



An
Bord
Pleanála

Inspector's Report ABP-317822-23

Development	Solar PV energy development
Location	Culmullin, Curraghtown, Cultromer, Gaulstown, Bogganstown, Cullendragh, Drumree, Co. Meath
Planning Authority	Meath County Council
Planning Authority Reg. Ref.	221508
Applicant	Energia Solar Holding Limited
Type of Application	Planning Permission
Planning Authority Decision	Grant Planning Permission
Type of Appeal	Third Party
Appellants	1 no. Third Party Appeal: Anne-Marie Delany, Paul Bohan, Caterine Bond, John McGovern, James Tallen, Daniel Langan,

	Elaine Cowley.
Observers	Aidan Langan Eco Advocacy Peter Sweetman
Date of Site Inspection	22 May 2024
Inspector	Sinéad O'Connor

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1.0 Site Location and Description

- 1.1. The site of 171.34 ha is located in County Meath, circa 4 km to the southwest of Dunshaughlin. The site is irregular in shape and is situated in the townlands of Culmullin, Curraghtown, Cultromer, Gaulstown, Bogganstown and Cullendragh. The site comprises 3 no. parcels of land as follows:
- Site 1. (circa 22 ha). Northern Area, which comprises Field No. 1 to 7, inclusive. Includes a connection to the Culmullin Road (R125) and Haynestown Road (L-62061).
 - Site 2. (circa 59 ha) Central Area, which comprises Field No. 8 to 23, inclusive. Road frontage onto Haynestown Road (L-62061).
 - Site 3. (circa 89 ha) Southern Area, which comprises Field No. 24 to 42, inclusive. Includes a connection onto Haynestown Road (L-62061).
- 1.2. The lands of the subject site are currently under separate ownership, and 8 no. letters of consent are included with the application documentation. At the time of the site visit, the site was predominantly used for grazing livestock. Field boundaries are largely defined by mature hedgerow vegetation and trees. There are 3 no. waterbodies at the subject site; Moyleggan waterbody at Site 1, Dunboyne Stream at Site 2, and Blackhall Little waterbody at Site 3.
- 1.3. The following 6 no. Recorded Monuments are located proximate to the subject site:
- ME043-045 – ‘Ritual Site – Holy Well’ is located to the southeast of the entrance to Site 1, on the opposite side of the R125. The application documentation refers to this feature under ref NA14.
 - ME044-014 – ‘Field System’ is located at the eastern boundary of Site 1. The application documentation refers to this feature under ref NA45.
 - ME044-015 – ‘Large Enclosure’ is located to the east of Site 1. The application documentation refers to this feature under ref NA44.
 - ME043-035 – ‘Ringfort- Rath’ is located to the south of Site 2. The application documentation refers to this feature under ref NA22.
 - ME043-036 – ‘Ringfort- Rath’ is located to the south of Site 2. The application documentation refers to this feature under ref NA23.

- ME044-026 – ‘Ringfort- Rath’ is located at the western boundary of Site 3. The application documentation refers to this feature under ref NA24.

2.0 Proposed Development

- 2.1. The proposed solar energy development comprises photovoltaic (PV) panels mounted on steel structures, underground cabling and ducting, 47 no. medium voltage (MV) power stations (6.06m x 2.44m x 2.89m), 3 no. substations (12m x 8m x 4.7m), 2.4-metre high wire perimeter fencing with mammal gates, 69 no. pole mounted CCTV cameras with motion-activated infra-red lighting, and access tracks. During the construction phase it is proposed to erect 3 no. temporary construction compounds. An output of up to 110 mega watt (MW) maximum export capacity (MEC) is referred to however, it is noted in the submitted documentation that this may change due to advances in technology.
- 2.2. Solar panel mounts will generally be pile driven into the ground. In areas of identified archaeological potential, mounts will be secured to concrete feet (plinths). The development has a footprint of 4.44 ha (2.57%) of the site area. The remaining 166.9 ha (97.43%) of the site will be predominantly used for sheep grazing. Landscaping works include infill of hedgerow, and screening and bund planting.
- 2.3. The construction phase duration is stated to last 12 months and site decommissioning will take approximately 12 months.
- 2.4. A 10-year planning permission is sought, and the development has an operational life of 40 years.

3.0 Planning Authority Decision

3.1. Decision

On the 21 July 2023 Meath County Council issued a Notification to grant planning permission for the proposed development, subject to 24 conditions. I consider the following conditions are of note:

- Condition 2. The permission shall be for a period of 10 years.
- Condition 3. The megawatt output of the development shall be agreed in writing with the PA prior to the commencement of development.

- Condition 4 (a). Submission of a Site-Specific Flood Risk Assessment.
- Condition 4 (b). Essential infrastructure, including solar PV panels, shall be located outside of Flood Zones A & B.
- Condition 4 (c). The finished floor level of essential infrastructure such as 38kV Compound, battery storage and Inverter/Transformer shall be at least 500 mm above the 1 in 1000-year flood level.
- Condition 4 (d). No development works within 10 metres of watercourse.
- Condition 4 (e). To retain flood plain storage, access tracks in Flood Zone A & B shall not be raised above the local ground level.
- Condition 4 (f). Fencing shall not extend into the watercourse.
- Condition 4 (i). Submission of a maintenance plan for on site watercourses.
- Condition 5. Mitigation measures in the submitted NIS shall be implemented.
- Condition 6. Mitigation measures in the submitted Glint and Glare Assessment shall be implemented.
- Condition 8. Exact detail and location of transformers/inverters/substations and other ancillary structures shall be agreed with the PA prior to commencement.
- Condition 9. Exact detail, design, materials and location of mounting frames and solar panels shall be agreed with the PA prior to commencement.
- Condition 10. Exact detail and location of fencing shall be agreed with the PA prior to commencement.
- Condition 15. Submission to the PA of a Construction Traffic Management Plan.
- Condition 21. All structures shall be removed not later than 35 years from the date of commencement of the development. Prior to the commencement of development, a restoration plan shall be submitted to the PA for written agreement.
- Condition 23. Lodge a bond with the PA to ensure the satisfactory reinstatement of the site on cessation of works.
- Condition 24. Final mega-watt output of the development shall be agreed with the PA. A Section 48 development contribution shall be paid.

On the 20 January 2023, the PA issued a request for 5 no. items of Further Information. The 3 no. items of note are summarised below as follows:

- Item 1. Application of development Management Justification Test as per Chapter 5 of The Planning System and Flood Risk Management, Guidelines for Planning Authorities. Essential infrastructure, including Solar Panels, shall be located outside of Flood Zones A & B.
- Item 2 (a). Unobstructed sightlines of 160 m shall be provided at Site Access 1.
- Item 2 (b). Submission of a revised Construction Stage Traffic Management Plan to demonstrate how vehicles will pass on the L-62061, given its 3-metre width. The survey for Site Access 2 and 3 shall be extended.
- Item 3. If external lighting is proposed, the design should mitigate against obtrusive light and should include a lighting contour drawing.

On 17 May 2023 the PA notified all parties that the FI submitted 09 May 2023 was Significant and requested the applicant to publish additional Site and Newspaper Notices. These were submitted to the PA on 30 May 2023.

3.2. Planning Authority Reports

3.2.1. Planning Reports

The Meath County Council Planning Reports dated 20 January 2023 and 21 July 2023 form the basis of the Planning Authority's decision. The key points of the reports are summarised below:

- Preplanning meeting was held on 26 April 2022.
- Sustainable Energy Installations are considered a permitted use in the rural area. The proposed development is acceptable in principle.
- View ID 77 of the Development Plan 'View of Kileen castle/Skane Valley from south-east direction of the Warrenstown college' is circa 2.11 km north of the site. No views of the subject site from this location due to surrounding topography and vegetation.
- The submitted LVIA is considered acceptable.

- Glint and Glare assessment is considered acceptable. Native hedgerow planting/infill shall be maintained at 3m- 4m in height, at least.
- The Socio-Economic Assessment is considered acceptable.
- The Noise Impact Assessment is considered acceptable.
- With the implementation of proposed mitigation measures in the submitted NIS, the development will not have significant effects upon qualifying features or the integrity of Natura 2000 sites.
- There are no recorded sites (RMP, RPS, NIAH) within the subject site boundary. There are 6 no. features in close proximity to the site and the Zone of Notification for Ringfort – Rath NA24 – is located adjacent to proposed works. Mitigation measures are proposed.
- An archaeological programme of works is recommended in respect of sub-surface features identified in the submitted geophysical survey.
- The majority of the site is within Flood Zone C. As per the FI submitted, the development will not remove flood storage areas or impact on the natural flow of watercourses. Conditions from the Environment Flooding Section and the Surface Water Section should be attached.
- Sightlines of 130 metres at Site Access 1 fall below 160 metres required. This matter was sufficiently addressed in FI through the relocation of Site Access 1 northwards by 25 metres and hedgerow trimming.
- Issues raised by the Transportation Section in respect of the provision of suitable passing locations on the L-6205 and the scope of the survey for Site Accesses 2 and 3 where suitably addressed at FI.
- Issues raised by the Public Lighting Section in respect of external lighting were adequately addressed at FI.
- Concerns raised in Third-Party submissions were adequately addressed by the applicant in the FI submitted.

3.2.2. Other Technical Reports

MCC Flooding – Environment & Water Services: Report dated 20 January 2023. Solar Farm and Ancillary Structures are classed as ‘essential infrastructure’ and a

‘highly vulnerable development’, which is not acceptable in Flood Zones. Request FI in respect of development on Flood Zones A&B, Justification Test, and critical flow calculation methodology.

MCC Flooding – Environment & Water Services: Report dated 19 July 2023. FI submitted did not use 3 no. methods for calculating critical flood flows and Justification Test has not been applied, as requested. Conditions recommended to address outstanding concerns.

MCC Lighting: Report dated 05 December 2022. Request FI in respect of external lighting design and potential for lighting impacts on surrounding areas.

MCC Lighting: Report dated 13 July 2023. FI response is satisfactory on the basis that no external lighting is proposed.

MCC Transportation Dept. Report dated 05 January 2023. Request FI in respect of 160 metre sightlines at Site Access 1, passing points on L-62061, and the scope of survey for Site Access 2 & 3.

MCC Transportation Dept. Report dated 22 June 2023. FI response is satisfactory. Recommends conditions in respect of sightlines at Site Access and submission of a Construction Stage Traffic Management Plan.

MCC Fire Service Dept. Report dated 22 December 2022. No objection subject to conditions.

3.3. Prescribed Bodies

Department of Housing, Local Government & Heritage: Report dated 20 December 2022: Request Archaeological Impact Assessment.

Uisce Eireann: Report dated 21 December 2022: No objection.

ESB: No response.

An Taisce: No response.

Inland Fisheries Ireland: No Response.

Waterways Ireland: No Response.

The Heritage Council: No Response.

3.4. Third Party Observations

The planning authority received 17 no. submissions on the original application and FI submitted. The issues raised in these submissions are generally reflected in the third-party appeal and observations received by the Board. Additional items raised are summarised together below as follows:

- Development should be assessed in respect of; the proper planning and sustainable development of the area, environmental impacts, the need for EIAR, the Habitats Directive, and the Water Framework Directive.
- Misleading project title by referring to just 1 no. townland.
- Misleading information in respect of HGV traffic movements.
- Dust and pollution nuisance.
- Lack of screening from hedgerows during winter months.
- Health impacts on the rural community.
- Lack of clarity in respect of hedgerows and trees to be maintained.
- Bee keeping does not require lands at the scale of the subject site.
- Noise impacts during the construction phase.
- Devaluation of nearby properties.
- Lack of archaeological investigation.
- Lack of information in respect of storm damage or wildfire.
- Need for protection of mature trees in the locality.
- Queries over Meath County Council's objective decision making in light of Development Contributions arising from the project.
- Insufficient community benefit from the project.
- Overconcentration of solar farms.
- Inconsistent assessment of development by the PA in rural areas of Meath.
- Inaccuracies in the socio-economic statement, and queries raised in respect of its objectivity and reliability.

- Negative impacts on the local economy.

4.0 Planning History

The recent planning history of the site can be summarised as follows:

- P.A. Ref. 2360432: On 14 March 2024 planning permission was granted for amendments to Reg. Ref. 21/319, to change the permitted single storey dwelling to a 1.5 storey dwelling. This site overlaps with Site 2 at Haynestown Road (L62061).
- ABP Ref. 316372-23: On the 21 April 2023 EirGrid lodged an application for the 'Kildare-Meath Grid Upgrade' comprising a 400kV underground cable between Dunstown 400kV substation (Co. Kildare) and Woodland 400kV substation (Co. Meath, within 1km of the subject site). A decision on this case has yet to be issued. This site overlaps with the eastern boundary of Site 3.

Relevant planning applications in the immediate vicinity of the subject site include the following:

- ABP Ref. 300746-18: On the 02 May 2018 planning permission was refused to Element Power Ireland Ltd. for the construction of a wind farm including 36 km of cabling to be laid under the public road. At its closest point, this application site is circa 130 metres from the subject site where cabling was proposed to be laid under the R156.
- P.A. Ref. 212214, ABP Ref. 314058-22: On 14 December 2023 planning permission was granted to Energia Solar Holdings Limited for a Solar PV development and associated site works, subject to 15 no. conditions. This site is located circa 950 metres west of Site 1, on the opposite side of the R125.
- ABP Ref. VA17.317498: On 30 June 2023 an Electricity Development Application was lodged by Energia Solar Holdings Ltd. for the construction of a 220 kV substation compound and associated site works. A decision has yet to be issued. This site is located to the west of Site 1, within the site of P.A. Ref. 212214
- P.A. Ref. 22837: On 25 October 2022 planning permission was granted to GDA Energy 4 Ltd. for new battery energy storage facility & synchronous condenser, and associated site works. This site is located c. 850 metres northeast of Site 2.

- P.A. Ref. 23136: On the 05 April 2023 planning permission was granted to GDA Energy 4 Ltd. for amendments to P.A. Ref. 22837. This site is located c. 850 metres northeast of Site 2.
- P.A. Ref. 2360296: On the 17 November 2023 planning permission was granted to EirGrid PLC for works to increase power output at the existing Louth – Woodland 220 kV overhead powerline. This linear development is located circa 1.2 km northeast of Site 2.

5.0 Policy Context

5.1. European Policy

5.1.1. Directive (EU) 2023/2413 (RED III), Council Regulation (EU) 2024/223 and Regulation (EU) 2022/2577

Directive (EU) 2023/2413 (referred to as RED III) came into force on 20 November 2023. This Directive amends the previous, Directive (EU) 2018/2001, and sets a binding target of 42.5% share of renewables in EU energy consumption by 2030, with an aspirational target 45%.

Council Regulation (EU) 2022/2577 was adopted to address an energy supply crisis and to support a faster deployment of renewables, which is necessary to strengthen the EU's security of supply and lower energy prices. Regulation (EU) 2024/223 was adopted by the Council of the European Union on 22 December 2023 and introduced amendments to, and extended certain provisions of, Regulation (EU) 2022/2577.

Provisions to be prolonged relate to:

- Requirements surrounding the consideration of alternatives,
- Compensatory measures.
- Re-powering of existing renewable energy sources.
- Exemptions from certain environmental assessment obligations set in Union environmental legislation for renewable energy projects.
- Designation of renewables acceleration areas.

I note that certain long-term measures of Regulation 2022/2577 were included in Directive (EU) 2018/2001 by means of RED III, which is required to be transposed into national law 1 July 2024 and 21 May 2025.

I consider it of relevance to this project that Article 3(1) of 2022/2577 provides that there is a rebuttable presumption that renewable energy projects are of overriding public interest and serve public health and safety, unless there is clear evidence that such projects have major adverse effects on the environment which cannot be mitigated or compensated for. Article 16f of Directive (EU) 2018/2001 uses a similar wording.

Note: Regulations to transpose RED III and Regulation 2022/2577 are currently in draft.

5.2. National Policy

5.2.1. Climate Action Plan 2024

The Climate Action Plan 2024 (CAP24) sets out a roadmap for how Ireland will deliver on its climate target to reach climate neutrality by 2050 and a 51% reduction in Green House Gas (GHG) emissions by 2030, compared to 2018 levels. These targets are legally binding under the Climate Action and Low Carbon Development (Amendment) Act 2021, discussed in Section 5.2.2 of this report. Relevant aspects of the CAP include the following:

- As per Section 2.1, in 2022, electricity (primarily power generation) represented 14.4% of Irelands GHG emissions.
- Table 3.2 'Sectoral Emission Ceilings' sets a ceiling for the electricity sector of 40 million tonnes of carbon dioxide equivalent (MtCO₂eq) for 2021-2025, and a ceiling of 20 MtCO₂eq for 2026-2030.
- Section 11.2.2.4 establishes the role of private sector investments in wind and solar electricity generation to achieve a low carbon transition.
- Chapter 12 'Electricity' sets a national target of up to 5 GW of Solar energy production by 2025, rising to 8 GW by 2030. It is noted that the decarbonisation of other sectors including transport, heating and industry are reliant on electrification to achieve their targets.

- A key action under Chapter 12 is the acceleration of onshore wind and solar energy generation, to increase renewable energy generation to supply 80% of demand by 2030.
- As per Section 12.1.3, a major acceleration in onshore wind and solar PV is required to achieve national and regional targets.
- In line with the Renewable Energy Directive, Section 12.4.1 states that the delivery of renewable energy plants and associated infrastructure are presumed as being in the overriding public interest.

5.2.2. Climate Action and Low Carbon Development (Amendment) Act 2021

The Climate Action and Low Carbon Development (Amendment) Act 2021, sets legal targets for GHG emissions, carbon budgets and requires annual updates to the Climate Action Plan. Key points of this Act include the following:

- Section 3(1) states that the State will pursue a climate neutral economy by no later than the end of the year 2050.
- Section 6A, inserted by the Act, requires that annual GHG emissions at the end 2030 will be 51% less than annual GHG emissions reported at the end of 2018.
- In respect of decision making, Section 17 of the Act inserts the following text:

“(1) A relevant body shall, in so far as practicable, perform its functions in a manner consistent with—

 - (a) the most recent approved climate action plan,
 - (b) the most recent approved national long term climate action strategy,
 - (c) the most recent approved national adaptation framework and approved sectoral adaptation plans,
 - (d) the furtherance of the national climate objective, and
 - (e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.”.

5.2.3. National Energy Security Framework (April 2022)

The document was issued in response to Russia’s invasion of Ukraine in February 2022 and the resulting impacts on Europe’s energy system. This Framework addresses energy security across the electricity, gas, and oil sectors and takes

account of the need to decarbonise our society and economy. I consider the following points of note:

- As per Section 2.1, oil and gas represent circa 80% of Ireland's energy requirement (for transport, heating, industry and power generation). Oil accounts for 45% of Ireland's energy requirement, making Ireland one of the most oil dependant countries in the EU.
- Point 4 no. of Figure 15 – 'A 10-Point Plan to Cut Oil Use (Source: International Energy Agency)' seeks to accelerate the deployment of new wind and solar projects.
- Response 25 of this Framework seeks to align all elements of the planning system to fully support accelerated renewable energy development.

5.2.4. National Energy & Climate Action Plan 2021-2030

Under this Plan, it is proposed to transition to a low carbon energy system and decouple energy consumption from economic and population growth. Key relevant points of this plan include the following:

- Under section Decarbonisation – Renewable Energy, it is proposed to increase reliance on renewables from 30% up to 70% by 2030.
- Enhanced resilience of the gas and electricity networks.
- Key Objectives under 'Decarbonisation – Renewable Energy' include an increase of up to 1.5GW of grid scale solar energy. Under 'Energy Security' Key Policies and Measures include an increase in indigenous renewable sources including solar, wind and bioenergy.

