



An
Bord
Pleanála

Inspector's Addendum 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(s)	Energia Solar Holding Limited
Type of Application	Permission
Planning Authority Decision	Grant
Type of Appeal	Third
Appellants	Anne-Marie Delany & others,
Observers	Aidan Langan Eco Advocacy Peter Sweetman
Date of Site Inspection	31/03/25
Inspector	Una Crosse

1. Introduction

1.1 Context

This is an addendum report to the first Inspector's report in respect of ABP 317822-23 dated 21st June 2024 which includes a planning assessment, EIA Screening Determination, Appropriate Assessment, a recommendation, Reasons and Considerations and Conditions.

1.2 Board Direction seeking Further Information

The Board in its direction dated 19/07/24 stated

The Board noted the Meath County Development Plan 2021-2027 policies and objectives related to renewable energy development including Policies INF OBJ 34, INF OBJ 35 and INF OBJ 39. In this regard:

1. *“The Board is of the opinion that the grid connection, while not part of the subject planning application, does form an integral part of the overall proposed project by connecting the solar panels to the national grid. In that regard, therefore, the Board considers that the grid connection should form part of the Appropriate Assessment screening. You are therefore requested to submit to An Bord Pleanála an appropriate level of detail in relation to the*
 - (i) *intended construction, operation and decommissioning methodology for the grid connection and*
 - (ii) *receiving environment along the indicated grid connection route to examine the likelihood of the overall proposed development having a significant effect on the qualifying interest(s) of a European Site”.*
2. *The Board also noted that no information was provided on how internal tracks and underground cabling will traverse the 3 waterbodies at the site. You are therefore requested to submit to An Bord Pleanála an appropriate level of detail in relation to the*
 - (i) *Intended construction methodology and*
 - (ii) *Environmental assessment of same in the context of the European Sites and waterbodies.*

A section 132 Notice dated 30 July 2024 issued on the basis of the Direction outlined above with a response required on or before the 9th September 2024.

1.3 Board Direction Seeking Addendum Report

Following the applicant's response to the Section 132 Notice (summarised in Section 2 below) a Board Direction dated 30 January 2025, requested that:

“the Planning Inspector consider the additional information received in response to the Section 132 Notice and Section 131 notices and in response to the revised public notices and to prepare an Addendum Report for the Boards consideration”.

1.4 Addendum Report

I have read the first Inspectors Report and concur with the assessment and recommendation of same including the EIA Screening Determination. Therefore, this addendum report considers the applicant's response to the above request and the submissions received following circulation of the said documentation under section 131. A recommendation, for the Board's consideration is provided in conclusion, following the consideration of the further information submission and responses to same.

2. Applicant's Response

2.1 Documentation Received

The applicant in its response received on the 9th September 2024 submitted the following:

- (Revised) Natura Impact Statement (dated 28 August 2024) including:
 - Technical Appendix 8: Outline Construction Environmental Management Plan – Addendum Report 1 – Bogganstown Solar Farm (dated 6 September 2024)
 - Outline Construction Environmental Management Plan – Addendum Report 2 – Bogganstown Solar Farm – Future Grid Route (dated 6 September 2024)

The applicant in their covering letter concludes that there is an ecological connection between the proposed development and the River Boyne and River Blackwater SAC,

a hydrological connection between the proposal and the Rye Water Valley/Carton SAC and a distant connection to the South Dublin Bay SAC, the North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA and the North Bull Island SPA.

There is no ecological or hydrological connection between the future grid connection route and any Natura 2000 site.

It is concluded that the proposal development, including the watercourse crossings within the solar farm and future grid connection route will not adversely affect the integrity of any Natura 2000 designated site due to measures inaugurated during the design phase and following relevant guidance to prevent pollution during the construction and operation phases. Pollution prevention measures, proposed drainage management and waste management measures are outlined within the report. It is stated that with the implementation of these measures and the recommendation for a precautionary pre-commencement Otter survey, it is considered that the proposed development will not have a significant effect upon any qualifying features, and therefore the integrity, of the Natura 2000 site connected with the applications site.

2.2 Board Direction seeking Readvertisement and Circulation

A Board Direction, dated 25 October 2024, requested that:

“On the basis of the submission material received, the Board decided to defer this case in order for the updated Natura Impact Statement to be readvertised and for the new reports to be circulated to parties”

2.3 Request to Parties under Section 131

By correspondence dated 8 November 2024, a request for responses to the applicant’s submission, in accordance with Section 131 of the PDA 2000, as amended, issued to the parties to the appeal, with responses required on or before 28 November 2024.

2.4 Request to Applicant

By correspondence dated 8 November 2024, the applicant was requested to submit evidence of revised public notices by 28 November 2024. Copies of public notices were received on 18 November 2024, both (site and newspaper) dated the 18 November 2024 providing 5 weeks for submissions.

