34 seeks to ensure an Appropriate Assessment in accordance with the Habitats Directives (92/43/EEC) and national guidance is carried out where appropriate and seeks to protect and conserve the conservation value of Natura 2000 sites and other designated sites.
- 6.7.8. It is a policy of the Council, HER POL 37, to encourage the retention of hedgerows and distinctive boundary treatments in rural areas. Policy HER POL 49, 50 and 52 seek to protect and enhance the character and distinctiveness of landscapes in accordance with the Meath Landscape Character Assessment and requires landscape and visual impact assessments to be submitted with planning applications for development which may have significant impact on landscape character areas of medium or high sensitivity.
- 6.7.9. The landscape character assessment, attached as appendix 7 to the Plan identifies the site as being in area 10 'The Ward Lowlands'. Area 10 has medium potential capacity to accommodate large farm buildings, medium potential capacity to accommodate new visitor facilities, low potential capacity to accommodate multi-house developments, low potential capacity to accommodate overhead cables, low potential capacity to accommodate underground services, low potential capacity to accommodate wind farm development and low potential capacity to accommodate biomass and commercial forestry. The site is in a high sensitivity landscape.
- 6.7.10. The site is zoned as 'RA Rural Areas'. It is an objective to protect and promote in a balanced way, the development of agriculture, forestry and sustainable rural-related enterprise, community facilities, biodiversity, the rural landscape, and the built and cultural heritage in RA Rural Areas. Among a list of permitted uses are sustainable energy installations and utility structures.

## **6.8. Natural Heritage Designations**

- 6.8.1. The nearest designated sites are:
- Rye Water Valley / Carton SAC, site code 001398, 11.7km to the south-west.
  - Malahide Estuary SPA, site code 004024, 14.8km to the east.

- Malahide Estuary SAC, site code 000205 and proposed Natural Heritage Area, site code 000205, c. 14.5km to the east.

## 6.9. EIA Screening

6.9.1. The proposed development is not of any type included in Schedule 5 of the Planning and Development Regulations 2001 (as amended), i.e., development for which mandatory EIA is required, nor is it integral to any project that is of a type included in Schedule 5. Having regard to the nature and scale of the development there is no real likelihood of significant effects on the environment arising from the development. The need for environmental impact assessment can, therefore, be excluded at preliminary examination and a screening determination is not required.

## 7.0 The Appeal

### 7.1. Grounds of Appeal

Eco Advocacy CLG, have submitted an appeal against the decision to grant permission. The issues raised include:

- An application for costs under s.145 of the Planning and Development Act, 2000.
- Clarity on number of years applied for.
- The negatives outweigh the benefits.
- The RESS scheme is wrong – if there were no grants there would be no solar. The project is unsustainable without grants. Chasing grant sources makes very poor planning law.
- Deep Bore Geothermal is preferable.
- Strongly object to the use of finite resources, including land, for solar or wind energy.
- Destruction of agricultural land is contrary to the European Landscape Convention.
- Dissatisfaction with the AA.

- Proposed use is different from established use.
- Would give rise to significant traffic movements, interfering with amenities and increased NO2 levels.
- Will be a source of significant noise.
- Application should not be considered in isolation; need to consider wider planning context. A list is provided of similar developments; 14 in Co. Meath; 3 in Co. Kildare and 2 in Co. Wicklow.
- Grid connection needs to be considered.
- Drive for data centres is daft and unsustainable, contributing to destruction of landscape and finite resources.
- Raises concern of stormwater management from solar panels. Queries whether the run-off from solar panels poses a threat to water, the environment and our health; queries chemical interaction between guano and panels or falling objects (e.g., branches). An assessment on the safety and health implications, on animals and humans, of run-off from metals/substances is required. Consideration of impacts on soil is required.
- Cadmium Telluride is used to make solar modules and is extremely dangerous and is toxic if ingested.
- Gallium arsenide (GaAs) is used in a range of devices including solar cells, and is listed as a carcinogen in California, and is considered a carcinogen in animals. Other studies on rats or mice indicate cancer results from lung irritation and inflammation as a result of inhaling fine GaAs powders.
- Citing an article regarding PV content: lists toxic chemicals in solar panels. If exposed to water it can release hydrochloric acid which is corrosive, and bad for human and environmental health.
- Production of solar panels includes harmful greenhouse gases.
- Request details of the heavy metals and rare earth metals used in the solar panels, and an analysis of the environmental impacts and costs of production.
- Cannot find any EIA or NIA with the file.

- Geophysical analysis for archaeology required.
- Will cause residential property devaluation.
- Reference to amenity and tourism in the area/region.
- Considers the planner's report does not adequately assess concerns and issues raised. Reference to Kelly v An Bord Pleanála 2014 IEHC 400 and Sweetman v An Bord Pleanála C258/11.
- No guidelines for solar energy; solar applications should be suspended until an analysis of solar energy is carried out.
- Re. capacity factors – output claims are ambitious, citing an article relating to capacity factors, a guide to understanding the limitations of energy sources like wind farms.
- Re source of aggregates – where will they be sourced. A substantial amount of aggregate quarried is unauthorised or conditions are not complied with. Consider NO<sub>2</sub> pollutants. Establish quantities of aggregate required.
- It should not be called a solar 'farm'.
- It should not be located on land. It should be located on roof surfaces, other hard surfaces or brownfield sites. Many examples are given.
- The trouble with solar waste - citing an article regarding waste related to solar panels: Amount, composition, challenges to re-cycling, global inequality (dumping in poor nations), etc.
- Questioning certain narratives regarding the eco-friendliness of those energy supplies, classified as renewables.
- Ask the Board to satisfy itself that the proposal complies with the EIA Directive, ECJ case law, article 6 of the Habitats Directive and the SEA Directive. Several judgements are cited.
- Visual impact concerns and inadequate assessment of this issue; including Meath, a heritage county.
- Concern raised regarding impact on east coast air traffic.
- Are fire services equipped to deal with a fire at a solar installation?

- Concerns raised over electrical issues; short circuits, arc faults, arc flash.
- Solar panels fry birds and pose a particular hazard for migratory birds.
- EU sites – it is essential that all scientific evidence is properly examined to ensure that there is no danger of significant direct, indirect or secondary effects.
- Employment in construction arguments are erroneous. More labour-intensive industry such as intensive horticulture would sustain more jobs.
- The manufacture of support structures must be considered; only five/six months per year producing electricity in Ireland; unacceptable carbon footprint, the amounts of concrete, aggregate and steel are not given in the application. Establish the carbon footprint of the entirety of the proposal, including at end-of-life. Consider human rights and fuel used.
- Alternative energy sources are outlined: including deep-bore geothermal which is the most promising and its advantages are set out.
- Re dispatchability – solar power is highly sporadic and erratic.
- Enforcement is poor. Conditions will not be enforced. Self-policing is problematic.
- Concluding points focus on dispatchability issues with solar farms; proposals are grant-driven; leads to a loss of agricultural land, solar has only a small part to play in a sustainable energy mix; heritage and tourism impacts from incongruous built form. Request that decision to grant is overturned.
- A list of additional sources is provided. Reference is made to an industrial estate in a residential area in Trim.

7.1.1. The appeal documentation includes a request under Section 145 of the Planning and Development Act, 2000, as amended, for the appellant to be compensated for their expenses and work in preparing the appeal and provides a summary of the expenses. The appellant contends that there should be consequences for poor decision-making; that Meath County Council should pay for their costs.

## 7.2. Applicant Response

- 7.2.1. Neo Environmental have responded on behalf of the applicant to the grounds of appeal. The response includes Appendix 1, Natura Impact Statement and Appendix 2, Piling Rig Data. The main body of the response includes the following points:
- 7.2.2. Re. life and duration of permission: it was confirmed that the life of the permission is 10 years; the operation and restoration plans is for 35 years.
- 7.2.3. Re. community benefit: the proposed development would provide numerous benefits to the community:
- Economic, including a community benefit fund will be available to the local area.
  - The land would be taken from intensive agricultural use;
  - It will help with the reduction of CO<sub>2</sub> and other harmful gases from fossil fuel energy plants. It will contribute to meeting Ireland's challenging target of producing 70% of electricity from renewables by 2030.
  - The €700,000 development contribution will benefit the community.
  - Proposed solar panels are single crystal silicon and are fully recyclable. Other materials used will be disposed of appropriately.
- 7.2.4. Re. RESS scheme / grants: ensures that only projects with the lowest cost of energy are successful. It is a key element in reaching Ireland's 2030 climate targets. Solar farms are essential to meet climate action objectives in National Planning Framework. Photovoltaics has become one of the most cost-effective energy generators available.
- 7.2.5. Re. productivity / adequate sunlight: visible light, and not daylight, drives PV cells. Long hours of daylight also assist. Short daylight hours in winter are compensated by long daylight hours in summer.
- 7.2.6. Re. dispatchability/capacity factors: this is true for all renewable energy technologies; battery storage will assist with renewable generation. A well-established energy storage system is necessary. The production of intermittent renewables such as wind and solar are monitored and intermixed so as to utilise the available energy

from both sources at a given time. Technological improvements means panels have a higher efficiency rate than earlier panels.

- 7.2.7. Re. oppose use of agricultural land/inappropriate land use: it will result in ground disturbance of 2.75%. Details of floor area and ground disturbance by each component of the project is provided. It will result in a net gain in ecological enhancement. Upon decommissioning land can revert back to open pasture. The site can be used for agricultural purposes throughout lifetime of solar farm.
- 7.2.8. Re. European Landscape Convention: site selection was carried out with a review of the County Development Plan. Additional planting is proposed. The Landscape Visual Impact Assessment is referred to.
- 7.2.9. Re. traffic movements: a Construction Traffic Management Plan (CTMP) was submitted with the application: construction and operational traffic will be low. Traffic will be managed and scheduled.
- 7.2.10. Re. noise and disturbance: the highest noise level will from compaction of access tracks and piling operations. Piling will be completed within c. 4 weeks; effects are temporary and low impact.
- 7.2.11. Re: multiple applications from various applicants: Cumulative effects were considered; no significant cumulative effects were identified due a number of factors including the low height of panels. The development is reversible. Benefits to scheme are outlined.
- 7.2.12. Re. grid connections: proposed grid route is not required to be included as part of an application for a solar farm as it can be dealt with separately. The grid route was a major consideration in the initial site appraisal.
- 7.2.13. Re. data centres/motorways/windfarms: the points raised in relation to data centres and motorways are irrelevant; the proposed development is not a motorway or windfarm.
- 7.2.14. Re. habitats/human health/run-off: The flood risk assessment determined that a formal drainage system is impractical; the development will not increase flood risk. Water run-off will infiltrate to ground. Lists design and drainage measures. There is no evidence to suggest that run-off from solar panels poses a threat to groundwater aquifers.