5.2.5. Ireland's Draft Updated NECP 2021-2030 (Updated Version)

This draft document comprises an update to the NECP in accordance with the Governance of the Energy Union and Climate Action Regulations. This draft Plan looks to 2050. Relevant points of this draft plan include the following:

- Increase the percentage of electricity generated from renewable sources from 40% up to 80% by 2030.
- Key Objectives under 'Decarbonisation – Renewable Energy' include accelerated delivery of wind (onshore and offshore) and solar to reach 80% of electricity demand by 2030. A target of 5GW of solar energy by 2025, up to 8 GW by 2030.

5.2.6. National Planning Framework – Project Ireland 2040

The National Planning Framework (NPF) seeks to guide private and public investment across Ireland for the benefit of the people and the environment.

Relevant provisions of the NPF include the following;

- Under Section 1.3 ‘Shared Goals – Our National Strategic Outcomes’ seeks to achieve the transition to a low carbon, climate resilient and sustainable economy by 2050. This renewables-focused energy system will utilise on-shore and off-shore energy sources such as wind, wave and solar.
- Key future planning and development and place-making policy priorities for the Eastern and Midland Region include harnessing the potential of the region to produce renewable energy from wind, solar, biomass and wave.
- Under Section 5.4 ‘Planning and Investment to Support Rural Job Creation’ rural areas will continue to contribute significantly to renewable energy supply. Renewable energy generation will be accommodated on large tracts on rural land, and emphasis is placed on continuing to protect the environment and respect the needs of local people.
- Aims of National Strategic Outcome (NSO) 8 ‘Transition to a Low Carbon and Climate Resilient Society’ include the following:
 - deliver 40% of electricity needs from renewables by 2020,
 - reinforce the energy network,
 - provide energy security and resilience,
 - consider carbon capture and storage as part of carbon neutral energy generation,
 - consider potential to connect Ireland to the EU electricity grid,
 - roll-out of the National Smart Grid Plan
- Section 9.2 ‘Resource Efficiency and Transition to a Low Carbon Economy’ seeks a reduction in Carbon Dioxide emissions by at least 80% by 2050, compared to 1990 levels, across electricity generation, built environment and transport sectors.

- National Policy Objective 55 seeks to “Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050”.

5.2.7. National Development Plan 2021-2030

The National Development Plan (NDP) describes a range of public expenditure commitments to achieve the spatial strategy for Ireland set out in the NPF. Chapter 13 ‘Transition to a Climate-Neutral and Climate-Resilient Society’ refers to NSO 8 of the NPF and sets Strategic Investment Priorities including investment in wind/solar energy and the electricity network.

5.3. Regional and Local Policy

5.3.1. Eastern & Midland Regional Assembly Regional Spatial & Economic Strategy 2019-2031

The subject site is located in the Eastern & Midland region and is, therefore, subject to the provisions of the Eastern & Midland Regional Assembly Regional Spatial & Economic Strategy 2019-2031 (EMRA RSES). Relevant provisions of the RSES include the following:

- Regional Strategic Outcomes (RSOs) 9. ‘Support the Transition to Low Carbon and Clean Energy’ seeks to “Pursue climate mitigation in line with global and national targets and harness the potential for a more distributed renewables-focussed energy system to support the transition to a low carbon economy by 2050. (NSO 8, 9)”.
- Section 4.8 ‘Rural Places: Towns, Villages and the Countryside’ seeks to support job creation in rural areas in energy production, and notes that demand for increased renewable energy production will likely be met in the rural area.
- Section 7.9 ‘Climate Change’ refers to the need to replace fossil fuels or high embedded carbon products with sustainable alternatives and enhancing carbon sinks. This section refers NSO 8 of the NPF and states that considerable wind, wave and solar energy resources are required, with connectivity to the major sources of demand.
- Under subsection ‘Decarbonising the Energy Sector’ the RSES refers to a facilitating appropriate renewable energy infrastructure, upgrades to the electricity

grid, and utilisation of wind/bioenergy/solar/offshore energy to generate electricity from indigenous renewable sources. This section calls upon Local Authorities to identify suitable areas for renewable energy with reference to potential impacts on biodiversity, landscape and heritage, and to harness the potential for renewable energy in the Region.

- Subsection 'Decarbonising the Energy Sector' refers to the need to reflect on, engage with, and be responsive to the communities impacted by renewable energy infrastructure.
- Regional Policy Objective (RPO) 7.35 states: "EMRA shall, in conjunction with local authorities in the Region, identify Strategic Energy Zones as areas suitable for larger energy generating projects, the role of community and micro energy production in urban and rural settings and the potential for renewable energy within industrial areas. The Strategic Energy Zones for the Region will ensure all environmental constraints are addressed in the analysis. A regional landscape strategy could be developed to support delivery of projects within the Strategic Energy Zones".

5.3.2. Development Plan

The Meath County Development Plan 2021-2027, as varied, is the relevant Statutory Plan. This Plan was the subject of Judicial Review (2021 No. 958 JR) which did not impact upon the development site or proposal.

I consider that the following provisions of the Development Plan are relevant:

- The site is outside the development boundaries of any settlements defined in the Development Plan and, therefore, is located within a rural area.
- Zoning Category RA – Rural areas have the 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. Utility Structures are listed as a Permitted Use. I note that Solar Farm is not included as a separate category of use. Under Section 11.14.2 'Permissible and Non-Permissible Uses', uses not expressly listed as either permissible or open for consideration are deemed not to be acceptable in principle, and are to be considered on their individual merits. Such uses will only be permitted if they enhance, complement, are ancillary to, or neutral to the zoning objective.

- Map 8.6 'Views & Prospects' does not show any protected views within the subject site. View 77 'view of Kileen Castle/Skane Valley from south-east direction of the Warrenstown College' is located circa 4 km to the north of the subject site and faces in a north-east direction.
- Section 6.15.3.1 'Solar Energy' notes that large scale solar farms have been positively considered by the PA in recent years, and notes that proposals for solar farms will be subject to Site Specific Flood Risk Assessment (SSFRA) as per the Planning System and Flood Risk Management Guidelines 2009 for Planning Authorities.
- DM OBJ 77 of Section 11.8.2 'Solar Energy' requires the submission of the following documents in support of solar energy proposals:
 - Glint & Glare Assessment
 - Outline Construction Environmental Management Plan (CEMP)
 - Biodiversity Management Plan
 - Public Consultation details
 - Noise Assessment
 - Socio-Economic Assessment
 - EIA Screening
 - Ecology Assessment
 - Archaeology Assessment
 - Traffic & Transport Assessment
 - Landscape and Visual Assessment
 - Hydrology Appraisal/Flood Risk Assessment
 - Decommissioning/Restoration Plan.
- MOV OBJ 71 requires Glint and Glare assessments of solar farms within 15 km of Airports. INF POL 43 has the same requirement specifically in respect of Dublin Airport.
- Policy HER POL 1 of Section 8.6 'Archaeological Heritage' seeks to protect sites, monuments and places included on the Sites and Monuments Record, the Record of

Monuments and Places, areas in the Register of Historic Monuments, monuments the subject of Preservation Orders, and archaeological objects. HER POL 2 seeks to protect all sites and features of archaeological interest in situ or, at a minimum, by record.

- HER POL 52, under Section 8.17 'Landscape', seeks to protect and enhance the quality, character, and distinctiveness of the landscapes of the County in accordance with the Landscape Character Assessment.
- As per Map 01: Landscape Character Types, the subject site is located in Landscape Character Area 12. Tara Skryne Hills. This LCA is formed of 2 no. land parcels and the site is located in the southern parcel.
- As per Map 02: Landscape Character Areas and Map 03 Landscape Sensitivity, the Tara Skryne Hills LCA has an Exception Value and a High Sensitivity, respectively.
- Appendix 5 of the Plan contains the Landscape Character Assessment for the County. In respect of Potential Capacity, Section 8. LCA 12 – Tara Skryne Hills notes that this area has:
 - Low potential capacity to accommodate overhead cables, substations and communication masts due to their visual prominence and the high sensitivity of this LCA.
 - Low potential capacity to accommodate underground services that would be detrimental to the integrity of existing landscape features due to the high sensitivity of the area and large numbers of archaeological artefacts.

Policy and objectives relevant to solar farms includes:

- 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 as per the Planning System and Flood Risk Management Guidelines 2009 for Planning Authorities (or any updated guidelines).
- INF POL 35: To seek a reduction in greenhouse gases through energy efficiency and the development of renewable energy sources utilising the natural resources of the County in an environmentally acceptable manner consistent with best practice and planning principles.

- 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, wind, geothermal, hydro and bio-energy at suitable locations within the County where such development does not have a negative impact on the surrounding environment (including water quality), landscape, biodiversity or local amenities so as to provide for further residential and enterprise development within the county.
- HER OBJ 50 To require landscape and visual impact assessments prepared by suitably qualified professionals be submitted with planning applications for development which may have significant impact on landscape character areas of medium or high sensitivity.

5.4. Natural Heritage Designations

The subject site is not within or immediately adjacent to any designated areas or Natura 2000 sites. The subject site is circa 7 km north of the Rye Water Valley/Cartron Special Area of Conservation (SAC) (Site Code 001398) and proposed Natural Heritage Area (pNHA) (Site Code 001398). The site is upstream of the River Rye and has a hydrological connection to this river through the Blackhall Little Waterbody at Site 3. The site is circa 11.5 km southeast of the River Boyne and River Blackwater SAC (Site Code 002299). There is no hydrological connection between the subject site and the River Boyne and River Blackwater SAC.

5.5. EIA Screening

- 5.5.1. Solar energy development is not listed as a class of development for the purposes of EIA under Part 2 of Schedule 5, within the Planning and Development Regulations, 2001 (as amended). In this regard, a requirement for preliminary examination or EIA would not arise.
- 5.5.2. Table 2 'Assessment of Effects of Proposed Development' of the 'Environmental Impact Assessment Screening' submitted to the PA contains an assessment of the development with reference to the Criteria listed in Schedule 7A of the Planning and Development Regulations 2001 (as amended). On the basis that this information was submitted, an EIA Determination was made (see Appendix 1 and Appendix 2 of this report).

- 5.5.3. Circular Letter EUIPR 01/2023 in respect of Planning and Development (Amendment) (No. 2) Regulations 2023 (S.I. 383 of 2023) notes that field boundary removal and recontouring fall under the remit of restructuring of a rural landholding. Part A and B of Schedule 1 of the Environmental Impact Assessment (Agriculture) Regulations 2011 sets out the thresholds for screening for EIA and mandatory EIA in respect of rural restructuring of farmland as follows:

Restructuring of rural land holdings	Screening Required	Mandatory EIA
Length of field boundary to be removed	Above 500 metres	Above 4 Kilometres
Re-Contouring (within farm-holding)	Above 2 hectares	Above 5 hectares
Area of lands to be restructured by removal of field boundaries	Above 5 hectares	Above 50 hectares

- 5.5.4. From the Drawing nos. NEO00791_096_A Figure10a 'Landscape & Ecology Management Plan', NEO00791_097_B Figure10b 'Landscape & Ecology Management Plan', NEO00791_098_C Figure10c 'Landscape & Ecology Management Plan' submitted in response to the appeal, I note that 11.6 metres of hedgerow is to be removed to facilitate access to the site. Drawing Nos. NEO00791_071I_A Figure 5.6 'Visibility Splay 2', and NEO00791_072I_A Figure 5.7 'Visibility Splay 3' submitted to the PA refer to the realignment of a total of 80 metres of hedgerow at the Site Accesses 2 and 3. Drawing No. NEO00791_070I_A Figure 2 – Rev B 'Visibility Splay 1' submitted to the PA at FI illustrates that hedgerow realignment is not required at this site access. The submitted documentation does not state how hedgerows are to be realigned and, for the purpose of this assessment, I consider it appropriate to assume that these areas will be removed and replanted. Section 8.40 of the submitted Outline Construction Environmental Management Plan states the 19.3 metres of internal site hedgerow will be removed to facilitate development. Combining the hedgerow to be removed with that to be realigned gives a total of 110.9 metres, which is below the thresholds for screening

and for mandatory EIA under the Environmental Impact Assessment (Agriculture) Regulations 2011.

- 5.5.5. I note that there is a discrepancy between the quantity of hedgerow removal stated in the Applicants Response to the Appeal and my calculations based on the drawings and CEMP submitted. Section 2.152 of the Applicants Response to the Appeal states that 124.5 metres of hedgerow will be from the site in total. I note that no basis for this calculation is provided in the documentation submitted. It is my opinion that difference between the stated quantity of hedgerow removal and the calculated quantity is negligible with reference to the total quantity of hedgerow at the site. Under each scenario, the level of hedgerow removal is substantially below the thresholds for screening and for EIA.
- 5.5.6. The hedgerow to be removed and realigned at the subject site occurs at the proposed site entrances where the field structures are largely defined by the adjoining road. In this way, I consider that the removal and realignment of these existing portions of hedgerow will not alter the overall shape of the field or restructure the landholding. As per the submitted documentation, recontouring at the site is not proposed. The area of the subject site is gently undulating and the proposed ground works, including laying of cabling, piling and track laying, will not alter the site levels. I note that localised levelling may occur at the 3 no. proposed substation buildings (8 metre x 12 metres) and the 3 no. temporary site construction compounds (60 metres x 50 metres). I do not consider these works significant with reference to the size of the landholding and, therefore, would not constitute recontouring of the lands. In this way, I do not consider that the requirement for EIA would arise under this part.
- 5.5.7. Part 2 of the Fifth Schedule of the Planning and Development Regulations 2001, as amended, includes in Part 10 'Infrastructure Projects' a threshold in respect of private roads as follows:

(dd) *'All private roads which would exceed 2000 metres in length'.*

I note that the Planning and Development Act 2000, as amended, does not include a definition of a 'Private Road'. Section 2 of the Roads Act 1993, as amended, does define 'Road' and this definition refers, inter alia, to *'any street, lane, footpath, court, alley or passage...bridge...pavement or footway ...'*. The proposed development includes circa 7 km of internal tracks. As per Section 8.61 of the submitted Outline Construction Environmental Management Plan, these tracks will be circa 3.5 metres

wide and be constructed of crushed local stone laid on geotextile/geogrid. As per the submitted documentation, these tracks will not be raised about surrounding ground levels. As per the submitted Decommissioning Plan, the tracks will be removed from the site and the area restored once the solar farm reaches the end of its lifetime. These tracks will not be available for use by the public and are provided to facilitate construction and maintenance works at the site. Owing to their limited width, informal construction, and temporary nature, I do not consider that the proposed tracks constitute a private road in respect of Part 10 'Infrastructure Projects' of the Regulations. In this way, I do not consider that the need for EIA of the proposed development arises under this part.

- 5.5.8. I note that no details are provided in respect of the grid connection. For completeness, I note that the Applicant may only engage with the ESBN and EirGrid in respect of a connection to the National Grid once planning permission is obtained for the solar farm. Any future grid route from the proposed solar farm will be subject to pre-application consultation under Section 182E of the Planning and Development Act 2000, as amended. Where the Board determines that the proposal constitutes Strategic Infrastructure Development (SID), an application will be lodged under section 182A of the Act.
- 5.5.9. Any future grid connection from the proposed development will be considered on its merits with reference to National, Regional and Local planning policy, and the proper planning and sustainable development of the locality. During the assessment of a future grid connection, environmental impacts will be assessed in combination with any impacts arising from the subject solar farm. In this way, the cumulative impacts of the proposed solar farm and the future grid connection will be assessed by the Competent Authority when the full details of the future grid connection have been finalised under the Enduring Connection Policy (ECP), which I consider appropriate.

6.0 The Appeal

6.1. Grounds of Appeal

On 17 August 2023 1 no. Third Party appeal was lodged on behalf of 7 no. persons. The appeal comprises an Appeal Statement. I consider that the key points raised in the appeal can be summarised as follows:

- The Further Information submitted did not address the observer's concerns.
- Loss of residential amenity.
- Loss of privacy owing to CCTV.
- Health impacts on local residents, including impacts on mental health and wellbeing.
- Spatial alignment of solar farms encircling Dublin.
- Contravention of the EU Solar Energy Policy (May 2022).
- Contravention of the Meath County Development Plan 2021-2027, particularly HER POL 52.
- Development sets an undesirable precedent.
- Information submitted was insufficient to facilitate a full assessment by Meath County Council, as evidenced by the conditions attached to the PA decision.
- Critical details in respect of sightlines, flood risk, traffic hazard, and fencing should not be addressed by condition.
- No information provided in respect of final output of the solar PV farm.
- Conditions in respect of refuelling indicate that this is an industrial project.
- Site is within an area defined as "Area under Strong Urban Influence", which are subject to controls to preserve the rural environment.
- Scale of development and loss of agricultural land.
- Visual impacts are understated in the submitted documentation.
- Inappropriate negative impacts on the Tara and Skyrne Hills Landscape Character Area (LCA 12).
- Solar PV development recently refused by MCC owing to adverse visual impacts, with reference to HER POL 52 of the Development Plan (PA Ref. 22/552).
- High concentration of solar farms in South and East Meath despite a lack of Solar Farm Guidelines.
- Proposed development is not a use that is Permitted in Principle or Open for Consideration under Section 11.14.6 of the Development Plan.

- The scale of the project does not align with the drawings submitted to MCC.
- Inappropriate impacts on historic and cultural heritage.
- Creation of a traffic hazard.
- Local roads are in poor condition and are too narrow to accommodate construction traffic.
- The L-6205 cannot accommodate 2-cars passing.
- Proposed mitigation measures seek to reduce risks to road users, but do not eliminate risk.
- Mitigation measures are aspirational and unworkable.
- HGV traffic will have a deleterious effect on the local road network.
- Passing locations submitted by the applicant are residential in nature.
- No consent given by landowners for construction vehicles to use their driveways.
- Residential driveways do not have suitable sightlines for HGV traffic.
- Quantity of HGV traffic is inappropriate in this rural area. Up to 40 HGV journeys per day, which equates to 1 no. HGV journey every 15mins during peak times.
- Impacts of HGV traffic is understated in the submitted documentation.
- Unacceptable traffic delays and disruption caused by proposed Stop-Go system.
- A full glint and glare assessment for Dublin Airport was not submitted. New flight paths at Dublin Airport traverse part of the site.
- Glare from solar panels may impact pilots' ability to navigate.
- No consultation with aviation authorities submitted. No information sought from the Irish Aviation Authority or Dublin Airport Authority.
- It is not appropriate to include mitigation measures in respect of glint and glare owing to impacts on road users and aircraft.
- Significant negative impacts on the surrounding environment.
- Loss of habitat, natural heritage and eco system destruction.
- No surety that existing trees and hedgerows will be retained.

- Impacts of proposed fencing on existing hedgerows.
- Part of the site is at medium to high risk of flooding. MCC do not classify solar panels as Water Compatible Development.
- The area has been subject to significant flooding in recent years, and extreme weather events will increase.
- The applicant's references to other solar farm developments are inappropriate and incorrect.
- Light pollution from proposed security lighting is contrary to the MCC biodiversity plan.
- Lighting will cause obtrusive and excessive light pollution.
- Wildlife at the site will continuously set-off motion sensitive lighting.
- The applicant was requested to submit a lighting plan. No such plan was submitted.
- Environmental impacts during the decommissioning phase.
- Solar panels contain toxic materials and cannot be wholly recycled.
- Long term impacts of decommissioned solar panels is not understood.
- The application and consenting process for solar farms is inappropriate.

6.2. **Applicant Response**

The Applicant submitted a response to the appeal on 14 September 2023. This response contained an Appeal Statement with Appendices comprising updated planning drawings, updated landscaping figures, transportation drawings, and a construction traffic programme. The key issues raised in this response can be summarised as follows:

- The planning drawings submitted with the Applicant's Response have an amended title block to confirm that these are final layouts and not indicative, as is stated in the planning drawings submitted to the PA. The proposed layout is not amended from that submitted to the PA.