3. Future Grid Connection and Watercourse Crossings

3.1 Future Grid Connection

In the interest of clarity, the nature and location of the future grid connection is set out herein. It is proposed that the future grid connection, which does not form part of the subject application, would comprise of a 38kV cable to connect the proposed solar farm to the 220kV Culmullin substation (ABP-317498-23) approved by An Bord Pleanála on 16 August 2024.

This consented substation is located within the lands of the consented Woodtown solar farm (Energia) which was permitted under Ref. 212214 (ABP-314058-22).

The future cable route, which is presented on Figure 1 Indicative Grid Route of the Outline Construction and Environmental Management Plan (addendum report 2) and section 1.6 is anticipated to comprise –

- 309m along public road,
- 1672m on existing access tracks
- 1327m on consented access tracks within the Woodtown solar farm.
- 912m within the subject application boundary and
- 872m through adjoining farmland.

The total combined length provided for the figures above is 5.092km of cable route. I would note that Section 3.4 of the Outline Construction and Environmental Management Plan (addendum report 2) refers to a total length of 2.6km ‘broken up into a 1.2km section and a 1.4km section’. It also references 800m running along Hayestown Road and the remaining 1.8km travelling through agricultural grassland which combined is 5.2km. I would note that the route is identified such that an assessment of its likely significant effects for the purposes of AA screening can be determined. It is clarified that the cable route does not cross any watercourses and no in-stream works are required.

3.2 Watercourse Crossings

The documentation submitted with the response includes Figure 1 – Watercourse Crossings which highlights the three watercourses and the five crossing points –

described as five new/upgraded culvert crossing points over internal watercourses (elsewhere in the documentation it clarifies that three are new and two are upgraded). A sectional drawing of the cable crossing of the culverted stream crossing is also provided. The Outline Construction Environmental Management Plan (Technical Appendix 8 – Addendum Report 1) outlines the methodology for the watercourse crossings which are proposed to comprise a box culvert with the invert set below the bed level of the existing channel facilitating flow, fish passage and reducing the risk of sedimentation. The Construction Methodology is proposed at section 8.71 with specific measures for silt management. It is stated that it is part of the OPW arterial drainage scheme requiring a Section 50 Application under the Arterial Drainage Act 1945 and inviting that a condition seeking same is included in any planning consent.

4. Third Party Responses

In response to the Section 131 request submissions were received from the following which are summarised below:

Meath County Council (14.11.24)

- No comments to submission

Aidan Langan (20.11.24)

- Requested more time be afforded to response

Darren O'Rourke TD (19.11.24)

- Vast renewable resources can deliver energy security and independence for Ireland in the future if managed in the right way.
- Rather than rely on private companies, need a plan-led approach, clear guidelines and a robust regulatory authority, to ensure interests of state and local communities prioritised.
- Absence of Government Guidelines for large scale solar development with copies of responses to parliamentary questions (38298/24 & 38824/24) confirming same.
- Disappointing particularly as need for guidelines on onshore wind agreed and plan-led approach taken in relation to offshore wind.

- Government approach makes no sense, and while should have been done earlier, now an excellent time to set out the rules in relation to solar development – how much is need, where it is need, how it should be delivered and best ownership model.
- Existing applications should not only be considered in line with prevailing planning framework but also in line with best international practice.

In response to the new public notices, dated 18 November 2024, responses were received from:

- Anne-Marie Delaney & Others (23.12.24)
- Aidan Langan (23.12.24)

Given the commonality of issues raised in both submissions, which refer to the wider development rather than specifically to the revised documents, subject of the Section 132 Notice, they are summarised as they relate to the NIS and accompanying documentation submitted by the applicant and then under other matters which relate to the wider development.

Revised Natura Impact Statement & Accompanying Reports

- NIS limits assessment to pre-existing Natura 2000 sites and has not considered impact on biodiversity of immediate locale with potential impact on aquatic insects from solar panels outlined.
- Reference to 2023 paper by Zhang, B et al. on impact of solar arrays with multi year studies of impacts of solar arrays on natural environment required.
- Short sighted to consider that protecting biodiversity in Natura 2000 sites is sufficient to mitigate environmental damage caused by green infrastructure.
- Visual inspection of potential impact to the water environment outlined in Table 6-2 not sufficient with water sampling required.
- Impact of solar arrays on bird mortality with evidence outlined including reference to a number of articles.

