

REPORT TO INFORM APPROPRIATE ASSESSMENT SCREENING FOR PROPOSED ENERGY WORKS AT SDC LEISURE CLONDALKIN, NANGOR ROAD, CLONDALKIN, DUBLIN 22

Report to Inform AA Screening

Prepared for:

South Dublin County Council



Comhairle Contae South Dublin
Átha Cliath Theas County Council

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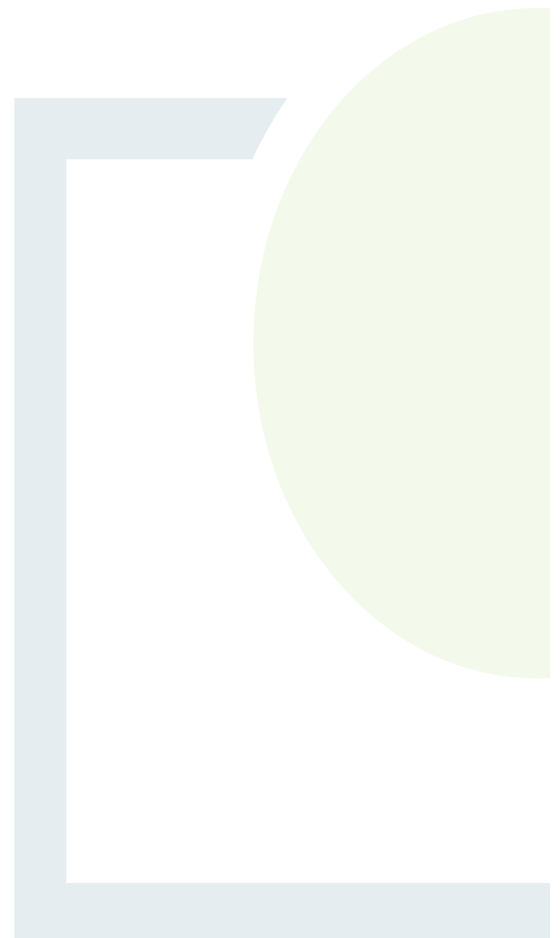
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Abstract: Fehily Timoney and Company is pleased to submit this Report to Inform Appropriate Assessment Screening to South Dublin County Council for the proposed energy works at SDC Leisure Clondalkin, Nangor Road, Clondalkin, Dublin 22.

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1. INTRODUCTION

Fehily Timoney and Company (FT) have been commissioned by South Dublin County Council (SDCC) to prepare this Appropriate Assessment Screening Report, for undertaking energy works aimed at decarbonising and improving energy efficiency at SDC Leisure Clondalkin, Nangor Road, Clondalkin, Dublin 22 (referred to as the 'proposed development' in this report).

This report presents an examination of whether the proposed works are likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and is based on best available scientific knowledge. This report has been prepared to inform the competent authority in completing their statutory obligations in relation to Appropriate Assessment, as required by Article 6(3) under Council Directive 92/43/EEC (Habitats Directive)¹.

1.1 Legislative Context

Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive)² provides legal protection for habitats and species of European importance. The Directive requires that where a plan or project is likely to have a significant effect on a European Site, while not directly connected with or necessary to the nature conservation management of the site, it will be subject to 'Appropriate Assessment' to identify any implications for the European site in view of the site's Conservation Objectives. Specifically, Article 6(3) of the Habitats Directive states:

"6(3) Any plan or project not directly connected with or necessary to the management of the site (Natura 2000 sites) but likely to have significant effect thereon, either individually or in combination with other plans or projects, shall be subject to Appropriate Assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."

The competent authority must carry out a screening for appropriate assessment to assess, in view of best scientific knowledge, if the proposed project, individually or in combination with another plan or project is likely to have a significant effect on a European site. If it cannot be excluded, on the basis of objective information, that the proposed project, individually or in combination with other plans or projects, will have a significant effect on a European site, an appropriate assessment of its implications for the European Site(s) in view of the Site's conservation objectives is required to be carried out.