- To address the Appellants' concerns in respect of inward views, Section 2.44 of the Applicant's Response proposes to provide semi-mature/mature screening planting at the beginning of development. In this way, the immediate (or Year '0') views inwards would be reduced from Moderate to Minor.
- The updated landscaping plans submitted as Appendix B of the Applicant's Response includes additional planting, as stated in Section 2.44 of the response. The updated views and photomontages submitted with the Applicant's Response show the impacts of these proposed amendments.
- The documentation submitted to the PA includes 11 no viewpoints and photomontages. Appendix B of the Applicant's Response includes 6 no. additional viewpoints comprising 4 no. short-range views and 2 no. views from the Hill of Tara and Skryne Hill. Visibility of the proposed development is limited to glimpse views. The development will not be visible from the Hill of Tara or Skryne Hill.
- The subject site is over 10 km from the key characteristics of LCA 12, which comprise Skryne Hill and the Hill of Tara. Intervening vegetation and buildings will screen the proposed development from view.
- There are 2 no. solar farms within 5km of the subject site, and a further 2 no. solar farms circa 7km from the site. The Landscape and Visual Impact Assessment submitted to the PA found in-combination views to have minor adverse impacts on the landscape.
- Comparisons to the solar farm refused planning permission under PA Ref. 22/552 are inappropriate as that site was located in the east of LCA 12 in an area with different topography and vegetation cover.
- The proposed development covers 33.9% of the site when viewed from above and ground disturbance will occur on 2.57% of the site.
- The final output of the development will be agreed prior to the construction so that the development may incorporate any advances and increasing efficiencies in solar technology.
- As per the FI response submitted to the PA, Site Access 1 has a visibility splay of 160 metres from a point 2.4 metres back from the road edge and approximately 10.2 metres of hedgerow is to be removed.

- Perimeter fence locations and other infrastructure are shown in the layout drawings submitted to the PA and were considered acceptable. Fencing will be erected circa 5 metres behind the existing and proposed hedgerows.
- Post decommissioning, the subject site will return to agricultural use with the benefit of enhanced biodiversity value.
- Proposed low intensity sheep grazing will keep vegetation heights at an optimal level for ground nesting birds.
- The implementation of the Landscape and Ecology Management Plan submitted to the PA will result in an overall increase in hedgerows. The Biodiversity Management Plan submitted to the PA will result in an overall biodiversity gain by replacing improved grassland and arable fields with a species rich grass and wildflower mix, planting wildflower meadows, and providing hibernaculum, bird boxes, bat boxes and invertebrate hotels.
- 124.5 metres of hedgerow and 6 no. trees will be removed as part of the proposed development. 4,961 metres of new hedgerow will be planted. Trees cannot be planted between proposed solar arrays as these would cause shading of the PV panels.
- Policies of the Meath County Development Plan 2021-2027 support solar farm developments. Section 11.8.2 Solar Energy and objective DM OBJ 77 of the Plan outline the requirements for solar farm applications.
- The PA assessment found that Solar Energy is a permitted use in Rural Areas (RA). The proposed development aligns with the objective for Rural Areas.
- The proposed development is multi-use comprising renewable energy production, sheep grazing, and biodiversity enhancement.
- No recorded Archaeological sites, or sites/structures listed in the Record of Monuments and Places (RMP), Record of Protected Structures (RPS) or National Inventory of Architectural Heritage (NIAH) are located within the site.
- The Archaeology & Architectural Heritage Impact Assessment submitted to the PA found that indirect effects on surrounding heritage would be low.

- Ballast foundations are proposed in areas with potential sub-surface archaeological features identified in the Archaeological Geophysical Survey and direct impacts on adjoining identified archaeological features will not occur.
- The Applicant's Response proposes additional traffic mitigation measures that did not form part of Section 5.77 Mitigation of the Construction Traffic Management Plan submitted to the PA. Proposed measures in Section 2.75 of the Applicant's Response include the timing of works to ensure that Site 3 does not commence until Site 2 is completed, and the transportation of construction workers to Sites 2 and 3 by minibus from Site 1. Section 2.88 of the Applicants' Response suggests that a text alert system for residents on the L-62061 in respect of traffic impacts could be implemented.
- Appendix C of the Applicant's Response shows proposed traffic management works including signage and Flag/Gate personnel at site entrances. It is proposed to implement a Stop-Go system at Sites 2 and 3 on the L-62061.
- Appendix D of the Applicants' Response contains a 55-week Construction Traffic Programme.
- The proposed construction phase haulage route was chosen to limit the use of the L-62061 to 600 metres.
- Road surveys indicate that the L-62061 is sufficiently wide to accommodate HGVs.
- The Roads Department of the PA considered the proposed haulage route appropriate, subject to proposed mitigation.
- The Construction Traffic Management Plan submitted to the PA confirms that the Applicant will repair construction related road damage.
- A stop-go system is appropriate given the low traffic levels on the L-62061. Significant impacts on road users are not predicted.
- The maximum predicted traffic movement of a construction vehicle every 15minutes relates to both HGVs and LGVs and would only occur at Site Access 1 onto the R125.
- The appointed contractor will be obliged under contract to use the haulage routes submitted to the PA in support of this application.

- Solar farms are provided for in the National Planning Framework, Regional Spatial and Economic Strategy for the Eastern and Midland Region, and the Meath County Development Plan.
- The proposed development aligns with the Policies and Objectives of the Meath County Development Plan 2021-2027.
- Recent decisions by An Bord Pleanála outline that there is sufficient policy guidance for decision making in respect of solar farms. The absence of specific guidance in respect of solar farms is not sufficient to refuse planning permission for these types of development. Reference is made to ABP Refs. 301321-18 and PL26.247217, PA Ref 20160690 and ABP Ref. 302475-18.
- Adherence to the Outline Construction Environmental Management Plan and implementation of buffer zones and the drainage management plan will ensure no impacts on water quality arise.
- Assessments submitted to the PA indicate that the development will not negatively impact residential amenity.
- CCTV cameras will be orientated to protect residents' privacy.
- As per Section 2.204 of the Applicant's Response, security lighting serving the CCTV cameras are infra-red and will not have light emitting components.
- The subject site is outside the 15km radius for the requirement of a glint and glare assessment of Dublin Airport.
- Post mitigation screening, there will be no glint and glare impacts on roads.
- The modelling in the Flood Risk and Drainage Impact Assessment submitted to the PA includes a 30% allowance for climate change, which is sufficient to encapsulate increased rainfall over the lifespan of the proposed development.
- Recent decisions by An Bord Pleanála clarify that solar panels are considered water compatible. Reference is made to ABP Ref. 311460-21, PA Ref. 21/396.
- 2.3% of the site occurs within Flood Zone A or B. Solar panels are located 0.3 metres above predicted 1 in 1000 flood year levels. Essential infrastructure is located on Flood Zone C.

- Climate Action Plan seeks to install 8GW of solar PV. This estimated to require 24,000-26,000 acres nationwide, which constitutes 0.2% of Ireland's agricultural land. The subject site constitutes circa 0.003% of Ireland's agricultural land.
- A community benefit fund will be operated throughout the lifetime of the proposed development.
- The proposed solar panels comprise silicon from sand, which is fully recyclable. The panels do not contain harmful chemicals.

6.3. Planning Authority Response

On the 07 September 2023 the PA submitted a response to the appeal. The PA is satisfied that each of the issues raised in the Appeal has been considered during their assessment of the application and the FI submitted. The PA requests that their decision to grant planning permission is upheld.

The PA submitted a further response on 27 September 2023 to state that they had no further comment to add to make in respect of the application.

6.4. Observations

3 no. valid observations on the appeal have been submitted. The issues raised that are in addition to the grounds described in the appeal statement are summarised below as follows:

- There has been no research on long term effects of solar farms and concentration of solar farms on rural environment.
- The application is premature pending national Strategic Environmental Assessment (SEA) of solar farms.
- There is an unnecessary burden on residents and NGO's to assess multiple applications in this locality.
- Proposed solar arrays are fixed and are an inefficient use of resources.
- Solar energy is sporadic, is reliant on other energy sources and battery storage, and produces higher Green House Gas emissions than wind or nuclear energy.

- Experience from other countries indicates the solar panel does not reduce fossil fuel consumption and does not produce sufficient power to fuel energy intensive developments.
- There has been a failure to assess negative environmental impacts of manufacturing, transportation and recycling of solar panel and ancillary structures.
- There are negative health impacts and human rights issues associated with the manufacturing and recycling of solar panels.
- Heat emitted from solar panels impacts regional and global temperatures.
- Ireland is too far north to efficiently capture solar energy.
- Negative impacts on the community far out-weigh the benefits.
- The development is economically reliant on grants and is resource hungry. Failure to produce a cost/benefit analysis of the development.
- The proposed development is an inappropriate use of productive agricultural land and is contrary to the European Landscape Convention.
- Queries raised in respect of compliance with EU Directives 85/337/EEC and 92/42/EEC, and the SEA Directive.
- Applicant failed to assess potential deep bore geothermal energy.
- Failure to assess electromagnetic field impacts and health impacts of energy generated.
- In-combination impacts of projects and grid connections not assessed.
- It is inappropriate that solar farm applications are developer led.
- Development does not align with the established use of the area.
- Loss of carbon sequestering vegetation.
- Solar panels impact on reproductive cycle of aquatic insects, the flight paths of migratory birds, and impacts domestic bird populations.
- Increased storm water flow from solar panels.
- Potential contamination of water run-off from solar panel components and coatings. Health and environmental impacts of leachate from solar panels.

- There is potential for negative impacts on the health of grazing livestock.
- No assessment was undertaken of potential to use roof space instead of agricultural land. Examples provided of roof level solar PV.
- Impacts on tourism and tourist attractions.
- Noise disturbance during the construction phase.
- Risk of electrocution, increased fire risk, and arc flash as a result of the proposed development has not been assessed.
- Inadequacy of Appropriate Assessment. The PA failed in its requirements to undertake Appropriate Assessment.
- It is not possible for the pollution prevention measures, drainage management, and waste management provisions of the submitted NIS to comply with the requirements of Courts of Justice of the European Union in Case 258/11.

6.5. Further Responses

On 10 October 2023 the Third Party Appellants submitted a response to the submissions made on the Appeal. The issues raised are largely similar to those discussed in the Appeal statement submitted 17 August 2023. Issues raised that are in addition to those outlined in the appeal are summarised below as follows:

- The status and importance of landscape is recognised at EU and National level.
- The Meath County Development Plan 2021-2027 prioritises energy production and makes no reference to solar farms.
- The Development Plan outlines that the amalgamation of farms and the enlargement of fields has a detrimental effect on landscape character and biodiversity, and affirms that overhead wires, substations and communication masts have a detrimental effect on the landscape.
- General policies of the Development Plan seek to facilitate agricultural practices in rural areas, to respect the scale, pattern, materials, and vernacular style in the assessment of new development, and have regard to environmental impacts in the assessment of new infrastructural development.

- The solar farm is unlikely to be properly decommissioned owing to the associated cost and technical difficulties. In this way, the negative landscape and visual impacts will be irreversible.
- The Applicant's statement that just 2.57% of the site will be subject to construction works/ground disturbance is misleading as much of the site will be covered with solar panels.
- Lands at the subject site are highly fertile and of high agricultural value. Solar farms should be located on marginal agricultural land. Sheep farming is typically located on lower quality lands and is often economically unviable.
- Proposed low intensity sheep grazing regime at the site is unviable and the Applicant's references to the dual use of the site are misleading.
- The Applicant provides no details on how sheep at the site would be looked after.
- Proposed grazing will not enhance biodiversity at the site.
- Proposed buildings at the site are not in-keeping with the Meath Rural Housing Design Guidelines. Proposed substations are similar in size to small bungalows.
- Proposed substations are out of character in this rural area and will lead to the industrialisation of this rural area.
- Required sightlines of 160 metres on the R125 are not provided.
- The R125 is particularly dangerous at the entrance to Site 1 owing to sharp bends and dips in the road.
- Suitable sight lines are not feasible at the other site entrances due to the narrow width of the road.
- With reference to the Civil Aviation Authority's Guidelines (2023), the Applicant is incorrect in stating that there is no requirement to assess glint and glare impacts on aircraft.
- The Applicant has not provided an assessment of glint and glare impacts on residents.
- Contamination of drinking water by spillages at site refuelling areas.

- The proposed solar farm is one of 3 no. solar farm developments in the area. Together, these developments impact the rural landscape character.
- The Applicant has provided no contingency plan for screen planting failures.
- Disagree with the findings of the submitted Landscape and Visual Assessment on the basis that the site will be clearly visible from nearby homes and roads.
- Images provided from the Hill of Tara were taken during the summer months, when there was full foliage cover. The development will likely be visible from the Hill of Tara during the winter months.
- Works will result in the displacement of animals and birds.
- Under the Development Plan, existing trees at the site should be retained and hedgerows protected.
- Insufficient information is provided in respect of the implementation of traffic mitigation measures.
- Surety not provided on quantity of operational phase/maintenance trips.
- Findings of road survey do not align with typical usage of road network.
- Insufficient engagement with residents.

On the 10 October 2023 an Observer, Aidan Langan, submitted a response to the Applicant's submission. The issues raised that are in addition to the grounds described in the appeal statement and the initial observation are summarised below as follows:

- Failure of the Applicant to address the concerns raised in the previous submissions.
- Insufficient road width remaining for pedestrians or cyclists by passing HGVs on the L-62061.
- Bends in the L-62061 limits visibility for drivers.
- Queries raised in respect of the accuracy of road traffic surveys undertaken and the conclusions reached by the Applicant in respect of traffic impacts.

7.0 **Assessment**

I have read the entire contents of the file, visited the subject site and its surroundings, have had particular regard to planning policy in relation to solar farms as well as the issues raised in the Third Party appeal and the observations submitted. I consider the critical issues in determining the current application and appeal before the Board are as follows:

- Suitability of the Site for Solar Farm Development
- Landscape Character and Visual Impacts
- Flood Risk
- Traffic
- Environmental and Biodiversity
- Heritage
- Residential Amenity
- Other Issues

7.1. **Suitability of the Site for Solar Farm Development**

- 7.1.1. The site is located in a rural area circa 4 km southwest of Dunshaughlin Town Centre and is largely in agricultural use. The lands are owned by 8 no. separate landholders and field boundaries are well defined by mature hedgerow. Development in the vicinity of the site predominately comprises agricultural buildings and rural dwellings that front the road network in clusters. I note that the subject site is largely backland in nature and only immediately fronts the public road at Haynestown (L-62061).
- 7.1.2. The Appellants and observers raised concerns in respect of the appropriateness of the subject site for the proposed solar farm with reference to the land use zoning objectives and rural development objectives of the Development Plan. Reference is made to the loss of good agricultural land and the need to protect the rural environment from industrial type development.

- 7.1.3. The Planner's Report dated 20 January 2023 found that solar farm development is a permitted use on zoned rural lands. The report notes that a balanced approach is required in supporting the rural economy, landscape, heritage, and the environment.
- 7.1.4. In respect of compliance with the Development Plan, I note that Utility Structures are included as a permitted use in rural areas (RA). Solar Farms are not listed as a separate use class in the Development Plan however, I consider that a solar farm falls within the category of Utility Structure on the basis that their primary function is to generate electricity. The Plan specifically supports the development of renewable energy sources through policy INF POL 35 and objective INF OBJ 39 and provides specific guidance for solar farm applications under DM OBJ 77, INF OBJ 28, and INF POL 43. Drawing from the above, I consider that the proposed solar farm aligns with the zoning provisions and objectives for renewable energy generation under the Development Plan and is, therefore, a suitable land use at this location.
- 7.1.5. In terms of its use, layout, and ground cover, it is my opinion that the subject site is similar to other agricultural lands in the wider locality and across the country. I do not consider that the loss of the subject site from active agricultural use will have any significant impacts on the agricultural industry overall. A review of information from the CORINE 2018 assessment found that agriculture is the predominant Land Use Cover type in Ireland, at circa 67.6% national land cover. Given the extent of agricultural land nationally with reference to the size of the subject site, I do not consider that the change of primary land use at the subject site from agriculture to energy generation will have a significant impact on the agriculture sector. In addition, I consider it relevant to this assessment that the proposed development is temporary in nature. Post-decommissioning of the solar farm, the landowners may choose to return the subject site to predominantly agricultural use with no permanent impacts on land cover expected.
- 7.1.6. There is no national land use policy in Ireland which prescribes the preservation or protection of agricultural lands and to which this development would be contrary, nor is there any national guidance specifically in relation to the location of solar energy development. I note that the NPF, RSES and Meath County Development Plan, as a primary planning framework for land use and development in County Meath, specifically support the deployment of renewable energy developments. Section 5.4 of the NPF outlines the role of rural areas in the delivery of renewable energy development and NSO 8 supports the transition to a low carbon energy system.

Similarly, Section 4.8 of the RSES acknowledges that the demand for renewable energy production will be largely met in the rural area. Drawing from national, regional and local planning policies and objectives, it is my opinion that development of the nature proposed on agricultural land is acceptable in principle.

- 7.1.7. Solar farms require large tracts of flat and open land. The subject site is largely flat and under grass and is, in my opinion, well suited to solar PV development. This locality has existing energy transmission infrastructure at the Woodland substation and is the subject of ongoing grid upgrades such as those sought under ABP Ref. 316372-23 and permitted under PA Ref. 2360296. In the interest of efficiency, I consider it appropriate that new renewable energy sources are located proximate to existing electricity transmission infrastructure and close to sources of electricity demand, such as Dunshaughlin, Dunboyne and the Greater Dublin Area. In this regard, I consider that the location for the proposed development is strategically appropriate.
- 7.1.8. Queries are raised by the observers in respect of the appropriateness and effectiveness of solar PV, particularly with reference to other forms of electricity generation. I do not consider that this falls within the remit of this current assessment, which is focused on appraising the development sought.
- 7.1.9. Drawing from the above, I consider that the proposed solar PV development is appropriate and acceptable at this location.

7.2. Landscape Character and Visual Impacts

- 7.2.1. The landscape in the immediate vicinity of the site is characterised by slightly undulating agricultural lands, defined and mature field boundaries, and linear rural residential development. As part of the development sought, it is proposed to erect a 2-metre-high security fence inside the existing hedgerow at the perimeter of the site, to infill existing hedgerow where necessary, and to provide planted bunds at the southern boundary of Site 1 and part of the northern boundary of Site 2. Proposed solar arrays are mounted on a steel structure facing south at an angle of between 15 and 30 degrees and will have a maximum height of 3.2 metres. As per the submitted documentation, the proposed solar PVs will cover circa 34 percent of the site area when viewed from above. The proposed transformer stations (47 no.) and substations (3 no.) are 2.89 metres and 4.7 metres in height, respectively.