Other Issues

Scale, Landuse, Policy and Guidelines

- Request to establish if proposal is related to other planning applications by Energia within the area with list of references provided covering 667.8ha of prime agricultural land in South Meath placing unacceptable burden responding to separate applications;
- Series of related applications which should be viewed as one and seek clarification of the MW capacity of combined installations and effects on health and well-being;
- Size and scale of proposal will irrevocably change the landscape with catastrophic and ruinous impact on natural assets and lives of residents.
- Area under Strong Urban Influence in Meath County Development Plan with development of solar arrays inappropriate land use with areas of land taken out of production with nature of development industrial vandalism of the landscape.
- Lack of literature around application of technology in the country with focus on economic viability with more attention paid internationally to land use and social acceptance (references provided to academic papers).
- Reference to Italian government ban on solar panels on productive agricultural land which Ireland should follow.
- Meath has highest proliferation of solar farm permissions which is questioned with solar not a use permitted in principle of open for consideration in the CDP and impacts on natural beauty and heritage with scale having a significant negative impact on environment changing the rural environment irrevocably.
- No policies or guidelines for solar farms in rural areas in Meath CDP or nationally with no assessment or study of implications of large number of solar farms in south and east Meath.
- Free reign to developers on location with, in subject case, minimal public consultation.
- Reference to parliamentary questions on lack of national guidance and remiss to grant permission in the absence of national guidance.
- No identified zoning for green energy projects with large scale solar not fitting for agricultural land with national policy on categorisation of land zoning for CDP review required in advance of granting permission.

Validity and Monitoring

- Inaccurate notices
- Absence of application for grid connection, deconstruction of the solar farm and effect on European site Directive.
- Errors outlined by PA not rectified with permission granted for an incomplete application.
- Issues raised in respect of applicants FI response and validity of the application and consider application should be nullified. FI response did not address concerns raised by third parties and question oversight of commitments made by applicant.
- Serious Concerns at proposed self- monitoring with material conflict of interest for developer to have compliance role which is unethical and exposes residents to risk.
- Concern at disclaimer of agent in reports that information cannot be relied upon questioning the value, accuracy of same and addresses the potential omissions.
- Impact of unsightly fencing (drawing highlighting same) and intrusive lighting proposed materially altering the landscape with no provision for tree planting between the panels.

Residential Amenity

- Invasive lighting contrary to objectives of CDP to minimise harmful effects and protect environment with significant effect on residences with motion censored lighting very sensitive and likely to be on a lot transforming area into an industrialised zone.
- Issue of glint and glare has not been addressed with no study undertaken and no consultation with aviation authorities given new flightpaths and no information sought from IAA or Dublin Airport.

Cultural Heritage

- Forensic archaeological and detailed geographical analysis required in advance of permission being granted with area rich in archaeology and history.

- Sites in Meath developed to accommodate growing tourist demand with lots of historical sites and natural attractions.
- Proposal unacceptably excessive with a detrimental impact on natural heritage and landscape.
- Incorrect assertion in EIAR report of major/moderate visual effect in immediate landscape with refusal for a smaller solar farm at Ardath (22/552) for impact on landscape with proposal having a similar impact.

Landscape

- Destruction of agricultural land contrary to European Landscape Convention with requirements of PDA 2000 on preservation of landscape not complied with and unsatisfied with Landscape Character Assessment.

EU Directives & Protection of Trees

- ABP to satisfy themselves that application complies with EU law and question if SEA Directive is complied with, questioning how a project can comply when programmes and plans have not with impact on trees outlined and requirements of 1963 PDA set out in respect of duty to secure objectives in the CDP.

Water & Soils

- Impact of solar arrays near waterbodies with impact on aquatic insects.
- Impact on stormwater management systems from sediment accumulation and potential threat from run-off on groundwater aquifer.
- Coating on the panels is toxic (polytetrafluoroethylene- PTFE and fluorinated ethylene -FEP) with potential exposure to humans if panels damaged with potential impact on groundwater and domestic wells.
- Poor half life with heavy metals with leaching of heavy metals to soils and no health and safety analysis.

Traffic Hazard

- Impact on narrow local roads and limited mitigation measures to reduce impact of noise, dust and disruption to lives of residents.
- Imposition of HGV traffic unacceptable in rural area with passing of HGV's not facilitated posing significant danger and disruption with local road network

inadequate with permission for HGV's to pull into private driveways not forthcoming.

- EIA report conclusion of no significant impact during construction incorrect.

4. Policy Context

The Board is advised that there have been no material changes to National or Local policy as it would apply to the proposed development since the original Inspectors report was discharged. Therefore, I refer the Board to Section 5 of the first Inspectors report.

5. Assessment

5.1 Context

At the outset I note that the submissions received in response to the Section 132 Notice raised matters in addition to those pertaining to the request set out in the Section 132 Notice. I note the issues raised and consider that they have been addressed comprehensively by the inspector in her report dated 21 June 2024.

This addendum report pertains to the matter of appropriate assessment for the proposed solar farm development in conjunction with the future grid connection as delineated on the figures submitted in the response to the section 132 Notice, only. The information submitted in response to the Boards request regarding the watercourse crossings is also addressed within the appropriate assessment below.

As noted the grid connection is indicative, only, does not form part of the application for permission, may be subject to amendment/change and may be subject to a separate application for permission at which stage it would, itself, be subject to assessment with regard to the proper planning and sustainable development of the area and to the requirements in terms of appropriate assessment.