- 7.2.15. Re: hazardous fluids to transfer heat; falling branches: the proposal is not a solar thermal system; no potential risk to watercourses. A sufficient buffer from trees/hedgerows is proposed.
- 7.2.16. Re: toxicity of panel materials/what inside a PV/materials used: proposed panels are single crystal silicon from sand; these panels do not include cadmium telluride, copper indium selenide, cadmium gallium (di)selenide, copper indium gallium (di)selenide and hexafluoroethane. Panels are not prone to degradation or leaching. Cadmium is not used so leaching is a non-issue. Solar modules are governed by the Waste Electrical and Electronic Equipment (WEEE) Directive. Solar farms do not produce harmful byproducts. The solar arrays and associated infrastructure will be removed from the site and the disturbed lands will be reinstated.
- 7.2.17. Re: production of solar panels/soil impact/heavy metal poisoning: proposed development would not result in negative impacts on soil health, animals or human health.
- 7.2.18. Re: analysis of environmental impacts, costs and human rights: The applicant is committed to operating in a socially, environmentally and ethically responsible manner and is committed to ensuring that the supply chain is properly vetted.
- 7.2.19. Re: archaeology: applicant is committed to undertaking a full geophysical survey of the site and welcomes a condition in this regard.
- 7.2.20. Re: devaluation of property: there is no evidence to prove that solar farms decrease the value of property in that particular area. The scheme was amended in response to concerns raised by the residents association.
- 7.2.21. Re: motorways; amenity and tourism: as the proposal is not for a motorway, the point is irrelevant. The solar farm will not hinder amenity and tourism activities.
- 7.2.22. Re: Planner's report: the response to further information robustly reviewed the submissions made; the Planner was satisfied that all concerns and issues raised were fully addressed.
- 7.2.23. Re: Guidelines for solar energy: National, regional and local planning policy supports the development of renewable energy technology.

- 7.2.24. Re: source of aggregates: source of aggregate will be decided at a later date; will be from a nearby authorised quarry. Excavated soil is expected to be reused on site. Very little concrete will be used.
- 7.2.25. Re: planning and enforcement / compliance with conditions: the development is compliant with all relevant planning policies. The applicant intends to comply with all conditions.
- 7.2.26. Re: carbon footprint of proposal/sustainability: references publications that support renewable energy. Solar energy creates an insignificant carbon footprint compared with savings from avoiding fossil fuels. Solar panels generate energy that produce no greenhouse gas emissions. Material used which are not recyclable will be disposed of in an appropriate manner. Very little concrete is required.
- 7.2.27. Re: use of the term solar farm: this term has been used for large scale solar developments across the Republic of Ireland for the past 5 years.
- 7.2.28. Re: alternative locations for solar development: supports the development of solar and other forms of renewable energy development at appropriate locations.
- 7.2.29. Re: solar waste/waste dumping: current waste legislation was taken into account during the production of the waste management report. Solar modules are governed by the Waste Electrical and Electronic Equipment (WEEE) Directive.
- 7.2.30. Re: questioning the narrative of clean energy supply: Renewables are cleaner and offer a sustainable alternative to fossil fuels. There are significant policy drivers at government level to support renewable energy. Panels have become more productive, resilient and cost-effective.
- 7.2.31. Re: visual impact: A Landscape and Visual Impact Appraisal (LVIA) was submitted, supported by a Landscape and Environmental Management Plan (LEMP) which indicated mitigation measures. Further mitigation measures were proposed at the response to further information stage. The assessment is considered robust. An Architectural & Archaeological Impact Assessment assessed the visual effects upon archaeological and heritage assets within the surrounding area. No notable cumulative landscape or visual effects will occur.
- 7.2.32. Re: air traffic: a glint and glare assessment has been undertaken; no runways or approach paths were identified as being affected. The impact on the old and new Air

Traffic Control Towner (ATCT) was assessed; it was determined that topography would block all views into the proposed development from the ATCTs.

- 7.2.33. Re. fire services: Reiterates response to the request for further information and concludes that any initial concerns of the Fire Service had been answered.
- 7.2.34. Re. electrical safety: the solar farm will operate autonomously. There will be scheduled visits and regular reporting. Fire risks are not any greater than those associated with other electrical equipment. All live electrical equipment maintenance must be carried out by trained personnel using appropriate tools and PPE. A detailed health and safety plan will be in place and all maintenance operatives will be trained and qualified to perform maintenance.
- 7.2.35. Re. birds: There is no evidence to suggest solar farms fry birds in Ireland. Articles cited by appellant are referred to and rebutted. There is evidence that solar farms have the potential to support wildlife and increase biodiversity.
- 7.2.36. Re. dissatisfied with AA screening: Meath County Council undertook an AA Screening and concluded that a NIS was not required. For completeness a Natura Impact Statement (NIS) is submitted and included as Appendix 1 to the response to appeal.
- 7.2.37. Re. compliance with the EIA Directive, SEA Directive and ECJ case law: there is no requirement to submit an EIAR; sets out the legislation relating to EIA requirements. References case law in support. The National Planning Framework, Regional Spatial and Economic Strategy and the County Development Plan have been subject to SEA – it is within this policy context that the project is being developed.
- 7.2.38. Re. employment: an estimated 160 people will be employed at any one time during construction. Will generate business rates and contributions. It will provide some long term roles for security, maintenance, and operational requirements.
- 7.2.39. Re. alternative renewable energy sources: provides a general comment on alternative renewable energy sources including that geothermal is relatively untested in Ireland and would require significant research and identification of suitable sites. States that without large-scale utility type wind and solar farms Ireland will not meet its renewable energy targets.

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

- 7.3.1. The Board invited Meath County Council to make a submission in respect of the applicant's response to appeal. Meath County Council, in response, referred the Board to the Planner's reports which considered the issues in the appeal submission and requesting the decision to grant is upheld subject to the original conditions. The submission is stated to form a response to the 3<sup>rd</sup> party appeal and that the issues raised have been fully considered.

### **7.4. Further Response from Third Party**

- 7.4.1. Eco Advocacy submitted a response to the applicant's response to appeal. In it, Eco Advocacy state the applicant's response failed to adequately address its concerns, and that the concerns raised in the appeal, remain.

### **7.5. Notice of Natura Impact Statement**

- 7.5.1. Following the applicant's response to appeal, which included a Natura Impact Statement (NIS), the applicant was directed to publish a new newspaper notice and erect a new site notice, in accordance with section 142(4) of the Planning and Development Act, 2000, as amended. A copy of the notices were subsequently submitted to An Bord Pleanála.
- 7.5.2. No submissions or observations were received in respect of the notice of Natura Impact Statement.

## **8.0 Assessment**

- 8.1.1. Having examined the application details and all other documentation on file, including all of the submissions received in relation to the appeal, and inspected the site, and having regard to relevant local/regional/national policies and guidance, I consider that the main issues in this appeal are as follows:
- Principle of the development
  - Landscape and visual impact
  - Glint and glare

- Health and Safety
- Noise
- Flood risk
- Traffic and transport
- Archaeology and architectural heritage impact
- Other issues
  - Sustainability of solar technology
  - SEA / EIA
  - Grid Connection
  - Ecological impact
  - Duration of permission
  - Water Supply
- Appropriate assessment

The following assessment is dealt with under these headings.

## **8.2. The Principle of the Development**

- 8.2.1. The grounds of appeal argue that in the absence of national guidance on solar developments that solar applications should be suspended. The appeal states that they strongly oppose the use of agricultural land for solar energy; that solar farms are industrial and remove valuable agricultural land from arable farming.
- 8.2.2. The proposal consists of a solar photovoltaic (PV) development with associated infrastructure, landscaping and cable route to enable the export of renewable energy to the national grid. Renewable energy development is supported in principle at national, regional and local policy levels, with collective support across government sectors for a move to a low carbon future and an acknowledgement of the need to encourage the use of renewable resources to reduce greenhouse gas emissions and to meet renewable energy targets set at a European Level. It is also an action of the NPF under National Policy Objective no. 55 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’.

- 8.2.3. Meath County Development Plan 2021-2027 supports renewable energy. Policies INF POL 34, 35, 36, 39 and DM POL 27 (listed above) are relevant and support the development of renewable sources of energy. Objective INF OBJ 39 in particular supports the development and exploitation of renewable energy sources such as solar where it does not have a negative environmental impact. In my opinion, these objectives clearly support the principle of solar farm development in a rural area.
- 8.2.4. I note that the Meath County Development Plan 2021-2027, at section 6.15.3.1, states that ‘large scale solar farms have been positively considered on suitable sites within the County in the recent past. As of May 2019, twenty solar photovoltaic farms were granted planning permission across the County’.
- 8.2.5. The site is located on agricultural lands that are outside any designated settlement. The site is zoned as ‘RA Rural Areas’, the primary objective of which is to protect and promote the value and future sustainability of rural areas. Among a list of permitted uses are sustainable energy installations and utility structures. I note that less intensive agricultural use (e.g., sheep grazing) can take place alongside the solar farm use.
- 8.2.6. At decommissioning stage, all solar panels, cabling, structures etc, will be removed and the foundation of the control cabins will be top-soiled over. I acknowledge that the proposed solar farm would have an impact on the agricultural productivity of the site for the lifetime of the proposed development, however any such impacts would be temporary and the proposed development would not result in the permanent loss of agricultural land.
- 8.2.7. Conclusion

There is no national guidance in relation to the location of solar energy facilities. National guidance would be of benefit particularly having regard to the proliferation and scale of this type of development on large tracts of agricultural land. Notwithstanding, there is policy support for this type of renewable energy development at national, regional and local policy levels and I am satisfied that the proposed development is suitably located and is acceptable in principle.

