

Henry J Lyons

February 2022

# RAVENS ROCK ROAD ROAD SHD

## Building Lifecycle Report



Revision	Description	Date
01	Stage 3 Submission	Feb. 2022

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# **RAVENS ROCK ROAD SHD**

**IVM House, nos. 31 Ravens Rock Road and 31a Ravens Rock  
Road, Sandyford Business Park, Dublin 18.**

**Building Lifecycle Report**

**Ravensbrook Limited**

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## 00 INTRODUCTION

# INTRODUCTION

This report relates to the proposed development on lands at IVM House, nos. 31 Ravens Rock Road and 31a Ravens Rock Road , Sandyford Business Park, Dublin 18.

The Sustainable Urban Housing; Design Standards for New Apartments - Guidelines for Planning Authorities were published in March 2018 (hereafter referred to as the Apartment Guidelines). The Apartment Guidelines introduced a requirement to include details on the management and maintenance of apartment schemes. This is set out in Section 6.11 to 6.14 - 'Operation & Management of Apartment Developments'.

Section 6.13 of the Apartment Guidelines requires that residential applications, including shared accommodation proposals:

'include a building life cycle report, which in turn includes an assessment of long term running and maintenance costs as they would apply on a per residential unit basis at the time of application'

'demonstrate what measures have been specifically considered by the proposer to effectively manage and reduce costs for the benefit of residents.'

This Building Life Cycle report sets out to address the requirements of Section 6.13 of the Apartment Guidelines. The report is broken into two sections as follows:

## Section 1:

An assessment of long term running and maintenance costs as they would apply on a per residential unit basis, per bedspace in this instance, at the time of application;

## Section 2:

Measures specifically considered by the proposer to effectively manage and reduce costs for the benefit of residents.

This report has been prepared in association with the following consultants:

- Henry J Lyons Architects
- CS Consulting Engineers
- Axiseng Consulting Engineers
- John Spain Associates
- Park Hood Landscape Architects
- BPG3.
- AWN Consulting

The detailed description of the development is as follows:

- The development will consist of the demolition of the existing 2 no. storey building (c.717sqm) and hard surface parking area on the site and construction of a Build to Rent residential development comprising 101 no. residential apartments as follows:
  - 101 no. build to rent apartments within a part 5, part 6 to part 11 no. storey building over partial basement comprising 65 no. 1 bedroom apartments and 36 no. 2 bedroom apartments (balconies on all elevations);
  - 734 sqm of external communal amenity space provided in the form of a podium courtyard at first floor level and a series of rooftop terraces at fifth, sixth and tenth floor levels, c. 514sqm of public open space provided fronting Carmanhall Road;
  - 511 sqm of resident support facilities/ services and amenities space provided at ground and first floor levels;
  - Vehicular access to the development will be from the upgraded existing access from Ravens Rock Road;
  - Provision of 10 no. car parking spaces [1 no. accessible] at surface level, 2 no. motorcycle spaces; and 234 no. cycle parking spaces;
  - Provision of 4 no. Ø0.3m Microwave link dishes to be mounted on 2 No. steel support pole affixed to lift shaft overrun, all enclosed in radio friendly GRP shrouds, together with associated equipment at roof level;
  - Provision of an ESB substation, switch room and plant room at ground floor level, hard and soft landscaped areas, public lighting, attenuation, service connections and all ancillary site development works.

# 01 SECTION1

# PROPERTY MANAGEMENT OF COMMON AREAS

## Long Term Running Costs

From the outset of this project, care has been taken by the applicant to ensure that long-term running costs for residents and maintenance costs for the operators are reasonable. The aim of Applicant is to manage and minimise potential unnecessarily high running costs.

Running costs are calculated on a per bedspace basis.

## Property Management of the Common Areas of the Proposed Development

The applicant has considered the long term running costs for residents and maintenance costs for the operators from the commencement of the design process, with the aim to manage and minimise potential unnecessarily high running

Costs for expenditure on a per residential unit basis.

Bringing forward the proposals for the subject site, the design team have a proven track record in the delivery of residential projects and the applicant is a client of Hooke & MacDonald, a well-established property and asset manager with a hands-on operational team.

The design team have applied lessons from permitted shared accommodation schemes and the application of standards from the new apartment guidelines. Therefore, ensuring the provision of an excellent end product which will be well managed and easily maintained for the foreseeable future.

For this report '*the Residence*' will be considered as per a Build to Rent Development, where there is a commercial entity owning or operating and maintaining the development. The Multi Unit Developments Act, 2011 (MUD Act) sets out the legal requirements regarding the management of apartment developments. In this regard it is advised that when granting permission for such developments planning authorities attach appropriate planning conditions that require the following:

- Compliance with the MUD Act
- Establishment of an Owners Management Company (OMC)
- Establishment and ongoing maintenance of a sinking fund commensurate with the facilities in a development that require ongoing maintenance and renewal.