5.2 Appropriate Assessment Screening

Screening Determination - Significant effects cannot be excluded

In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of objective information provided by the applicant, I

conclude that the proposed development could result in significant effects on the River Boyne and River Blackwater SAC in view of the conservation objectives of the Otter which is a qualifying interest of this site and the Rye Water Valley/Carton SAC in view of the conservation objectives of the qualifying interests dependent on water quality . It is therefore determined that Appropriate Assessment (stage 2) under Section 177V of the Planning and Development Act 2000, as amended of the proposed development is required. Appropriate Assessment Determination.

Please refer to Appendix 1 for Screening.

5.3 Appropriate Assessment Conclusion: Integrity Test

In screening the need for Appropriate Assessment, it was determined that the proposed development could result in significant effects on the River Boyne and River Blackwater SAC (002299) and Rye Water Valley/Carton SAC (001398) in view of the conservation objectives of those sites and that Appropriate Assessment under the provisions of S177U was required.

Following an examination, analysis and evaluation of the NIS, all associated material submitted including the further information submitted, I consider that adverse effects on site integrity of the River Boyne and River Blackwater SAC (002299) and Rye Water Valley/Carton SAC (001398) can be excluded in view of the conservation objectives of these sites and that no reasonable scientific doubt remains as to the absence of such effects.

My conclusion is based on the following:

- Detailed assessment of construction, operational and decommissioning impacts.
- Effectiveness of mitigation measures proposed including those set out in the updated NIS and appendices to same.
- Application of planning conditions to ensure compliance with the mitigation measures are implemented.

- The proposed development will not affect the attainment of conservation objectives for the River Boyne and River Blackwater SAC (002299) and Rye Water Valley/Cartron SAC (001398)

Please refer to Appendix 2.

5.4 Conditions

Given the passage of time and the submission of further information in response to the Section 132 Notice issued by the Board I recommend that a number of the conditions recommended in the Original Inspector's report are revised which I address in turn.

Condition 1

I propose that this condition be revised to include the documentation submitted in response to the section 132 Notice as follows:

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 and 9 September 2024 except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

Condition 6

I recommend that this condition is revised to omit reference to the Natura Impact Statement as follows:

All of the environmental, construction, operation and decommissioning phase mitigation measures set out in the 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 with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development.

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

Additional Condition

An additional specific condition is proposed requiring compliance with the mitigation measures in the NIS as follows:

The mitigation measures contained in the updated Natura Impact Statement (NIS) and appendices to same submitted on 9 September 2024, shall be implemented in full.

Reason: *To protect the integrity of European Sites.*

Additional Condition

Given the works proposed to the watercourses, it is recommended that an additional condition is included requiring compliance with the OPW Arterial Drainage Scheme as follows:

Prior to commencement, details of all works consented by or to be undertaken by the OPW pursuant to Section 50 or Section 9 of the Arterial Drainage Act 1945 as amended including all proposed and amended, crossings, diversions, or other relevant amendments to waterbodies shall be submitted to the Planning Authority.

Reason: *In the interests of regulating, restricting and controlling development in an area subject to flood risk, for pollution prevention and the protection of the environment.*

6. Recommendation

I endorse the inspector's recommendation in her report dated 21 June 2024 including the Environmental Impact Assessment Screening Determination and recommend that permission is granted. I have undertaken an Appropriate Assessment. I have provided revised Reasons and Considerations and set out a number of revisions to the proposed conditions based on the Original Inspector's report and two additional conditions.

Reasons and Considerations

The Board performed its functions in relation to the making of its decision, in a manner consistent with Section 15(1) of the Climate Action and Low Carbon Act 2015, as amended by Section 17 of the Climate Action and Low Carbon Development (Amendment) Act 2021, (consistent with the most recent approved, climate action plan, national long term climate action strategy, national adaptation framework and approved sectoral adaptation plans, the furtherance of the national climate objective, and the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State);

And in coming to its decision, the Board had regard to the following:

(a) European, national, regional and local planning, energy, climate and other policy of relevance, including in particular the following:

European Policy/Legislation including:

- Directive 2014/52/EU amending Directive 2011/92/EU (Environmental Impact Assessment Directive);
- Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directive);
- Directive 2000/60/EC (Water Framework Directive)

National Policy and Guidance including:

- Project Ireland 2040 - National Planning Framework (2018);
- National Development Plan (2021-2030);
- The objectives and targets of the National Biodiversity Action Plan 2023-2030;
- Long-term Strategy on Greenhouse Gas Emissions Reduction (2024);
- Policy Statement on Security of Electricity Supply (November 2021);
- National Energy Security Framework (April 2022);
- National Energy and Climate Action Plan (2021-2030);

Regional and Local Planning Policy, including in particular:

- Eastern & Midland Regional Assembly Regional Spatial & Economic Strategy 2019-2031
- Meath County Development Plan 2021-2027;

(b) The location, nature, scale and layout of the proposed development and the pattern of development in the area and

(c) The range of mitigation measures set out in the Natura Impact Statement.

(d) The submissions received in relation to the application and appeal by all parties.

CONDITIONS

In addition or in lieu of the conditions recommended in the Inspectors report as follows:

Revised Condition 1

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 and 9 September 2024 except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with

the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

Revised Condition 6

All of the environmental, construction, operation and decommissioning phase mitigation measures set out in the 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 with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development.