- 7.2.2. Under Section 7.25 of the Biodiversity Management Plan submitted to the PA, hedgerow and screening planting is to be undertaken within the first available planting season (November to March). Section 2.44 of the Applicant's Response to the Appeal submitted 14 September 2023 suggests that semi-mature and mature screening planting could be undertaken early in the construction phase to reduce immediate visual impacts.
- 7.2.3. The Appeal statement outlines that the proposed development will have a significant negative impact on the landscape and the overall visual amenity of the area owing to its scale and industrial design. The Appellants refer to the concentration of solar farms in South Meath and the cumulative impact of these on the landscape and natural beauty of the area. The Appellants find that the proposed development, alone or in combination with other permitted solar farms, will have a detrimental impact on the Tara Skryne Hills Landscape Character Area and contravenes Development Plan objectives in respect of Landscape Character. The Appellants consider that the submitted LVIA understates the impact of the proposed development.
- 7.2.4. The PA assessment raised no concerns in respect of the impact of the proposed development on the Landscape Character Area or impacts on visual amenity. The Planner's Report dated 20 January 2023 found that the proposed development would not be visible from protected View 77 "*view of Kileen Castle/Skane Valley from south-east direction of the Warrenstown College*" and concluded that the submitted landscape assessment was acceptable.
- 7.2.5. In respect of Landscape Character, I note that the area of the subject site is heavily modified by agricultural and residential development and does not constitute a pristine natural environment. With reference to its topography, layout and species (flora and fauna) noted during the site visit, I consider that the landscape immediately surrounding the subject site is typical of other rural areas in Meath and its surrounding counties. The landscape is gently undulating and long to medium range views across the landscape are limited by existing structures and vegetation. In this way, I consider that the landscape is sufficiently robust to accommodate the proposed development without undue negative impacts.
- 7.2.6. Under the Landscape Character Assessment of the Development Plan the subject site occurs within LCA 12, which is stated to have a high landscape sensitivity and low capacity for development. It is my opinion that these designations are largely

based on potential impacts on the Hill of Tara and Skryne, which are of national importance. The subject site is located over 10 kilometres to the south of these sensitive areas and is separated by intervening urban and agricultural development. The Applicant's response to the Appeal includes 2 no. viewpoints from the Hill of Tara and Skryne Hill towards the subject site, and notes that the subject development will not be visible from these areas. Drawing from the information submitted and surrounding topography, I do not consider that significant impacts will arise on the views and character of the landscape surrounding Hill of Tara and Skryne Hill as a result of the proposed development.

- 7.2.7. Inward views to the subject site from the surrounding area are largely limited to glimpse views through existing vegetation. The subject site is predominantly back land in nature and is located 1 no. field away from the public road, which reduces potential for inward views or significant visual amenity impacts. I consider that the retention of existing field boundaries within the subject site will also mitigate against medium range views across the site and will work to 'break up' the massing of the scheme. In this way, views into the site are very localised as screening is provided by existing vegetation. Where the proposed development has direct road frontage at the Haynestown Road (L-62061) the subject site is currently unscreened, and Field 8 of Site 2 is visible. As part of the proposed development, hedgerow and infill planting is proposed at potential viewpoints into the site, including the view from Haynestown Road. I note that proposed planting will take time to become established and provide sufficient screening of the subject development from the road. In this regard, I consider that the Applicant's proposal to undertake semi-mature/mature screening planting early in the construction phase, as per the Response to the Appeal, is appropriate. With proposed planting and screening in place, I consider that visual impacts of the proposed development on the area will be minor. I note that views of the proposed development may still occur from 1st floor windows of adjoining properties however, these views are limited in extent and visual impacts will also be reduced by proposed screen planting. If the Board is minded to grant planning permission for the proposed development I recommend that a condition is attached to require the implementation of the Landscape & Ecology Management Plan as modified to include mature/semi-mature screening planting prior to development elsewhere at the site or in the first planting season, whichever is sooner.

7.3. Flood Risk

- 7.3.1. The areas surrounding the 3 no. waterbodies at the subject site are designated Flood Zones A & B under the Meath County Development Plan Strategic Flood Risk Assessment. In the Applicant's Response to the Appeal, it is estimated that circa 2.3% of the site is in Flood Zone A & B and the remainder of the site is in Flood Zone C. The proposed development includes solar PV arrays within Flood Zones A, B & C, while all transformers and substations are located within Flood Zone C. During the site visit I found that the ground at the site was firm underfoot despite heavy rain in the previous days. Parts of the site contained patches of Rushes, which often indicate wetter ground conditions. These species occurred predominantly in the western part of Site 3.
- 7.3.2. Condition 4 of the PA decision requires the submission of a SSFRA and justification test prior to the commencement of development. Part (b) of Condition 4 requests changes to the layout to remove solar panels from Flood Zones A & B on the basis that the PA considers solar panels as essential infrastructure. The Appeal Statement refers to increased flooding risk due to changes in weather patterns and the implications of this on flood risk at the site. The Appellants consider that the provision of solar panels in Flood Zones A & B is inappropriate as these works do not constitute water compatible development.
- 7.3.3. In respect of the requirement to submit an SSFRA as part of an application for solar farm development, I consider that there is some ambiguity in the Development Plan. DM OBJ 77 of Section 11.8.2 'Solar Energy' requires the submission of a Hydrology Appraisal/Flood Risk Assessment with solar farm applications, as opposed to a Site Specific Flood Risk Assessment sought under Section 6.15.3.1 and Objective INF OBJ 28. Having reviewed the documentation, I consider that the flooding information submitted to the PA and in Response to the Appeal is sufficient to allow an assessment of flooding risk at the site.
- 7.3.4. Table 3.1 'Classification of vulnerability of different types of development' of The Planning System and Flood Risk Management Guidelines for Planning Authorities (2009) does not refer specifically to solar farms or solar PV. I note that "*Essential infrastructure, such as primary transport and utilities distribution, including electricity generating power stations and sub-stations,..*" is listed as 'Highly Vulnerable' under

Table 3.1. I consider that the proposed 3 no. substations and 47 no. MV power stations fit into this definition for highly vulnerable development.

- 7.3.5. In respect of the proposed solar panels and support frames, I note that these parts of the development have a low development footprint and will not significantly increase the quantity of impermeable surfaces at the site or result in significant losses of flood storage. I consider it relevant that solar PV panels are designed for outdoor use and are sufficiently robust to withstand extreme weather and rainfall. I note that the effects of flooding at these structures will not cause the release of significant sources of pollution, will not impact vital utilities or electricity supply in the region, and will not potentially cause loss of life of any persons. On the basis of these characteristics, it is my opinion that the proposed Solar PV Panels and racks do not fit into the 'Highly Vulnerable Development' or 'Less Vulnerable Development' classification. I consider the solar PV most closely align with the 'Water-Compatible Development' classification. In this way, I have assessed the proposed solar PV arrays as water compatible development.
- 7.3.6. Applying the sequential test outlined in Section 3.2 'Sequential Approach' and Fig. 3.2 'Sequential approach mechanism in the planning process' of the Guidelines, I consider it appropriate that the 'Highly Vulnerable' parts of the development, comprising the substations and MV power stations, are located on Flood Zone C. With reference to Figure 3.2 of the Guidelines, I consider it reasonable that a small portion of the proposed PV arrays, support structures and tracks are located in Flood Zone A & B. As per Figure 3.2, a Justification Test is only required where Highly Vulnerable development is located on Flood Zone B or where Highly Vulnerable and Less Vulnerable development is located on Flood Zone A. Under the proposed development, only water compatible development is proposed within Flood Zone A or B, therefore, a Justification Test is not required under the Guidelines. I note that mitigation measures in respect of flooding risk are proposed in Technical Appendix 4: Flood Risk and Drainage Impact Assessment, submitted to the PA, including the provision of soakaway channels and maintenance of plant cover at the site. I consider that these mitigation measures are appropriate. If the Board is minded to grant planning permission for the proposed development, I recommend that a condition be attached to require the implementation of all mitigation measures outlined in the submitted Flood Risk and Drainage Impact Assessment.

- 7.3.7. From the documentation submitted to the PA and in response to the Appeal, I note that areas of flooding risk where panels are proposed are predicted to have flood depths of 0.5 metres or less during the 1 in 1000-year flood event. The panel racks have a stated height of 0.8m metres above ground level, which gives a minimum freeboard of 0.3 metres above the predicted flood levels, inclusive of climate change. I consider that this freeboard is sufficient to prevent impacts on the proposed development. I note that Flood Zones A & B comprise a small proportion of the site, which reduces the potential for impacts on the functionality of the development. The Development Plan does not include a Policy or Objective to exclude solar panels and ancillary structures from Flood Zones A & B. In this way, and drawing from the above, I do not consider that there is any basis to exclude solar PV from Flood Zones A and B at the subject site. In this way, I do not consider it necessary to change the layout of the proposed development as was required under Condition 4 (b) of the PA decision.
- 7.3.8. The proposed development includes SUDS features to manage surface water drainage at the site. All surface water is to be discharged to ground rather than to a surface water network. It is proposed to provide soakaways at these structures, as required. Given the size of these impermeable areas with reference to the size of the grassed area of the site, I consider this approach appropriate. Infiltration trenches are proposed at all three sites and will be located downhill of proposed works. As per Table 4-18 Storage Estimates of the Flood Risk and Drainage Impact Assessment submitted to the PA, the volume of these trenches exceeds the total storage requirements of each site. I consider these works sufficient to manage surface water run-off from the site.
- 7.3.9. Drawing from the above, I consider that the proposed development including the flooding and drainage mitigation measures outlined is acceptable at the subject site.

7.4. Traffic

- 7.4.1. The subject site is served by regional and local roads and is located circa 3 km southwest of Junction 6 off the M3. 3 no. access points to the site are proposed, Site 1 is accessed from the R125 and Sites 2 and 3 are accessed from the L-62061. Owing to the unmanned nature of the operational development, traffic impacts arise predominantly during the construction phase. As per the haulage route submitted as

Figure 5.1 to the PA, construction traffic will exit the M3 onto the R125 traveling south, turn onto the R156 travelling east, and then onto the L-6205 travelling north to reach the L-62061.

- 7.4.2. The Applicant's response to the Appeal includes additional proposed mitigation measures including the use of minibuses to bring construction workers from Site 1 to Sites 2 and 3, the phasing of development to only begin works on Site 3 once Site 2 is completed, a temporary reduction of the speed limit on the L-62061, and the implementation of a text alert system for residents.
- 7.4.3. The Appellants and observers state that the proposed development will create a traffic hazard owing to the quantity of construction vehicles proposed and the narrowness of the road network. It is submitted that parts of the haulage route are too narrow for two vehicles to safely pass, and that insufficient road width is provided for pedestrians and cyclists. Construction traffic will cause significant disruption to families and farmers who rely on the existing road network.
- 7.4.4. In their report dated 21 July 2023 the PA had no objection to the proposed development in respect of traffic once suitable sightlines are provided and a Construction Stage Traffic Management Plan is agreed and implemented.
- 7.4.5. Table 5-2 of the Technical Appendix 5: Construction Traffic Management Plan submitted to the PA estimates a total of 1891 HGV deliveries and 3782 HGV movements during the 12-month construction phase. A maximum of 20 no. deliveries per day is estimated and it is stated that typical delivery numbers will be below this, on the basis that deliveries will be made across all 3 no. sites. I note that Section 2.77 of the Applicant's Response to the Appeal states that a maximum 15 no. construction vehicles per day are predicted during the construction phase however, in the context of that section I consider that this rate refers to Sites 2 and 3 only. Table 2.2 of the Applicant's Response to the Appeal, refers to traffic survey data from the R125 (mislabelled as R235) and the L-62061. The assessment predicts that at Site 1, weekly HGV traffic will increase by 0.26% and LGV traffic will increase by 2.97%, when compared to existing traffic levels. At Site Access 2, weekly HGV movements will increase by 5.2% and weekly LGV movements will increase by 5.7%. At Site Access 3, weekly HGV movements will increase by 5.3% and weekly LGV movements will increase by 7.9%. The submitted traffic surveys noted the low

baseline levels of traffic on the L-62061, which aligns with my findings during the site visit.

- 7.4.6. At the time of the site visit, I noted existing HGV traffic on the R125 and R156 and I consider that these roads are suitably wide to accommodate construction traffic without creating a traffic hazard. From the data submitted by the Applicant, I consider that the traffic impacts on the R125 during the construction phase of development will be negligible.
- 7.4.7. The L-6205 and L-62061 are narrower than the surrounding Regional Roads and neither road has footpaths, lighting or markings. Drawing from the site visit, I consider that the L-6205 is sufficiently wide for 2-way traffic once due care is taken by road users. From the documentation submitted, the L-62061 has a width of 4 metres. On the basis that a HGV is 2.55 metres in width, as per Section 2.80 of the Applicant's Response to the Appeal, I do not consider that the L-62061 is sufficiently wide to allow HGVs to safely pass other road users. Owing to the temporary nature of the construction phases at Sites 2 and 3 and the surveyed low traffic levels on the L-62061, I consider that the implementation of mitigation measures is appropriate in this instance. It is my opinion that a Stop-Go system on the 600 metres of the L-62061 between site accesses 2 & 3 and the L-6205 will prevent 2-way traffic meeting at this section of road, which will mitigate against conflicts between HGV traffic and other road users. The proposal to reduce the speed limit on this section of the L-62061 to 20 km/hr during the construction phase will further mitigate against traffic incidents. I note the Applicant's suggestion in the Response to the Appeal to reduce construction worker vehicles on the L-62061 and to implement a text alert system for residents. I consider that both of these mitigation measures will reduce pressure on the road network during the 55-week construction phase. I acknowledge that construction traffic and proposed mitigation measures will be an inconvenience to residents on the L-62061, and to a lesser extent on the L-6205. These roads have a limited number of houses and farms, which reduces the scope of potential impacts. I note that the L-62061 and L-6205 connect to the R154 and R125 to the north, respectively, which provides an alternative route for local residents and farmers during the construction phase. I consider that the inconveniences of construction phase traffic measures will be temporary in nature and will be fully resolved on the completion of development. If the Board is minded to grant planning permission for the proposed development, I recommend that a condition is attached to require the

implementation of all traffic management mitigation measures outlined in the submitted documentation.

- 7.4.8. The Appeal statement refers to the 4 no. overtaking locations on the L-62061 identified in the Applicant's FI response. 2 no. of these locations are residential and 2 no. are agricultural, and the Appellants state that no permission is given for the Applicant to use their driveways for overtaking construction traffic. In this regard, I consider that the implementation of proposed mitigation measures, including a Stop-Go system on the L-62061 throughout the Site 2 and 3 construction phases, will mitigate against the need for overtaking. In this way, residential driveways will not be utilised by construction traffic.
- 7.4.9. Drawing No. NEO00791_070I_A Figure 2 'Visibility Splay 1' submitted to the PA at FI stage shows that 160 metre sightlines will be provided at Site Access 1 onto the R125. The R125 has a design speed limit of 80 km/hr at the location of the proposed entrance however, the traffic surveys submitted by the Applicant found that 85% of drivers drove at or below 73.8 km/hr on the R125. Table 5.5 of Transport Infrastructure Ireland's Publication DN-GEO-03060 'Geometric Design of Junctions (priority junctions, direct accesses, roundabouts, grade separated and compact grade separated junctions)' states that sightlines of 160 metres should be provided at junctions where the design speed is 85 km/hr. Drawing from this guidance, I consider that the proposed sightlines at Site Access 1 are sufficient to prevent a traffic hazard. Drawing from my site visit, I consider that the proposed sightlines can be provided at the site and are acceptable at this location.
- 7.4.10. Drawings No. NEO00791_071I_A Figure 5.6 'Visibility Splay 2' and NEO00791_072I_A Figure 5.7 'Visibility Splay 3' submitted to the PA show that 90-metre sightlines will be provided at Site Accesses 2 and 3 onto the L-62061. The speed limit on the L62061 is 80 km/hr and the traffic surveys submitted by the Applicant found that 85% of drivers drove at or below 59.2 km/hr on this road. The TII guidelines DN-GEO-03060 provide for sightlines of 90 metres at simple junction with a design speed of 60 km/hr. On the basis of the site visit, I do not consider that it would be feasible to drive at 80km/hr on the L-62061 owing to its width and alignment. I consider it acceptable that Site Accesses 2 and 3 are designed to reflect the surveyed traffic speeds, in this instance. It is my opinion that the proposed 90-metre sightlines can be provided at the site and are sufficient to provide the creation of a traffic hazard.

7.4.11. Item no. 2 of the PA's request for Further Information requests that the scope of the road condition survey should be increased to include all of the haulage route from the L-62061 to 200 metres either side of the L-6205/R-156 junction. I note that this item was not specifically addressed in the Applicant's response. To ensure the satisfactory maintenance of the road network, I consider it appropriate that a condition is attached to reflect the PA request in respect of extended road condition surveys. If the Board is minded to grant planning permission for the proposed development, I recommend that a condition is attached to require pre-construction road surveys on the haulage route from the entrances to Sites 2 & 3 to 200 metres either side of the L-6205/R-156 junction.

7.4.12. In light of the foregoing, I consider that the proposed development with the implementation of construction phase traffic mitigation measures, will not have a significant impact on road safety and is appropriate at this location. I note that no significant operational traffic will arise, and that these movements can be accommodated on the road network without mitigation measures.

7.5. Environmental and Biodiversity Impacts

7.5.1. The subject site comprises 42 no. agricultural fields that are largely delineated with mature hedgerow. Figure 2.2 of the submitted Ecological Appraisal indicates that Improved Agricultural Grassland is the dominant habitat at the site, followed by Wet Grassland in the east of Site 3 and Hedgerows and Treelines at field boundaries. Field surveys found evidence of Badger, and bird species observed comprise Blackbird, Great Tit, Chaffinch, Hooded Crow, Starling, Wood pigeon and Mallard. Suitable habitat was identified for bats and hedgehog at field boundaries and suitable habitat for otters occurs at the 3 no. waterbodies that traverse the site.

7.5.2. The Appellants concerns relate to the loss of habitat at the subject site as a result of the proposed development. The Appeal statement seeks surety that existing hedgerows and trees at the site will be retained and protected from damage. Issues are raised by the Appellants and Observers in respect of water contamination and the environmental impacts associated with the decommissioning and recycling of solar panels.

7.5.3. Table 2.7 of the Ecological Appraisal found that the Improved Agricultural Grassland, which is the dominant habitat at the site, is of low biodiversity and low ecological

value. Similarly, the existing hedgerows were found to have low species diversity and low ecological value. I consider this appraisal acceptable based on the species and habitats noted during the site visit. As per Chapter 7 of the submitted Biodiversity Management Plan, the existing agricultural fields will be reseeded to create species rich grassland. These grasslands will be maintained at ideal height by low level sheep grazing, as stated in the Applicant's Response to the Appeal. A wildflower meadow is proposed to be planted at Field 17 in Site 2 and at the northeast corner of Site 3. Mixed species hedgerow will be planted to infill the existing hedgerow. Other habitat enhancements proposed include the provision of 16 no. bat boxes, 14 no. bird boxes, 4 no. hibernaculum, and 5 no. invertebrate hotels, as per the specifications in the Biodiversity Management Plan and shown in Drawing NEO00791_093I_A Figure 2. Rev A 'Indicative Infrastructure Layout' submitted to the PA. On the basis that the existing habitats across the site are largely of low biodiversity and ecological value, I consider that the proposed development will have an overall positive impact on the habitats at the subject site.

- 7.5.4. In respect of hedgerow retention, Section 2.17 of the Ecological Appraisal outlines that a 5-metre buffer from hedgerows will be maintained during the construction phase. I note that the proposed fencing is set-back from the existing hedgerow and will, therefore, not impact on its stability or viability. As is discussed in Section 5.5 of this report, a total of 110.9 metres of hedgerow is to be removed or realigned to facilitate the proposed development. Given the scale and low biodiversity value of the existing hedgerow at the site, I do not consider that this loss of hedgerow will have a significant impact on the ecological value of the site.
- 7.5.5. In respect of impacts on fauna, I note that the Applicant proposes to undertake pre-construction surveys in respect of badgers, bats and otters, as per the Biodiversity Management Plan, and implement environmental mitigation measures in respect of disturbance and accidental trapping, pollution and siltation prevention, and prevention of noise impacts. Given the highly mobile nature of these species, I consider that such pre-construction surveys 48 hrs in advance of construction works are appropriate to identify potential impacts and inform suitable mitigation measures, as per the Outline Construction Environmental Management Plan. I consider that the proposed habitat enhancements, as discussed in Section 7.5.3 of this report, will improve fauna species diversity at the site.