The provisions of Article 6(3) do not apply where the proposed plan or project is 'connected with or necessary to the management of the site'. In this case, the proposed project is not directly connected with or necessary to the management of any European site(s).

¹ European Commission. (2021). Commission notice- Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (Issue 2021/C 437/01).

² European Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Habitats Directive).



1.2 Methodology

The purpose of appropriate assessment is to assess the implications of a plan or project on European site in view of that site's conservation objectives, individually and in combination with other plans or projects.

The assessment was conducted in accordance with the following guidance:

- Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin (2009, updated 2010) (Environment Heritage and Local Government, 2009)³.
- Interpretation Manual of European Union Habitats. Version EUR 28. (European Commission, 2013)⁴.
- Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC. European Commission (2019). Brussels, (2019/C 33/01). OJ C 33, 25.1.2019⁵.
- OPR Practice Note PN01 Appropriate Assessment Screening for Development Management, (Office of the Planning Regulator, 2021)⁶.
- Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Commission Notice (2021) Brussels, 28.9.2021 C(2021) 6913 final (European Commission, 2021)⁷.

³ Environment Heritage and Local Government. (2009). Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities.

⁴ European Commission. (2013). Interpretation Manual of European Union Habitats. EUR 28.

⁵ European Commission. (2019). Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC.

⁶ Office of the Planning Regulator. (2021). OPR Practice Note PN01. Appropriate Assessment Screening for Development Management.

⁷ European Commission. (2021). Commission notice- Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (Issue 2021/C 437/01).



1.3 Relevant Experience and Expertise of Assessor and Reviewer

Conor Murphy of FT prepared the report. Conor is a Project Ecologist working in the Circular Economy and Environment Team in FT. Conor has four years' postgraduate experience and holds a BSc. (Hons) in Zoology from University of Galway (formerly National University of Ireland, Galway) and a MSc. in Wildlife Conservation and Management (1st Class Hons) from University College Dublin. Conor has in-depth knowledge of environmental policy, legislation and assessment procedures. Conor has an in-depth knowledge of the AA process and understanding of the legislation governing AA practice in Ireland and the EU.

Richard Deeney of FT was responsible for reviewing the assessment and report. Richard is a Principal Environmental Scientist working as part of the Circular Economy and Environment Team at FT. Richard holds a B.Sc. First Class Honours degree in Environmental Management from Technological University Dublin (formerly Dublin Institute of Technology) and an Advanced Diploma in Planning and Environmental Law with the Honorable Society of King's Inns. Richard is a Chartered Environmentalist with the Society for the Environment and has 14 years' experience.

Bernie Guinan was responsible for reviewing and approving the report. Bernie is Director with FT and is a Chartered Waste Manager. She has 25 years' experience in delivering and managing projects and infrastructure delivery for a wide variety of sectors. Bernie has extensive experience in all aspects of strategic management planning and infrastructure development in Ireland, the UK, KSA and UAE. She is an experienced planning policy analyst and strategic planner. She has in-depth knowledge of all environmental and planning policy, legislation and guidance. She has been providing environmental, planning and waste management consultancy services to public bodies for over 25 years. She has a vast amount of experience coordinating EIA, SEA and AA projects, including national, large-scale and complex projects.



2. DESCRIPTION OF THE PROJECT

2.1 Overview of the Proposed Development

The proposed development is part of a wider project to decarbonise SDCC's buildings with the largest energy consumption and greenhouse gas emissions. The Baseline Emissions profile published in SDCC's Local Authority Climate Action Plan (LACAP) 2024-2029 identified six buildings in SDCC ownership that had the highest emissions reductions potential. The Clondalkin Leisure Centre was one of the six identified buildings.

The proposed works comprise:

- Installation of a rooftop solar PV array, with associated site works.
- Installation of a heat pump system to be located on the split level roof, adjacent to the existing plant room, with associated site works. A 2 m louver fence will be installed around the compound area above the existing parapet.

