

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

Report to Inform EIA Screening

Prepared for:

South Dublin County Council



Comhairle Contae South Dublin
Átha Cliath Theas County Council

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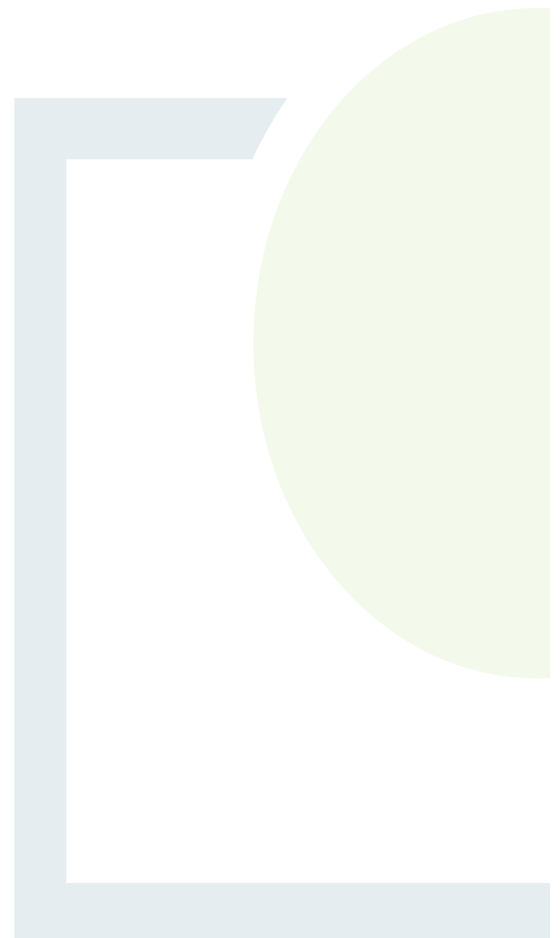
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Abstract: Fehily Timoney and Company is pleased to submit this Report to Inform EIA Screening to South Dublin County Council for the proposed energy works at SDC Leisure Clondalkin, Nangor Road, Clondalkin, Dublin 22.

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1. INTRODUCTION

South Dublin County Council (SDCC) are starting the Part 8 Process for undertaking energy works aimed at decarbonising and improving energy efficiency at the SDC Leisure Clondalkin, Nangor Road, Clondalkin, Dublin 22, D22 E283.

Fehily Timoney and Company (FT) was commissioned by SDCC to prepare a report to inform their EIA Screening for the Part 8 Process for the installation of a heat pump system located on the split level roof, and rooftop solar PV array.

The proposed development is herein referred to as the 'project' or the 'proposed development'.

1.1 Project Overview

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. RELEVANT EXPERIENCE AND EXPERTISE OF THE ASSESSOR AND REVIEWER

Eimear Daly and Sanghamitra Nidhi Dutta of FT were responsible for completing this assessment and report.

Eimear is a Project Scientist working in the Circular Economy and Environment Team in FT. She holds a BSc. (Hons) in Zoology and Earth and Ocean Science from University of Galway (formerly National University of Ireland, Galway) and a MSc. in Global Change: Ecosystem Science and Policy from University College Dublin/Justus Liebig Universität, Gießen.

Sanghamitra is a Senior Project Environmental Scientist working with the Circular Economy and Environment Team in FT, with five years of experience. She holds a BSc. in Environmental Science from St. Edmund's College, India and a MSc. in Global Change: Ecosystem Science and Policy from University College Dublin/Justus Liebig Universität, Gießen. Sanghamitra has carried out EIA Screenings for various types of developments, including several Part 8 developments for South Dublin County Council.

Richard Deeney of FT was responsible for reviewing, checking and finalising 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 Honourable Society of King's Inns. Richard is a Chartered Environmentalist with the Society for the Environment and has 15 years' experience.

Richard has a vast amount of experience coordinating and completing Environmental Impact Assessment Reports and Reports to Inform EIA Screening for a wide variety of development projects including closed landfill remediation projects, materials recovery facilities, soil recovery facilities, healthcare waste management facilities, quarries, power generation facilities, industrial facilities, residential development and tourism development. Richard has a wide and thorough understanding of the various environmental factors that need to be considered during the EIA process and has an in-depth understanding of the legislation and up-to-date case law governing EIA practice in Ireland and the EU. Richard has an in-depth understanding of every stage of the EIA process from the Screening Stage to the Scoping Stage, up to the EIAR completion stage.

Bernie Guinan was responsible for reviewing and approving the assessment and report. Bernie is Director with FT and is a Chartered Waste Manager. She has over 25 years' experience in delivering and managing projects 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 20 years. She has a vast amount of experience coordinating EIA, SEA and AA projects, including national, large-scale and complex projects.



3. DESCRIPTION OF THE EXISTING SITE AND THE RECEIVING ENVIRONMENT

3.1 Existing Site

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

The buildings contain a dry sports facility, a 25 m x 17 m pool, gym, creche and studios for classes. The original SDC Leisure Clondalkin building was constructed in 1970 and refurbished in 2007 while the newer building was constructed in 2007. The building has a useful floor area of 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.

3.2 Receiving Environment

The area surrounding the proposed development location is urban in nature. The SDC Leisure Clondalkin building is bounded on the northeast by the apartment building (Sally Mills Apartments) and the leisure centre carpark. The remainder of the site is bounded by recreational facilities such as an outdoor gym, playground and sports fields.

The SDC Leisure Clondalkin building is located within the Casement Aerodrome Solar Safeguarding Zone.

Access to the site is through the Old Nangor Road to the north-west of the site, which intersects with the R113 to the west. Various pedestrian and bike access routes bypass the site.