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

Additional Condition

The mitigation measures contained in the updated Natura Impact Statement (NIS) and appendices to same submitted on 9 September 2024, shall be implemented in full.

Reason: *To protect the integrity of European Sites.*

Additional Condition

Prior to commencement, details of all works consented by or to be undertaken by the OPW pursuant to Section 50 or Section 9 of the Arterial Drainage Act 1945 as amended including all proposed and amended, crossings, diversions, or other relevant amendments to waterbodies shall be submitted to the Planning Authority.

Reason: *In the interests of regulating, restricting and controlling development in an area subject to flood risk, for pollution prevention and the protection of the environment.*

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.

Una Crosse
Inspectorate
2 April, 2025

Appendix One – Screening for Appropriate Assessment

Screening for Appropriate Assessment	
Test for likely significant effects	
Step 1: Description of the project and local site characteristics	
Brief description of project	A detailed description of the development is provided in section 3 of the original inspector's report. In summary the solar PV Energy development with a total size of 171.34 hectares, is to include photovoltaic (PV) panels mounted on steel structures, underground cabling and ducting, 47

	<p>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 megawatt (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. A ten-year permission has been sought with a 35 year operational life</p>
<p>Brief description of development site characteristics and potential impact mechanisms</p>	<p>It is proposed to construct a solar energy development on a site comprising of 3 parcels (Site 1,2,3) within fields of improved agricultural grassland with a total site area of 171.34ha which 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 which has a low biodiversity and low ecological value. Other habitats include Wet Grassland in the east of Site 3 and Hedgerows and Treelines at field boundaries. Field surveys found evidence of Badger, and bird species including Blackbird, Great Tit, Chaffinch, Hooded Crow, Starling, Wood pigeon and Mallard. Suitable habitat was identified for bats and hedgehog at field boundaries. Suitable habitat for otters occurs at the 3 no. waterbodies that traverse the site which comprise the Moyleggan waterbody at Site 1, Dunboyne Stream at Site 2, and Blackhall Little waterbody at Site 3.</p>

	<p>A future grid connection to a consented substation to the north of the site and the details of proposed watercourse crossings, of which there are five, are examined in the documents submitted as part of the s.132 notice response. It is outlined that the grid connection route comes no closer than 10m from the Dunboyne Stream and 425m of the Moyleggan Stream. Mitigation measures are proposed in respect of the watercourse crossings, three of which are new and two are proposed to be upgraded.</p> <p>The site is located 6 km north of the Rye Water Valley/Carlton 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).</p> <p>The 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 to the east of the site with a distant hydrological link to the subject site via the Blackhall Little waterbody feeding into the River Liffey, and the Moyleggan and Dunboyne Streams which feed into the Tolka.</p>
Screening report	Yes
Natura Impact Statement	Yes, revised in response to s.132 Notice.
Relevant submissions	Reference in appeals and response to s.132 Notice to inadequacy of NIS as it limits assessment to Natura 2000 sites. Other references to protection of the environment and impact of solar arrays on the environment.

Step 2. Identification of relevant European sites using the Source-pathway-receptor model

Three European sites are potentially within a zone of influence of the proposed development however one (River Boyne and Blackwater SPA 004232) has no hydrological or ecological connection to the site as outlined below.

I note that the screening report considered a further four sites within Dublin Bay, North Dublin Bay SAC 000206, South Dublin Bay SAC 000210, South Dublin Bay and River Tolka Estuary SPA 004024, North Bull Island SPA 004006) due to the hydrological connection via the two watercourses on the site to the River Tolka and River Liffey. However, given the distance of the pathway is approximately 36km downstream and 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 that there is no likelihood of significant effects from the proposal I have ruled these out for further examination due to distance and lack of/ very weak ecological connections.

I would also note that the North-West Irish Sea SPA 004236 site was not included in the first or revised NIS but I have referenced here for completeness although similar to the four sites referenced above, given the distance of the pathway is approximately 36km downstream and the dilution factor there is no likelihood of significant effects from the proposal. I am therefore satisfied that these sites can be excluded from further consideration.

European Site (code)	Qualifying interests Link to conservation objectives (NPWS, date)	Distance from proposed development (km)	Ecological connections	Consider further in screening Y/N
Rye Water Valley/Carton SAC - 001398	Petrifying springs with tufa formation (Cratoneurion) [7220] Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]	6 km north of SAC	Hydrological Connection within solar farm site – Via Blackhall Little watercourse.	Y