Shared accommodation schemes, where there is a commercial entity owning, or operating and maintaining the development, may by their nature have different arrangements and obligations. Planning authorities should provide planning conditions for such developments which ensure the provision of appropriate management and maintenance structures including for the scenario where the shared Accommodation nature of a development is altered following specified period under SPPR 7(a) above.

## Service Charge Budget

The property management company (PMC) has several key responsibilities for the development for agreement with the development owners.

There would typically be a service charge budget in multi unit developments to cover items such as cleaning, landscaping, refuse management, utility bills, insurance, maintenance of mechanical/electrical lifts/ life safety systems, security, property management fee, etc, to the development common areas in accordance with the Multi Unit Developments Act 2011 ("MUD" Act); with shared accommodation, this is undertaken by management instead.

## Sinking Fund

It is expected that a sinking fund allowance will account for future major maintenance and upgrade costs. A 10 year Planned Preventative Maintenance (PPM) strategy will determine the level of sinking fund required.

## 02 SECTION 2

# ENERGY & CARBON EMISSIONS

# ENERGY & CARBON EMISSIONS

Measures	Description	Outcome
<b>HVAC System</b>	Heat Recovery in mechanical ventilation system The inclusion of heat recovery unit into the ventilation system allows for heat transfer between exhaust and supply air before the heating and cooling coils thus reducing heating and cooling load.	Reduction in energy consumption and carbon emission.
	Heating systems have been designed to facilitate integration of a future District Heating (DH) system. District heating offers many benefits and real cost-saving advantages. It will allow users to decide when, where and how much energy they need, ensuing maximum comfort, whilst providing hot water on demand.	A future district heating system comes from a sustainable and efficient process and eliminates any carbon emissions produced on site for heating.

Measures	Description	Outcome
	<p>Consideration is given to the requirements of the Building Regulations and includes reference to BS 7543:2015, 'Guide to Durability of Buildings and Building Elements, Products and Components', which provides guidance on the durability, design life and predicted service of buildings and their parts.</p> <p>All common parts of the proposed apartment buildings and the durability and performance of these are designed and specified in accordance with Figure 4; Phases of the Life Cycle of BS7543; 2015. The common parts are designed to incorporate the guidance, best practice principles and mitigations of Annexes of BS 7543; 2015 including:</p> <p>Annex A – Climatic Agents affecting durability  Annex B – Guidance on materials and durability  Annex C – Examples of material or component failures Annex D – Design Life data sheets.</p>	Ensures the long term durability and maintenance of materials is an integral part of the design and specification of the proposed development.
<b>Cladding materials</b>	Use of brickwork and solid metal panels are used throughout. Metal work is to have marine grade PPC finish.	Choosing robust materials reduces ongoing maintenance and repairs.
<b>Windows</b>	Use of factory finished aluclad windows and doors.	Requires no ongoing maintenance.

# LANDSCAPE

# HEALTH & WELL BEING

Measures	Description	Outcome
<b>Site Layout &amp; Design</b>	Generous and high quality landscaped areas have been designed within the proposed development. This includes soft and hard landscaping. Refer to landscape documentation as well as architectural design statement.	An improved environment and access to natural elements within the development.
<b>Green Roofs</b>	Use of green roofs throughout the development.	Attenuation provided by the green roof reduces the burden on rainwater goods, resulting in fewer elements that could require repair.

# MANAGEMENT

Measures	Description	Outcome
<b>Resident's User Guide</b>	Residents Pack – This is prepared by the Operator Management team, and would typically provide information on contact details for the managing agent, emergency contact information, transport links in the area, and a clear set of the rules and regulations.	Residents are as informed as possible so that any issues can be addressed in a timely and efficient manner.

Measures	Description	Outcome
<b>Daylight &amp; Sunlight</b>	The design, separation distances and layout of the apartment blocks have been designed to optimise the ingress of natural daylight & sunlight to the proposed apartments to provide good levels of natural light.	Reduces the reliance on artificial lighting thereby reducing running costs. Improved mental health
<b>Accessibility</b>	All units will comply with the requirements of TGD Part M and Part K.	Reduces the level of adaption and associated costs potentially necessitated by resident's future circumstances.
<b>Security</b>	The scheme is designed to incorporate natural surveillance wherever possible and supplemented by the following strategies: - CCTV monitoring - Access control to the Basement Level - Secure bicycle stands covered by CCTV - Routine access fob audits.	Help to reduce potential security & management costs.
<b>Passive Surveillance</b>	Combination of commercial, amenity and residential access at street level, including own door apartments. With a variety of access points with different uses, there will be increased activity providing passive surveillance. Apartments and amenity have access to, and views of the communal open spaces.	Help to reduce anti social behaviour, reduce cost of remedial works to vandalism, and improve sense of security for residents
<b>Natural Amenity</b>	Communal open spaces provided at multiple levels for the enjoyment of residents; public open space to the perimeter of the site provides a visual amenity, and possible link to future parkland.	Facilitates community interaction, socialising and play resulting in improved well being.
<b>Central Location</b>	The site is located in a very central location with good access to public transport, parks and public spaces	Encourages interaction with the city and the outdoors to promote a healthy lifestyle.
<b>Reduced car parking Provision + Transport Links</b>	Provision of a reduced number of car parking spaces and immediate proximity to cycle lanes and close proximity to public transport links that connect with national routes	Discourages individual car ownership, encourages uptake of cycling, walking, and increased use of public transport. Reduced emissions & improved physical health & well being.