### 8.3. Landscape and Visual Impact

- 8.3.1. The grounds of appeal argue that a solar development of the scale proposed, together with other solar development in the area, would have a significant impact on the landscape and rural character of the area.
- 8.3.2. The application is accompanied by a Landscape and Visual Impact Appraisal (LVIA) submitted as technical appendix 1 of the application. The LVIA is based on a 5km study area. A Residential Visual Amenity Assessment (RVVA) is submitted with the application and should be read in conjunction with the LVIA (and Glint and Glare Assessment). The RVVA is based on a study area of 1km set from the site boundary of the proposed development. Both the LVIA and RVVA were prepared by Neo Environmental.
- 8.3.3. In response to third party submissions and further information request issued by Meath County Council, the applicant revised the scheme to address concerns raised in relation to the impact on the residential amenity of properties along the eastern boundary of field 17. All panels are removed from field 17 and a new hedgerow is proposed along the western boundary of field 17.
- 8.3.4. The site is generally flat and lies at elevation of 80-90m AOD. The highest lands are along the north-western boundary. There are some long-range views to the east. The site comprises 17 fields in agricultural use (tillage and sheep farming) which are generally bound by mature hedgerow. Fields to the south are typically small to medium in scale and are well enclosed by hedgerows. Fields to the north are typically medium to large in scale and are generally bounded by mature hedgerows.
- 8.3.5. In the Meath County Development Plan 2021-2027 the site is located in Landscape Character Area (LCA) 10, 'The Ward Lowlands'. The Landscape Character Assessment described the LCA as having a low landscape value and a high landscape sensitivity. According to the Landscape Character Assessment, Area 10 has medium potential capacity to accommodate large farm buildings and new visitor facilities, low potential capacity to accommodate multi-house developments, overhead cables, underground services, wind farm development and biomass and commercial forestry. There are no protected views and prospects in the vicinity of the site.

- 8.3.6. The site is c.4.9km southwest of Fingal's High-lying Agriculture LCA (high landscape value and high landscape sensitivity), c.3.7km north of Low-lying Agriculture LCA (modest landscape value and low landscape sensitivity) and c.5.4km west of Rolling Hill LCA (modest landscape value and medium landscape sensitivity).
- 8.3.7. The LVIA considered that the proposed development will result in moderate to moderate/minor adverse effects on the site and will reduce to minor adverse as planting becomes established. The LVIA considers the effects on the landscape during construction phase will be temporary/minor adverse. During construction phase, the effects on landscape are considered to be localised moderate/minor to moderate. The LVIA considered that with mitigation planting carried out that the effects will be reduced to minor adverse due to the high degree of containment. There is considered to be no change to neighbouring LCAs (either in Meath or Fingal), due to intervening landscape, topographical fluctuations and distance.
- 8.3.8. Computer generated bare earth Zone of Theoretical Visibility (ZTV) maps were prepared, which determines the potential extent of the proposed development's visibility across the 5km study area (Appendix 1A). The ZTV maps indicate that the potential for visibility across the study area is reduced; coverage is largely concentrated around the central area and to the northeast.
- 8.3.9. Ten viewpoints were selected for assessment and include a mix of views from publicly accessible routes and some internal views within the application site where its boundary is near to a receptor. Of the ten viewpoints, only four are modelled to show the proposed development at Year 0 (with initial site planting) and Year 5 (with more established planting). An additional viewpoint (viewpoint 11) is included in the response to further information submitted to Meath County Council.
- 8.3.10. It is noted that it was determined by the applicant that the lack of visibility of Fairyhouse Racecourse, located c.900m west of the site, from within the application site meant that it was discounted from further appraisal as effects are considered negligible. This is largely supported by the ZTV maps and my site visit, although it was noted that the taller buildings within the Fairyhouse Racecourse complex were visible from the western fields nos. 8 and 9.
- 8.3.11. The LVIA considers that potential visibility will be limited to those receptors within the immediate area. Based on information submitted and following my site visit I agree



that potential visibility will be limited to those identified receptors in the immediate area. Those affected include residents, road users and farm workers in the immediate area. The views of road users and farm workers are generally transient and limited. Affected residences will experience filtered views and in some instances new views of a solar farm. I agree with the LVIA that the potential effects upon assessed receptors range from 'No Change' to 'Moderate Adverse, reducing to No Change to Moderate/Minor Adverse as mitigation planting becomes established'.

- 8.3.12. Mitigation and enhancement measures are set out in the LVIA and include: structures will be off set 5m from the nearest existing hedgerows and drainage ditches; hedgerows will be maintained and augmented, except for a break in hedgerows between Field 11 and 13 for a new access track, siting of access tracks and buildings will be clustered together near to field boundaries.
- 8.3.13. Potential cumulative impacts of five permitted but not yet constructed solar farms, located within 5km of the appeal site, were assessed in the LVIA. The proposed development will be of similar scale to the adjoining permitted solar farm to the immediate south (ABP ref. 301023-18). The LVIA considers that the increase [in area] would result in a localised moderate adverse effect on the character of 'The Ward' LCA, however the intervening hedgerows would greatly restrict the potential for cumulative views of both developments from any local receptors. The solar arrays to the south would also limit views further north of the proposed development. Potential cumulative visual effects will be limited resulting in 'No Change to Minor adverse effects'.
- 8.3.14. It is noted that since the application was made for the subject proposed development, a further application for a 220MW solar farm was submitted on a site of 265.8ha 200m to the east and this is currently on appeal (ABP Ref. 311831-21). I consider that collectively, proposed and permitted solar schemes in the vicinity have the potential to significantly alter the landscape in the rural area. In respect of the subject appeal, I am satisfied that the site is relatively flat and is well contained by mature hedgerows, and would, if permitted, by subject to landscape mitigation, helping to ensure the satisfactory visual containment of the proposed development, over time.

- 8.3.15. As a related issue to visual impact, I note the response to request for further information, where the applicant states the lighting within the application site is limited to motion censored security lighting located on the CCTV columns. No light pollution to nearby houses would therefore arise.
- 8.3.16. I consider the LVIA and photomontages submitted with the application is an accurate reflection of the impact that the proposed development would have, and is sufficiently detailed. I acknowledge the concerns raised in the appeal regarding the visual and landscape impact effects of the proposed development individually and cumulatively and note the increased separation distance of solar panels from residential properties along the Kilbride Road.
- 8.3.17. The list of views and prospects to be protected and their significance, is attached as appendix 10, and depicted in Map 8.6 'Views & Prospects'. I am satisfied that there are no views of prospects in the vicinity of the site which would be impacted by the proposed development.

8.3.18. Conclusion

In my opinion, the relatively flat landscape, the limited height of the proposed solar panels together with the buffers from residential properties and landscaping proposals would ensure that the proposed solar farm would not have an undue adverse impact on the visual amenity of the area.

**8.4. Glint and Glare**

- 8.4.1. The grounds of appeal refer to the potential for glint and glare impacts from the proposed development. In broad terms, glint is produced as a direct reflection of the sun on a smooth surface, such as a solar panel, while glare is a more scattered reflection of light produced from a rougher surface and is less intense than glint.
- 8.4.2. A Glint and Glare Assessment, prepared by Neo Environmental, is attached as Appendix 7 to the application. A Residential Visual Amenity Assessment submitted with the application should be read in conjunction with the Glint and Glare Assessment. A 1km survey area around the application site was used, whilst a 20km study area is chosen for aviation receptors. Results for panel angles of 15 and 30 degrees are considered. Four aerodromes are located within the 20km study area;

however, only Dublin Airport was considered close enough to require a detailed assessment.

8.4.3. The mitigation measures proposed include:

- Hedgerow along the south boundary of field no. 9 (screen residential receptor(RR) 1);
- Hedgerow along the eastern boundary of fields 5, 7 and 12 (screen RR27, 28, 29, 30, 34, 36, 37, 83 and 84);
- Hedgerow to rear of RR8.

Once mitigation in in place, there is predicted to be no impact and therefore no significant effects.

8.4.4. The report assesses each receptor based on worst-case impacts. Of the initial 84 residential receptors, (31 having showed no possible glare); 53 were considered to be potentially impacted using a bald earth scenario, high impact was anticipated at 31 receptors, medium at 4 and low at 18; reducing to high at 11 and none for the remainder, when the actual visibility was assessed. When the proposed mitigation is taken into account the impacts reduce to none at all receptors.

8.4.5. Of the 24 initial road receptors, solar reflections are possible at 21 of the locations; considered to be potentially impacted using a bald earth scenario, high impact was anticipated at all 21 receptors. When the actual visibility was assessed, impact was reduced to high at 4 and none for the remainder. With the proposed mitigation the impacts reduce to none.

8.4.6. No road receptors were considered south or east of the proposed solar farm. The local road to the south is c.800m from the site and is separated by a permitted solar farm (which is presently under construction). His road continues eastwards and partially bounds the site along the eastern boundary. I note, however, that residential properties along this road were assessed for impact. I further note section 7.81 of the Glint and Glare Assessment which states that only two roads within the 1km study area required detailed assessment; that the impacts on minor roads which serve dwellings are considered to be insignificant, as vehicle users of these roads will likely be travelling at low speeds and therefore there is a negligible risk of safety impacts from glint and glare. I am satisfied due to the nature of the local roads to the south

and east that traffic will be travelling at low speeds and accept, therefore, that there is a negligible road safety risk arising from glint and glare impacts. I further note the road to the south is in a non-reflection zone, Figure 2, Road Based Receptors refers.

- 8.4.7. The Glint and Glare Assessment includes an assessment of impact for Dublin Airport. The report states that no runways or approach paths are affected by glint and glare from the proposed development. Green glare (low potential for after-image) was predicted from the glint and glare analysis for both old and new Air Traffic Control Towers at Dublin Airport. Upon review of the ground elevation profiles, it was found that the impact would reduce to none. No submission was received from Dublin Airport Authority in respect of the proposed development.
- 8.4.8. Condition 8 of the planning authority's decision required implementation of mitigation measures in the Glint and Glare assessment (section 7.106 & 7.107) to reduce the risk of exposure to none; submission of post construction Glint and Glare inspection and survey from local receptors; submission of a report to the planning authority, following year 1 and agree any remedial works any subsequent year when Glint and Glare issues arise, during the life of the project.

8.4.9. Conclusion

I am satisfied, taking account of the measures proposed and the use of appropriate conditions, that the issue of glint and glare can be adequately addressed.