	<p>Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]</p> <p>CO001398.pdf</p> <p>NPWS 2021</p>		No hydrological connectivity with grid connection route.	
<p>River Boyne and River Blackwater SAC 002299</p>	<p>River Lamprey Lampetra fluviatilis 1099</p> <p>Salmon Salmo salar 1106</p> <p>Lutra lutra (Otter) [1355]</p> <p>Alkaline fens 7230</p> <p>Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)* 91E0</p> <p>CO002299.pdf</p> <p>NPWS 2021</p>	<p>11.5 km south of SAC</p>	<p>While the watercourses traversing the site are downstream, there is an ecological connection – given the site is within the range of the Otter in the SAC with suitable habitat within the application site. Salmon and Lampray may be present in the watercourse. No ecological or hydrological connectivity with grid connection route.</p>	<p>Y</p>

River Boyne and Blackwater SPA 004232	Alcedo atthis (Kingfisher) [A229] CO004232.pdf NPWS 2024	11.5 km south	No connection with solar farm or future grid connection route. Kingfisher territories (1-5km) would not extend this distance from the SPA to the application site.	N
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Step 3. Describe the likely effects of the project (if any, alone or in combination) on European Sites

The proposed development site which is downstream of the River Boyne and River Balckwater SAC will not result in any direct effects on either SAC, however due to the size and scale and the potential ecological pathway with the River Boyne and River Blackwater SAC and hydrological pathway with the Rye Water Valley/Carnton SAC via the watercourses on the site, impacts generated by the construction and operation of the solar farm development require consideration.

AA Screening matrix

Site name Qualifying interests	Possibility of significant effects (alone) in view of the conservation objectives of the site	
	Impacts	Effects
Rye Water Valley/Carnton SAC 001398 Cratoneurion (Petrifying springs with tufa formation) [7220]	Direct: None likely given distance to the site. Indirect: I concur with the Inspector in her original report that owing to the hydrological link to the subject site, indirect impacts on this habitat may occur due to water pollution or	I concur with the Inspector in her report that 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

<p>Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]</p> <p>Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]</p>	<p>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.</p>	<p>morphology of on-site waterbodies. Therefore, it would not contribute to established threats and pressures at this waterbody or inhibit the waterbody from reaching a 'good' status. However, I note the mitigation measures proposed and in particular the details and particulars submitted in respect of the watercourse crossings which are stated to prevent pollution of the watercourses. While they may not be aimed specifically at avoiding or mitigating likely significant impacts on any Natura 2000 sites, their reference in the revised NIS, requires that they be considered in light of the hydrological connection.</p>
	<p>Likelihood of significant effects from proposed development (alone): Yes</p>	
	<p>If No, is there likelihood of significant effects occurring in combination with other plans or projects?</p>	
	Impacts	Effects

River Boyne and River Blackwater SAC 002299 River Lamprey Lampetra fluviatilis 1099 Salmon Salmo salar 1106 Lutra lutra (Otter) [1355] Alkaline fens 7230 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)* 91E0	Direct No direct impacts anticipated. Indirect Release of silt and sediment during site works. Release of construction related compounds including hydrocarbons to surface water Increased human disturbance at this site, particularly during the construction/ installation phase	Potential disturbance risks to Otter, a qualifying interest species for the SAC, which could be associated with increased noise, additional lighting and increased human activity at both construction and post construction phases; potential damage to riparian and river habitats associated with inadvertent spillages of hydrocarbons and/or other chemicals during construction phase;
	Likelihood of significant effects from proposed development (alone): Yes	
	If No, is there likelihood of significant effects occurring in combination with other plans or projects?	
Step 4. Conclude if the proposed development could result in likely significant effects on a European site		
Based on the information provided in the screening report, site visit, review of the conservation objectives and supporting documents, I consider that in the absence of mitigation measures beyond best practice construction methods, the proposed development has the potential to result significant effects on the River Boyne and River Blackwater SAC. Such impacts could be significant in terms of the stated conservation objectives of the SAC when considered on their own and in combination with other projects and plans in relation to potential disturbance to the Otter.		

It is not possible to exclude the possibility that proposed development alone would result significant effects on River Boyne and River Blackwater SAC from effects associated with disturbance risks to otter.

Furthermore, I consider that in the absence of mitigation measures, the proposed development has the potential to result in significant effects on the Rye Water Valley/Carlton SAC, albeit the distance from the site to the qualifying interests is lengthy. Notwithstanding, given the methodology employed for crossing the watercourses and the mitigation measures proposed for same I consider it prudent to examine the potential effects further.

An appropriate assessment is required on the basis of the possible effects of the project 'alone'. Further assessment in-combination with other plans and projects is not required at screening stage.

Proceed to AA.

Screening Determination - Significant effects cannot be excluded

In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of objective information provided by the applicant, I conclude that the proposed development could result in significant effects on the River Boyne and River Blackwater SAC in view of the conservation objectives of the Otter which is a qualifying interest of this site and the Rye Water Valley/Carlton SAC in view of the conservation objectives of the qualifying interests dependent on water quality . It is therefore determined that Appropriate Assessment (stage 2) under Section 177V of the Planning and Development Act 2000, as amended of the proposed development is required.