- 7.5.6. The EPA 'Update on Pressures Impacting on Water Quality' published 2024 indicates that the Blackhall Little waterbody (Ref. IE_EA_09R010400) had poor status from 2016 to 2021, Dunboyne Stream (IE_EA_09D040500) also had a poor status and the Moyleggan Waterbody (IE_EA_09T010600) had a moderate status. Each of the waterbodies is at risk of not reaching 'Good' status, as required under the Water Framework Directive. This more recent publication notes significant issues in respect of morphology and nutrients, and significant pressures in respect of domestic wastewater treatment, agriculture and physical habitat modification. I note that the proposed development does not include any wastewater treatment facilities and all construction phase foul waters will be removed from site for treatment. I consider that the change of dominant land use from agriculture to energy generation will decrease agricultural and nutrient run-off from the site, which may reduce potential for pressures on these waterbodies. The structure and hydro-morphology of the waterbodies on site will not be altered as part of the proposed development and will specifically be protected during the construction and operational phases through best practice measures, including compliance with IFI guidelines. Drawing from the above, I do not consider that the proposed development will undermine the status of the waterbodies on the site and, it is my opinion, that the works may help to elevate the status of these waters by removing significant threats and pressures within the site boundary.
- 7.5.7. From the documentation submitted, it is not apparent how proposed perimeter fencing will interact with existing surface waterbodies. I consider that the provision of fencing within the waterbodies should be avoided to prevent hydro morphological and ecological impacts on the streams. If the Board is minded to grant planning permission for the proposed development, I recommend that a condition is added to prevent the provision of perimeter fencing within surface waterbodies at the site.
- 7.5.8. During the construction phase there is potential for water contamination arising from accidental spillages of fuel or construction materials and from the release of silt. Under Sections 8.75 – 8.80 of the Outline Construction Environmental Management Plan submitted to the PA, fuel and chemical storage and refuelling will be undertaken in accordance with best practice measures. Under Section 8.105, swales will be provided at the lowest point of each construction compound to capture potentially silt laden surface waters. Under Section 8.109, temporary swales, or similar, will be provided to collect runoff from internal site tracks. Section 2.104 of the Ecological

Appraisal states that silt traps will be provided in drainage ditches. Foul water infrastructure is not proposed at the site, and it is stated in Section 8.91 that portable toilets and welfare facilities will be provided during the construction phase.

Wastewater arising from these facilities will be held in tanks and disposed of off-site. Sections 2.17 and 2.96 of the Ecological Appraisal outline that a 2-metre buffer will be maintained on either side of field drains and waterbodies to prevent physical impacts. I consider that standard pollution and siltation prevention measures as per Construction Industry Research and Information Association (CIRIA) guidelines should be implemented at the site, in addition to those measures outlined in the application documentation. With the implementation of measures proposed in the application documentation and standard best practice, I do not consider that the construction phase of development poses a significant likely risk to waterbodies. As is discussed in section 7.5.9 of this report, there are no dangerous emissions or contaminants associated with the proposed solar panels. In this way, pollution of ground water and surface water will not occur during the operational phase of development. If the Board is minded to grant planning permission for the proposed development I recommend that a condition is attached to require compliance with the CIRIA SuDS Manual C753 (2015), Control of Water Pollution from Construction Sites C532 (2001), and Environmental Good Practice on Site C811 (2023).

- 7.5.9. Having reviewed the submitted documentation I note that there is no information provided on how internal tracks and underground cabling will traverse the 3 no. waterbodies at the subject site. I note that no submission was made from the IFI in this regard. From Drawings No. NEO00791_013I_A Figure 5.4, NEO00791_024I_B Figure 5.15, NEO00791_028I_B Figure 5.19 and NEO00791_039I_B Figure 5.30, it appears as though 4 no. crossings will be provided over these waterbodies. At the time of the site visit there was an existing track with a culvert at Site 1, which corresponds with the crossing location shown in the application drawings. The Inland Fisheries Ireland (IFI) Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters (2016) outlines methods for traversing waterbodies and preventing negative structural and hydrological impacts during the construction phase. I consider that the implementation of these Guidelines in respect of crossings over the 3 no. waterbodies at the site will prevent significant impacts. If the Board is minded to grant planning permission for the proposed development, I recommend that a condition is attached to require all works in, at or over the waterbodies comply

with the provisions of the IFI Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters (2016).

- 7.5.10. As per the Decommissioning Plan submitted to the PA, at the end of its operational lifetime all components of the proposed solar farm will be removed from site. It is stated in Section 2.11 that underground cabling will be removed, but ducting will remain in-situ. Section 2.22 of the Decommissioning Plan indicates that the disposal of solar panels is governed by the Waste Electrical and Electronic Equipment (WEEE) Directive and that infrastructure removed from the site will be handled in accordance with Statutory and best practice requirements. Section 2.9 of the Applicant's Response to the Appeal states that the proposed Solar Panels are made of crystal silicon and do not contain chemicals that could leech into the environment during the operational or decommissioning phases. Drawing from the above, I am satisfied that the decommissioning phase of the proposed development and recycling of the solar panels will not have significant likely environmental impacts at the subject site or surrounding area.
- 7.5.11. Condition No. 23 of the PA decision includes a bond to ensure the satisfactory decommissioning of the proposed solar farm and reinstatement of the subject site. I note that obligations under waste licensing and waste regulations fall under separate regulatory processes, and I consider that the PA's approach is reasonable in this case. If the Board is minded to grant planning permission for the proposed development, I recommend that a condition be included to require the provision of a bond to ensure the decommissioning and restoration of the subject site.
- 7.5.12. Drawing from the foregoing, it is my opinion that the proposed development would not have a significant negative impact on the environment, habitats or biodiversity at the subject site. Having reviewed the submitted documentation and undertaken a site visit, I consider that the implementation of the Biodiversity Management Plan and works shown in the Landscape & Ecological Management Plan drawings will result in a biodiversity net gain at the site.

7.6. Heritage

- 7.6.1. The subject site is located proximate to 6 no. Recorded Monuments, including a Holy Well (ME043-045), a Field System (ME044-014), a Large Enclosure (ME044-015) and 3 no. Ringfort-Raths (ME043-035, ME043-036, and ME044-026). The site does

not contain any Recorded Monuments or archaeological features however, archaeological assessments undertaken by the applicant identified areas of high archaeological potential. The proposed development includes mitigation measures in respect of archaeological heritage including a construction phase exclusion zone around ME044-026 at Site 3, archaeological monitoring during ground works, and the use of ballast (floating) foundations in identified areas of archaeological potential.

- 7.6.2. I note that the field numbering system used in the submitted Archaeology & Architectural Heritage Impact Assessment does not consistently align with the Field Numbering in Figure 3 'Field Numbers' used in the rest of the application documents.
- 7.6.3. The Appeal Statement indicates that the subject site occurs in an area of significant importance with reference to the Hill of Tara, Skryne Hills, and archaeological features in the vicinity of the site. It is stated that the proposed development will undermine the protection of national heritage. The PA in their assessment note the high potential for sub-surface remains at the site and draw from the submission from the Department of Housing, Local Government and Heritage dated 20 December 2022 in recommending a condition is attached to require pre-construction archaeological assessments at the site.
- 7.6.4. The subject site is located over 10 km to the south of the Hill of Tara and Skryne Hill. The proposed development will not be visible from these Heritage Sites, as discussed in section 7.2 of this report and, therefore, will not undermine the structure or setting or impact on the character or integrity of the Hill of Tara or Skryne Hill.
- 7.6.5. There are no Recorded Monuments within the site. Of the 6 no. Recorded Monuments proximate to the site, I consider that ME043-045, ME044-015, ME043-035 and ME043-036 are a sufficient distance from the proposed development to prevent negative impacts on their integrity. ME044-014 relates to relic field patterns of potentially medieval origin and is mapped to the field adjoining Field 4 in Site 1. From aerial imagery, field markings occur within 5 metres of the subject site and in excess of 15 metres from proposed solar panels. The submitted Archaeology & Architectural Heritage Impact Assessment states that impacts on this feature will be negligible. From the site visit, I note that there is currently no substantial field boundary between the subject site and the Recorded Monument, which may result in construction vehicles entering this field and impacting on ME044-014. To prevent construction vehicles from entering this area and from disturbing the field patterns, I

consider that a fence should be erected on the eastern side of Field 4 prior to, and for the duration, of the construction phase. If the Board is minded to grant permission for this development, I recommend that a condition is attached to this effect.

- 7.6.6. As shown in the Historic Environment Viewer (accessed June 2024), ME044-026 – ‘Ringfort- Rath’ is located circa 80 metres north of the proposed entrance to Site 3 and immediately adjoins the western boundaries of Fields 27 and 28. Section 3.160 of the submitted Archaeology & Architectural Heritage Impact Assessment indicates that this feature is circa 1.2 km from the subject site, which appears to be an error. The feature comprises a vegetated earthen bank encircling a grassed area. Owing to existing hedgerows at field boundaries, I do not consider that the proposed development will have a significant negative impact on the setting of this Recorded Monument during the operational phase. I consider that construction phase mitigation measures will be required to protect the monument from larger construction vehicles. If the Board is minded to grant planning permission for the proposed development, I recommend that a condition is attached to require a buffer with secure fencing around ME044-026 for the duration of the construction phase.
- 7.6.7. To protect unidentified subsurface features, I consider it appropriate that ballast foundations are provided in identified areas of archaeological potential, as proposed in the application documentation. Further to the above, I consider it appropriate that the recommendations of the Department of Housing, Local Government and Heritage in their submission to the PA are included as a condition of any permission at the site. Having reviewed the submitted archaeological impact assessment and the mitigation measures therein, I recommend that a revised condition from that requested by the DHLGH is attached to any grant of planning permission at the site. In this way, if the Board are minded to grant planning permission for the development, I recommend that a condition is attached to reflect the requirements of the DHLGH and Condition 20 of the PA decision.
- 7.6.8. In light of the foregoing, and with the implementation of proposed mitigation measures and recommended conditions, I consider that the proposed development will not have any significant negative impact on the heritage value of the site or surrounding area. In this way, I consider that the proposed solar farm is appropriate at this location.

7.7. Residential Amenity

- 7.7.1. There is rural residential development on all of the roads surrounding the subject site. These existing units are generally detached, 1 or 2-storey houses with front and rear gardens. The Appellants are part of this rural community and raise concerns in respect of residential amenity impacts as a result of the proposed development. The Appeal statement describes loss of privacy due to proposed CCTV cameras, light pollution from proposed security lights associated with the CCTV cameras, and health impacts arising from the proposed development.
- 7.7.2. The proposed development includes 69 no. CCTV cameras positioned on 3.5 metre poles along the 2.4 metre perimeter fence. I note that the CCTV cameras will be located on the inside of the existing hedgerows and field boundaries, which will reduce potential for direct overlooking of adjoining properties. Notwithstanding the function of the CCTV cameras to surveil the subject site, I consider that there is potential for these cameras to overlook adjoining properties. To prevent inappropriate overlooking and loss of privacy, I consider that CCTV cameras should be mounted and cowled to face inwards at the subject site. If the Board is minded to grant planning permission for the proposed development, I recommend that a condition is included to this effect.
- 7.7.3. As per the submitted documentation, motion sensor infra-red lighting is proposed to serve the CCTV cameras. These infra-red lights do not emit light that is visible to humans and, therefore, will not cause light pollution and will not impact upon the residential amenity of the surrounding community. It is confirmed in the Further Information submitted to the PA that no other external lighting is proposed at the site. Drawing from the above, I do not consider that the proposed development will have any negative impacts on residential amenity in respect of light.
- 7.7.4. The Appellants and observers refer to potential health impacts of the proposed development. It is stated that the proposed development will negatively affect the natural environment causing impacts on mental health and wellbeing. Potential environmental impacts of the proposed development are assessed in Sections 5.5, 7.6 and 8.0 of this report, which find that the proposed development would not have likely significant impacts on the environment, protected sites, or biodiversity at the subject site. The subject site comprises works to private land and, therefore, the works will not impact on the availability of public green spaces or community areas in

the locality. I consider that nuisance and stress may arise during the construction phase due to increased noise and traffic. On the basis that the construction phase is limited to 12 months and active areas will move across the site throughout this period, I do not consider that significant negative health impacts arise.

7.7.5. The Applicant's Response to the Appeal confirmed that the proposed Solar Panels will be constructed of silicon crystals derived from sand and that contamination of water sources will not occur. On this basis, I do not consider that harmful chemicals or emissions will arise from the proposed Solar Panels. Other potential impacts on human health include noise and glint and glare, which are discussed in detail in Section 7.8 of this report. In short, this assessment found that significant negative impacts in respect of noise and glint and glare would not occur.

7.7.6. As per Section 5.4 of the NPF, I note that solar farms are typically located on large tracts of rural land and, therefore, a balanced assessment of development is required to respect the residential community. On the basis of the foregoing, I consider that the implementation of recommended conditions and of proposed mitigation measures will prevent undue negative impacts on local residents.

7.8. Other Issues

I have addressed a series of other issues raised by the Appellants and Observers in the text below.

7.8.1. **Glint and Glare:** The application is accompanied by a Glint and Glare assessment, which assessed the proposed development in respect of worst case 'Bald Earth' scenarios and actual visibility at 181 no. individual receptors, 76 no. road receptors, 10 no. runway paths and 3 no. air traffic control towers. I consider that this assessment was sufficiently thorough in appraising impacts on residents, surrounding roads and airfields. The assessment recommends mitigation measures to prevent glint and glare impacts, including landscaping bunds and screening. I note that these mitigation measures are integrated into the proposed development and form part of drawings submitted to the PA. Drawing from the above, I do not consider that glint and glare impacts arise at residential receptors or roads.

7.8.2. In respect of aviation impacts, the subject site is outside of the 15 km radius of Dublin Airport and, therefore, an assessment of impacts is not required under MOV OBJ 71 or INF POL 43 of the Development Plan. Sections 7.193 and 7.194 of the

Glint and Glare assessment includes an appraisal of impacts on Weston Airport and Trim Airfield, which concludes that there are no glint or glare impacts on approach paths or air traffic control towers. Solar PV panels are designed to absorb rather than reflect light and, as per the information submitted, these panels cause a reflection similar to waterbodies and less than typical building materials such as glass, shed roofs, or plastic coverings. Drawing from the above, I do not consider that the proposed development will have a detrimental effect on pilots navigating to Dublin Airport or any nearby airfield. In light of the foregoing, I consider that the proposed development will not have significant glint and glare impacts and is, therefore, an appropriate addition to this area.

7.8.3. **Noise:** A Noise Impact Assessment was submitted in support of this application. The assessment relates solely to operational noise and concludes that the proposed development will not have significant negative noise impacts on surrounding dwellings. I note that the assessment finds that the only sources of noise during the operational phase will be from the 47 no. MV power stations. These structures are located in excess of 15 metres from site boundaries and produce lower levels of noise during the night when energy generation is lower/absent. I consider the methodology for assessment of operational noise arising from the proposed development is sufficiently robust, and I accept the conclusions reached.

7.8.4. It is my opinion that there is potential for noise impacts during the construction phase of the proposed development owing to the quantity of pile driving associated with the construction. I consider that the Applicant should comply with relevant construction noise standards throughout the construction phase, as per the ABC method in Table E1 of BS5228.

Period	Threshold Value ($L_{Aeq,t}$)
	Category A – Ambient noise is Less than these values
Night-time (23.00–07.00)	45
Evenings and weekends	55
Daytime (07.00–19.00) and Saturdays (07.00–13.00)	65

- 7.8.5. Noise mitigation measures including noise barriers should be deployed as required at the site to align with the thresholds in BS5228 to prevent significant noise impacts on nearby properties. If the Board is minded to grant planning permission for the proposed development, I recommend that a condition is attached to require that construction phase noise accords with BS5228.
- 7.8.6. **Fire Safety:** The Observers raised concerns in respect of public safety and fire risk arising from the proposed solar farm. I note that compliance with fire safety regulations is a separate parallel regulatory requirement and is not within the remit of this assessment. Notwithstanding this, that the Fire Service Department of Meath County Council made a submission in respect of the proposal, dated 22 December 2022. The Fire Service Department had no objection to the development subject to conditions, which require fire brigade access to the development in accordance with Sub Sections 5.2 of the Technical Guidance Document B 2006 (reprint 2020) and pre-commencement contact with that department. Drawing from the above, I do not consider that the proposed development would constitute a fire risk or pose a risk to public safety.
- 7.8.7. **Insufficiency of Information Submitted:** The Appellants raised concerns in respect of the adequacy of the information submitted to the PA and the range of details to be agreed by condition. Having read and reviewed all documents and drawings submitted by the Applicant, I consider that the information provided is sufficient to facilitate an assessment of the development proposed. Technical details in respect of transformer/inverter/substation locations (condition 8 of the PA decision), mounting frames and solar panels (condition 9), fencing (condition 10), landscaping (condition 13), and sightlines (condition 14) are provided in the submitted documentation in sufficient detail to facilitate assessment by the competent authority and Third Parties, in my opinion. Under Conditions 3 and 24 of the PA decision, the final output of the development shall be agreed with the PA prior to the commencement of development. This requirement is derived from the Meath County Council S.48 Contribution Scheme 2024-2029, which applies development contributions on the basis of final energy output for renewable energy developments. I note that technical advances in solar power generation are continuing at pace, and I consider that the final output of the solar farm could be improved within the 10-year duration of the planning permission sought. To facilitate innovation and to apply the

Section 48 Contribution Scheme, I consider it appropriate that the final energy output is agreed closer to the time of construction.

7.8.8. **Lack of Guidance on Solar Farms:** The Appellants and Observers note the lack of national Guidance and strategic environmental assessment in respect of solar farm developments. I note that European and National Policies supports the expansion of renewable energy generation, as is summarised in Sections 5.1 and 5.2 of this report. Sections 6.15.3.1 'Solar Energy' and 11.8.2 'Solar Energy' of the Meath County Development Plan 2021-2027 outline the Council's stance in respect of supporting solar farms and provide development standards for solar farm developments. Drawing from the above, it is my opinion that sufficient guidance on solar farms and renewable energy generation is provided in the NPG, RSES and the Development Plan to facilitate the assessment of the proposed development with reference to the sustainable development of the area. In this regard, I do not consider that the lack of national guidelines on solar farm development precludes the Board from granting permission for the proposed development.

7.8.9. **Community Gain:** Sections 7.71 and 7.72 of the Planning Statement and Sections 2.194, 2.195 and 2.196 of the Applicant's Response to the Appeal indicates that the Applicant will have a community benefit fund, which will be separate from the Section 48 Development Contributions to be paid to Meath County Council. No further details of this proposed community fund are provided in the application documentation. I note that the PA decision does not include any condition in respect of a community fund and the Development Plan does not specify any requirement for the establishment of a community fund as part of solar energy installations. For clarity, I consider it appropriate that the Applicant provides further details of the proposed community fund in consultation and agreement with the PA. If the Board is minded to grant planning permission for the proposed development, I recommend that a condition is attached to require the Applicant to agree in writing with the PA details for the implementation of the proposed community benefit fund.

8.0 **Appropriate Assessment**

The proposed development is not connected with or necessary for the management of any European site. The Applicant submitted a Natura Impact Statement which identifies a zone of influence based on the source-receptor-pathway model and

outlines a detailed methodology for the assessment of potential impacts arising from the proposed development on a total of 7 no. Natura 2000 sites.