## 8.5. Health and Safety

- 8.5.1. The appeal raises considerable concern regarding possible health and safety impacts, in particular, the use of toxic material in the solar panels and the impact of water run off on our natural resources and human health.
- 8.5.2. I note the applicant's response to appeal which states that the solar panels do not include cadmium telluride, copper indium selenide, cadmium gallium (di)selenide, copper indium gallium (di)selenide and hexafluoroethane. The applicant states the solar panels proposed are single crystal silicon which originates from sand.
- 8.5.3. Having regard to the foregoing, I concur with the applicant's view that there is no clear evidence to support the claim that health and safety impacts would arise from a

Solar PV development of the nature proposed and I consider the development to be acceptable in this respect.

## 8.6. Noise

- 8.6.1. The grounds of appeal consider that the proposed development will be a source of significant noise and provides a list of potential sources during construction.
- 8.6.2. A Noise Impact Assessment, prepared by Neo Environmental accompanies the application, and includes Appendix 6A, Figures, and Appendix 6B, Manufacturer's Noise Data. A total of 65 noise sensitive receptors (all residential dwellings) were included in the assessment within a study area of 500m of the application site.
- 8.6.3. Noise modelling was undertaken to predict noise levels and assess acoustic impact arising during the operational phase of the proposed development. The main noise source associated would be from the 21 power stations which enclose the inverters and transformer, and the 7 battery storage units. The solar panels do not generate noise.
- 8.6.4. No baseline monitoring was conducted due, according to the Noise Impact Assessment, to the relatively low levels of noise produced from solar farms. A background noise level of 35dB (LA90), typical of a rural night-time setting with no wind, was used for comparison purposes. I am satisfied, having regard to the location of the site in a rural area, with the baseline line noise level and methodologies used to assess noise impact. The noise source will be constant during daylight hours once operational. For the purposes of the assessment the noise sources were considered as constant. The proposed development is predicted to have a negligible or low impact at all receptors within the study area. No mitigation is considered necessary. It was found that the highest predicted noise would be 35.6dB at receptor no. 8, 0.6(dB) above the baseline noise level and is considered to be of low impact..
- 8.6.5. Noise would also arise at construction and decommissioning stages. The predicted construction/decommissioning noise levels are not assessed in the Noise Impact Assessment. The applicant, in its response to Appeal notes, the highest noise level during construction is likely to be from compaction of access tracks and installation of mounting frames, including piling. The response notes the closest new section of

access track lies 130m from the nearest noise sensitive receptor, and that at this distance the any noise is likely to be of low impact.

- 8.6.6. Noise levels from active piling operations will be a max. of 75dB at 5m, based on the Pauselli 700 Solar Pile Driver. The sound pressure level is indicated to be 55dB at Receptor 8 (at 49m to piling operations) and Receptor 54 which is indicated to have sound pressure level of 55dB LAeq (at 50m to piling operations).
- 8.6.7. The development includes a buffer between residential receptors and the proposed solar farm. I am satisfied that the construction/decommissioning works are temporary (most piling will be completed within 4 weeks) and localised; associated noise impacts arising are not therefore considered to be significant.

8.6.8. Conclusion

Having regard to the Noise Assessment and buffer between the proposed development and residential receptors, I do not consider that the proposed development would have any undue adverse noise impact on property in the vicinity. Notwithstanding, I consider it reasonable to include a standard noise condition in any grant of permission.

8.7. **Flood Risk**

- 8.7.1. The Fairyhouse Stream bounds part of the western and northern site boundaries and flows eastwards, joining with the Broadmeadow River approx. 5.4km to the east. I note from a review of available data (including [EPA Water Maps](#)) this section of the Fairyhouse Stream was diverted in the past and now bounds the field boundary.
- 8.7.2. Based on available data, ([www.floodinfo.ie](http://www.floodinfo.ie)), I note that fluvial flooding is a source of risk along the Fairyhouse Stream from the 0.1% (low probability), 1% (medium probability) and 10% (high probability) annual exceedance probability (AEP) event. According to the flood maps the flood extent is confined to the stream channel. No overtopping of the channel is predicted to occur of the stream bounding the site.
- 8.7.3. I note too that the Fairyhouse Stream forms part of the arterial drainage scheme (ADS), maintained by the OPW. An open drain located along field boundaries to the south of the site, draining eastwards, is also maintained by the OPW as part of the

ADS. Lands in proximity to these OPW maintained watercourses are identified as benefitting lands, i.e., drained lands as part of the ADS.

- 8.7.4. A Strategic Flood Risk Assessment, published as part of the Meath County Development Plan 2021-2027, includes a flood risk assessment for Ratoath. The land the subject of the appeal is included as part of the assessment for Ratoath. The Fairyhouse Stream that partially bounds the northeast of the site is indicated as Flood Zone A ([Strategic Flood Risk Assessment Meath CDP 2021-2027](#)). I note the OPW are currently reviewing the flood risk information relating to Ratoath ([www.floodinfo.ie](http://www.floodinfo.ie)) however the site is outside the area of review.
- 8.7.5. A Flood Risk and Drainage Impact Assessment (FRA) has been prepared by Neo Environmental and accompanies the application. The FRA concludes that there is no risk of fluvial flooding from the Fairyhouse Stream within the application site and considers that the site is contained within flood zone C. The FRA considers that the panels and access tracks can be classed as 'Water Compatible Development' whilst the substation and inverters can be classed as 'Highly Vulnerable Development'.
- 8.7.6. In respect of drainage, surface water run-off is proposed to be managed via three soakaway channels; the location of which are on a downward slope where overland flow is most likely. The northern soakaway is expected to capture any overland flow prior to it reaching the Fairyhouse Stream. Water falling from the solar panels is expected to infiltrate to the soil underneath while the access tracks are to be unpaved, with the use of temporary swales or similar to collect run-off, which will discharge to ground through percolation areas. Run-off from the power stations and battery storage containers and associated hard-standing areas will discharge to ground, via a percolation area. During construction stage, hardstanding run-off will be directed to a swale.
- 8.7.7. I note the report prepared by Meath County Council's Environment Department, dated 22<sup>nd</sup> March 2021, wherein it is stated:

*With reference to the Meath County Council MapInfo flood mapping for the relevant area, part of the development site to the northern boundary of the site is shown to be partially situated in Flood Zone A.*

The report acknowledges the applicant's site-specific flood risk assessment which accompanied the application and notes the site contains OPW maintained drainage

channels. The report concludes that there is no objection, from a flooding perspective, subject to conditions. I note that the request for further information which issued from Meath County Council did not raise flood risk issues.

8.7.8. Section 3.5 of the 'Planning System and Flood Risk Management Guidelines for Planning Authorities' (2009) states that most types of development would be considered inappropriate in flood Zone A – high probability of flooding; development in this zone should be considered in exceptional circumstances. I note that a buffer of 10m is proposed along the Fairyhouse Stream, which is identified as flood zone A. Other than additional landscaping, no works are proposed to the Fairyhouse Stream and no development is proposed in the flood zone.

#### 8.7.9. Conclusion

I am satisfied, having regard to the documentation on file including the flood risk and drainage impact assessment, the OPW's flood extents maps and the Meath County Development Plan 2021-2027 Strategic Flood Risk Assessment, that the proposed development is not in or unduly close to an area at risk of flooding. Furthermore, having regard to the nature of the development, i.e., limited extent of impermeable ground cover and drainage measures I am satisfied that the proposed development is satisfactory in terms of drainage and will not lead to or contribute to flood risk in the area.

### 8.8. **Traffic and Transport**

8.8.1. The grounds of appeal raise concerns that the proposed development would give rise to significant traffic movements, interfering with amenities and would lead to increased NO2 pollutants.

8.8.2. A Construction Traffic Management Plan accompanies the planning application and describes the existing road network in the vicinity and the potential traffic and transportation impacts on same. The site access is via an existing farm access off the L1007 (Kilbridge Road) which bounds the site to the east. During the construction period, it is anticipated that there would be an approximate maximum of 20 daily HGV deliveries over a 6-month period, totalling 996 HGV deliveries; overall traffic volumes are considered to be low. Haulage vehicles are expected to exit the M2 at Junction 3 (Ashbourne South) onto the R125 and head westward for



approximately 5km before existing onto the L1007, travelling south for c.3km before turning right into the site. It is anticipated that there will be approximately 30 staff on site at one time during construction. There is expected to be between 5-10 LGVs per annum during the operational phase. The number of HGVs required for the decommissioning period will be slightly higher than the construction phase.

- 8.8.3. The applicant refers to TII publication, Geometric Design of Junctions, outlines a desirable visibility splay dimension of 160m x 3m for a road with an 80km/h speed limit. It is proposed to increase the sightlines from the access point to 160m by widening the entrance and possibly relocating two telephone poles. The applicant proposes to conduct a pre and post-construction condition survey of the L1007, 200m either side of the access point, and undertakes to reinstate the road if required.
- 8.8.4. The site is proposed to be accessed off a county road, which is identified as having a locally important function / particularly important transport link. Map 9.2 of the County Development Plan refers. I note the policy RD Pol 39 of the County Development Plan which seeks to protect those non-national roads of regional or local importance from unnecessary and excessive individual access/egress points, which would prejudice the carrying capacity and ultimately the function of the road. I note that no concerns were raised in this regard by the Planning Authority.
- 8.8.5. I note condition 13 of the planning authority's grant of permission required completion of a pre-and post-construction survey of local roads and lodgement of a bond of €25,000 to secure the satisfactory completion of any required repairs, I consider a standard condition in this regard could be attached to any grant of permission that may issue.

8.8.6. Conclusion

Following a site inspection and a review of the application documentation, including the Construction Traffic Management Plan, and having regard to the haulage routes and local road network which I consider suitable to carry the additional load and traffic required during the construction phase, and having regard to short-term nature of the construction project and the overall low volumes of traffic associated with the proposal, I am satisfied that the proposed development would not lead to a traffic hazard or to traffic congestion/obstruction and is acceptable from a traffic safety and

roads perspective. I am satisfied, taking account of the measures proposed and the use of appropriate conditions, that the issue of traffic can be adequately addressed.