2.2 Construction Phase of the Proposed Development

2.2.1 Overview of Proposed Installation Works

The proposed works comprise the installation of a roof-mounted solar photovoltaic (PV) system and air source heat pumps (ASHP) at SDC Leisure Clondalkin. The solar panels will generate renewable electricity for on-site use, while the ASHP will provide space heating and hot water.

Works include electrical and mechanical installations, external placement of the heat pump unit, and internal connections.

Three heat pumps with the following specifications will be installed:

- Manufacturer: Rhoss
- Model: WinPACK ECO HT65
- Length: 3660mm
- Height: 2000mm
- Depth: 1520mm

One heat pump with the following specifications will be installed:

- Manufacturer: Rhoss
- Model: MidiPACK-PI
- Length: 1635mm
- Height: 1670mm
- Depth: 600mm



The proposed solar panels to be installed will be of the following specifications:

- Deep Blue 3.0 505W MBB Half Cell Module
- Width of panel 1130mm
- Length of panel 2090mm
- Depth 20mm
- Solar panels will remain in fixed position.

The estimated area of solar PV arrays to be installed will be 1,300 m².

2.2.2 Construction Programme

Construction works will be carried out between September to December 2026, with some potential works continuing into early 2027.

Hours of construction will be restricted to the times defined in the SDCC CDP:

- 07:00-19:00 on Monday to Friday
- 09:00-13:00 on Saturdays

No work will be undertaken on Sundays, bank holidays and public holidays. Approximately 1 to 10 no. construction workers will be employed for carrying out the works.

2.2.3 Environmental Management during Construction

The selected contractor (Alternative Heat Ltd.) has carried out a site-specific risk assessment applicable to the proposed development site and has prepared a suite of mitigation measures for identified risks. This has been included in the Health and Safety Plan prepared by the contractor, and a summary of the risk assessment and mitigation measures can be found in the Part 8 Planning Report for the proposed development.

These measures will mitigate the following identified risks:

- Public safety risks from high pedestrian activity near council services, car parks, shops, public transport links and nearby facilities
- Traffic disruption and congestion affecting roads, car parks, staff, visitors and service users
- Temporary restricted access to the leisure centre and disruption to services.
- Noise and vibration affecting nearby residential areas, schools, offices, businesses and leisure centre operations.
- Dust and air quality issues
- Emergency access restrictions for the leisure centre and surrounding facilities
- Construction waste and debris causing pedestrian hazards, environmental damage or visual pollution
- Weather-related delays and hazards such as slippery surfaces, flooding or unsafe materials during windy conditions



- Reputational and community impact from poor communication or mismanagement of disruption
- Security and emergency preparedness risks due to high daily footfall and continuous public activity

Note: No environmental mitigation measures have been considered when examining whether the proposed works are likely to have a significant effect on a European site (either alone or in combination with other plans or projects)

2.3 Operational Phase of the Proposed Development

The proposed development, once operational, will act as a low-carbon, sustainable heating system for the building as well as capturing visible light to convert it to renewable energy for use within the building. Scheduled servicing and maintenance will be carried out on the heat pumps and on the solar PV arrays as required by the appointed contractor.

The operational phase of the proposed development is projected to bring down the building's energy annual energy consumption to 1,212,413 kWh per year. This will result in 57% savings. The building will also consequently reduce greenhouse gas emissions to 303,938 kgCO₂e, resulting in 50% reduction on current levels.

2.4 Existing Environment

The proposed development will be sited on the roof of the SDC Clondalkin Leisure Centre and on the split-level roof at the western boundary of the building. The proposed development will be contained within the red line boundary area of 5,313 m² (0.5313 hectares).

The SDC Clondalkin Leisure Centre contains a dry sports facility, a 25 m x 17 m pool, gym, creche and studios for classes and is used by Clondalkin residents and wider community. The original SDC Clondalkin Leisure Centre building was constructed in 1970 and further refurbished in 2007 with the construction of a new building. The total floor area of the existing building is 5,035 m².