Screening for Appropriate Assessment and the Appropriate Assessment of the proposed development is in Appendix 3 of this report, and the determinations for both stages are in Sections 8.1 and 8.2 below. These assessments were undertaken with reference to the following:

- DoEHLG (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities: Guidance for Planning Authorities.
- EPA Maps (<https://gis.epa.ie/EPAMaps/default>). Accessed May 2024.
- EPA (2024) Update on pressures impacting on water quality – May 2024, accessed June 2024.
- European Commission (2002) Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EC
- European Commission (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC.
- European Communities (Conservation of Wild Birds (North Bull Island Special Protection Area 004006)) Regulations 2010. S.I. No. 211 Of 2010. Dublin, Stationery Office.
- European Communities (Conservation of Wild Birds (River Boyne And River Blackwater Special Protection Area 004232)) Regulations 2012, S.I. No. 462 of 2012. Dublin, Stationery Office.
- European Union Habitats (Rye Water Valley/Carton Special Area of Conservation 001398) Regulations 2018. S.I. No. 494 Of 2018. Dublin, Stationery Office.
- European Union Habitats (North Dublin Bay Special Area of Conservation 000206) Regulations 2019, S.I. No. 524 Of 2019. Dublin, Stationery Office.
- European Union Habitats (South Dublin Bay Special Area of Conservation 000210) Regulations 2019. S.I. No. 525 Of 2019. Dublin, Stationery Office.
- Inland Fisheries Ireland (2016) 'Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters'. Dublin, Inland Fisheries Ireland.

- Meath County Council (<https://www.eplanning.ie/MeathCC/searchtypes>). Accessed May 2023.
- National Planning Application Database (<https://www.myplan.ie/national-planning-application-map-viewer/>). Accessed May 2023.
- NPWS (2013) Conservation Objectives: North Dublin Bay SAC 000206. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2013) Conservation Objectives: South Dublin Bay SAC 000210. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2015) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2015) Conservation Objectives: North Bull Island SPA 004006. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2019). The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview. Unpublished NPWS report.
- NPWS (2019). The Status of EU Protected Habitats and Species in Ireland. Volume 2: Habitat Assessments. Unpublished NPWS report.
- NPWS (2019). The Status of EU Protected Habitats and Species in Ireland. Volume 3: Species Assessments. Unpublished NPWS report.
- NPWS (2021) Conservation Objectives: River Boyne and River Blackwater SAC 002299. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
- NPWS (2021) Conservation Objectives: Rye Water Valley/Carton SAC 001398. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

- NPWS (2022) Conservation objectives for River Boyne and River Blackwater SPA [004232]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.
- NPWS (2023) Conservation Objectives: North-west Irish Sea SPA 004236. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
- NRA (Year: Unknown) Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes. National Roads Authority St Martin's House, Waterloo Road, Dublin 4.

8.1. Screening Determination.

- 8.1.1. In accordance with Section 177U(4) of the Planning and Development Act 2000 (as amended) and on the basis of objective information
- 8.1.2. I conclude that the proposed development is likely to have a significant effect on Otter (*Lutra lutra*) in the River Boyne and River Blackwater SAC 'alone' in respect of effects associated with ex-situ species mortality/ disturbance.
- 8.1.3. It is therefore determined that Appropriate Assessment (stage 2) [under Section 177V of the Planning and Development Act 2000] is required on the basis of the effects of the project 'alone'.

8.2. Appropriate Assessment Determination.

- 8.2.1. 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 2000 as amended.
- 8.2.2. Having carried out screening for Appropriate Assessment of the project, it was concluded that the likelihood of significant effects on the Otter in the River Boyne and River Blackwater SAC could not be excluded. 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.
- 8.2.3. 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 River Boyne and River Blackwater SAC or any other European site, in view of the site's Conservation Objectives. This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.

9.0 Recommendation

Having regard to the foregoing, I recommend that permission be granted for the proposed development.

10.0 Reasons and Considerations

Having regard to;

- a) The nature, scale and extent of the proposed development.
- b) The national targets for renewable energy contribution to the overall national grid.
- c) The national, regional and local policy support for developing renewable energy, in particular:
 - i. Council Regulation (EU) 2024/223 and Regulation (EU) 2022/2577
 - ii. Climate Action Plan 2024
 - iii. Climate Action and Low Carbon Development (Amendment) Act 2021
 - iv. National Energy Security Framework (April 2022)
 - v. National Energy & Climate Action Plan 2021-2030
 - vi. Ireland's Draft Updated NECP 2021-2030 (Updated Version)
 - vii. National Planning Framework – Project Ireland 2040
 - viii. National Development Plan 2021-2030
 - ix. Eastern & Midland Regional Assembly Regional Spatial & Economic Strategy 2019-2031
 - x. Meath County Development Plan 2021-2027
- d) The relationship of the proposed development with the surrounding rural environment,

e) Measures proposed for the construction, operation and decommissioning of the development.

f) The submissions on the file, and

g) The documentation submitted with the application and appeal including the observations and responses submitted.

I consider that, subject to compliance with the conditions set out below, the proposed development would not have undue impacts on land use, would not have an unacceptable impact on the character of the landscape, would not seriously injure the visual and residential amenities of the area, would not lead to an increased risk of flooding within the site or adjoining lands, would be acceptable in terms of traffic safety and health, would not have an unacceptable impact on ecology or on any European Site, would not injure cultural or archaeological heritage on-site or in the vicinity, and would make a positive contribution to Ireland's requirements for renewable energy in accordance with national regional and local policy. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

11.0 Conditions

1.	<p>The development shall be carried out and completed in accordance with the plans and particulars lodged with the application as amended by particulars received by Meath County Council on 9 May 2023 and by An Bord Pleanála on 14 September 2023 except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.</p> <p>Reason: In the interest of clarity.</p>
2.	<p>The period during which the development hereby permitted may be carried out shall be 10 years from the date of this order.</p>

	<p>Reason: Having regard to the nature of the proposed development, the Board considered it reasonable and appropriate to specify a period of the permission in excess of five years.</p>
3.	<p>Prior to the commencement of development, the final mega-watt output of the development shall be agreed in writing with the Planning Authority.</p> <p>Reason: In the interest of clarity.</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 Decommissioning and Restoration Plan, including a timescale for its implementation, providing for the removal of the solar arrays, including all foundations, anchors, CCTV cameras, fencing and site access to a specific timescale, shall be submitted to, and agreed in writing with, the planning authority.</p> <p>Reason: To enable the planning authority to review the operation of the solar farm over the stated time period, having regard to the circumstances then prevailing, and in the interest of orderly development.</p>
5.	<p>This permission shall not be construed as any form of consent or agreement to a connection to the national grid or to the routing or nature of any such connection.</p> <p>Reason: In the interest of clarity.</p>
6.	<p>All of the environmental, construction, operation and decommissioning phase mitigation measures set out in the Natura Impact Statement, Landscape and Visual Impact Assessment, Ecological Appraisal, Flood Risk and Drainage Impact Assessment, Noise Impact Assessment, Glint and Glare Assessment, Outline Construction Environmental Management Plan 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. Where such measures require details to be agreed</p>

	<p>with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development.</p> <p>Reason: In the interest of clarity and the protection of the environment during the construction and operational phases of the development.</p>
7.	<p>a) A Construction Traffic Management Plan shall be submitted to the planning authority for written agreement prior to the commencement of development.</p> <p>b) All mitigation measures outlined in Technical Appendix 5: Construction Traffic Management Plan and in the Applicants Response to the Appeal submitted to ABP 14 September are to be implemented to include, inter-alia, the following:</p> <ul style="list-style-type: none"> • Road condition surveys 200 metres either side of Site Access 1 on the R125 and on the haulage route from Site Access 2 & 3 to 200 metres either side of the L-6205/R-156 junction. The Applicant will be liable to repair any damaged caused to the public road during the construction phase. • Management of traffic on the L-62061. • Phasing of development to ensure that construction works at Site 3 only commences when works to Site 2 have been completed. <p>Reason: In the interest of traffic safety.</p>
8.	<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. Such arrangements shall include the use of swale features designed in accordance with the CIRIA SuDS Manual C753 (2015).</p> <p>b) All works in, at or over the waterbodies at the site shall comply with the provisions of the Inland Fisheries Ireland (2016) Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters.</p> <p>c) Perimeter fencing shall not extend into waterbodies at the site. Prior to the commencement of development, the Applicant shall submit to the</p>

	<p>planning authority for written agreement a fencing plan containing details of fencing in the vicinity of waterbodies at the site.</p> <p>d) No construction works shall occur within 2-metres of field drains or waterbodies.</p> <p>Reason: In the interest of public health and environmental protection.</p>
9.	<p>a) Pollution prevention measures shall be employed at the site in accordance with best practice guidelines including CIRIA Control of Water Pollution from Construction Sites C532 (2001), and Environmental Good Practice on Site C811 (2023).</p> <p>b) The provisions of the NRA 'Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes' shall be implemented throughout the construction phase.</p> <p>Reason: In the interest of environmental protection.</p>
10.	<p>Landscaping shall be carried out in accordance with submitted details. Mature/semi-mature screening planting shall take place prior to development elsewhere at the site or in the first planting season, whichever is sooner.</p> <p>Reason: To mitigate visual impacts.</p>
11.	<p>Cables from the Solar Arrays within the site shall be located underground.</p> <p>Reason: In the interests of Health and Safety, and Visual Amenity</p>
12.	<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 and cowed to face into the site and shall not be directed towards adjoining property or the road.</p> <p>c) The power stations shall be dark green in colour and substations shall be finished in a neutral colour such as light-grey or off white and the roof shall be of black slate or tiles.</p> <p>Reason: In the interests of clarity, and of visual and residential amenity</p>
13.	<p>The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site in</p>

	<p>accordance with the submitted Archaeological and Architectural Heritage Impact Assessment. The developer shall:</p> <p>(a) Notify the planning authority in writing at least four weeks prior to the commencement of any site operation relating to the proposed development,</p> <p>(b) Engage the services of a suitably qualified archaeologist to undertake further archaeological assessment of areas of higher archaeological potential, as identified during previous geophysical assessment, including test trenching (under licence as per National Monuments Acts 1930-2004),</p> <p>(c) Having completed the work, the archaeologist should submit a written report to the Planning Authority and to the National Monuments Service of the Department of Housing, Local Government and Heritage in advance of the commencement of construction works. Where archaeological material are shown to be present, preservation in situ, preservation by record, or monitoring may be required.</p> <p>(d) Employ a suitably-qualified archaeologist to monitor all ground works at the site, including excavation for cable trenches and at substations.</p> <p>(e) Utilise floating concrete feet/ ballast foundations on solar array support structures in areas of identified archaeological potential.</p> <p>(f) Provide buffer and secure fencing around Recorded Monument ME04-026 and at the eastern side of Field 4 in Site 1 during the construction phase.</p> <p>Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.</p>
14.	<p>a) Site development and building works shall be carried out only between the hours of 0800 to 1800 Mondays to Fridays inclusive, between 0800 to 1400 hours on Saturdays and not at all on Sundays or public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.</p>

	<p>b) During the construction phase, noise shall accord with the relevant provisions and thresholds of BS5228.</p> <p>Reason: In order to safeguard the amenities of property in the vicinity.</p>
15.	<p>The construction of the development shall be managed in accordance with a Construction Management Environmental 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> <ul style="list-style-type: none"> • Details of the site and materials compound(s) including area(s) identified for the storage of construction refuse; • Details of areas for construction site offices and staff facilities; • Details of site security fencing and hoardings; • Details of on-site car parking facilities for site workers during the course of construction; • Details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site; • Measures to obviate queuing of construction traffic on the adjoining road network; • Measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network; • Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels; • Containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained. Such bunds shall be roofed to exclude rainwater; • Off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil; and

	<ul style="list-style-type: none"> 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>A record of daily checks that the works are being undertaken in accordance with the Construction Environmental Management Plan shall be kept for inspection by the planning authority.</p> <p>Reason: In the interest of amenities, public health and safety</p>
16.	<p>Prior to the commencement of development, details of the community gain proposals referred to in the Planning Statement and the Applicant's Response to the Appeal shall be submitted to and agreed in writing with the planning authority.</p> <p>Reason: In the interest of clarity.</p>
17.	<p>Hedgerow cutting, realignment and/or removal shall occur outside of the period March 1st to August 31st.</p> <p>Reason: In the interest of protecting nesting birds.</p>
18.	<p>Prior to commencement of development, the developer shall lodge with Meath County Council 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>Reason: To ensure satisfactory reinstatement of the site</p>
19.	<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</p>

	<p>planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.</p> <p>Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.</p>
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I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.



Sinéad O'Connor
Planning Inspector
21 June 2024

Appendix 1 - Form 1

EIA Pre-Screening

[EIAR not submitted]

An Bord Pleanála Case Reference	317822-23		
Proposed Development Summary	Solar PV energy development		
Development Address	Culmullin, Curraghtown, Cultromer, Gaulstown, Bogganstown, Cullendragh, Drumree, Co. Meath		
1. Does the proposed development come within the definition of a 'project' for the purposes of EIA? (that is involving construction works, demolition, or interventions in the natural surroundings)		Yes	X
		No	No further action required
2. Is the proposed development of a class specified in Part 1 or Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) and does it equal or exceed any relevant quantity, area or limit where specified for that class?			
Yes	-	Class.....	EIA Mandatory EIAR required
No	X	<p>From the drawings and documents submitted, the proposed development falls substantially below the thresholds for rural restructuring under Part A and B of Schedule 1 of the Environmental Impact Assessment (Agriculture) Regulations 2011 in respect of field boundary removal. I note that recontouring of the site is not proposed.</p> <p>Owing to their limited width, informal construction, and temporary nature, I do not consider that the proposed internal tracks at the subject site constitute a private road for the purposes of Part 10 'Infrastructure Projects' of Part 2 of the Fifth Schedule of the Planning and Development Regulations 2001, as amended.</p>	Proceed to Q.3
3. Is the proposed development of a class specified in Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) but does not equal or exceed a relevant quantity, area or other limit specified [sub-threshold development]?			
	Threshold	Comment	Conclusion

			(if relevant)	
No	X	N/A	Schedule 7A information submitted. Proceed to Q.4	No EIAR or Preliminary Examination required
Yes	-			Proceed to Q.4

4. Has Schedule 7A information been submitted?		
No	-	Preliminary Examination required
Yes	X	Screening Determination required

Inspector: Sinead O'Garra

Date: 30 April 2024

Appendix 2 – EIA Screening Determination.

A. CASE DETAILS		
An Bord Pleanála Case Reference	Solar PV energy development	
Development Summary	Culmullin, Curraghtown, Cultromer, Gaulstown, Bogganstown, Cullendragh, Drumree, Co. Meath	
	Yes / No / N/A	Comment (if relevant)
1. Was a Screening Determination carried out by the PA?	Yes	EIA not required.
2. Has Schedule 7A information been submitted?	Yes	Table 2: ‘Assessment of Effects of Proposed Development’ of Environmental Impact Assessment Screening dated 03 November 2022 submitted to the PA.
3. Has an AA screening report or NIS been submitted?	Yes	Natura Impact Statement dated 03 November 2022 submitted to the PA. The application documentation includes an Ecological Appraisal dated 23 September 2022 and a Biodiversity Management Plan dated 23 September 2022, both submitted to the PA.
5. Have any other relevant assessments of the effects on the environment which have a significant bearing on the project been carried out pursuant to other relevant Directives – for example SEA	Yes	The Meath County Development Plan 2021-2027 supports the development of renewable energy sources. This Plan has been the subject of Strategic Environmental Assessment (SEA).

B. EXAMINATION	Where relevant, briefly describe the characteristics of impacts (ie the nature and extent) and any Mitigation Measures proposed to avoid or prevent a significant effect (having regard to the probability, magnitude (including population size affected), complexity, duration, frequency, intensity, and reversibility of impact)	Is this likely to result in significant effects on the environment? Yes/ No/ Uncertain
1. Characteristics of proposed development (including demolition, construction, operation, or decommissioning)		
1.1 Is the project significantly different in character or scale to the existing surrounding or environment?	The site comprises 42 no. fields that are predominantly in agricultural use. Field boundaries largely comprise mature hedgerow. The proposed solar farm would change character of the site, through the provision of solar arrays and ancillary works. I note that ground levels will remain unchanged, and the structure of the site will be retained through the maintenance and reinforcement of hedgerows. The existing fields will be seeded with grass mix to improve species diversity and these areas will be used for sheep grazing. Screening at the site will ensure no significant landscape or visual amenity impacts arise. I consider that the impact on the site will be moderate and not significant.	No

<p>1.2 Will construction, operation, decommissioning or demolition works causing physical changes to the locality (topography, land use, waterbodies)?</p>	<p>I consider that changes arising from the development are largely contained within the site itself, and do not significantly impact on the surrounding areas.</p> <p>The proposed development does not require field restructuring or recontouring works. Ground works are minimal with reference to the size of the site and comprise piling or ballast foundations for solar panel frames, cable channels (circa 1 metre deep and 1 metre wide), internal tracks, and construction of power stations and substations. The topography of the site will remain largely unchanged. No changes to watercourses are proposed. The land use of the site will change from predominantly agricultural to predominantly solar energy generation, though it is noted that sheep grazing of the site will occur throughout the operational phase. Post-decommissioning, the land use will return to agricultural use.</p>	<p>No</p>
<p>1.3 Will construction or operation of the project use natural resources such as land, soil, water, materials/minerals or energy, especially resources which are non-renewable or in short supply?</p>	<p>Construction materials will be typical for a solar farm of this scale. Due to the nature of proposed groundworks, minimal cut or fill material will arise. Soils remaining after backfilling of cable trenches will be utilised on-site for screening berms. The proposed development will contribute to renewable energy generation.</p>	<p>No</p>

<p>1.4 Will the project involve the use, storage, transport, handling or production of substance which would be harmful to human health or the environment?</p>	<p>Construction activities will require the use of potentially harmful materials including fuels and other such substances, which is typical of construction sites. Any impacts arising from accidental spillage would be local and temporary in nature. I consider that the implementation of the standard construction practice measures, as per the Outlined Construction Environmental Management Plan dated 22 September 2022, would mitigate against significant likely impacts.</p>	<p>No</p>
<p>1.5 Will the project produce solid waste, release pollutants or any hazardous / toxic / noxious substances?</p>	<p>Typical construction phase waste would arise including waste fuel or materials. Noise and dust emissions would occur. These impacts will be temporary in nature, circa 12 months, and the implementation of best practice construction methodology will mitigate against significant impacts. Owing to the nature of the project, operational wastes would be minimal. As per the documentation submitted, post decommissioning the solar PV panels will be recycled in line with waste management requirements.</p>	<p>No</p>
<p>1.6 Will the project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?</p>	<p>Application of the standard measures listed in the Outline Construction Environmental Management Plan will satisfactorily mitigate emissions from spillages or silt density during the construction phase. During the operational phase, SUDS features will prevent pollution of waterbodies or ground water.</p>	<p>No</p>

<p>1.7 Will the project cause noise and vibration or release of light, heat, energy or electromagnetic radiation?</p>	<p>During the construction phase noise and vibration impacts are likely to arise, particularly at residential properties closest to the site. These impacts will be short term in duration and will change as development progresses across the site. Lighting of the site during the construction phase is not proposed. Motion sensor lighting associated with proposed CCTV function on infrared and will not emit light. Solar farms are not associated with heat or electromagnetic radiation impacts.</p>	<p>No</p>
<p>1.8 Will there be any risks to human health, for example due to water contamination or air pollution?</p>	<p>Construction activity is likely to give rise to dust emissions and potential for water contamination arises from fuels and materials. Such construction impacts would be temporary and localised in nature and the application of standard measures within the Outline Construction Environmental Management Plan would satisfactorily address potential risks on human health. No operational impacts arise.</p>	<p>No</p>
<p>1.9 Will there be any risk of major accidents that could affect human health or the environment?</p>	<p>2.3% of the site is stated to be located in Flood Zone A and B. The remainder of the site is in Flood Zone C. As per the submitted Flood Risk and Drainage Impact Assessment, modelled flood levels in Flood Zones A & B are circa 0.5 metres or less. Proposed panel heights in Flood Zone A and B are set 0.30 metres above predicted flood levels. During the operational phase people will only visit the site periodically.</p>	<p>No</p>