## **8.9. Archaeology and Architectural Heritage Impact**

- 8.9.1. Issues concerning archaeological and architectural heritage impact are principally raised in the third-party submissions made to Meath County Council. The appeal raises concerns of heritage impact and considers a geophysical analysis for archaeology is required.
- 8.9.2. An 'Archaeology and Architectural Heritage Impact Assessment' (AAHIA) accompanies the planning application and was prepared by Neo Environmental. There are 7 no. Historic Garden's and Designed Landscapes identified within the study zone (extending 5km from the site boundaries), while 1 no. protected structure and 20 no. recorded archaeological sites were identified within the study area (extending 2km from the site boundaries) – all of which are outside the site boundary. Using the Zone of Theoretical Vision (ZTV), possible impacts were reduced to 2 no. HGDLS, 1 no. protected structure and 16 no. recorded archaeological sites. Due to the separation distance to the identified heritage sites, the intervening hedgerows, trees and built structures and the absence of standing remains at the recorded archaeological sites that are at or near or share views with the application site, overall, indirect effects of the proposed development are considered to be either 'low to negligible' or 'negligible'.
- 8.9.3. A standing stone measuring c.1.75m in height, of possible archaeological interest is located on site (field 19). The stone is not recorded and is likely not to be prehistoric in origin, given its location on relatively flat ground with no clear views. The assessment considers that it may be a rubbing stone for cattle. A 10m exclusion zone is proposed around the standing stone in order to avoid direct impacts.
- 8.9.4. An access track and possibly a cable trench is proposed to cross the historical townland boundary. The AAHIA considers that the impact will have a low direct effect on the townland boundary.
- 8.9.5. While the solar farm extends over a relatively large site, extensive sub-surface ground disturbance will largely be confined to the proposed tracks, cable trenches, and construction compound.

8.9.6. Proposed mitigation measures are contained in the AAHIA. These include a 10m buffer around an upright standing stone and that archaeological monitoring should take place in respect of the groundworks at the townland boundary. An archaeological programme of works involving pre-construction evaluation (e.g., geophysical survey and targeted trenching) and/or archaeological monitoring at construction stage is recommended.

8.9.7. I note the submission from the DAU, dated 28<sup>th</sup> January 2021, which recommended in the event of a grant of permission that an Archaeological Impact Assessment, to include the results of a geophysical survey, is prepared.

8.9.8. I note the report of the Architectural Conservation Officer of Meath County Council raises no concerns in respect of the proposed development.

8.9.9. Conclusion

Having regard to the documentation on file including the report from the DAU, I am satisfied that archaeological conditions as recommended by the DAU are appropriate in the event of a grant of permission. Subject to these conditions, I consider that the proposed development would not have any undue adverse impact on archaeology or architectural heritage.

8.10. **Other Issues**

8.11. Sustainability of Solar Panel Technology

8.11.1. The grounds of appeal are largely centred around the use of solar voltaic panels for renewable energy production versus other technologies, and the negative impacts of use of solar panels.

8.11.2. Arguments are made in the grounds of appeal that solar panels contain rare earth metals and other finite resources and are liable to leach chemicals into the ground; that they involve disposal of waste with implications for poorer countries; have negative impact on birds; involve risk of fires and electrical short circuits; and that the solar farm will reduce the amount of valuable land available for agricultural use. These issues are, in my opinion, sufficiently addressed by the applicant in the response to appeal.

- 8.11.3. I do not consider that it is necessary for the Board to adjudicate on the relative benefits of the various renewable energy technologies. Solar energy is supported in relevant plans and government policies. No particular negative impacts are apparent. Decommissioning and the disposal of the panels is currently regulated under waste regulations and will be similarly regulated at the end of the projected 35 year life.
- 8.11.4. In my opinion these matters have been adequately addressed and should not be a reason to refuse or modify the proposed development.

#### 8.12. SEA / EIA

- 8.12.1. The need for SEA and EIA have been raised in the grounds of appeal. The response from the applicant refers to the cascade of plans which have been subject to strategic environmental assessment (SEA) under which the proposed development falls to be considered. The response notes it has been determined previously that EIA is not required.
- 8.12.2. SEA is a process to which plans relating to policy are subjected, such as the current Meath County Development Plan, which, as previously referred to, generally supports solar power generation. Other strategic plans, such as the National Planning Framework and the Regional Spatial and Economic Strategy have been subject to SEA and support renewable energy development.
- 8.12.3. As regards environmental impact assessment (EIA), this was dealt with under an earlier heading in this report, where it was concluded that the need for environmental impact assessment can be excluded at preliminary examination and a screening determination is not required.

#### 8.12.4. Grid Connection

The appeal raises concerns in relation to potential impacts from the grid connection associated with the proposed solar farm. I note that the grid connection does not form part of the current planning application and is subject to a separate consenting process.

#### 8.12.5. Ecological Impact

- 8.12.6. An Ecological Impact Assessment (EclA) prepared by Neo Environmental accompanies the application and includes the findings of a Habitat Survey. A Biodiversity Management Plan and a Landscape and Ecology Management Plan are

also included with the application. The Landscape and Ecology Management Plan was revised in response to the further information request and primarily reflects the omission of panels from field no. 17 along the eastern site boundary. A Natura Impact Statement (NIS) was submitted to the Board in response to the appeal. Impact on Natura 2000 sites is considered in section 9.0 of this Inspector's Report.

8.12.7. The EclA finds that the site has been identified as arable or heavily grazed improved agricultural grassland, which are of low ecological value with limited potential to support wildlife. Potential impacts include habitat loss and fragmentation; disturbance to wildlife during construction and decommissioning, and; surface water contamination. Measures to mitigate impact and enhance the site's ecological value include:

- 5m buffer around hedgerows, tree buffers (dependent on height) and 3m buffer from all field drains
- 10m buffer to OPW drain and Fairyhouse Stream
- Installation of bat boxes, new hedgerow planting and infill planting
- Mammal gates in security fencing;
- Pre-commencement surveys;
- Standard best practice pollution prevention measures.

8.12.8. I concur with the findings of the EclA that with the implementation of mitigation measures, including further surveys prior to and during construction, there would be no significant effects arising from the proposed development.

8.12.9. Having regard to the IFI submission, I note its requirement for an invasive species and biosecurity plan to treat and manage invasive species on site. The submission also calls for an agreed method statement where cables are proposed to cross watercourses. I consider it appropriate to attach a condition in this regard to any grant of permission that may issue.

8.12.10. Duration of Permission

8.12.11. The appeal queries the duration of permission. It is noted that a 10 year permission was not expressly sought. The applicant clarified in the response to the planning authority and in response to the Board that the applicant seeks a 10 year

permission with an operational period of 35 years. Having regard to section 41 of the Planning and Development Act 2000, as amended, the nature and extent of the development and the requirement to obtain separate consent(s) for grid connection, should the Board be minded to grant permission, it is considered reasonable to specify that the duration of permission as 10 years and an operational period of 35 years is appropriate.

8.12.12. Water Supply

8.12.13. Notwithstanding the submission from Irish Water recommending a condition be attached in respect of connection to water supply, the applicant states, in response to the request for further information, that there is no requirement for a water supply to the site. In the event of a grant of permission, I do not consider it necessary to attach a water supply condition.

## 9.0 **Appropriate Assessment**

### 9.1. **Appropriate Assessment Screening**

9.1.1. Compliance with Article 6(3) of the Habitats Directive

9.1.2. The requirements of article 6(3) of the Habitats Directive, as related to screening the need for appropriate assessment of a project under part XAB, section 177U of the Planning and Development Act, 2000 (as amended) are considered fully in this section. The areas addressed in this section are as follows:

- Compliance with Article 6(3) of the EU Habitats Directive;
- Screening the need for appropriate assessment;
- The Natura Impact Statement and associated documents;
- Appropriate assessment of implications of the proposed development on the integrity each European site.

9.1.3. Compliance with Article 6(3) of the EU Habitats Directive

9.1.4. The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the

management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site before consent can be given.

9.1.5. The proposed development is not directly connected to or necessary to the management of any European site and therefore is subject to the provisions of Article 6(3).

9.1.6. Background on the Application

9.1.7. The applicant submitted an 'Appropriate Assessment Screening' report, prepared by Neo Environmental, dated 9<sup>th</sup> October 2020, as part of the planning application. The applicant provides a description of the proposed development and identifies European Sites within a possible zone of influence of the development. Associated reports were also submitted with the planning application such as a Construction and Environmental Management Plan (CEMP) and an Ecological Impact Assessment (EclA).

9.1.8. The applicant's AA Screening Report concluded that no significant effects will occur for the qualifying habitats and species of the SAC and SPA and will not lead to a significant adverse effect upon any Natura 2000 sites within the study area.

9.1.9. The applicant submitted a Natura Impact Statement (NIS) in response to the appeal (Appendix 1). The NIS was prepared by Neo Environmental and is dated 26<sup>th</sup> August 2021. The NIS was not accompanied with a revised or updated AA Screening Report, therefore, this screening determination is carried out *de-novo*.

9.1.10. Screening for Appropriate Assessment – Test of likely significant effects

9.1.11. The project is not directly connected with or necessary to the management of a European Site and therefore it needs to be determined if the development is likely to have significant effects on a European site(s).

9.1.12. The proposed development is examined in relation to any possible interaction with European sites designated Special Conservation Areas (SAC) and Special

Protection Areas (SPA) to assess whether it may give rise to significant effects on any European Site.

9.1.13. Brief description of the development

9.1.14. The applicant provides a description of the project on pages 6 and 7 of the AA Screening Report, page 6 of the NIS and elsewhere e.g., section 4 of the Planning Statement. In summary, the development comprises:

- a solar PV development with an operational life of 35 years on a total site area of 82.5 hectares to include:
- solar panels mounted on steel support structures, associated cabling and ducting;
- 21 no. MV power station;
- 7 no. battery storage containers;
- 1 no. temporary construction compound;
- access tracks; hardstanding area;
- boundary security fencing and security gates;
- CCTV, landscaping and ancillary works.

9.1.15. The development site is briefly described on page 9 of the Planning Statement and in more detail on pages 25 and 26 of the Landscape and Visual Impact Appraisal. The site is described as 'predominately arable with some of the smaller southwestern fields under pasture with sheep grazing'. The lands are relatively flat land and fields are generally well contained by a mix of hedgerows with occasional trees, fencing and ditches. Ditches were generally dry at the time of site inspection, with the notable exception of the Fairyhouse Stream which bounds the north-west of the site and flows into the Broadmeadow River some 4.8km to the east.