The building is currently heated by gas boilers. The existing building currently consumes 2,836,050 kWh annually. Annual greenhouse gas emissions from the current building operations are 611,858 CO₂e.

2.4.1 Description of Existing Ecological Baseline

2.4.1.1 *Desktop Assessment*

In July 2026, a desk study was carried out to collate available information on the existing natural environment at the location of the proposed development. This comprised a review of the following publications, data and datasets:

- Environmental Protection Agency (EPA) (on-line map-viewer including the Appropriate Assessment Tool);
- Aerial imagery of the proposed development and surrounding lands
- Tailte Éireann National Land Cover Map
- OSI Aerial photography and 1:50000 mapping
- Geological Survey Ireland (GSI) maps and data
- Department of Housing, Planning, and Local Government- EIA Portal;



- National Parks and Wildlife Service – online European site network information, including site conservation objectives;
- National Parks and Wildlife Service – Information on the status of EU protected habitats and species in Ireland (including Article 17 and Article 12 Reports);
- National Biodiversity Data Centre (NBDC) Biodiversity Maps viewer (Accessed July 2026); and
- National Land Cover (2018) dataset (Accessed July 2026).

The area surrounding the proposed development location is semi-urban in nature, comprising various amenity grasslands and residential properties. Clondalkin Leisure Centre is bounded on the north by commercial buildings and by Mill Lane to the south. The Leisure Centre's car park and apartments (Mill Pond) are located to the east of the building with amenity grassland and Clondalkin Community Centre's GAA pitches located to the west.

The wider road network surrounding Clondalkin Leisure Centre and Library include Old Nagor Road to the north, Tower Road to the east and the R113 to the west.

Clondalkin Leisure Centre is underlain by Dublin ground water body (ID: IE_EA_G_008). The groundwater status is 'Good'. Soils underlying the site is classified as Urban, described as 'Urban - soil concreted cover', and are underlain by Made subsoils.

The proposed development site is underlain by a Locally Important Aquifer (Bedrock which is Moderately Productive only in Local Zones). Groundwater vulnerability is classified as 'Extreme', indicating that groundwater at the site has natural characteristics that makes it extremely vulnerable to contamination by human activities.

The proposed development is located within the Water Framework Directive (WFD) Catchment Liffey and Dublin Bay (Catchment ID: 09), the Liffey_SC_090 Sub-catchment (Sub-catchment ID: 09_15) and the CAMAC_030 River Sub Basin (IE_EA_09D010620). The closest waterbody within the same sub-basin is the Jobstown Stream (IE_EA_09C020310), located approximately 65 m to the south. The Camac River (EPA Code: 09C02, Order: 4th) flows in a north-easterly direction before discharging into the Liffey Estuary Upper (IE_EA_090_0400) approximately 9.2 km north-east of the site. The receiving Camac River is of 'Poor' biological status (WFD Status 2019-2024) and is at risk of failing to meet 'Good' status.

An unnamed waterbody (Segment Code: 09_20) is located c. 17 m to the south-east of the proposed development. The unnamed waterbody discharges into the Camac River c. 237 m to the west of the proposed development.

As per CORINE land use (2018), the development site is classified as 'Pastures' (231).

According to the National Land Cover mapping, the proposed development comprises Buildings (110) and Other Artificial Surfaces (130). Examination of the orthophotography indicates the presence of a Treeline (470) located along the south-western boundary of the proposed development.

Examination of the Catchment Flood Risk Assessment (CFRAM) flood maps for the area indicate that the development site is not at high risk of fluvial flooding.

There were no records of alien invasive species documented within the proposed development site.



3. SCREENING FOR APPROPRIATE ASSESSMENT

3.1 Introduction

This section of the report examines whether the proposed works are likely to have a significant effect upon European Sites, either alone or in combination with other plans or projects.