<p>1.10 Will the project affect the social environment (population, employment)</p>	<p>The Socio Economic Assessment submitted to the PA concludes that negative social impacts will not arise. I agree with these findings. I note that the proposed development will take the area of the site out of farming for the duration of its life-cycle. Once the development is decommissioned the site will go back to agricultural use. The area of the sites is rented from the 8 no. landowners, which will supplement their income and indirectly support local businesses. The site comprises private land and, therefore, the proposed development will not impact on the availability of public open spaces or community areas in the locality.</p>	<p>No</p>
<p>1.11 Is the project part of a wider large-scale change that could result in cumulative effects on the environment?</p>	<p>There are 2 no. solar farms within a 5 km radius of the site. These solar farms have been assessed on their merits in respect of the sustainable development of the area, and I do not consider that cumulative effects on the environment arise.</p>	<p>No</p>
<p>2. Location of proposed development</p>		
<p>2.1 Is the proposed development located on, in, adjoining or have the potential to impact on any of the following:</p> <ul style="list-style-type: none"> a) European site (SAC/ SPA/ pSAC/ pSPA) b) NHA/ pNHA c) Designated Nature Reserve d) Designated refuge for flora or fauna e) Place, site or feature of ecological interest, the preservation/conservation/ protection of 	<p>The nearest European sites are listed in Section 5.4 of this report. An NIS was submitted with the application, and I have undertaken Appropriate Assessment of the proposed works. See Appendix 3 of this Report.</p> <p>No impacts on Natura Sites or their QI (species or habitats), or on designated sites arise.</p>	<p>No</p>

which is an objective of a development plan/ LAP/ draft plan or variation of a plan		
<p>2.2 Could any protected, important or sensitive species of flora or fauna which use areas on or around the site, for example: for breeding, nesting, foraging, resting, over-wintering, or migration, be significantly affected by the project?</p>	<p>Protected habitats were not identified at the site.</p> <p>The Ecological Appraisal submitted to the PA found evidence of fox, badgers and suitable habitat for bats, otters and frogs.</p> <p>Mitigation measures including pre-commencement surveys for birds, badgers and otters, and Preliminary Roost Assessment of trees to be removed will inform mitigation measures at the site including the locations of mammal gates and enclosure of excavation areas during construction. Hedgerow and tree removal at the site is limited to 110.9 metres, as per the drawings and documents submitted. Remaining hedgerows will be retained, protected, and infilled. Works to hedgerows specified in the Application Documentation will occur outside of the period 01 March to 31 August.</p> <p>The proposed development would not result in significant impacts to any protected sites, including those downstream.</p>	<p>No</p>
<p>2.3 Are there any other features of landscape, historic, archaeological, or cultural importance that could be affected?</p>	<p>The site is located proximate to 6 no. Recorded Monuments. Implementation of identified standard construction phase measures, including fencing and buffers, will prevent direct and indirect impacts on known archaeological features. Surveys undertaken at the site and described in the Archaeology and</p>	<p>No</p>

	Architectural Heritage Impact Assessment identified areas of high archaeological potential. Ballast foundations will be used in these locations to protect archaeological remains.	
2.4 Are there any areas on/around the location which contain important, high quality or scarce resources which could be affected by the project, for example: forestry, agriculture, water/coastal, fisheries, minerals?	The subject site comprises agricultural land that is typical in this part of County Meath and is not a scarce landscape typology at a local or national level.	No
2.5 Are there any water resources including surface waters, for example: rivers, lakes/ponds, coastal or groundwaters which could be affected by the project, particularly in terms of their volume and flood risk?	SUDs features will be implemented at the site to prevent surface water impacts or impacts on existing waterbodies. As per submitted documentation, 2.3% of the site is designated Flood Zone A & B. With reference to the predicted flood levels, I do not consider that significant flooding risks arise.	No
2.6 Is the location susceptible to subsidence, landslides or erosion?	No	No
2.7 Are there any key transport routes (eg. National primary Roads) on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected by the project?	No. Traffic impacts are limited to local roads, and these impacts are short term in duration and are not significant. The proposed haulage route starts/ends at Junction 6 of the M3 and travels on 2 no. Regional Roads (R.125 and R156). Owing to the scale of predicted construction traffic with reference to existing traffic levels on the regional roads and the M3, I do not consider that significant impacts on congestion will arise.	No

<p>2.8 Are there existing sensitive land uses or community facilities (such as hospitals, schools etc) which could be significantly affected by the project?</p>	<p>No. Culmullen National School is on the R125, which forms part of the proposed haulage route. The submitted documentation indicates that construction level traffic will have a negligible impact on traffic levels on the R125. With reference to submitted traffic information and the temporary nature of the construction phase, I do not consider that Culmullen National School will be significantly affected by the project.</p>	<p>No</p>
<p>3. Any other factors that should be considered which could lead to environmental impacts</p>		
<p>3.1 Cumulative Effects: Could this project together with existing and/or approved development result in cumulative effects during the construction/ operation phase?</p>	<p>Surrounding development was found to have no significant environmental impacts. The proposed development will not have significant environmental impacts. No potential residual impacts arise that would give rise to significant cumulative environmental effects with the subject project.</p>	<p>No</p>
<p>3.2 Transboundary Effects: Is the project likely to lead to transboundary effects?</p>	<p>No</p>	<p>No</p>
<p>3.3 Are there any other relevant considerations?</p>	<p>No</p>	<p>No</p>
<p>C. CONCLUSION</p>		
<p>No real likelihood of significant effects on the environment.</p>	<p>Agreed</p>	<p>ElAR Not Required</p>
<p>Real likelihood of significant effects on the environment.</p>	<p>-</p>	<p>-</p>

D. MAIN REASONS AND CONSIDERATIONS

Having regard to

- the nature and scale of the proposed development, which is below the threshold in respect of classes 10(b)(i), 10(b)(iv) and 14 of Part 2 to Schedule 5 of the Planning and Development Regulations 2001, as amended;
- the location of the proposed solar farm on agricultural land with established field boundaries;
- the nature of the existing site and the pattern of development in the surrounding area;
- the location of the development outside of any sensitive location specified in Article 299(C)(1)(a)(v) of the Planning and Development Regulations 2001, as revised;
- the criteria set out in Schedule 7 of the Planning and Development Regulations 2001, as amended, and;
- the features and measures proposed by the applicant that are envisaged to avoid or prevent what might otherwise be significant effects on the environment, including measures identified to be provided as part of the project Landscape and Visual Impact Assessment, Ecological Appraisal, Biodiversity Management Plan, Flood Risk and Drainage Impact Assessment, Outline Construction Environmental Management Plan, and the Archaeological and Architectural Heritage Impact Statement.

It is considered that the proposed development would not be likely to have significant effects on the environment and that the preparation and submission of an environmental impact assessment report would not, therefore, be required.

Inspector: Sinead O'Gara

Date: 31 May 2024

Approved (DP/ADP) _____

Date _____

Appendix 3 – Appropriate Assessment

Screening for Appropriate Assessment Screening Determination

Step 1: Description of the project

I have considered the proposed solar farm on a site of 171 ha at Culmullin, Curraghtown, Cultomer, Gaulstown, Bogganstown, Cullendragh, Drumree, Co. Meath in light of the requirements of S177U of the Planning and Development Act 2000 as amended.

The subject site is located 6 km north of the Rye Water Valley/Carton SAC (Site Code: 001398) and 11.5 km south of the River Boyne and River Blackwater SAC (Site Code: 002299) and the River Boyne and River Blackwater SPA (Site Code: 004232).

North Dublin Bay SAC (Site Code: 000206), South Dublin Bay SAC (Site Code: 000210), South Dublin Bay and River Tolka Estuary SPA (Site Code: 004024), North Bull Island SPA (Site Code: 004006) and the North-West Irish Sea SPA (Site Code: 004236) are in excess of 25 km east of the site. These sites at Dublin Bay are hydrologically linked to the subject site via the Blackhall Little waterbody feeding into the River Liffey, and the Moyleggan and Dunboyne Streams feeding into the Tolka.

The proposed development comprises a solar PV farm and ancillary cabling, internal tracks, perimeter fencing, CCTV and infra-red lighting, power stations, client substations, and landscaping works.

Step 2: Potential impact mechanisms from the project

The subject site is not within or directly adjacent to any Natura 2000 site. In this way, direct habitat loss or disturbance of flora as a result of the proposed development would not arise.

Direct impacts may arise as a result of disturbance or mortality of mobile fauna. During the construction and decommissioning phases of the development, it is possible for ex-situ fauna disturbance or mortality to occur at the subject site.

Indirect impacts may occur as a result of hydrological connections between the subject site and Natura 2000 sites. The subject site is located upstream of the Rye Water Valley/Carton SAC and has a hydrological connection to this SAC via the Blackhall Little waterbody that traverses Site 3. The River Rye is a tributary of the River Liffey. The Moyleggan waterbody at Site 1 and the Hayestown and Dunboyne Stream at Site 2 are upstream of the Tolka River and provide a hydrological connection to this river system. The River Liffey and Tolka River ultimately flow into Dublin Bay, and the Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA and the North-West Irish Sea SPA. Surface water pollution during the construction and

decommissioning phases, including contamination from silt, hydrocarbons, sewage and cement, have potential to impact QI species (flora and fauna).

The potential direct and indirect impacts discussed above occur during the construction and decommissioning phases, which are each 12 months in duration. Owing to their limited duration, I consider these impacts are temporary in nature.

As per Table 5-1 of the NIS and from the review of EPA and NPWS data, I do not consider that a hydrological or overland connection occurs between the subject site and the River Boyne and Blackwater SPA. Owing to the lack of connectivity to the River Boyne and River Blackwater SPA and the distance to the subject site and the QI species for the site, I have screened out this site from further assessment.

Step 3: European Sites at risk

Table 1 European Sites at risk from impacts of the proposed project [example]

Effect mechanism	Impact pathway/Zone of influence	European Sites	Qualifying interest features at risk
Water Pollution/ Contamination	Hydrological Connection – Via Blackhall Little waterbody.	Rye Water Valley/Carton SAC	Petrifying springs with tufa formation (Cratoneurion) [7220] Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]
Species Disturbance or Mortality.	Ecological Connection – Within Range of Otter in the SAC.	River Boyne and River Blackwater SAC	Lutra lutra (Otter) [1355]
Water Pollution/ Contamination	Hydrological Connection – Via Tolka River and River Liffey from on-site waterbodies	North Dublin Bay SAC	Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glaucopuccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410]

			<p>Embryonic shifting dunes [2110]</p> <p>Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]</p> <p>Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]</p> <p>Humid dune slacks [2190]</p> <p><i>Petalophyllum ralfsii</i> (Petalwort) [1395]</p>
Water Pollution/ Contamination	Hydrological Connection – Via Tolka River and River Liffey from on-site waterbodies	South Dublin Bay SAC	<p>Mudflats and sandflats not covered by seawater at low tide [1140]</p> <p>Annual vegetation of drift lines [1210]</p> <p><i>Salicornia</i> and other annuals colonising mud and sand [1310]</p> <p>Embryonic shifting dunes [2110]</p>
Water Pollution/ Contamination	Hydrological Connection – Via Tolka River and River Liffey from on-site waterbodies	South Dublin Bay and River Tolka Estuary SPA	<p>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]</p> <p>Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</p> <p>Ringed Plover (<i>Charadrius hiaticula</i>) [A137]</p> <p>Grey Plover (<i>Pluvialis squatarola</i>) [A141]</p> <p>Knot (<i>Calidris canutus</i>) [A143]</p> <p>Sanderling (<i>Calidris alba</i>) [A144]</p> <p>Dunlin (<i>Calidris alpina</i>) [A149]</p> <p>Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</p> <p>Redshank (<i>Tringa totanus</i>) [A162]</p> <p>Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</p>

			<p>Roseate Tern (<i>Sterna dougallii</i>) [A192]</p> <p>Common Tern (<i>Sterna hirundo</i>) [A193]</p> <p>Arctic Tern (<i>Sterna paradisaea</i>) [A194]</p> <p>Wetland and Waterbirds [A999]</p>
Water Pollution/ Contamination	Hydrological Connection – Via Tolka River and River Liffey from on-site waterbodies	North Bull Island SPA	<p>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]</p> <p>Shelduck (<i>Tadorna tadorna</i>) [A048]</p> <p>Teal (<i>Anas crecca</i>) [A052]</p> <p>Pintail (<i>Anas acuta</i>) [A054]</p> <p>Shoveler (<i>Anas clypeata</i>) [A056]</p> <p>Oystercatcher (<i>Haematopus strategus</i>) [A130]</p> <p>Golden Plover (<i>Pluvialis apricaria</i>) [A140]</p> <p>Grey Plover (<i>Pluvialis squatarola</i>) [A141]</p> <p>Knot (<i>Calidris canutus</i>) [A143]</p> <p>Sanderling (<i>Calidris alba</i>) [A144]</p> <p>Dunlin (<i>Calidris alpina</i>) [A149]</p> <p>Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</p> <p>Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</p> <p>Curlew (<i>Numenius arquata</i>) [A160]</p> <p>Redshank (<i>Tringa totanus</i>) [A162]</p> <p>Turnstone (<i>Arenaria interpres</i>) [A169]</p> <p>Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</p> <p>Wetland and Waterbirds [A999]</p>

Water Pollution/ Contamination	Hydrological Connection – Via Tolka River and River Liffey from on-site waterbodies	North-West Irish Sea SPA	Red-throated Diver (<i>Gavia stellata</i>) [A001] Great Northern Diver (<i>Gavia immer</i>) [A003] Fulmar (<i>Fulmarus glacialis</i>) [A009] Manx Shearwater (<i>Puffinus puffinus</i>) [A013] Cormorant (<i>Phalacrocorax carbo</i>) [A017] Shag (<i>Phalacrocorax aristotelis</i>) [A018] Common Scoter (<i>Melanitta nigra</i>) [A065] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Common Gull (<i>Larus canus</i>) [A182] Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183] Herring Gull (<i>Larus argentatus</i>) [A184] Great Black-backed Gull (<i>Larus marinus</i>) [A187] Kittiwake (<i>Rissa tridactyla</i>) [A188] Roseate Tern (<i>Sterna dougallii</i>) [A192] Common Tern (<i>Sterna hirundo</i>) [A193] Arctic Tern (<i>Sterna paradisaea</i>) [A194] Little Tern (<i>Sterna albifrons</i>) [A195] Guillemot (<i>Uria aalge</i>) [A199] Razorbill (<i>Alca torda</i>) [A200] Puffin (<i>Fratercula arctica</i>) [A204] Little Gull (<i>Hydrocoloeus minutus</i>) [A862]
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Rye Water Valley/Cartron SAC: The Petrifying springs with tufa formation (Cratoneurion) habitat is located at Louisa Bridge in the west of Leixlip, circa 10.5 km from the subject site. The area of this habitat is estimated at 1,250 m². Narrow-mouthed Whorl Snail and Desmoulin's Whorl Snail were found in 1 no. 1km grid square in the SAC, proximate to Louisa Bridge.

River Boyne and River Blackwater SAC: The full extent of the Alkaline Fen habitat in this SAC are not mapped though the main areas are said to occur at Lough Shesk, Freekan Lough, Newtown Lough in the upper reaches of the Stonyford River, circa 35 km northwest of the subject site. Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) occur an area of circa 16.7 ha and are located west of Drogheda, circa 30 km north of the subject site. Owing to the separation distance between these habitats and the subject site, and the lack of hydrological or ecological connection, I do not consider that significant negative impacts will on these habitats will arise. I note that there is no hydrological connection between the subject site and the River Boyne and River Blackwater SAC therefore, impacts on River Lamprey and Salmon will not arise. Otter are found along the full extent of the SAC, from estuary to headwaters. This is a highly mobile species and it is noted in the submitted Ecological Assessment that suitable habitat for otter occurs at the ditches and waterbodies on the subject site. Owing to this potential connection, I have screening Otter into this assessment.

North Dublin Bay SAC: The Mudflats and sandflats not covered by seawater at low tide is the largest habitat in the SAC and is stated to be circa 578 ha in extent. The extent Annual vegetation of drift lines is not mapped in NPWS documents but is recorded at both North Bull and South Bull sub-sites. *Salicornia* and other annuals colonising mud and sand were found to occupy an area of circa 29 ha, with the largest area of *Salicornia* flats occurs north of the central causeway. Atlantic salt meadows (*Glaucopuccinellietalia maritima*) occupy an area of circa 81.5 ha and are located on the western side of both North and South Bull. Mediterranean salt meadows (*Juncetalia maritimi*) have an estimated area of 7.89 ha and 2007 surveys recorded this habitat north of the causeway, at the boundary with dune habitats and St. Anne's Golf Course. Embryonic shifting dunes are dynamic in nature and are estimated to occupy an area of 6 ha. This habitat is predominantly located at the North Bull sub-site. Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) are similarly dynamic and are estimated to cover an area of circa 3 ha. This habitat forms a continuous strip at or near the seaward edge of the dunes. Fixed coastal dunes with herbaceous vegetation (grey dunes) have a habitat extent of circa 105 ha. Humid dune slacks occur on North Bull and South Bull and have an extent of circa 12 ha. Petalwort (*Petalophyllum ralfsii*) is located along the circa 741 metres long track south east of St. Anne's Golf Club.

South Dublin Bay SAC: Mudflats and sandflats not covered by seawater at low tide occupy an area of circa 720 ha and is dominant throughout this SAC.

South Dublin Bay and River Tolka Estuary SPA: This SPA is designated for 13 no. bird species and the Wetland and Waterbirds [A999] habitat. This habitat is estimated to be 2,192 ha in extent. The NPWS documents note that Grey Plover (*Pluvialis Squatarola*) is proposed to be removed from the list of Special

Conservation Interests for this SPA. Surveys undertaken between 1995 and 2000 found internationally important populations of Light Bellied Brent Goose, and nationally important numbers of Oystercatcher, Ringed Plover, Grey Plover, Knot, Sanderling, Dunlin, Bar-tailed Godwit, Redshank Black-headed Gull, Common Gull and Herring Gull. Other species noted include Great Crested Grebe, Curlew and Turnstone. The site hosts a nationally important population of Common Tern, and it is an internationally important passage/staging site for Roseate Tern, Common Tern and Arctic Tern.

North Bull Island SPA: This SPA is designated for 17 no. bird species and 1 no. Wetlands habitat. The Wetland habitat is estimated at circa 1,713 ha. The site supports internationally important populations of Light-bellied Brent Goose, Black-tailed Godwit and Bar-tailed Godwit, and nationally important populations of Shelduck, Teal, Pintail, Shoveler, Oystercatcher, Grey Plover, Golden Plover, Knot, Sanderling, Dunlin, Curlew, Redshank, Turnstone and Black-headed Gull.

North-West Irish Sea SPA: I note that the submitted NIS makes no reference to North-West Irish Sea SPA. For completeness, I have included the North-West Irish Sea SPA in this assessment. This SPA is listed for 21 no. bird species. Surveys in 2016 estimated 120,232 marine birds in Autumn and 34,625 marine birds during that winter. The SPA supports internationally important populations of Manx Shearwater, Great Northern Diver and Common Scooter.

Step 4: Likely significant effects on the European site(s) 'alone'

The submitted Ecological Appraisal includes details of desktop and field surveys undertaken at the site. During the field surveys undertaken 25th, 26th, 28th and 29th April 2022 and 6th May 2022, no QI habitats or species were identified at the subject site.