The proposed development site is located within zoning classification 'OS' - *'To preserve and provide for open space and recreational amenities'* under the SDCC County Development Plan 2022-2028 (CDP).

The SDC Leisure Clondalkin building is underlain by Dublin ground water body. The groundwater status is 'Good'. The building is underlain by a Locally Important Aquifer, described as 'Bedrock'. Soils underlaying the site is classified as Elton, described as *'Luvisol: Well drained mineral soils'*, and Urban described as *'Urban - soil concreted cover'*, and are underlain by Man Made subsoils. CORINE 2018 describes land-use at the site as *'Agricultural Areas'*.

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.



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 Zone A (Dublin Conurbation) as defined within EPA Air Quality Zones. The nearest Air Monitoring Site is located approximately 3.74km to the north-east at Ballyfermot (Station 50. Ballyfermot, Dublin 10), where the concentrations of air pollutants were as follows at the time of reporting¹:

- PM2.5 - 3.7 µg/m³
- PM10 - 7.5 µg/m³
- NO2 - 5.4 µg/m³

There are no features of archaeological or architectural heritage within the site boundaries. The east of the site is bordered by the Sites and Monuments Record Zone of Notification R149476. A number of recorded features also exist approximately 250m to the east of the site; two Crosses (DU017-041004-) (DU017-041003-), a Church (DU017-041002-), Historic town (DU017-041----), and a Round tower (DU017-041006-).

The site boundary does not overlap with any European Sites; Special Protection Areas (SPA) or Special Areas of Conservation (SAC). The accompanying Appropriate Assessment (AA) Screening Report has considered dominant ecological pathways for transmission of impacts and potential European Sites that may share connectivity with the proposed development. These European Sites include South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC.

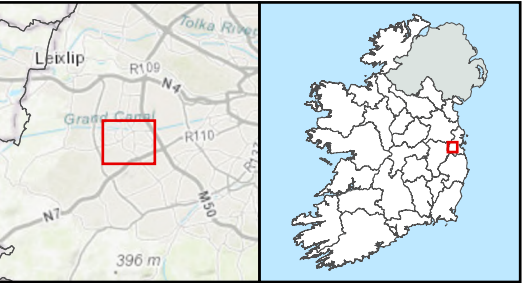
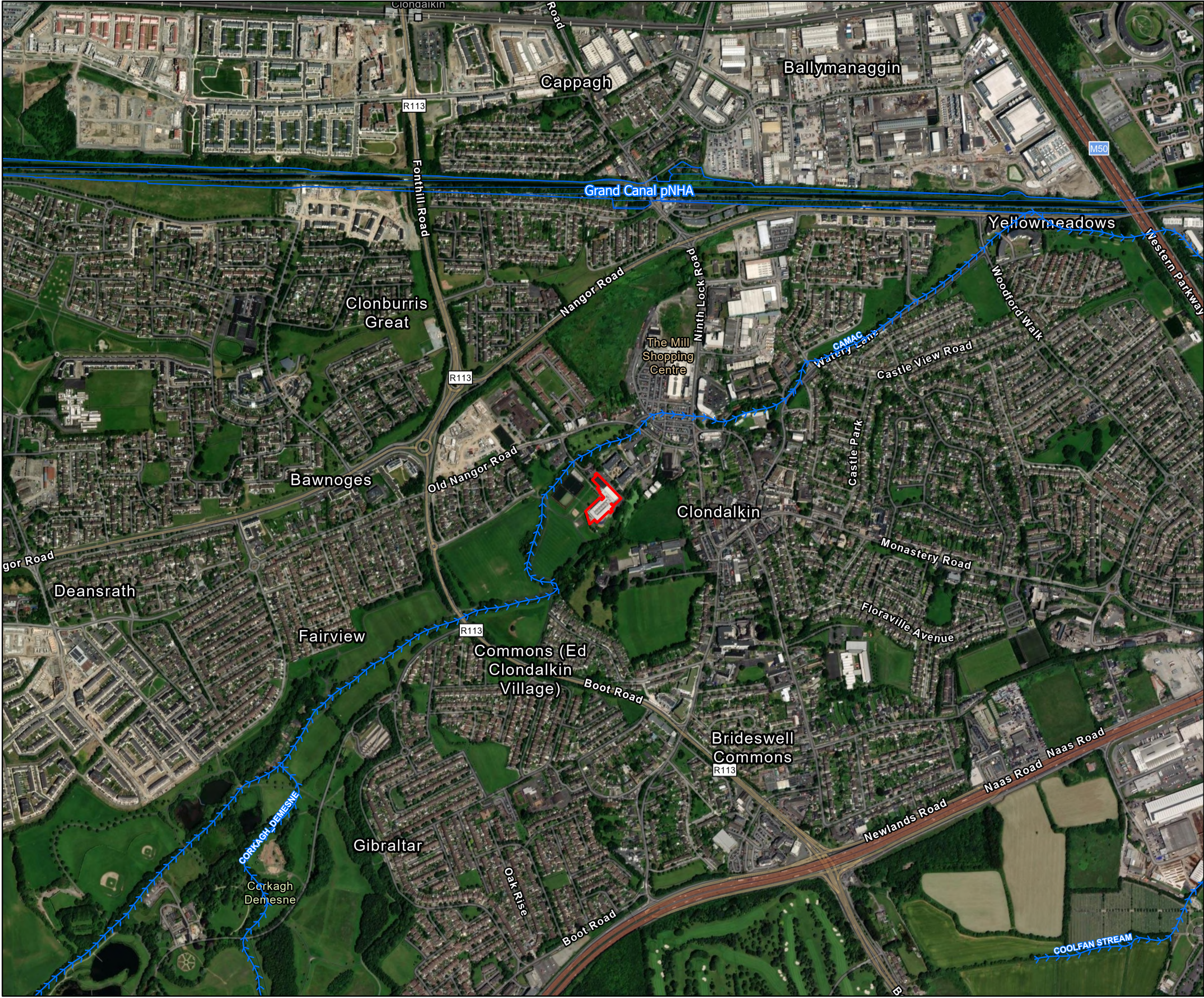
The site boundary does not overlap with any Natural Heritage Area. The nearest proposed Natural Heritage Site is The Grand Canal, which is approximately 860 m north of the site.