3.2 Identification of European Sites within the Zone of Influence of the Proposed Development

The process of determining the likelihood of significant effects from a Proposed Development on European sites is an iterative process centred around a Source-Pathway-Receptor (S-P-R) model as per OPR, 2021⁸. For an effect to be established, all three elements of this mechanism must be in place. The absence of one of the elements of the mechanism is sufficient to conclude that a potential effect cannot occur.

- Source(s) – e.g. pollutant run-off, noise, removal of vegetation, etc.;
- Pathway(s) – functional link, or ecological pathway e.g. watercourse flowing into a downstream SAC; and
- Receptor(s) – the qualifying habitats and species of European sites and ecological resources supporting those habitats/species.

In the context of this report, a source is any identifiable element of the Proposed Development that is known to interact with the receiving environment. A receptor is the Qualifying Interests (QI)⁹ for an SAC/cSAC or Special Conservation Interests (SCI)¹⁰ for an SPA/cSPA or an ecological feature that is known to be utilised by the QI/SCI. In practice, the term QI also applies to SCIs (and is used in this document for simplicity). A pathway is any connection or link between the source and the receptor.

The European Commission Notice (2021) on the 'Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC', states that in identifying European sites (Natural 2000 sites), which may be affected by the project, the following should be identified:

- Any European sites geographically overlapping with any of the actions or aspects of the proposed development in any of its phases, or adjacent to them;

⁸ Office of the Planning Regulator. (2021). OPR Practice Note PN01 Appropriate Assessment Screening for Development Management

⁹ SACs are areas designated under the Habitats Directive to conserve habitats listed in Annex I of the Directive and plant and animal species listed in Annex II. Collectively these are referred to as the 'Qualifying Interests' or 'QIs' of the SAC / cSAC.

¹⁰ SPAs are sites classified under the Birds Directive to protect rare or vulnerable bird species listed in Annex I to the Directive as well as regularly occurring migratory species and wetlands. Wetland habitats that support internationally important populations of migratory birds may be coastal or inland. Collectively, these species and habitats are referred to as the 'Special Conservation Interests' of the SPA / cSPA.



- Any European sites within the likely zone of influence (Zoi) of the proposed development. European sites located in the surroundings of the proposed development (or at some distance) that could still be indirectly affected by aspects of the proposed development, including as regards the use of natural resources (e.g., water) and various types of waste, discharge or emissions of substances or energy;
- European sites whose connectivity or ecological continuity can be affected by the proposed development.

There are no European sites geographically overlapping with the proposed development. As such, further consideration is given to the 'likely zone of influence' and 'connectivity or ecological continuity'.

3.3 Zone of Influence

As per CIEEM guidelines (2018)¹¹, the Zoi for a proposed development is defined having regard to the spatial and temporal scale of potential biophysical changes in the environment which might occur because of the development and throughout its lifetime. In considering such potential biophysical changes, the following was considered:

- Impacts on habitats - the potential for biophysical change by disturbance/damage/ degradation is taken as the footprint of the works (including site clearance) plus 10 m beyond (based on Ryan Hanley, 2014)¹². There are no European sites located within 10 m of the proposed development.
- For groundwater dependant terrestrial ecosystems (GWDTE), regard is had to SEPA guidelines¹³ which prescribes a potential hydrogeological effect zone of 250 m from ground works. There are no European sites located 250 m of the Proposed Development.
- The NRA (2006) Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes¹⁴ notes a 150 m potential disturbance Zoi for otter for breeding holts and 20 m for non-breeding active holts. As such the study area included the proposed development site plus a 150 m buffer to assess habitat suitability for otter and potential association with an SAC population. The proposed development is not located within 150 m from an SAC. Furthermore, there is no connections between the proposed development and any surface waterbody, therefore indirect connections can be ruled out.
- The potential disturbance Zoi for birds beyond the footprint of the proposed development was considered having regard to Cutts et al (2013)¹⁵ and was defined as 500 m. Consideration of connectivity or ecological continuity for birds is set out in 3.3.1.