The Rye Water Valley/Carnton SAC has 3 no. conservation objectives.

- To restore the favourable conservation condition of petrifying springs with tufa formation (Cratoneurion),
- To restore the favourable conservation condition of Narrow-mouthed Whorl Snail (*Vertigo angustior*), and
- To maintain the favourable conservation condition of Desmoulin's Whorl Snail (*Vertigo moulinsiana*).

High Importance pressures or threats to the Petrifying Springs with Tufa Formation habitat type include “*Mixed source pollution to surface and ground waters (limnic and terrestrial)*”. Owing to the hydrological link to the subject site, indirect impacts on this habitat may occur due to water pollution or contamination during the construction phase of development. The EPA ‘Update on Pressures Impacting on Water Quality’ published 2024 indicates that the Blackhall Little waterbody (Ref. IE_EA_09R010400 had poor status from 2016 to 2021 and is at risk of not reaching ‘Good’ status, as required under the Water Framework Directive. This more recent publication notes significant issues in respect of morphology and nutrients, and significant pressures in respect of domestic wastewater treatment, agriculture and physical habitat modification. The proposed development does not include wastewater treatment, will reduce agricultural run-off due to the proposed change of land use, and will not modify the hydro morphology of on-site

waterbodies. In this way, I do not consider that the proposed development will contribute to established threats and pressures at this waterbody or inhibit the waterbody from reaching a 'good' status. I consider that standard practice construction methodology in respect of surface water management outlined in Sections 8.75-8.84, and Table 8-5 of the Outline Construction Environmental Management Plan will prevent significant impacts on water quality in the Blackhall Little waterbody. I am satisfied that these are standard site measures and are not designed or aimed at avoiding or mitigating likely significant impacts on any Natura 2000 sites. Owing to the distance of the site from the SAC and the dilution factor provided by the River Rye, I do not consider that the proposed development would prejudice the Conservation Objective to Restore Petrifying Springs with Tufa Formation habitat within this SAC.

Pressures and Threats to Narrow-mouthed Whorl Snail (*Vertigo angustior*) include changes to grassland management and recreation. The proposed solar farm development will not alter the management of the Rye Water Valley/Cartron SAC in respect of grazing/mowing or recreational activities and, therefore, significant impacts on Narrow-mouthed Whorl Snail as a result of the proposed development are not anticipated. Pressures and Threats to Desmoulin's Whorl Snail (*Vertigo moulinsiana*) include natural succession leading to species composition changes and natural habitat changes. Owing to its distance from the SAC, the proposed solar farm will not alter species composition or habitat structure at the site.

The River Boyne and River Blackwater SAC has 5 no. conservation objectives.

- To maintain the favourable conservation condition of Alkaline fens,
- To restore the favourable conservation condition of Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*),
- To restore the favourable conservation condition of River Lamprey (*Lampetra fluviatilis*),
- To restore the favourable conservation condition of Atlantic Salmon (*Salmo salar*),
- To maintain the favourable conservation condition of Otter (*Lutra lutra*)

'High Importance' pressures and threats to Alkaline Fens include changes to management, drainage and changes to hydrological flow. Mixed source pollution is listed as a 'Medium Importance' pressure and threat. 'High Importance' pressures and threats to River Lamprey relate to blockages in the waterbody and changes in precipitation. Pollution by fertilizers is listed as a 'Medium Importance' pressure and threat. 'High Importance' pressure and threats to Atlantic Salmon include diffuse pollution of ground and surface waters, mixed source pollution, and alteration to the waterbody. Given the lack of hydrological connection between the subject site and the River Boyne and River Blackwater SAC, I do not consider that likely significant impacts on these QI habitats and species arise. Pressures and threats to Alluvial forests are invasive species, problematic native species and removal of all trees. Owing to the distance between the subject site and this SAC, impacts on the Alluvial forest will not occur. The NPWS (2019) 'The Status of EU Protected Habitats and Species in Ireland' does not list pressures or threats to Otter. It is noted that the medium threat arises from Otter mortality on roads however, these incidents have local impacts only. The Ecological Appraisal submitted with the application notes suitable habitat for Otter at the subject site. Section 5.6 of the submitted NIS outlines that Otter can hold territories of up to 20km, which brings the subject site into range for Otters associated with the SAC. During the

construction and decommissioning phases of the development, it is possible for Otter disturbance or mortality to occur at the subject site. In addition, I consider that pollution of waterbodies at the site during the construction phase could decrease prey species available to Otters. Owing to the retention of streams and hedgerows and the static nature of the proposed solar panels, I do not consider that likely significant direct impacts on Otters occur during the operational phase of the development.

There is significant overlap between the Natura 2000 sites located within and proximate to Dublin Bay comprising: North Dublin Bay SAC (Site Code: 000206), South Dublin Bay SAC (Site Code: 000210), South Dublin Bay and River Tolka Estuary SPA (Site Code: 004024), North Bull Island SPA (Site Code: 004006) and the North-West Irish Sea SPA (Site Code: 004236). I note that the field surveys undertaken at the subject site found no QI habitats or species associated with these Natura 2000 sites. Drawing from the above, I consider that the subject site is not an ex-situ location for QI species. Owing to the distance between the subject site and Dublin Bay, the dilution factor provided by the River Tolka and the River Liffey and the size of these river catchments, and the findings of site surveys, I do not consider that the proposed development would have likely significant impacts on the QI (habitats and Species) at North Dublin Bay SAC, South Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, and North-West Irish Sea SPA. On the basis of the foregoing, I have not assessed these sites further.

Table 2: Could the project undermine the conservation objectives ‘alone’

European Site and qualifying feature	Conservation objective	Could the conservation objectives be undermined (Y/N)?	
		Water Pollution or Siltation	Ex-Situ Disturbance/ Mortality
River Boyne and River Blackwater SAC - Otter (Lutra lutra)	To maintain the favourable conservation condition of Otter (Lutra lutra)	N – No Hydrological Connection.	Y – Direct disturbance/ mortality

Drawing from the above, I cannot exclude the likelihood of significant negative effects of the project ‘alone’ on Otter (Lutra lutra) in the River Boyne and River Blackwater SAC. An appropriate assessment is required on the basis of the effects of the project ‘alone’. Further assessment in-combination with other plans and projects is not required at this time. **Proceed to AA.**

With reference to the magnitude of potential impact on Otter from the River Boyne and River Blackwater SAC, I note that the NPWS (2019) species assessment document notes that species mortality on roads is not considered to pose a threat to the conservation status of the species nationally. In this way, I consider that potential disturbance or mortality of Otter at the subject site during the construction phase would have local impacts only.

Overall Conclusion- Screening Determination

In accordance with Section 177U(4) of the Planning and Development Act 2000 (as amended) and on the basis of objective information

I conclude that the proposed development is likely to have a significant effect on Otter (*Lutra lutra*) in the River Boyne and River Blackwater SAC 'alone' in respect of effects associated with ex-situ species mortality/ disturbance.

It is therefore determined that Appropriate Assessment (stage 2) [under Section 177V of the Planning and Development Act 2000] is required on the basis of the effects of the project 'alone'.

Appropriate Assessment

Appropriate Assessment:

Having reviewed the NIS and application documentation submitted by the applicant, I am satisfied that the information allows for a complete assessment of any adverse effects of the development, on the conservation objectives of the following European sites alone, or in combination with other plans and projects.

Mitigation Measures:

Table 3. below lists the site-specific mitigation measures required in respect of the effect listed in Table 2 above. These mitigation measures are drawn from the Chapter 7 of the NIS, Sections 8.40, 8.48-8.116 of the Outline Construction Environmental Management Plan, and Sections 2.103, 2.104, 2.105 and 2.115 of the Ecological Appraisal submitted by the applicant.

In addition to the above, I consider it appropriate that specific measures in respect of watercourse crossings and buffers from active otter holts in line with IFI (2016) 'Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters' the NRA 'Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes' are included as mitigation measures during the construction phase of development.

Table 3. Mitigation Measures

European Site and qualifying feature	Effect	Mitigation Measures
Otter (<i>Lutra lutra</i>)	Ex-situ mortality/ Disturbance.	Pre-commencement otter survey within 48 hrs of construction.
Otter (<i>Lutra lutra</i>)	Ex-situ mortality/ Disturbance.	Use of pre-commencement otter survey to identify suitable

		locations for mammal gates.
Otter (Lutra lutra)	Ex-situ mortality/ Disturbance.	All excavations to be securely covered, or a suitable means of escape provided (ramp at 45 degrees) at the end of each working day to prevent accidental trapping of otter.
Otter (Lutra lutra)	Ex-situ mortality/ Disturbance.	Limit the hours of construction to between 0800 to 1800 Mondays to Fridays inclusive, between 0800 to 1400 hours on Saturdays and not at all on Sundays or public holidays.
Otter (Lutra lutra)	Ex-situ mortality/ Disturbance.	Compliance with Construction Industry Research and Information Association (CIRIA) Guidance Documents Technical Note 138 'Planning to Reduce Noise Exposure in Construction' and British Standard BS5228 in respect of noise.
Otter (Lutra lutra)	Ex-situ mortality/ Disturbance.	Implementation of Biodiversity Management Plan.
Otter (Lutra lutra)	Ex-situ mortality/ Disturbance.	Water crossings shall be constructed in accordance with IFI (2016) 'Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters' and NRA 'Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes'
Otter (Lutra lutra)	Ex-situ mortality/ Disturbance.	No works should be undertaken within 150m of any holts at which breeding females or cubs are present
Otter (Lutra lutra)	Ex-situ mortality/ Disturbance.	No wheeled or tracked vehicles should be used

		within 20m of active, but non-breeding, otter holts.
Otter (<i>Lutra lutra</i>)	Ex-situ mortality/ Disturbance.	Where active (but not breeding) otter holts are found within areas of intensive works, exclusion procedures may be undertaken under the supervision of a NPWS derogation license holder.

I consider that the implementation of these mitigation measures will ensure that the proposed development will have no likely adverse impacts on the QI's (habitats and species) or the integrity of the River Boyne and River Blackwater SAC. These mitigation measures would be implemented by the Applicant and their contractors at the site.

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 the River Boyne and River Blackwater SAC in view of its Conservation Objectives.

This conclusion has been based on a complete assessment of all implications of the project alone and in combination with plans and projects.

In Combination Effects:

Section 8 of the NIS submitted contains the cumulative assessment of impacts arising from the subject development in combination with other plans or projects. I have assessed cumulative impacts in respect of two pathways; the persistent addition or losses of the same materials or resource integral to the protected site, and the compounding effects as a result of the coming together of two or more effects.

The subject site is not located within or in close proximity to any Natura 2000 site and is not identified as an ex-situ habitat for qualifying species, therefore, no incremental loss of habitat will occur as a result of the proposed development either alone or in-combination with other plans or proposals. The proposed solar farm will not draw significant volumes of surface water, groundwater or materials, in this way the proposed development will not impact the structure of any Natura 2000 sites either alone or in combination with other sites.

To assess potential compounding effects, I have assessed what I consider to be key plans and projects listed in Table 4 below. This table lists National, Regional and Local Plans and planning applications for large or utility developments within approximately 5 km of the subject site, including those listed in Table 8-1 of the NIS submitted. I have not included an assessment of Planning Reference VA02.VA0017 listed in Table 8-1 of the NIS as I was unable to find this application on the Planning Register.

Table 4: Plans and projects that could act in combination with impact mechanisms of the proposed project.			
Plan /Project	Description & Status	Distance from Subject Site	Effects Arising
National Planning Framework 2040	National Plan	n/a	No likely significant impacts
Regional Spatial and Economic Strategy for the Eastern and Midland Region	Regional Plan	n/a	No likely significant impacts
Meath County Development Plan 2021-2027	County Plan	n/a	No likely significant impacts
ABP. Ref. 316372-23	Kildare-Meath Grid Upgrade - Undecided	0 km	No likely significant impacts
PA. Ref. 212214, ABP Ref. 314058	Woodtown Solar PV Farm – Approved 2023.	0.9 km west	No likely significant impacts
PA. Ref. 22837	Battery storage and condenser – Approved October 2022	0.9 km north	No likely significant impacts
PA. Ref. 23136	Amendments to P.A. Ref. 22837 – Approved April 2023	0.9 km north	No likely significant impacts
PA. Ref. 2360296	Increase power at Louth/ woodland overhead line – Approved November 2023	1.2 km northeast	No likely significant impacts
PA. Ref. RA170873	South Meath Solar Farm – Approved August 2018 and Constructed	2.2 km southeast	No likely significant impacts
ABP Ref. VA17.317498	200 kV substation at Woodtown Solar Farm - Undecided	2.5 km west	No likely significant impacts
PA. Ref. RA140500	Residential development– Approved April 2015 and Constructed	3.8 km northeast	No likely significant impacts

PA. Ref. RA200041, ABP Ref. 307021-20	Residential development (amendments to PA Ref.DA120987) - Approved July 2020 and Constructed	4.2 km northeast	No likely significant impacts
PA. Ref. RA171416	Residential development – Approved August 2018 and Constructed	4.2 km northeast	No likely significant impacts
PA. Ref. DA120619	Extension of Planning permission for residential development (Ref. DA60537) – Approved and Under Construction	4.2 km northeast	No likely significant impacts
PA Ref. 21985, ABP Ref. 312723-22	Derryclare Solar Farm – Approved January 2023	5.1 km west	No likely significant impacts
PA Ref. 21546, ABP Ref. 311760	Solar Farm – Approved May 2022	6 km west	No likely significant impacts

The National Planning Framework 2040, Regional Spatial and Economic Strategy for the Eastern and Midland Region and the Meath County Development Plan 2021-2027 provide a framework for development in County Meath. Each of these plans has been the subject of Strategic Environmental Assessment and contain objectives to support solar farm developments and to prevent impacts on the environment and Natura 2000 sites. On this basis, I do not consider that significant likely impacts on Natura 2000 sites arise from the implementation of these Plans.

ABP. Ref. 316372-23: This application proposed to provide an underground cable between Dunstown substation in County Kildare and Woodland substation in County Meath. At the time of writing, the Board decided that further consideration is required in respect of this application. I note that this application will be the subject of appropriate assessment by An Bord Pleanála, including an assessment of in-combination impacts on Natura 2000 sites. The proposed cabling appears to occur predominantly under existing public roads, which prevents undue impacts on surrounding habitats or intrusion into Natura 2000 sites. Drawing from the above, I do not consider that likely significant cumulative impacts will occur in-combination with this development.

PA. Ref. 212214, ABP Ref. 314058: This permitted solar farm was the subject of Appropriate Assessment by An Bord Pleanála, including the assessment of in-

combination impacts. The Appropriate Assessment in the Inspector Report dated 14 November 2023 concluded that no residual impacts will occur with the implementation of proposed mitigation measures. The assessment concluded that cumulative impacts on the conservation objectives of Natura 2000 sites will not occur. Drawing from the above, I do not consider that cumulative impacts will occur in-combination with the proposed solar farm.

PA. Ref. 22837: Meath County Council undertook Appropriate Assessment Screening of this permitted battery storage and synchronous condenser in the Planning Report dated 16 August 2022. This screening concluded that likely significant impacts on European Sites would not arise either alone or in combination with other plans and projects. Drawing from this assessment, I consider that in-combination effects with this permitted development will not occur.

PA. Ref. 23136: This planning permission provides for amendments to PA. Ref. 22837 in respect of the layout and general arrangement of the site. The Meath County Council Planning Report dated 03 April 2023 concludes that the development alone or in combination with other development would not be likely to have significant effects on European Sites. In the absence of potential impacts, I consider that cumulative effects in combination with the proposed development will not occur.

PA. Ref. 2360296: This permitted development relates to upgrade works to the existing overhead line between the Louth 220 kV Substation in Monavallet Co. Louth and the Woodland 220 kV Substation in County Meath. Works in Meath County Council include the re-stringing of the overhead circuit conductors, strengthening of 25 no. tower foundations and replacement of hardware and fittings. The Meath County Council Planning Report dated 17 November 2023 contains the Appropriate Assessment of the development. This assessment concludes that the implementation of mitigation measures proposed will ensure that the development will not impact on the conservation objectives of Natura 2000 sites, both alone and in combination with other plans and projects. On the basis of this assessment, I consider that in-combination effects will not occur with the proposed development.

PA. Ref. RA170873: This permitted solar farm was the subject of Appropriate Assessment Screening by Meath County Council. The Planning Report dated 19 September 2017 concluded that Appropriate Assessment was not necessary as likely significant impacts on Natura 2000 sites would not occur as a result of the development, either alone or in combination with other projects. On the basis that no impacts arise from this permitted development, I consider that significant likely in-combination effects with the proposed solar farm will not occur.

ABP Ref. VA17.317498: At the time of writing this assessment, the Board found that further consideration of this proposed substation compound was required. I note that this application will be the subject of Appropriate Assessment by An Bord Pleanála, which will have regard for likely impacts on the conservation objectives of Natura 2000 sites of the development alone and in-combination with other projects. I note that this application is located within the footprint of the solar farm permitted under PA. Ref. 212214, ABP Ref. 314058, which itself was the subject of

Appropriate Assessment. In light of the foregoing, I do not consider that in-combinations effects with the proposed development will occur.

PA Ref. 21985, ABP Ref. 312723-22: This permitted solar farm was the subject of Appropriate Assessment by An Bord Pleanála. The Appropriate Assessment in the Inspector's Report dated 14 September 2022 concluded that the implementation of mitigation measures would ensure that no residual impacts arise, and that no significant likely effects are expected at Natura 2000 sites, either alone or in combination with other projects. I note that this solar farm immediately adjoins the solar farm permitted under PA Ref. 21546, ABP Ref. 311760, and this project was specifically assessed for potential cumulative impacts. On the basis of the foregoing, I consider that the proposed development in combination with this permitted solar farm, will not have a significant effect on Natura 2000 sites.

PA Ref. 21546, ABP Ref. 311760: This permitted solar farm was the subject of Appropriate Assessment by An Bord Pleanála. Section 8 of the Inspector's Report dated 27 April 2022 contains the Appropriate Assessment of the solar farm both alone and in combination with other plans and projects, in respect of the conservation objectives of Natura 2000 sites. This assessment concludes in stating that with the implementation of proposed mitigation measures, there will not be significant impacts on Natura 2000 sites either alone or cumulatively. Drawing from this assessment, I do not consider that in-combination impacts will occur with the proposed solar farm.

The residential developments permitted under PA. Refs. RA140500, RA200041, RA171416 and DA120619 occur on zoned and serviced urban lands in Dunshaughlin, which mitigates the potential for direct impacts on habitats or indirect impacts on ex-situ fauna. These developments will connect to public foul and surface water infrastructure, which mitigates potential for contamination to waterbodies. In this way, I do not consider that likely significant impacts on Natura 2000 sites will occur.

I note that the submitted NIS does not include any assessment of a future grid connection from the proposed solar panel. As is discussed in further detail in Section 5.5 of this report, the location or details of the future grid connection are unknown at this point and, therefore, cumulative assessment is not feasible. I note that any future grid connection will be the subject of an application and the competent authority will undertake a full cumulative assessment of the grid connection and the solar farm at that point.

Drawing from the above, I do not consider that significant impacts arise on the conservation objectives of Natura 2000 sites as a result of the proposed development in combination with other plans or proposals.

Overall Conclusion – Appropriate Assessment

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 2000 as amended.

Having carried out screening for Appropriate Assessment of the project, it was concluded that the likelihood of significant effects on the Otter in the River Boyne

and River Blackwater SAC could not be excluded. 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.

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 River Boyne and River Blackwater SAC or any other European site, in view of the site's Conservation Objectives. This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.

Inspector: Sinead O'Garra

Date: 13 June 2024