The proposed development is located within the *'Urban'* Landscape Character Area (as defined within the CDP). Landscape Sensitivity for this Landscape Character Area is *'N/A'*.

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. The surrounding land to the south-west has high probability of fluvial flooding.

The location of the development site and principal features surrounding the site are presented in Figure 3-1.

¹ Date of reporting: 02nd July 2026



Legend

- Site Boundary
- Proposed Natural Heritage Areas
- ~~~~~ Rivers

TITLE:		Site Location and Context - Clondalkin Leisure Centre	
PROJECT:		Environmental Assessments for SDCC Part 8 Application	
FIGURE NO:		3.1	
CLIENT:		South Dublin County Council	
SCALE:	1:10,000	REVISION:	0
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4. PROJECT DESCRIPTION

4.1 Overview of the Proposed Development

The proposed development is part of a wider project to decarbonise SDCC 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 SDC Leisure Clondalkin building was one of the six identified buildings.

4.2 Purpose/Rationale for the Proposed Development

The proposed development demonstrates SDCC's alignment to decarbonisation, climate action and progress towards the Public Sector Climate Action Mandate, which requires that public bodies, including Local Authorities, take actions to demonstrate decarbonisation and energy efficiency.

The SDCC Corporate Plan has identified 'Climate Leadership' as one of the seven Goals of the Plan and includes an objective to *'make South Dublin a low carbon and climate resilient county'*. The proposed development will directly promote the goal through carrying out these retrofitting works to improve energy efficiency of the council-owned building and result in percentage energy savings.

Action E8 (*'Progress Energy Performance (EPC) to deliver energy efficiency targets for SDCC owned buildings with significance energy usage, including the Leisure Centres, County Hall and Library and Clondalkin Civic Offices'*) of the SDCC LACAP identifies the progression of this project as part of a wider Energy Performance Contract to improve energy efficiency and reduce carbon emissions in SDCC-owned buildings. Action E15 of the LACAP also outlines the intention to install solar PV arrays on council-owned buildings, which the proposed development will support.

The SDCC CDP itself outlines various policies and objectives to support the decarbonisation and optimisation of both new and existing buildings in the County. Objective 3 of Policy E7 particularly supports this by stating *'To support and encourage the ongoing delivery of solar technology on Council owned buildings and sites in accordance with the South Dublin Climate Action Plan'*.

4.3 Construction Phase of the Proposed Development

4.3.1 Overview of Proposed Construction 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.

4.3.2 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.

4.3.3 Environmental Management during Construction

The appointed 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

4.4 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.

4.5 Noise Impact Assessment

A Noise Impact Assessment has been included in the Part 8 documents, which examines the potential impacts of operational noise from the proposed heat pumps on the surrounding buildings, residential units, or users of the building. Both daytime and night-time operational noise levels have been assessed.

The Noise Impact Assessment was undertaken in line with BS4142 Guidance. The assessment concludes that the proposed development will result in a '*low impact*' on all noise sensitive receptors during the daytime and night-time periods.

4.6 Glint and Glare

The SDC Leisure Clondalkin building is located within the identified Casement Aerodrome Solar Safeguarding Zone. A Glint and Glare Assessment was carried out by Macro Works Ltd to determine the potential for solar reflectance effects upon aviation receptors, in respect of the proposed roof-mounted solar PV installations on the SDC Leisure Clondalkin building roof.



The assessment identified the Casement Aerodrome as the key receptor, located approximately 3.2 km to the south-west of the proposed development. The Casement Aerodrome comprises two runways and an Air Traffic Control Tower (ATCT).

Regarding aviation receptors, the SGHAT assessment returned a '*Pass*' result for runway approach paths associated with both the Casement Aerodrome. In relation to the ATCT, the assessment returned a '*Fail*' result for Casement Aerodrome, with the results showing a theoretical potential for Green Glare for a total of 27 minutes over the course of a year. A subsequent visibility analysis confirmed the potential for visibility of the Panel Array PA1 at Casement ATCT.

Notwithstanding this finding, several mitigating factors are relevant to the assessment of potential glint and glare effects:

- Inclusion of the use of anti-reflective coating designed to minimise reflectance effects (less than 3% reflectance)
- The distance from the ATCT to the proposed development and the numerous existing structures within the surrounding and intervening landscape that already emit similar or greater levels of reflectance, forming part of the established visual environment.
- Green Glare is categorised as a Low potential to cause after-image.

It should be noted that the potential reflectance period relates to a total of 27 minutes per year. In this regard, the potential for the ATCT to experience any reflectance emanating from the proposed rooftop array is extremely limited.



5. EIA SCREENING

5.1 Legislative Background

The Environmental Impact Assessment Directive ('EIA Directive')² on the assessment of the effects of certain public and private projects on the environment, requires member states to ensure that a competent authority carries out an assessment of the environmental impacts of certain types of projects, as listed in the Directive, prior to development consent being given for the project.

The EIA Directive requires the following:

'In order to ensure a high level of protection of the environment and human health, screening procedures and environmental impact assessments should take account of the impact of the whole project in question, including, where relevant, its subsurface and underground, during the construction, operational and, where relevant, demolition phases.'

Requirements for the carrying out of EIA of various types of development are transposed into Irish legislation under the Planning and Development Act 2000 (as amended) and the Planning and Development Regulations 2001 (as amended) (the 'Regulations'). Schedule 5, Part 1 of the Regulations includes a list of projects which are subject to EIA based on their type. Part 2 of the same schedule includes a list of projects which by reason of scale also fall into the EIA category for example, wind farms with more than 5 no. turbines or having a total output greater than 5 megawatts or waste handling facilities that handle more than 25,000 tonnes of waste per annum all fall into Part 2. Schedule 5 also includes a section on extensions or changes to developments for example, any change or extension to existing projects which would result in the development being of a class listed in Schedule 5 or result in an increase in size greater than 25% or 50% of the appropriate thresholds would fall into Schedule 5 and thus require an EIA. Any development that meets the above criteria requires 'Mandatory EIA.'