9.1.16. Taking account of the characteristics of the proposed development in terms of its location and the scale of works, the following issues are considered for examination in terms of implications for likely significant effects on European sites:

- Construction related -uncontrolled surface water/silt/ construction related pollution



- Habitat loss/ fragmentation
- Habitat disturbance /species disturbance (construction and / or operational).

9.1.17. Submissions and Observations

9.1.18. Following the receipt by the Board of the NIS, the applicant submitted revised public notices in accordance with section 142(4) of the Planning and Development Act, 2000, as amended, notifying the public that a NIS was submitted. No submission or observations were received.

9.1.19. European Sites

9.1.20. The development site is not located in or immediately adjacent to a European site. The closest European site is the Rye Water Valley Carton SAC c. 11.7km south-west.

9.1.21. I present a summary of European sites that occur within a possible Zone of Influence (Zol) of the proposed development in Table 9-1 below. Where a possible connection between the development and a European site has been identified, these sites are examined in more detail. The possibility of potential impact to each site is considered. Potential impacts to Rye Water Valley/Carton SAC were discounted because of the absence of any connectivity between the two European sites and the elements of the proposed development. There is a potential hydrological and ornithological connectivity between the proposed solar farm development and the Malahide Estuary SAC and SPA via the Broadmeadow River which flows into the estuary. I concur with considering only these two sites as being within the Zol.

**Table 9-1 Summary Table of European Sites within a possible Zone of Influence of the proposed development**

European Site (code)	List of Qualifying interest /Special conservation Interest	Distance from proposed development (Km)	Connections (source, pathway receptor)	Considered further in screening Y/N
Rye Water Valley/Carton SAC (001398)	Petrifying springs with tufa formation (Cratoneurion) [7220] Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]	c. 11.7km	None	No

<p>Malahide Estuary SAC (000205)</p>	<p>Mudflats and sandflats not covered by seawater at low tide [1140]  Salicornia and other annuals colonising mud and sand [1310]  Atlantic salt meadows (Glauco-Puccinellietalia maritima) [1330]  Mediterranean salt meadows (Juncetalia maritimi) [1410]  Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]  Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]</p>	<p>c. 14.5km</p>	<p>Hydrological via Fairyhouse Stream which bounds part of the north-western site boundary and flows into the Broadmeadow River which flows into the Malahide Estuary.</p>	<p>yes</p>
<p>Malahide Estuary SPA (004025)</p>	<p>Great Crested Grebe (Podiceps cristatus) [A005]  Light-bellied Brent Goose (Branta bernicla hrota) [A046]  Shelduck (Tadorna tadorna) [A048]  Pintail (Anas acuta) [A054]  Goldeneye (Bucephala clangula) [A067]  Red-breasted Merganser (Mergus serrator) [A069]  Oystercatcher (Haematopus ostralegus) [A130]  Golden Plover (Pluvialis apricaria) [A140]  Grey Plover (Pluvialis squatarola) [A141]  Knot (Calidris canutus) [A143]  Dunlin (Calidris alpina) [A149]  Black-tailed Godwit (Limosa limosa) [A156]  Bar-tailed Godwit (Limosa lapponica) [A157]  Redshank (Tringa totanus) [A162]  Wetland and Waterbirds [A999]</p>	<p>c. 14.8km</p>	<p>Hydrological, via Fairyhouse Stream which bounds part of the north-western site boundary and flows into the Broadmeadow River which flows into the Malahide Estuary. Ornithological connectivity.</p>	<p>Yes</p>

9.1.22. Identification of Likely Effects

9.1.23. The conservation objectives of the Malahide Estuary SAC – Conservation objectives are set out in the Conservation Objectives series Malahide Estuary SAC 000205

documents published by the National Parks and Wildlife Service (NPWS) [link to Malahide Estuary SAC Conservation Objectives](#). They are:

to maintain the favourable conservation condition of:

- mudflats and sandflats not covered by seawater at low tide;
- Salicornia and other annuals colonising mud and sand;
- Mediterranean salt meadows; and

to restore the favourable conservation condition of:

- Atlantic salt meadows;
- shifting dunes along the shoreline with *Ammophila Arenaria*;
- fixed coastal dunes with herbaceous vegetation.

9.1.24. The conservation objectives of the Malahide Estuary SPA – Conservation objectives are set out in the Conservation Objectives series Malahide Estuary SPA 004025 documents published by the National Parks and Wildlife Service (NPWS) [link to Malahide Estuary SPA Conservation Objectives](#). They are to maintain the favourable conservation condition of the 14 no. bird species listed in Table 9-1 and to maintain favourable conservation condition of the wetland habitat.

9.1.25. Likely effects of the proposed solar farm on the European sites are considered in section 5 of the NIS. The NIS notes that aquatic systems and the species/habitats which are dependent on these systems are sensitive to pollution/contamination of surface waters as a result of contaminants entering a body surface water or groundwater. The effect of silt, bentonite (very fine silt) cement or concrete wash water and hydrocarbons were considered to have an adverse effect on aquatic environment. These contaminants would reduce water quality, clogs fish gills, covers aquatic plants, impacts invertebrates, reduces prey and leads to a degradation of habitat. They can also change the chemical balance of water and can be toxic to fish and other wildlife.

9.1.26. The Malahide Estuary SAC and SPA are located c. 14.5km east of the proposed development. The site is hydrologically connected to the SAC via the Fairyhouse Stream which borders the site along part of the north-western boundary.

Downstream, the Fairyhouse Stream is connected to Broadmeadow River which flows into the Malahide estuary.

- 9.1.27. While no direct effects would occur through land-take fragmentation of habitats given the distance of the site from the SAC and SPA and noting that no in-stream works are proposed, there is potential given the hydrological connection to the SAC and SPA, in the absence of mitigation measures for construction and decommissioning works could give rise to surface water pollution or contamination and disturbance to fauna. Having regard to the distance to the SPA, c. 14.8km from the proposed development, and the findings of the extended phase 1 habitat survey in April 2020 where no qualifying species were recorded, and having regard to the nature of the land being actively agriculturally managed and the absence of qualifying habitats that support identified species I consider that there is no risk of disturbance to, or displacement of, qualifying species.
- 9.1.28. An on-site electrical substation and cabling will be required to connect the solar farm to the electricity grid and will be subject of a Strategic Infrastructure Development (SID) planning application submitted directly to An Bord Pleanála. Potential impacts arising will be assessed as part of that application. I also note similar proposals for solar farms in the immediate vicinity, both planned and permitted that cumulatively could impact on surface water quality, in particular ABP Reg. Ref. 311831-21 for a solar farm on a site of c.265ha; which application includes a NIS. The Fairyhouse Stream (downstream of the current site) traverses the site and is hydrologically connected to the Malahide Estuary SAC and SPA via the Broadmeadow River. I note from the NIS submitted with the application does not include reference to the current appeal application the subject of this report, as it restricted consideration to permitted developments in the vicinity. This development, in the absence of mitigation measures, has potential to impact on surface water quality through e.g., release of sediments into /or pollution of the Fairyhouse Stream.
- 9.1.29. Given the hydrological connectivity to the Malahide Estuary SAC and SPA, the potential for significant adverse effects on the QI and SCI species as a result of export of potentially damaging waterborne pollutants e.g., sediment, concrete and hydrocarbons during construction cannot be ruled out. I consider, in the absence of mitigation, adverse impact on the SAC and SPA cannot be ruled out beyond scientific doubt. While I consider such adverse impact is unlikely, having regard to

the absence of consideration in the NIS of this development in-combination with the proposed scheme c.450m downstream of this site and the applicant's reference to 'mitigation measures' in the response to Appeal it is with an abundance of caution I consider it necessary to progress to Stage 2 Appropriate Assessment.

9.1.30. Mitigation Measures

9.1.31. No measures designed or intended to avoid or reduce any harmful effects of the project on a European site have been relied upon in this screening exercise.

9.1.32. Screening Determination

9.1.33. The proposed development was considered in light of requirements of section 177U of the Planning and Development Act, 2000, as amended. Having carried out screening for Appropriate Assessment of the project, I conclude that the project individually (or in combination with other plans or projects) could have a significant effect on European Sites Malahide Estuary SAC (site code 000205) and SPA (site code 004025) in view of the sites' Conservation Objectives, and Appropriate Assessment (and submission of a NIS) is therefore required. A summary of the AA Screening is presented in Table 9-2.

**Table 9-2 AA Screening Summary Matrix**

<b>Summary Screening Matrix</b>				
<b>European Site (link to conservation objectives <a href="http://www.npws.ie">www.npws.ie</a>)</b>	<b>Distance to proposed development/ source, pathway receptor</b>	<b>Possible effect alone</b>	<b>In combination effects</b>	<b>Screening conclusions</b>
Rye Water Valley/Carton SAC (001398)	11.7km	No possibility of effects due to the distance from and lack of connections to the habitat for which this site is designated.	No effect	Screened out for need for AA

Malahide Estuary SAC (000205)	14.5km / Hydrological connection via Fairyhouse Stream which bounds part of the north-western site boundary and flows into the Broadmeadow River which flows into the Malahide Estuary.	There is potential for significant adverse effects on the QI species as a result of export of potentially damaging waterborne pollutants e.g., sediment, concrete and hydrocarbons during construction.	Proposed large-scale solar farm to the east with potential to impact water quality of the Fairyhouse Stream, which is connected to the Malahide Estuary via the Broadmeadow River.	Possible significant effects cannot be ruled out without further analysis and assessment
Malahide Estuary SPA. (004025)	14.8km /Hydrological, via Fairyhouse Stream which bounds part of the north-western site boundary and flows into the Broadmeadow River which flows into the Malahide Estuary. Ornithological	There is potential for significant adverse effects on the SCI species as a result of export of potentially damaging waterborne pollutants e.g., sediment, concrete and hydrocarbons during construction.	Proposed large-scale solar farm to the east with potential to impact water quality of the Fairyhouse Stream, which is connected to the Malahide Estuary via the Broadmeadow River.	Possible significant effects cannot be ruled out without further analysis and assessment

## 9.2. Appropriate Assessment

### 9.2.1. The Natura Impact Statement (NIS)

9.2.2. A NIS prepared by Neo Environmental, dated 26<sup>th</sup> August 2021, was submitted to An Bord Pleanála in response to the appeal. The NIS examines and assess potential adverse effects of the proposed development on the Malahide Estuary SAC and SPA. The NIS identified and characterised the possible implications of the proposed development on the European sites, in view of the sites' conservation objectives, and

provides information to enable the Board to carry out an appropriate assessment of the proposed works.