¹¹ CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.3. Chartered Institute of Ecology and Environmental Management, Winchester

¹² Ryan Hanley (2014b) Stage 1: Appropriate Assessment Screening Methodology for the Maintenance of Arterial Drainage Schemes. Prepared by Ryan Hanley Consulting Engineers on behalf of the Office of Public Works

¹³ Scottish Environment Protection Agency (2014) Land Use Planning System SEPA Guidance Note 31. Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and groundwater Dependent Terrestrial Ecosystems.

¹⁴ NRA, 2006. Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes. Dublin: National Roads Authority. Available at: <http://www.nra.ie/Environment/>

¹⁵ Cutts N, Hemingway K and Spencer J (2013). The Waterbird Disturbance Mitigation Toolkit Informing Estuarine Planning and Construction Projects. Produced by the Institute of Estuarine and Coastal Studies (IECS). Version 3.2.



3.3.1 Connectivity or Ecological Continuity

Connectivity or ecological continuity refers to the degree to which different parts of a landscape, ecosystem, or habitat are physically or functionally linked, allowing the movement of organisms, nutrients, energy, or ecological processes across space. Consideration is therefore given to whether there could be landscape¹⁶ or ecological connectivity¹⁷ to any QI or SCI species. In considering connectivity or ecological continuity the following is noted:

- None of the terrestrial habitats that will be lost, damaged or degraded as a result of the proposed development are integral to the maintenance of the structure or function of any other habitats within any European sites and do not form continuity with any such habitats.
- The Institute of Air Quality Management (Holman et al, 2024)¹⁸ states that for sensitive ecological receptors, sensitivity to dust is 'High' up to 20 m from the source and reduces to 'Medium' over 50 m from the source. The guidelines also stipulate that dust deposition from construction typically occurs up to 500 m from large sites, 200 m from medium sites and 50 m from small sites. A 50 m Zol for dust is adopted given the small scale of the proposed development. There are no European sites located within the Zol of dust deposition and there are no surface waterbodies located within the Zol for dust deposition. S-P-R connectivity is ruled out.
- For potential for impacts on surface waters, regard is had to IFI (2020) guidelines¹⁹ which states that "The recommended [riparian] buffer zone width for larger river channels (>10 m) is 35 m to 60 m and for smaller channels (<10 m) is 20 m or greater". The unnamed waterbody (Segment Code: 09_20) is located c. 17 m south-east of the proposed development therefore lies within the Zol. The unnamed waterbody discharges into the Camac River c. 237 m to the west of the proposed development. The Camac River is hydrologically connected to the South Dublin Bay SAC (IE0000210) with an instream distance of c. 17.4 km.
- In terms of birds there are no SPAs within the 500 m potential disturbance Zol for birds. There is also no S-P-R connectivity for significant effects on the supporting/wetland habitat of SPAs. In order to assess potential connectivity between the proposed development and mobile SCIs, regard was had to the SNH guidelines for the core foraging ranges of SPA birds, and a 15 km range was adopted for consideration. That is, an assessment was made as to whether the habitats within the Zol of the proposed development could act as foraging or roosting habitat for any avian SCIs of SPAs which are located within 15 km of the proposed development, having regard to the conservation objective backing documents for each SPA. The following SPAs are located within 15 km of the proposed development: Wicklow Mountains SPA (IE0004040) (c. 11.4 km) and South Dublin Bay and River Tolka Estuary SPA (IE0004024) (c. 12 km).

¹⁶ Landscape connectivity is a combined product of structural and functional connectivity, i.e. the effect of physical landscape structure and the actual species use of the landscape.

¹⁷ Connectivity is defined as a measure of the functional availability of the habitats needed for a particular species to move through a given area. Examples include the flight lines used by bats to travel between roosts and foraging areas or the corridors of appropriate habitat needed by some slow colonising species if they are to spread.

¹⁸ Holman et al (2024). IAQM Guidance on the assessment of dust from demolition and construction, Institute of Air Quality Management, London.