The EIA criteria above are quite clear and prescriptive however in addition to the above Schedule 5 also includes a section relating to 'Sub-threshold' (Discretionary) EIA. This is where any project listed in Schedule 5 Part 2 which does not exceed a quantity, area or other limit specified in respect of the relevant class of development should be subject to EIA where the project would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7 of the Regulations.

5.2 Relevant EIA Screening Guidelines

This assessment was undertaken having regard to the following guidance:

- Guidance on EIA Screening (Directive 2011/92/EU as amended by 2014/52/EU), European Commission, 2017.
- Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development DEHLG (updated December 2020).
- Office of the Planning Regulator Practice Note (PN02) 'Environmental Impact Assessment Screening' (OPR, 2021).

² Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment.



- Guidelines on the information to be contained in Environmental Impact Assessment Reports (EIAR) (EPA, 2022).
- European Commission: Directorate-General for Environment, Interpretation of definitions of project categories of annex I and II of the EIA Directive, Publications Office of the European Union (2024).

5.3 Requirement for Mandatory EIA

The proposed development does not fall into a class of development set out in Schedule 5, Part 1 of the Regulations.

The proposed development has a potential relationship to the following classes of development defined under Schedule 5, Part 2 of the Regulations:

- Development Class 3(a): Industrial installations for the production of electricity, steam and hot water not included in Part 1 of this Schedule with a heat output of 300 megawatts or more.
- Development Class 3(b): Industrial installations for carrying gas, steam and hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables not included in Part 1 of this Schedule, where the voltage would be 200 kilovolts or more.
- Development Class 10(b)(iv): Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere.

The proposed development does not fall within the scope of Development Class 3(a) as it is not an industrial installation and does not generate heat output or energy output of 300 megawatts or more.

The proposed development does not fall within the scope of Development Class 3(b) as it is not an industrial installation, does not generate heat output or energy output of 300 megawatts or more, and does not include the transmission of electrical energy by overhead cables

The proposed development does not fall within the scope of Development Class 10(b)(iv) as the total area of the proposed development is substantially lower than the thresholds specified in the class.

It is clear the proposed development is significantly below the applicable thresholds for Mandatory EIA having regard to the above and the nature and scale of the development. Although a mandatory EIA is not triggered for the proposed project, an assessment of the likelihood of the proposed works to have a significant effect on the environment having regard to the criteria set out in Schedule 7 will be undertaken. If it is likely that the project will have a significant effect on the environment having regard to the criteria set out hereunder, an EIA will be required.

The EPA 2022 Guidelines on Information to be contained in Environmental Impact Assessment Reports notes that even where a proposed development is not a type that requires EIA, determining whether Sub-threshold EIA Screening is required is an increasingly complex issue and should not be decided on without full consideration of the EIA Directive's 'wide scope and broad purpose' as set out in the European Commission's document entitled Interpretation of definitions of project categories of annex I and II of the EIA Directive (2015, updated in 2024).



5.4 Sub-Threshold Development EIA Screening

This section of this report screens the project in the context of the criteria set out in Schedule 7 of the Regulations and Annex III of the EIA Directive. This EIA Screening considers the 'whole project' including all secondary ancillary/subsidiary elements essential to the construction and operation of the proposed development.

The criteria to be used to determine whether a project requires Sub-threshold EIA, set out in Schedule of the Regulations and Annex III of the EIA Directive, is set out below:

The requirements are as follows:

1. Characteristics of the Proposed scheme

The characteristics of projects must be considered, with particular regard to:

- a) the size and design of the whole project;*
- b) cumulation with other existing and/or approved projects;*
- c) the use of natural resources, in particular land, soil, water and biodiversity;*
- d) the production of waste;*
- e) pollution and nuisances;*
- f) the risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge;*
- g) the risks to human health (for example due to water contamination or air pollution).*

2. Location of the Proposed scheme

The environmental sensitivity of geographical areas likely to be affected by the proposed development, with particular regard to:

- a) the existing and approved land use,*
- b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground,*
- c) the absorption capacity of the natural environment, paying particular attention to the following areas:*
 - *wetlands, riparian areas, river mouths;*
 - *coastal zones and the marine environment;*
 - *mountain and forest areas;*
 - *nature reserves and parks;*
 - *areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive and;*
 - *areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure;*
 - *densely populated areas;*
 - *landscapes and sites of historical, cultural or archaeological significance.*



3. Types and Characteristics of Potential Impacts

The likely significant effects on the environment of proposed development in relation to criteria set out under paragraphs 1 and 2, with regard to the impact of the project on the factors specified in paragraph (b)(i)(I) to (V) of the definition of ‘environmental impact assessment report’ in section 171A of the Act, taking into account:

- a) the magnitude and spatial extent of the impact (for example geographical area and size of the affected population likely to be affected);*
- b) the nature of the impact;*
- c) the transboundary nature of the impact;*
- d) the intensity and complexity of the impact;*
- e) the probability of the impact;*
- f) the expected onset, duration, frequency and reversibility of the impact;*
- g) the cumulation of the impact with the impact of other existing and/or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment, and;*
- h) the possibility of effectively reducing the impact.*

This assessment uses the EIA Screening Checklist taken from the European Commission’s Guidance on EIA Screening (2017) to screen the proposed development for Sub-threshold EIA. This checklist encompasses the details required under Schedule 7 of the Regulation and Annex III of the EIA Directive. The results of the assessment are presented in Table 5-1.



Table 5-1: EIA Screening Checklist

Checklist Questions	Yes/No/Briefly Describe	Is this likely to result in a significant impact? Yes/No/Why?
1. Will construction, operation, decommissioning, or demolition works of the Project involve actions that will cause physical changes in the locality (topography, land use, changes in waterbodies, etc.)?	No. The installation works for the proposed development will be carried out on the roof of a built structure and will not result in the physical changes of any feature of the natural environment.	No.