Appendix 2 – Appropriate Assessment

Appropriate Assessment
<p>The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB, sections 177V of the Planning and Development Act 2000 (as amended) are considered fully in this section.</p>
<p>Taking account of the preceding screening determination, the following is an appropriate assessment of the implications of the proposed development of a solar farm and future grid connection in view of the relevant conservation objectives of the Rye Water Valley/Carton SAC and the River Boyne and River Blackwater SAC based on scientific information provided by the applicant.</p> <p>The information relied upon includes the following:</p> <ul style="list-style-type: none">• Natura Impact Statement prepared Neo Environmental, dated 28/08/2024 revised following request for further information including:<ul style="list-style-type: none">○ Technical Appendix 8: Outline Construction Environmental Management Plan – Addendum Report 1 – Bogganstown Solar Farm (dated 6 September 2024)○ Outline Construction Environmental Management Plan – Addendum Report 2 – Bogganstown Solar Farm – Future Grid Route (dated 6 September 2024)• Ecological Appraisal (Technical Appendix 2 (Vol 3 Part1)) <p>I am satisfied that the information provided is adequate to allow for Appropriate Assessment. I am satisfied that all aspects of the project which could result in significant effects are considered and assessed in the revised NIS and mitigation measures designed to avoid or reduce any adverse effects on site integrity are included and assessed for effectiveness.</p>
<p>Submissions/observations</p> <p>While a number of submissions refer to the NIS, there are none specific to the consideration of the potential for significant effects on any of the European sites within the zone of influence of the development. The submission from the DHLGH did not refer to Nature Conservation.</p>
<p>NAME OF SAC (SITE CODE): River Boyne and River Blackwater SAC (002299)</p>
<p>Summary of Key issues that could give rise to adverse effects:</p>

(i) Water quality degradation (construction and operation) (ii) Disturbance of mobile species See Sections 6.15-6.6.27 in the NIS			
Qualifying Interest features likely to be affected	Conservation Objectives	Potential adverse effects	Mitigation measures (summary)
Lutra lutra (Otter) [1355]	Maintain favourable conservation condition	Given the reach of this highly mobile species, potential for species to use the watercourses and riverbanks within the site and therefore potential adverse effects arising from disturbance and impact on water quality	Pre-commencement otter survey; Biodiversity management plan to be submitted to ensure enhancement of post construction site increasing potential prey sources; Watercourse crossing construction methodology, silt management; 2m protection buffers along watercourses; Pollution control measures; Application of industry standard controls, Inland Fisheries
River Lamprey Lampetra fluviatilis 1099	Restore favourable conservation condition	While no evidence on site, given potential for silt/sedimentation in watercourses mitigation required.	Watercourse crossing construction methodology silt management; 2m protection buffers along
Salmon Salmo salar 1106	Restore favourable conservation condition	While no evidence on site, given potential for silt/sedimentation in watercourses mitigation required.	watercourses; Pollution control measures; Application of industry standard controls, Inland Fisheries
Other QI's			
Alkaline fens 7230 and Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)* 91E0		Not at Risk - these QI's are excluded given distance and they are habitats located upstream of the subject site and watercourses that traverse.	
Assessment of issues that could give rise to adverse effects view of conservation objectives			

(i) Water quality degradation

Good quality water is necessary to maintain the populations of the QI species listed in the SAC which may travel downstream into the watercourses on site. Water quality degradation is the main risk from unmanaged site works where the watercourses on site may host QI species. Decrease in water quality would compromise conservation objectives for species listed.

No operational phase impacts are anticipated

Mitigation measures and conditions

Watercourse crossing methodology and silt management measures

Pollution Control Measures

Construction method statement

Mitigation measures are captured in the specific condition recommended to be included for the updated NIS and accompanying appendices submitted on 9 September 2024

(ii) Disturbance of mobile species

Given that the otter is highly mobile and the watercourses on the site offer suitable habitat and commuting opportunities within the aquatic environment. There may be some temporary disturbance during the daytime during the construction period from increased human presence and where works are required at watercourse crossings for the grid connection. However, the proposed development will not result in any temporary or permanent barriers to movement.

Mitigation measures and conditions

Pre-construction otter survey to ensure that no otter holt established in intervening period.

Biodiversity management plan (Tech Appendix 1) to ensure enhancement of post construction site increasing potential prey sources;

Watercourse crossing methodology and silt management measures

Pollution Control Measures

Construction method statement

I am satisfied that the measures proposed are adequate and will be effective in ensuring that the attributes required to maintain the favourable conservation condition for Otter will not be adversely affected.

Mitigation measures are captured in the specific condition recommended to be included for the updated NIS and accompanying appendices submitted on 9 September 2024

In-combination effects

I am satisfied that in-combination effects have been assessed adequately in the NIS with Section 8 providing an examination of plans and projects including the consented Woodtown solar farm and permitted substation. The proposed grid connection has also been assessed in the updated NIS as part of the overall project and no other plans and projects could combine to generate significant effects when mitigation measures are considered. I am satisfied that the applicant has demonstrated that no significant residual effects will remain post the application of mitigation measures.