# WASTE MANAGEMENT

As part of this application a Waste Management Strategies for the Development & Construction and Operational phases of the development were submitted by the Developer for the development. The documents illustrate how, at all times, industry best practices will be employed during the life cycle of the Development. Mitigation measures proposed during the Construction phase include:

1. On-site segregation of all waste materials where possible into appropriate categories including: -made ground, soil, subsoil, bedrock concrete, bricks, tiles, ceramics, plasterboard metals - dry recyclables e.g. cardboard, plastic, timber;
2. All waste materials will be stored in skips or other suitable receptacles in a designated area of the site;
3. Wherever possible, left over materials (e.g. timber of cuts) materials shall be re-used on-site;
4. Any potentially contaminated soil to be removed from site will be tested to confirm its contamination status and subsequent management requirements;
5. All waste leaving site will be recycled, recovered or disposed of at an appropriately licensed waste facility;
6. All waste leaving the site will be transported by suitable permitted contractors and taken to suitably licensed or permitted facilities;
7. All waste leaving the site will be recorded and copies of relevant documentation maintained.

During the operational phase, in order to minimise the disposal of waste material to landfill, the mantra of “reduce, reuse, recycle” will be promoted throughout the development. In addition, the following mitigation measures will be employed:

1. Suitable waste materials will be stored in bins or other receptacles in designated, easily accessible locations;
2. Waste leaving the site will be transported by suitable permitted contractors and taken to suitably permitted/licensed facilities;
3. Waste from the development will be segregated and stored in designated centralised waste storage areas at Ground Level;
4. These mitigation measures will ensure the waste arising from the Development is dealt with in compliance with the provisions of the Waste Management Act 1996-2011 (as amended), and associated Regulations, the Litter Pollution Act 2003 as amended, Eastern - Midlands Region (EMR) Waste Management Plan 2015-2021 and the Dublin City Council (Storage, Presentation and Segregation of Household and Commercial) Bye-Laws (2018), and achieve optimum levels of waste education, re-use and recycling.