2. Will construction or the operation of the Project use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or are in short supply?	Yes. A small quantum of materials will be used during the installation of the proposed development. Water and energy are used in the production of such materials. The proposed development, over operation, requires the use of electricity to convert into heat. The proposed heating system will, however, use less energy to operate, compared to traditional heating systems such as gas or oil boilers. It will not use any natural resources to an extent or magnitude that will cause likely significant effects on the environment.	No. No adverse significant effects will occur through the use of natural resources required over the construction or operational phase of the proposed development, owing to its scale and nature.
3. Will the Project involve the use, storage, transport, or production of substances or materials which could be harmful to human health, to the environment or raise concerns about actual or perceived risks to human health?	No. While the construction phase will generate a small quantum of waste (typically associated with the packaging of the heat pump units and solar PV arrays), this will not be hazardous in nature and will not be harmful to human health or the wider environment. There will be no generation of such substances or materials over the operational phase.	No. The proposed development will not utilise or produce substances or materials which could be harmful to human health or the environment. The proposed construction phase works will be undertaken in accordance with a Health and Safety Plan prepared by the appointed contractor, which will minimise risks to human health and the environment.



Checklist Questions	Yes/No/Briefly Describe	Is this likely to result in a significant impact? Yes/No/Why?
4. Will the Project produce solid wastes during construction or operation or decommissioning?	Yes. A small quantum of waste will be produced over the construction phase, typically consisting of recycling materials, such as wood from pallets, cardboard boxes from packaging, plastics packaging and metal scrap. This waste will be segregated and stored safely on site before being dispatched to an appropriately authorised waste facility for management. There will be no waste generation over the operational phase.	No. No significant effects are anticipated in relation to waste generation. The levels of waste produced over the construction phase will be minor. Any waste generated will be collected and managed by appropriate authorised waste collectors/facilities, in accordance with the provisions of the Waste Management Act (as amended).
5. Will the Project release pollutants or any hazardous, toxic or noxious substances to air or lead to exceeding Ambient Air Quality standards in Directives 2008/50/EC and 2004/107/EC?	No. The installation works over the construction phase may generate some levels of dust. The effects of this will be temporary and imperceptible. Some greenhouse gas emissions will occur over the operation of the proposed development. However, this will contribute to an overall reduction in the energy consumption of the SDC Leisure Clondalkin building as the proposed heating system is more energy efficient compared to traditional heating systems. The adjacent project involving the installation of solar PV arrays will not produce any emissions over its operational lifetime, and will contribute to the reduction of the building's energy consumption from the national grid and consequent greenhouse gas emissions.	No. The effects of the construction phase-related emissions will be temporary and imperceptible, given the magnitude and nature of the works to be carried out. The Health and Safety Plan of the appointed contractor contains dust control measures to prevent significant effects on receptors such as air quality, and human health. No emissions of significance will be generated over the operational phase. The proposed development is specifically designed to decarbonise and improve energy efficiency of the SDC Leisure Clondalkin building.



Checklist Questions	Yes/No/Briefly Describe	Is this likely to result in a significant impact? Yes/No/Why?
6. Will the Project cause noise and vibration or the releasing of light, heat energy or electromagnetic radiation?	Yes. Noise emissions will occur over the construction phase works as a result of installation of the proposed development. This will be temporary and imperceptible, given the scale and nature of the proposed development. Construction works will be carried out during hours specified in the SDCC CDP, and ongoing communication with building and facilities managers will be undertaken to schedule works where disruption to building users are minimised. There will be operational noise emissions from the proposed heat pumps. A Noise Impact Assessment has been undertaken, which notes that predicted noise levels will be below the measured background noise levels in the area, resulting in a '<i>low impact</i>'. The proposed development will not cause any vibration, light, heat energy or electromagnetic radiation over the operational phase. The proposed solar arrays have been subject to a glint and glare assessment (See Section 4.6) to evaluate the potential for hazards posed by solar reflection. The proposed development has resulted in a '<i>Pass</i>' for impacts on the runway approach paths associated with the Casement Aerodrome. While the proposed development returned a '<i>Fail</i>' for the ATCT, design mitigation measures have been incorporated to minimise reflectance effects to less than 3% reflectance.	No. Noise emissions over the construction phase will be temporary and imperceptible, and works will be carried out within defined working hours and will be scheduled to minimise disruptions to building users. Noise emissions for the operational phase will be medium-term to long-term (depending on the lifespan of the chosen heat pumps) and imperceptible. The proposed solar arrays for the adjacent project have been assessed for glint and glare. The glint and glare assessment has not identified any potential for significant solar reflections requiring mitigation.



Checklist Questions	Yes/No/Briefly Describe	Is this likely to result in a significant impact? Yes/No/Why?
7. Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?	No. An unnamed lake segment located c. 17 m to the south-east of the proposed development location, which discharges into the Camac River. However, the proposed development is located on the rooftop of a built structure and will not interact with either waterbody. There is limited potential for construction phase activities to result in the contamination of any environmental receptors, given the nature, scale and extent of the works. The works will not interact with the groundwater body underlying the building. The operational phase of the proposed development will not result in any environmental contamination.	No. The proposed development will not result in the discharge of any polluting material to surface water, groundwater or coastal water bodies. The accompanying AA Screening Report notes, 'Given the nature of works (installation of solar panels and heat pumps within existing building boundary), absence of an S-P-R (no direct hydrological connection), hydrological distance between the Camac River and the SAC (17.4 km) and dilution factor (SAC lies within Dublin Bay [ID: IE_EA_090_0000]). There will be no significant effects on South Dublin Bay SAC and its listed Qualifying Interests.' There will be no significant pollution effects on any receptor.