¹⁹ Inland Fisheries Ireland (2020) A Guide to the Protection of Watercourses through the use of Buffer Zones, Sustainable Drainage Systems, Instream Rehabilitation, Climate / Flood Risk and Recreational Planning.



- South Dublin Bay SAC (IE0000210): This SAC is located c. 12.4 km (direct distance) from the proposed development. The unnamed waterbody (Segment Code: 09_20) is located c. 17 m south-east of the proposed development and discharges into the Camac River c. 237 m to the west of the proposed development. The Camac River is hydrologically connected to the South Dublin Bay SAC (IE0000210) with an instream distance of c. 17.4 km. This SAC is considered further in terms of potential S-P-R connectivity and potential for significant effects in Table 3-1.
- Wicklow Mountains SPA (IE0004040): This SPA is located c. 11.4 km from the proposed development. The birds associated with this SPA, Peregrine and Merlin, have relatively small core foraging ranges of 2 km and 5 km respectively (SNH, 2016²⁰), as such, the project is located outside of the core foraging range of Peregrine and Merlin. Therefore, there is no S-P-R connectivity for significant effects on Wicklow Mountains SPA and listed SCIs.
- South Dublin Bay and River Tolka Estuary SPA (IE0004024): This SPA is located c. 12 km from the proposed development. The proposed development is located outside of the core foraging range of all avian SCIs with the exceptions of Tern species, Black-headed Gull and Light-bellied Brent Goose. Foraging ranges for Arctic tern, Common tern and Roseate tern lie between 23.2 km - 40.5 km (Nature Scot, 2023²¹), approximately 18.5 km for Black-headed Gull (Nature Scot, 2023²¹) and ca. 15 km is assumed based on the data provided in (SNH, 2016²²). The project and 500 m disturbance distance does not provide suitable habitat for Tern species and provides sub-optimal foraging habitat for these species. This SPA is considered further in terms of potential S-P-R connectivity and potential for significant effects in Table 3-1.

Based on the above, the following European sites are considered further in terms of potential S-P-R connectivity and potential for significant effects (see Table 3-1):

²⁰ Scottish Natural Heritage (2016) Guidance on Assessing Connectivity with Special Protection Areas (SPAs)

²¹ Nature Scot (2023) Guidance Note 3: Guidance to support Offshore Wind applications: Marine Birds - Identifying theoretical connectivity with breeding site Special Protection Areas using breeding season foraging ranges. Version 1: January 2023. Nature Scot, Scotland's Nature Agency

²² Scottish Natural Heritage (2016) Guidance on Assessing Connectivity with Special Protection Areas (SPAs)



Table 3-1: Identification of European Sites within the Zone of Influence of the proposed project

Site Code	Site Name	Distance (km)	Qualifying Features (qualifying interests & special conservation interests)	Potential Effects	Pathway for Significant Effects
(004024)	South Dublin Bay and River Tolka Estuary SPA	12	Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Oystercatcher (<i>Haematopus ostralegus</i>) [A130] Ringed Plover (<i>Charadrius hiaticula</i>) [A137] Grey Plover (<i>Pluvialis squatarola</i>) [A141] Knot (<i>Calidris canutus</i>) [A143] Sanderling (<i>Calidris alba</i>) [A144] Dunlin (<i>Calidris alpina</i>) [A149] Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Redshank (<i>Tringa totanus</i>) [A162] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Roseate Tern (<i>Sterna dougallii</i>) [A192] Common Tern (<i>Sterna hirundo</i>) [A193] Arctic Tern (<i>Sterna paradisaea</i>) [A194] Wetland and Waterbirds [A999]	The SPA is located outside of the ZoI of the proposed development and as such there is no potential for direct impacts on the SPA. However, consideration is given to potential for landscape/ecological connectivity. This SPA is located c. 12 km from the proposed development. The proposed development is located outside of the core foraging range of all avian SCIs with the exception of Tern species, Black-headed Gull and Light-bellied Brent Goose. Foraging ranges for Arctic tern, Common tern and Roseate tern lie between 23.2-40.5 km (Nature Scot, 2023²³). Due to the nature of works (installation of rooftop solar PV array and heat pump system), the proposed development and areas within the 500 m disturbance distance do not provide suitable habitat for Tern species which are largely marine species. Core foraging range for Black-headed Gull is 18.5 km (Nature Scot, 2023²³). Birdwatch Ireland indicates that this species forages on insects within arable fields in coastal and inland habitats. The grassland within 500 m of the project is built environment and disturbed, amenity grassland and is sub-optimal. More valuable habitat is present within the wider landscape. There will be no significant effects on SCI Black-headed Gull.	No