Findings and conclusions

The applicant determined that following the implementation of mitigation measures the construction and operation of the proposed development alone, or in combination with other plans and projects, will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects arising from aspects of the proposed development can be excluded for the European sites considered in the appropriate Assessment. No direct impacts are predicted. Indirect impacts would be temporary in nature and mitigation measures are described to prevent ingress of silt laden surface water and avoid disturbance to mobile species. Monitoring measures are also proposed to ensure compliance and effective management of measures. I am satisfied that the mitigation measures proposed to prevent adverse effects have been assessed as effective and can be implemented and that there will be no in-combination effects arising with the identified projects.

Reasonable scientific doubt

I am satisfied that no reasonable scientific doubt remains as to the absence of adverse effects.

Site Integrity

The proposed development will not affect the attainment of the Conservation objectives of the River Boyne and River Blackwater SAC (002299). Adverse effects on site integrity can be excluded and no reasonable scientific doubt remains as to the absence of such effects.

NAME OF SAC (SITE CODE): Rye Water Valley/Carton SAC (001398)

Summary of Key issues that could give rise to adverse effects:

(i) Water quality degradation (construction and operation)

See section 6.29- 6.40 in the NIS

Qualifying Interest	Conservation Objectives	Potential adverse effects	Mitigation measures (summary)

features likely to be affected			
Cratoneurion (Petrifying springs with tufa formation) [7220]	Restore favourable conservation condition	Potential for silt/sedimentation in watercourses mitigation required.	Watercourse crossing construction methodology, silt management; 2m protection buffers along watercourses; Pollution control measures; Application of industry standard controls, Inland Fisheries
Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]	Restore favourable conservation condition		
Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]	Maintain favourable conservation condition		

Assessment of issues that could give rise to adverse effects view of conservation objectives

(i) Water quality degradation

The Blackhall Little watercourse on site provides a hydrological connection to the SAC albeit at somewhat of a distance – c.6km. The subject site is upstream of the SAC so evidence of the QI's not present and unlikely. Good quality water is necessary to maintain the populations of the QI species listed in the SAC downstream with water quality degradation from polluted waters from unmanaged site works flowing into the SAC is the main risk. Decrease in water quality would compromise conservation objectives for species listed. The watercourse crossing proposed on the Blackhall Little stream introduces the potential to impact on water quality downstream.

No operational phase impacts are anticipated

Mitigation measures and conditions

Watercourse crossing methodology and silt management measures

Pollution Control Measures

Construction method statement

Mitigation measures are captured in the specific condition recommended to be included for the updated NIS and accompanying appendices submitted on 9 September 2024

In-combination effects

I am satisfied that in-combination effects have been assessed adequately in the NIS with Section 8 providing an examination of plans and projects including the consented Woodtown solar farm and permitted substation. The proposed grid connection has also been assessed in the updated NIS as part of the overall project and no other plans and projects could combine to generate significant effects when mitigation measures are considered. I am satisfied that the applicant has demonstrated that no significant residual effects will remain post the application of mitigation measures.

Findings and conclusions

The applicant determined that following the implementation of mitigation measures the construction and operation of the proposed development alone, or in combination with other plans and projects, will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects arising from aspects of the proposed development can be excluded for the European sites considered in the appropriate Assessment. No direct impacts are predicted. Indirect impacts would be temporary in nature and mitigation measures are described to prevent ingress of silt laden surface water. Monitoring measures are also proposed to ensure compliance and effective management of measures. I am satisfied that the mitigation measures proposed to prevent adverse effects have been assessed as effective and can be implemented and that there will be no in-combination effects arising with the identified projects.

Reasonable scientific doubt

I am satisfied that no reasonable scientific doubt remains as to the absence of adverse effects.

Site Integrity

The proposed development will not affect the attainment of the Conservation objectives of the Rye Water Valley/Carton SAC (001398). Adverse effects on site integrity can be excluded and no reasonable scientific doubt remains as to the absence of such effects.

Appropriate Assessment Conclusion: Integrity Test

In screening the need for Appropriate Assessment, it was determined that the proposed development could result in significant effects on the River Boyne and River Blackwater SAC (002299) and Rye Water Valley/Carlton SAC (001398) in view of the conservation objectives of those sites and that Appropriate Assessment under the provisions of S177U was required.

Following an examination, analysis and evaluation of the NIS, all associated material submitted including the further information submitted, I consider that adverse effects on site integrity of the the River Boyne and River Blackwater SAC (002299) and Rye Water Valley/Carlton SAC (001398) can be excluded in view of the conservation objectives of these sites and that no reasonable scientific doubt remains as to the absence of such effects.

My conclusion is based on the following:

- Detailed assessment of construction, operational and decommissioning impacts.
- Effectiveness of mitigation measures proposed including those set out in the updated NIS and appendices to same.
- Application of planning conditions to ensure compliance with the mitigation measures are implemented
- The proposed development will not affect the attainment of conservation objectives for the River Boyne and River Blackwater SAC (002299) and Rye Water Valley/Carlton SAC (001398)