8. Will there be any risk of accidents during construction or operation of the Project that could affect human health or the environment?	Construction phase works have the potential to create risks to human health and safety. The works will be carried out in accordance with the appointed contractor's methodologies, and will adhere to the Safety, Health and Welfare at Work Act and associated regulations. There are no particular risks to health and safety during the operational phase of the proposed development. The proposed development has been subject to a noise impact assessment and glint and glare assessment. Neither assessment has identified the potential for significant adverse effects over the operational phase.	No. Construction phase works will be undertaken safely and in accordance with the Safety, Health and Welfare at Work Act, and associated regulations. Given the implementation and adherence to method statements and the Health and Safety Plan which has been prepared by the appointed contractor, the risk of accidents is low.



Checklist Questions	Yes/No/Briefly Describe	Is this likely to result in a significant impact? Yes/No/Why?
9. Will the Project result in environmentally related social changes, for example, in demography, traditional lifestyles, employment?	Yes. The construction phase of the proposed development will impact employment numbers positively by creating opportunities for contractors required for the installation of the proposed development. This will result in temporary, not significant and positive effects on employment. The proposed development, upon operation, will support the local authority's decarbonisation and energy efficiency goals. The nature of these effects will be positive and long-term on receptors such as climate and population and human health.	The proposed development will lead to positive effects over the construction and operational phases.
10. Are there any other factors that should be considered such as consequential development which could lead to environmental impacts or the potential for cumulative impacts with other existing or planned activities in the locality?	No. The proposed development will not generate any perceptible negatives impacts, therefore cannot meaningfully contribute to cumulative effects, in conjunction with other development. The proposed development is entirely consistent with the nature of existing development in the surrounding urban area.	No.
11. Is the Project located within or close to any areas which are protected under international, EU or national or local legislation for their ecological, landscape, cultural or other value, which could be affected by the Project?	No. The proposed development is not located within or close to any sites or features that are protected by international, EU, national or local legislation for their ecological, landscape, cultural or other values. European Sites have been considered within the accompanying AA Screening Report, which includes South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC.	No. The AA Screening Report concludes that <i>'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.'</i>



Checklist Questions	Yes/No/Briefly Describe	Is this likely to result in a significant impact? Yes/No/Why?
	There are no cultural heritage features within the proposed development boundary or in its immediate vicinity that could be impacted by the construction or operational phase.	The proposed development will not have a likely significant effect on any European Site, given the nature and magnitude of the proposed development, its zone of influence, having regard to identified potential environmental impacts, and the distance from the proposed development to the protected sites.
12. Are there any other areas on or around the location that are important or sensitive for reasons of their ecology e.g., wetlands, watercourses or other waterbodies, the coastal zone, mountains, forests or woodlands, that could be affected by the Project	No. The area surrounding the proposed development location is typical of the urban built environment, consisting of commercial, residential and community buildings. The proposed development itself is located on a built structure and will not result in the loss of any greenfield area.	No. Given the scale and the nature of the proposed development, it is unlikely that the proposed development will result in any likely significant effects on any sensitive ecological receptors.
13. Are there any areas on or around the location that are used by protected, important or sensitive species of fauna or flora e.g., for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the Project?	No. The area surrounding the proposed development location is typical of the urban built environment, consisting of commercial, residential and community buildings. The proposed development itself is located on a built structure and will not require the removal of any trees or hedgerows. The AA Screening Report concludes that ' <i>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.</i> '	No. Given the nature and scale of the proposed development and the nature of the receiving environment, it is unlikely that the proposed development will result in any likely significant effects on sensitive ecological receptors.



Checklist Questions	Yes/No/Briefly Describe	Is this likely to result in a significant impact? Yes/No/Why?
14. Are there any inland, coastal, marine or underground waters (or features of the marine environment) on or around the location that could be affected by the Project?	No. An unnamed lake segment located c. 17 m to the south-east of the proposed development location, which discharges into the Camac River. However, the proposed development is located on the rooftop of a built structure and will not interact with either waterbody. There are no inland, coastal, marine or underground waters that could be affected by the proposed development, over either the construction or operational phase.	No. Given the location, nature and scale of the proposed development and the nature of the receiving environment, it is unlikely that the proposed development will result in any likely significant effects on sensitive hydrological or hydrogeological receptors.
15. Are there any areas or features of high landscape or scenic value on or around the location which could be affected by the Project?	No. The location of the proposed development site is on lands zoned 'OS' - <i>'To preserve and provide for open space and recreational amenities'</i> The proposed development itself is relatively minor in scale and visually unobtrusive. It does not conflict with the character of the receiving landscape ('Urban LCA'). The proposed development has also been subject to a glint and glare assessment, which concludes that there will be no significant solar reflection on the relevant receptors. There will be no landscape or visual impacts from installation or operation of the proposed development.	No. Given the nature and scale of the proposed development and the nature of the receiving environment, it is unlikely that the proposed development will result in any significant adverse effects on sensitive hydrological or hydrogeological receptors.



Checklist Questions	Yes/No/Briefly Describe	Is this likely to result in a significant impact? Yes/No/Why?
16. Are there any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the Project?	No. The proposed development will not be accessed by building users outside of staff for scheduled maintenance/servicing. The proposed development will not impact any routes or facilities with regards to access for members of the public.	No. Given the nature and scale of the proposed development and the nature of the receiving environment, it is unlikely that the proposed development will result in any significant adverse effects on any routes or facilities over the construction or operational phases.