- 9.2.3. The NIS describes the elements of the project (along or in combination with other projects and plans) that are likely to give rise to significant effects on the European sites. Potential impacts are set out as well as an assessment of their possible adverse effects on the conservation objectives of qualifying interest features and the mitigation measures that are to be introduced to avoid, reduce or remedy any adverse effects on the integrity of the European site. The NIS references the Ecological Impact Assessment (EclA) and associated findings of a habitat survey undertaken in April 2020.
- 9.2.4. The assessment of impacts presented in the NIS found that is unlikely for any significant direct or indirect impact on the conservation objectives of the Natura 2000 sites within 15km with implementation of mitigation measures. The NIS contains, inter alia, a description of the proposed development, the legislative background, detailed commentary on the two relevant European sites, a description of the existing environment, an overview of the potential indirect impacts that could occur, consideration of the cumulative/in-combination effects, mitigation, and analysis and conclusions.
- 9.2.5. The NIS concludes that 'the proposed development will not adversely affect the integrity of any Natura 2000 designated site due to measures inaugurated during the design phase and following relevant guidance to prevent pollution during the construction and operation phases...with the implementation of these measures, along with ongoing monitoring to ensure compliance, it is considered that the proposed development will not have a significant effect upon any qualifying features, and therefore the integrity, of the Natura 2000 sites connected with the application site'.
- 9.2.6. The NIS is silent on consultations with prescribed bodies. I note the appeal raised the issue of the need for a NIS, however, no issue specific to AA was raised by prescribed bodies or other third parties in submissions received.
- 9.2.7. Having reviewed the documents, submissions and consultations with the NPWS etc, I am satisfied that the information allows for a complete assessment of any adverse

effects of the development, on the conservation objectives of the Malahide Estuary SAC and SPA sites alone, or in combination with other plans and projects.

9.2.8. Appropriate Assessment of Implications of the Proposed Development

9.2.9. The following is a summary of the objective scientific assessment of the implications of the project on the qualifying interest features of the European sites using the best scientific knowledge in the field. All aspects of the project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects are considered and assessed.

9.2.10. The following Guidance has been adhered to in my assessment:

- DoEHLG (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, National Parks and Wildlife Service, Dublin
- EC (2021) Assessment of plans and projects significantly affecting Natura 2000 sites. Revised Methodological guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EC
- EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC

9.2.11. The following sites are subject to appropriate assessment:

Malahide Estuary SAC (Site code 000205);

Malahide Estuary SPA (Site code 004025).

9.2.12. A description of the sites and their QI/SCI, including any relevant attributes and targets are set out in the NIS and summarised in sections 9.1.22 and 9.1.24 of this report as part of my assessment.

9.2.13. In my opinion, having reviewed the development proposals, the main aspect of the proposed development that could affect the conservation objectives of the European sites arise from potential surface water pollution during the construction phase given the hydrological link between the solar farm site and the European sites. No Aspects of the operational or decommissioning phase of development have been identified that could affect the conservation objectives.



9.2.14. In Tables 9-3 and 9-4 I summarise the AA and site integrity test. The conservation objectives for the two European sites have been examined and assessed with regard to the identified potential significant effect and all aspects of the project, alone and in-combination with other plans and projects. Mitigation measures proposed to avoid and reduce impacts to a non-significant level have been assessed, and clear, precise and definitive conclusions reached in terms of adverse effects on the integrity of the European site.

9.2.15. **Table 9-3 AA Summary Matrix for Malahide Estuary SAC**

<b>Malahide Estuary SAC (site code 000205):</b> <b>Summary of Key issues that could give rise to adverse effects:</b> <ul style="list-style-type: none"> <li>• Water quality impacts due to pollutants or soil/sediment run-off during construction phase.</li> </ul> <b>Conservation objectives available: <a href="https://www.npws.ie/protected-sites/sac/000205">https://www.npws.ie/protected-sites/sac/000205</a></b>			
<b>Summary of Appropriate Assessment</b>			
<b>Qualifying Interest feature</b>	<b>Conservation Objectives Targets and attributes (summary)</b>	<b>Potential adverse effects</b>	<b>Mitigation measures</b>
Mudflats and sandflats not covered by seawater at low tide [1140]	To maintain favourable conservation condition	Yes – siltation and contamination from hydrocarbon release via hydrologically connected watercourses	Yes, best practice pollution prevention measures are set out in section 6 of the NIS and include detailed measures to mitigate impacts to water quality.
Salicornia and other annuals colonising mud and sand [1310]	To maintain favourable conservation condition	No - given distance of QI habitat from mouth of Broadmeadow River discharging to estuary, and the overall distance of the proposed development from the QI habitat.	n/a
Atlantic salt meadows (Glaucopuccinellietalia maritimae) [1330]	To restore favourable conservation condition	Yes – siltation and contamination from hydrocarbon release via hydrologically connected watercourses	Yes, best practice pollution prevention measures are set out in section 6 of the NIS and include detailed

			measures to mitigate impacts to water quality.
Mediterranean salt meadows (Juncetalia maritimi) [1410]	To maintain favourable conservation condition	No - given distance of Mediterranean salt meadows from mouth of Broadmeadow River discharging to estuary, and the overall distance of the proposed development from the salt meadows.	n/a
Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]	To restore favourable conservation condition	No - given distance of QI dunes from mouth of Broadmeadow River discharging to estuary, and the overall distance of the proposed development from the QI dunes.	n/a
Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	To restore favourable conservation condition	No - given distance of QI dunes from mouth of Broadmeadow River discharging to estuary, and the overall distance of the proposed development from the QI dunes.	n/a
<p>Overall conclusion: Integrity test</p> <p>Following the implementation of mitigation, the construction and operation of this proposed development will not adversely affect the integrity of this European site and no reasonable doubt remains as to the absence of such effects.</p>			

#### 9.2.16. Table 9-4 AA Summary Matrix for Malahide Estuary SPA

<b>Malahide Estuary SPA (site code 004025):</b>			
<b>Summary of Key issues that could give rise to adverse effects:</b>			
<ul style="list-style-type: none"> <li>• Water quality impacts due to pollutants or soil/sediment run-off during construction phase.</li> </ul>			
<b>Conservation objectives available:</b>			
<b>Summary of Appropriate Assessment</b>			
<b>Qualifying Interest feature</b>	<b>Conservation Objectives</b>	<b>Potential adverse effects</b>	<b>Mitigation measures</b>

	<b>Targets and attributes (summary)</b>		
Great Crested Grebe ( <i>Podiceps cristatus</i> ) [A005]	To maintain favourable conservation condition	The proposed development is sufficiently removed from the site to cause any direct impact on the bird species for which this site is designated.  Deterioration of water quality may impact on the biomass available for the bird species.	Yes, best practice pollution prevention measures are set out in section 6 of the NIS and include detailed measures to mitigate impacts to water quality, for example design measures of 3m buffer around drainage ditches and 10, to OPW stream and Fairyhouse Stream  Construction measures include:  a drainage management plan, availability of spill kits, refuelling and maintenance of vehicles to take place in designated area, wastewater from temporary staff toilets will be disposed via licensed contractors; emergency spill or pollution response methodology; additional attenuation measures for increased run-off such as swales.  Discharge from silt control measures will be discharged into an area of vegetation for dispersion of infiltration.
Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [A046]			
Shelduck ( <i>Tadorna tadorna</i> ) [A048]			
Pintail ( <i>Anas acuta</i> ) [A054]			
Goldeneye ( <i>Bucephala clangula</i> ) [A067]			
Red-breasted Merganser ( <i>Mergus serrator</i> ) [A069]			
Oystercatcher ( <i>Haematopus ostralegus</i> ) [A130]			
Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]			
Grey Plover ( <i>Pluvialis squatarola</i> ) [A141]			
Knot ( <i>Calidris canutus</i> ) [A143]			
Dunlin ( <i>Calidris alpina</i> ) [A149]			
Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156]			
Bar-tailed Godwit ( <i>Limosa lapponica</i> ) [A157]			

Redshank ( <i>Tringa totanus</i> ) [A162]			
Wetland and Waterbirds [A999]			
<p>Overall conclusion: Integrity test</p> <p>Following the implementation of mitigation, the construction and operation of this proposed development will not adversely affect the integrity of this European site and no reasonable doubt remains as to the absence of such effects.</p>			

9.2.17. In combination effects with other plans and projects

9.2.18. The potential for effects the proposed development to act in combination with other plans and projects or ongoing activities at the site and give rise to adverse effects is addressed comprehensively in Section 7 of the NIS and includes consideration of plans and individual projects. In-combination effects is further considered in section 9.1.29. From a review of the NIS and a review of planned and permitted developments in the area, I am satisfied that there are no likely significant in-combination effects arising as a result of the proposed development.

9.2.19. Mitigation Measures

9.2.20. A summary of mitigation measures is presented in tables 9-3 and 9-4 above. Full details are provided in Section 6 of the NIS covering measures required during construction, and operation of the proposal, construction and environmental management, duties and responsibilities. The mitigation measures proposed are the same for both the Malahide Estuary SAC and Malahide Estuary SPA.

9.2.21. Detail on the various environmental commitments are listed in detail relating to sediment control, drainage mitigation, concrete and hydrocarbon control, an emergency response plan and waste management are also provided. Additional environmental management commitments are set out in the Outline Construction Environmental Management Plan submitted with the application.

9.2.22. All the measures detailed are considered best practice and will be effective in achieving their aims. The measures are implementable. Overall, I am satisfied that the measures as described will be effective in avoiding and reducing any potential adverse effects to a level that is not significant.

9.2.23. Residual effects

9.2.24. The NIS is silent on residual effects. I am satisfied, following, consideration of the mitigation measures, and their correct and timely application that there will be no residual effects arising.

9.2.25. Integrity Test

9.2.26. Following the appropriate assessment and the consideration of mitigation measures, I am able to ascertain with confidence that the project would not adversely affect the integrity of Malahide Estuary SAC or Malahide Estuary SPA in view of the Conservation Objectives of these sites. This conclusion has been based on a complete assessment of all implications of the project alone and in combination with plans and projects.