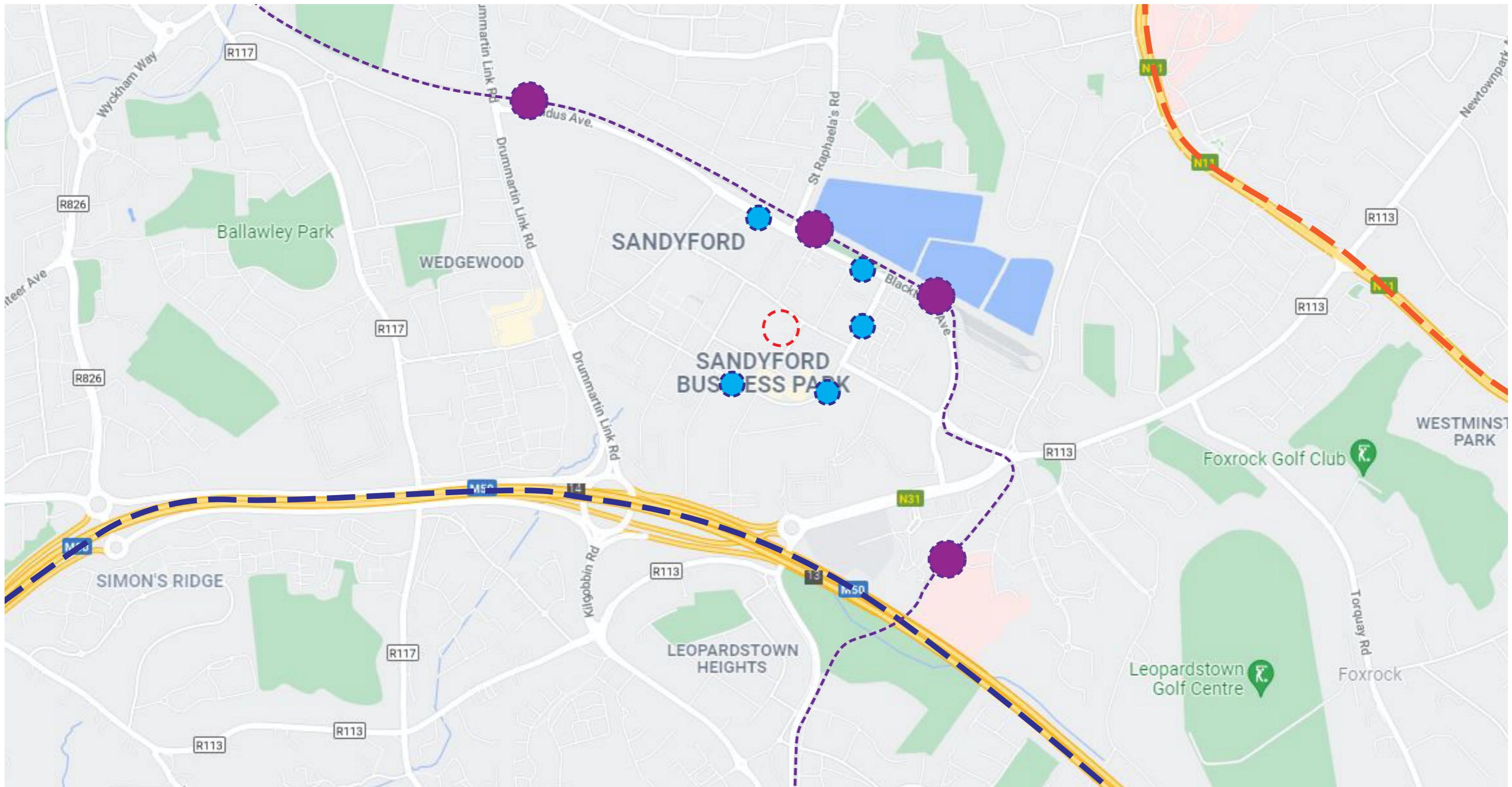
AWN Consulting Ltd. (AWN) has prepared an Operational Waste Management Plan (OWMP). The OWMP proposes a strategy for segregation (at source), storage and collection of all wastes generated within the buildings during the operational phase including dry mixed recyclables, cardboard and plastic packaging, organic waste, glass and mixed non-recyclable waste.

A communal Waste Storage Area (WSA) has been allocated within the development design to accommodate waste arising from the shared living residents. The WSA is located on the ground floor with both internal and external access. All residents will have access to the WSA, but it is envisaged that they will empty their waste into the Area Waste Stations (AWS) located on each floor. Space will be required to be allocated internally by building management for the storage of Waste Electrical and Electronic Equipment (WEEE), lightbulbs and waste cooking oil. The WSA location can be viewed on the drawings submitted with the application.

# TRANSPORT

Measures	Description	Outcome
<b>Access to Public Transport</b>	The site is located within 350m of a Luas green line stop, and 280m to the Dublin bus stop serving the following routes: 11, 75a & 118. Bus route provides access to the city centre, and major places of employment, in addition to providing links to national transport routes.	The availability, proximity and ease of access to high quality public transport services contribute to reducing the reliance on the private motor vehicle for all journey types. In addition, provision of a viable and practical sustainable alternative to journeys undertaken by the private motor car.
<b>Access to Public Transport (Luas)</b>	The Stillorgan Luas stop is 350m away, and the Sandyford Luas stop is within 550m from the proposed development.	The proximity, frequency and range of additional destinations served by Luas services enhance the accessibility levels of the proposed residential development.
<b>On-Site + on street car parking</b>	Ample On-Street Parking is available adjacent to the site on Donnybrook road as well as adjoining streets.	Where necessary residents as well as visitors parking can be accommodated.
<b>Bicycle Storage</b>	The provision of high-quality secure bicycle parking facilities, for both short term and long-term parking requirements. The provision for 184 no. bicycles has been provided for residents in a covered and secure location at ground floor level, conveniently located near access points to apartments. An additional 50. No. secure visitor bicycle parking spaces are provided at ground floor level; These are conveniently located to ensure there is bicycle parking conveniently located near to the access points.	Convenient and secure bicycle parking to increase the uptake of bicycle ownership and day to day use. Decreased emissions, and increased health and well being. In addition, provision of a viable and practical sustainable alternative to journeys undertaken by the private motor car.

# TRANSPORT MAP



- |                     |               |         |
|---------------------|---------------|---------|
| <br>SITE LOCATION   | <br>LUAS LINE | <br>N11 |
| <br>DUBLIN BUS STOP | <br>LUAS STOP | <br>50  |