17. Are there any transport routes on or around the location that are susceptible to congestion or which cause environmental problems, which could be affected by the Project?	No. The wider road network surrounding the building is well connected to the Regional (R113) Road network. The surrounding road network has the capacity to accommodate this temporary increase in traffic from construction phase vehicles. Access to the SDC Leisure Clondalkin building will be managed by the appointed contractor over the construction phase. A Construction Traffic Management Plan will be implemented by the contractor, with deliveries planned for off-peak hours and management of heavy goods vehicles (HGVs). Any temporary restrictions to access to the buildings and consequent disruptions to building users will be communicated in advance. Construction phase impacts on traffic and transport will be negative, imperceptible and temporary. Over the operational phase, access to the proposed development will be restricted to staff who will travel in light goods vehicles (LGVs) transporting tools for maintenance works.	No. The proposed development will not create any environmental problems pertaining to traffic or transportation over either construction or operational phase due to the capacity of the wider road network. A Construction Traffic Management Plan will be implemented over the construction phase.



Checklist Questions	Yes/No/Briefly Describe	Is this likely to result in a significant impact? Yes/No/Why?
	This can be characterised as a neutral effect as the resultant impacts on traffic and transport will be imperceptible and brief, lasting less than a day.	
18. Is the Project in a location in which it is likely to be highly visible to many people?	No. The proposed development will be located on the rooftop of the SDC Leisure Clondalkin building. It will not be visible for users of the building or passers-by generally.	No. The proposed development will not result in any significant visual effects due to its location and nature.
19. Are there any areas or features or cultural importance on or around the location that could be affected by the Project?	No. No features from the Sites and Monuments Records (SMR) or the National Inventory of Architectural Heritage are located near or within the proposed development boundary. The installation works will be contained within the site boundary.	No. The proposed development will not impinge on or adversely affect the settings of any heritage assets.
20. Is the Project located in a previously undeveloped area where there will be a loss of greenfield land?	No. The proposed development will be located on the rooftop area of the SDC Leisure Clondalkin building, a built structure. There will be no loss of greenfield land.	No. There is no loss of greenfield land associated with the proposed development.
21. Are there existing land uses within or around the location e.g., homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying that could be affected by the Project?	No. The proposed development will be located adjacent to a built structure. It will not conflict with any existing land-uses in the receiving environment.	No. Existing land uses will not be affected by the proposed development, given its nature, location and scale.
22. Are there any plans for future land uses within or around the location that could be affected by the Project?	No. There are no known future uses that can be affected by the proposed development.	No.



Checklist Questions	Yes/No/Briefly Describe	Is this likely to result in a significant impact? Yes/No/Why?
23. Are there areas within or around the location which are densely populated or built-up, that could be affected by the Project?	No. The proposed development is located in a built-up, urban environment. However, it will not generate any significant adverse impacts on any environmental receptor within the wider receiving environment over either construction or operational phase.	No.
24. Are there any areas within or around the location which are occupied by sensitive land uses e.g., hospitals, schools, places of worship, community facilities, that could be affected by the Project?	No. The proposed development is located in a built-up, urban environment. Despite the numerous population receptors in the receiving environment, the proposed development, owing to its nature and scale, will not generate any adverse environmental impacts that can lead to adverse effects. It is unlikely that the construction phase of the proposed development will result in any significant adverse effects, given the scale and temporary nature of the activities to take place. A glint and glare assessment has been carried out for the proposed solar PV arrays, which has concluded that there is no potential for significant solar reflection on the relevant aviation receptor (the Casement Aerodrome).	No.
25. Are there any areas within or around the location which contain important, high quality or scarce resources e.g., groundwater, surface waters, forestry, agriculture, fisheries, tourism, minerals, that could be affected by the Project?	No. There are no scarce natural resources within or in vicinity of the site that the proposed development will interact with.	No.



Checklist Questions	Yes/No/Briefly Describe	Is this likely to result in a significant impact? Yes/No/Why?
26. Are there any areas within or around the location which are already subject to pollution or environmental damage e.g., where existing legal environmental standards are exceeded, that could be affected by the Project?	No. No historic activities have been identified at the location of the proposed development that could have contributed to pollution or environmental damage. No existing environmental issues have been identified at the site.	No. No historic activities have been identified at the location of the proposed development that could have contributed to pollution or environmental damage. No existing environmental issues have been identified at the site.
27. Is the Project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g., temperature inversions, fogs, severe winds, which could cause the Project to present environmental problems?	No. The proposed development will not be susceptible to any natural disasters or adverse climatic conditions. OPW flood mapping indicates that the location of the proposed development has not been impacted by any recorded flood events. The location of the proposed development itself (i.e., on the rooftop of the built structure) does not directly make it vulnerable to flooding.	No. The proposed development, as designed and sited, is not susceptible to natural disasters or major accidents.



5.5 Schedule 7A Sub-Threshold Development Screening

The EIA Directive contains guidance for Member States on the information that should be provided by developers and applicants for the purposes of screening sub-threshold developments for EIA.

The guidance is provided by way of criteria set out in Annex III of the Directive and Schedule 7A of the Planning and Development Regulations 2001 (as amended) under the heading: *'Information to be provided by the applicant or developer for the purposes of screening sub-threshold development for Environmental Impact assessment'*

The information requirements are as follows:

1. A description of the proposed development, including in particular:
 - a) A description of the physical characteristics of the whole proposed development, and, where relevant, of demolition works, and
 - b) A description of the location of the proposed development, with particular regard to the environmental sensitivity of geographical areas likely to be affected.
2. A description of the aspects of the environment likely to be significantly affected by the proposed development.
3. A description of any likely significant effects, to the extent of the information available on such effects, of the proposed development on the environment resulting from:
 - c) The expected residues and emissions and the production of waste, where relevant, and
 - d) The use of natural resources, in particular soil, land, water and biodiversity.
4. The compilation of the information at paragraphs (1) to (3) shall take into account, where relevant, the criteria set out in Schedule 7.

The criteria for evaluating the significance of environmental impacts of the proposed development under Schedule 7A is referred to in Table 5-2. A description on how each criterion has been considered and assessed in this report is also provided.

Table 5-2: Schedule 7A Environmental Impact Assessment Screening Criteria

Schedule 7A Requirement	Description
A description of the proposed development, including in particular –	A detailed description of the proposed development has been provided in Section 4 and has been assessed with regard to Schedule 7 criteria in Table 5-1.
A description of the physical characteristics of the whole proposed development, and, where relevant, of demolition works, and	A description of the physical characteristics of the whole proposed development has been provided in Section 4 and has been assessed with regard to Schedule 7 criteria in Table 5-1.



Schedule 7A Requirement	Description
A description of the location of the proposed development, with particular regard to the environmental sensitivity of geographical areas likely to be affected.	A description of the location of the proposed development, with particular regard to the environmental sensitivity of geographical areas likely to be affected has been provided in Section 3 and has been assessed with regard to Schedule 7 criteria in Table 5-1.
A description of the aspects of the environment likely to be significantly affected by the proposed development.	A description of the aspects of the environment that may be affected by the proposed development is provided in Section 3 and further discussed in Table 5-1. It has been assessed in Table 5-1 that the proposed development would not be likely to have a significant effect on the environment.
A description of any likely significant effects, to the extent of the information available on such effects, of the proposed development on the environment resulting from: The expected residues and emissions and the production of waste, where relevant, and	A description of the aspects of the environment that may be affected by the proposed development is provided in Section 3 and further discussed in Table 5-1. It has been assessed in Table 5-1 that the proposed development would not be likely to have a significant effect on the environment - due to expected residues and emissions and the production of waste.
The use of natural resources, in particular soil, land, water and biodiversity.	A description of the aspects of the environment that may be affected by the proposed development is provided in Section 3 and further discussed in Table 5-1. It has been assessed in Table 5-1 that the proposed development would not be likely to have a significant effect on the environment - due to the use of natural resources, in particular soil, land, water and biodiversity.
The compilation of the information at paragraphs (1) to (3) shall take into account, where relevant, the criteria set out in Schedule 7.	The compilation of information at paragraph (1) to (3) has been taken into account in Section 5. The criteria as set out in Schedule 7 is addressed in Table 5-1.

5.6 Impact Characterisation

The construction phase of the proposed development has the potential to generate the following adverse environmental impacts:

- Noise emissions from construction works, vehicles and plant.
- Dust emissions from construction works.
- Increased traffic from construction works.
- Waste generation from packaging and installation of the heat pump units and solar PV arrays.



These construction phase impacts have the potential to generate **temporary** and **imperceptible** effects on the receiving environment.

The appointed contractor will implement a Health and Safety Plan over the construction phase that contain a suite of mitigation measures for avoiding, preventing and minimising significant adverse effects on the receiving environment (See Section 4.3.3).

There will be a **positive, temporary** and **not significant** effect on the local economy through a boost in employment over the construction phase.

The operational phase of the proposed development has the potential to generate the following adverse environmental impact:

- Noise emissions from the operation of the heat pump system.

The operational phase impacts have the potential to generate **medium-** to **long-term, imperceptible** effects on the receiving environment.

The proposed development will generate the following positive environmental effects:

- The proposed development will contribute to decarbonising and energy efficiency goals of the Local Authority, particularly the carbon emissions reduction target of 51%. This will result in a **long-term, positive effect** on climate and population and human health.

5.7 Cumulative Assessment

The proposed development will not generate any perceptible negatives impacts, therefore cannot meaningfully contribute to cumulative effects, in conjunction with other development. The proposed development is entirely consistent with the nature of existing development in the surrounding urban area.



6. CONCLUSION

Requirements for the carrying out of EIA of various types of development are transposed into Irish legislation under the Planning and Development Act 2000 (as amended) and the Planning and Development Regulations 2001 (as amended) (the 'Regulations').

The proposed development does not individually or cumulatively fall into a class of development set out in Schedule 5, Part 1 and 2 of the Regulations and therefore, does not require a Mandatory EIA.

It is clear the proposed development is significantly below the applicable thresholds for Mandatory EIA having regard to the above and the nature and scale of the development. The proposed development may however constitute a type of development prescribed for under Part 2 of Schedule 5, therefore Sub-threshold EIA Screening to determine whether the proposed development would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7 and 7A of the Regulations, was carried out.

Having regard to available information on the proposed development, the criteria in Schedule 7, the information provided in accordance with Schedule 7A of the Regulations and the following:

- The nature, scale, extent of the proposed development;
- The temporary duration of construction works for the proposed development;
- The characteristics of the receiving environment surrounding the development site; and
- The mitigation measures to avoid, prevent and minimise significant adverse effects on the receiving environment.

It is concluded that the proposed development would not be likely to have significant effects on the environment and that the completion of an EIAR for the proposed development is not required.



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