**9.3. Appropriate Assessment Conclusion**

9.3.1. The proposed solar farm development has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act, as amended.

9.3.2. Having carried out screening for Appropriate Assessment of the project, it was concluded that it may have a significant effect on Malahide Estuary SAC and Malahide Estuary SPA. Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of those sites in light of their Conservation Objectives.

9.3.3. 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 sites nos. 000205 or 004025, or any other European site, in view of the sites' Conservation Objectives.

9.3.4. This conclusion is based on the following:

- a full and detailed assessment of all aspects of the proposed project including proposed mitigation measures in relation to the Conservation Objectives of Malahide Estuary SAC and Malahide Estuary SPA.

- detailed assessment of the in-combination effects with other plans and projects including historical projects, current proposals, and future plans.
- no reasonable scientific doubt as to the absence of adverse effects on the integrity of Malahide Estuary SAC.
- no reasonable scientific doubt as to the absence of adverse effects on the integrity of Malahide Estuary SPA.

## 10.0 Recommendation

10.1. I recommend that planning permission should be granted subject to conditions, for the reasons and considerations as set out below.

## 11.0 Reasons and Considerations

Having regard to:

- i. European, national, regional, and county level support for renewable energy development such as:
  - the government's Climate Action Plan 2021
  - the government's Project Ireland 2040 National Planning Framework
  - the Regional Spatial & Economic Strategy 2019-2031 published by the Eastern and Midland Regional Assembly
  - the Meath County Development Plan 2021-2027
- ii. the nature, scale, and extent of the proposed development,
- iii. the documentation submitted with the application, including the Natura Impact Statement, Planning Statement and appendices, and the Construction and Environment Management Plan,
- iv. the nature of the landscape and absence of any specific conservation or amenity designation for the site,
- v. mitigation measures proposed for construction, operation, and decommissioning of the site, and

vi. the submissions on file including those from prescribed bodies, the planning authority, and other third parties,

it is considered that, subject to compliance with the conditions set out below, the proposed development:

- would be in accordance with European, national, and regional renewable energy policies and the provisions of the Meath County Development Plan 2021-2027,
- would not seriously injure the visual or residential amenities of the area, or otherwise, of property in the vicinity,
- would not interfere with a protected view and prospect of importance, or have an unacceptable impact on the character of the landscape or on cultural or archaeological heritage,
- would not have a significant adverse impact on ecology,
- would be acceptable in terms of traffic safety and convenience, and,
- would make a positive contribution to Ireland's renewable energy requirements.

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

## 12.0 Conditions

1	The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars submitted on the 18th day of June 2021, 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><b>Reason:</b> In the interest of clarity.</p>
2	<p>The period during which the development hereby permitted may be carried out shall be 10 years from the date of this order.</p> <p><b>Reason:</b> Having regard to the nature of the development, the Board considers it appropriate to specify a period of validity of this permission in excess of five years.</p>
3	<p>All of the environmental, construction, ecological and heritage-related mitigation measures, as set out in the Technical Appendices, including the Ecological Impact Assessment, the Construction and Environmental Management Plan, the Archaeology and Architectural Heritage Impact Assessment and Flood Risk and Drainage Impact Assessment and the Natura Impact Statement, and other particulars submitted with the application, shall be implemented by the developer in conjunction with the timelines set out therein, except as may otherwise be required in order to comply with the conditions of this Order.</p> <p><b>Reason:</b> In the interests of clarity and of the protection of the environment during the construction and operational phases of the development.</p>
4	<p>(a) The permission shall be for a period of 35 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>(b) Prior to commencement of development, a detailed restoration plan, including a timescale for its implementation, providing for the removal of the solar arrays, including all foundations, anchors, inverter/transformer stations, control building, CCTV cameras, fencing and site access to a</p>



	<p>specific timescale, shall be submitted to, and agreed in writing with, the planning authority.</p> <p>(c) On full or partial decommissioning of the solar farm, or if the solar farm ceases operation for a period of more than one year, the solar arrays, including foundations/anchors, and all associated equipment, shall be dismantled and removed permanently from the site. The site shall be restored in accordance with this plan and all decommissioned structures shall be removed within three months of decommissioning.</p> <p><b>Reason:</b> To enable the planning authority to review the operation of the solar farm over the stated time period, having regard to the circumstances then prevailing, and in the interest of orderly development.</p>
5	<p>(a) No artificial lighting shall be installed or operated on site unless authorised by a prior grant of planning permission.</p> <p>(b) CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property or the road.</p> <p>(c) Cables within the site shall be located underground.</p> <p>(d) The battery storage containers and power stations shall be dark green or grey in colour.</p> <p><b>Reason:</b> In the interests of clarity and of visual and residential amenity.</p>
6	<p>Prior to the commencement of development, details of the structure of the security fence showing provision for the movement of mammals shall be submitted for prior approval to the planning authority. This shall be facilitated through the provision of mammal access gates every 50 metres along the perimeter fence and in accordance with standard guidelines for provision of mammal access (NRA 2008).</p> <p><b>Reason:</b> To allow wildlife to continue to have access across the site and in the interest of biodiversity protection.</p>

7	<p>Prior to commencement of development, an archaeological Impact Assessment of the site shall be compiled as follows:</p> <p>(a) a suitably-qualified archaeologist shall be employed to carry out an archaeological assessment of the development site. The assessment will include the results of an archaeological geophysical survey. No sub-surface work should be undertaken in the absence of the archaeologist without his/her express consent.</p> <p>(b) The archaeologist shall carry out any relevant documentary research and inspect the site. Test trenches may be excavated at locations chosen by the archaeologist (licensed under the National Monuments Acts 1930-2004), having consulted the site drawings.</p> <p>(c) Having completed the work, the archaeologist shall submit a written report to the Planning Authority and to the National Monuments Service in advance of the commencement of construction works. Where archaeological material/features are shown to be present, preservation in situ, preservation by record (excavation) or monitoring may be required.</p> <p>(d) If significant archaeological remains are found further monitoring or excavation may be required; construction shall not commence until the Planning Authority and the Department have had the opportunity to evaluate the Archaeological Assessment. In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.</p> <p><b>Reason:</b> In order to conserve the archaeological heritage of the area and to secure the preservation in-situ or by record and protection of any archaeological remains that may exist within the site.</p>
8	<p>(a) The landscaping scheme shown on drawing numbers NEO00679I_027_01_A, NEO00679I_027_02_A and</p>

	<p>NEO00679I_027_03_A, as submitted to the planning authority on the 18<sup>th</sup> day of June 2021 shall be carried out within the first planting season following commencement of development.</p> <p>(b) Landscaping and planting shall be carried out in accordance with details contained in the Biodiversity Management Plan submitted to the planning authority on the 3<sup>rd</sup> March 2021.</p> <p>(c) All planting shall be adequately protected from damage until established. Any plants which die, are removed, or become seriously damaged or diseased, within a period of five years from the completion of the development shall be replaced within the next planting season with others of similar size and species, unless otherwise agreed in writing with the planning authority.</p> <p><b>Reason:</b> In the interest of residential and visual amenity.</p>
9	<p>The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including:</p> <p>(a) Location of the site and materials compound(s) including area(s) identified for the storage of construction refuse;</p> <p>(b) Location of areas for construction site offices and staff facilities;</p> <p>(c) Details of site security fencing and hoardings;</p> <p>(d) Details of on-site car parking facilities for site workers during the course of construction;</p> <p>(e) Details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site;</p> <p>(f) Measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network;</p>

	<p>(g) Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels;</p> <p>(h) Containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained. Such bunds shall be roofed to exclude rainwater;</p> <p>(i) Off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil;</p> <p>(j) Means to ensure that surface water run-off is controlled such that no silt or other pollutants enter local surface water sewers or drains;</p> <p>(k) Hours of construction.</p> <p>(l) Disturbance of riparian habitats should be minimised; a buffer of 10m minimum to river banks should be maintained. Riparian vegetations should be retained in as natural stated as possible at all times.</p> <p>(m) Short-term storage and removal/disposal of excavated material must be considered and planned to minimise pollution including drainage from topsoil storage area to be directed to a settlement area as necessary.</p> <p>(n) Details of an invasive species and biosecurity plan to treat and manage invasive species on site.</p> <p>A record of daily checks that the works are being undertaken in accordance with the Construction Management Plan shall be kept for inspection by the planning authority.</p> <p><b>Reason:</b> In the interest of amenities, public health, and safety.</p>
10	<p>(a) Drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works and services and, shall otherwise comply with Technical Appendix 4 Flood Risk Assessment and Drainage Impact Assessment submitted to the planning authority on 3rd February 2021.</p>

	<p>(b) Any cable-laying crossings of watercourses shall be trenchless and subject to an agreed method statement with IFI. No deleterious material shall discharge to any watercourse.</p> <p><b>Reason:</b> In the interest of public health and environmental protection.</p>
11	<p>(a) During the operational phase of the proposed development, the noise level arising from the development, as measured at the nearest noise sensitive location shall not exceed:</p> <p>(i) An Leq,1h value of 55 dB(A) during the period 0800 to 2200 hours from Monday to Saturday inclusive.</p> <p>(ii) An Leq,15 min value of 45 dB(A) at any other time. The noise at such time shall not contain a tonal component.</p> <p>At no time shall the noise generated on site result in an increase in noise level of more than 10 dB(A) above background levels at the boundary of the site.</p> <p>(b) All sound measurement shall be carried out in accordance with ISO Recommendation 1996:2007: Acoustics - Description and Measurement of Environmental Noise.</p> <p><b>Reason:</b> To protect the amenities of property in the vicinity of the site.</p>
12	<p>All road surfaces, culverts, watercourses, verges, and public lands shall be protected during construction and, in the case of any damage occurring, shall be reinstated to the satisfaction of the planning authority at the developer's expense. Prior to commencement of development, a road condition survey shall be carried out to provide a basis for reinstatement works. Details in this regard shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.</p> <p><b>Reason:</b> In order to ensure a satisfactory standard of development.</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 secure the satisfactory reinstatement of the site on cessation of the project coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.</p> <p><b>Reason:</b> To ensure satisfactory reinstatement of the site.</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><b>Reason:</b> It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.</p>

---

**Alaine Clarke**

**Planning Inspector**

**19<sup>th</sup> May 2022**