²³ Nature Scot (2023) Guidance Note 3: Guidance to support Offshore Wind applications: Marine Birds - Identifying theoretical connectivity with breeding site Special Protection Areas using breeding season foraging ranges. Version 1: January 2023. Nature Scot, Scotland's Nature Agency



Site Code	Site Name	Distance (km)	Qualifying Features (qualifying interests & special conservation interests)	Potential Effects	Pathway for Significant Effects
				The core foraging range of Light-bellied Brent Goose is assumed to be ca. 15 km based on the data provided in (SNH, 2016 ²⁴). Theoretically, the Project and 500 m disturbance zone overlap with the core foraging ranges of this SCI associated with the SPA. According to the Conservation Objective supporting document, Light-bellied Brent Goose, have a preference for foraging in intertidal areas with the Eelgrass (<i>Zostera</i> sp) and will feed on improved grassland when their primary source of food becomes depleted. However, amenity grassland is located within the 500 m disturbance zone of the project and there are no NBDC records of Light-bellied Brent Goose within 500 m of the proposed development. Furthermore, installation works will be temporary and will be restricted to the existing leisure centre building. There will be no significant effects on SCI Light-bellied Brent Goose.	
(000210)	South Dublin Bay SAC	12.4	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] Embryonic shifting dunes [2110]	This SAC is located c. 12.4 km (direct distance) from the proposed development. An unnamed waterbody (Segment Code: 09_20) is located c. 17 m outside the south-eastern boundary of the proposed development. The unnamed waterbody discharges into the Camac River c. 237 m to the west of the proposed development. The Camac River is hydrologically connected to the South Dublin Bay SAC (IE0000210) with an instream distance of c. 17.4 km.	No

²⁴ Scottish Natural Heritage (2016) Guidance on Assessing Connectivity with Special Protection Areas (SPAs)



Site Code	Site Name	Distance (km)	Qualifying Features (qualifying interests & special conservation interests)	Potential Effects	Pathway for Significant Effects
				Given the nature and extent of the proposed works (installation of solar panels and heat pumps within existing building boundary), the distance downstream (17.4 km) and the assimilative nature of receiving and downstream surface waters and Dublin Bay (ID: IE_EA_090_0000), the proposed development will not give rise to a likely significant effect on the SAC or its Qualifying Interests.	



3.4 Other plans and projects considered for potential in-combination effects

Article 6(3) of the Habitats Directive requires that:

“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives”.

It is therefore required that the likely significant effects of the proposed project are considered in-combination with any other plans or projects within the zone of influence.

As there are no meaningful pathways for effects identified with respect to European sites - given the nature of the habitats that will be affected by the project and the distance from relevant SPA location for SCI species. There are no further considerations required as the S-P-R model has been completed with no potential effects that could arise from the proposed project.

3.5 Screening Conclusion

The results of the S-P-R modelling process identified that - given the scale and nature of the potential sources identified in Section 3 - there are **no likely significant effects** identified to any European sites.

The AA screening process has considered potential effects which may arise during all phases of the proposed project. Through an assessment of the pathways for effects and an evaluation of the sources for impacts, taking account of the processes involved and the distance of separation from European sites, it has been evaluated that there are no likely significant effects on the qualifying interests, special conservation interest or the conservation objectives of any designated European site.



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