



Parkmore

Long Mile Road, Ballymount, Dublin 12

Mixed-Use Residential Development

Building Lifecycle Report
February 2025

LRD Stage 3 Planning Application

P3-S-01



Contents

INTRODUCTION..... 2

PROPOSED DEVELOPMENT..... 2

SECTION 01 3

SECTION 02 5

APPENDIX A..... 15

Project Code	System	Spatial Zone	Level	File Type	Originator	Role Type	Number	Revision
LMR	02	SW	XX	RP	RAU	AR	1002	P3-S-01

INTRODUCTION

The Sustainable Urban Housing: Design Standards for New Apartments – Guidelines for Planning Authorities were published in March 2018 and updated in 2023 (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 6.10 to 6.14 – “Operation & Management of Apartment Developments”, Specifically Section 6.12.

Section 6.12 of the Apartment Guidelines 2023 requires that apartment applications shall:

“Accordingly, planning applications for apartment development shall include a building lifecycle 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, as well as demonstrating 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 document sets out to address the requirements of Section 6.12 of the Apartment Guidelines. The report is broken into two sections as follows:

Section 01:

An assessment of long-term running and maintenance costs as they would apply on a “per residential unit” basis at the time of application.

Section 02:

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

PROPOSED DEVELOPMENT

The development will comprise a Large-Scale Residential Development (LRD) on a site at Parkmore Industrial Estate, Long Mile Rd, Robinhood, Dublin, 12. The proposed development will comprise the demolition of existing industrial units, and construction of a mixed use, residential-led development within 4 no. blocks ranging in height from 06 to 10 storeys over semi-basement. The development will comprise the following: 436 no. apartments (studios; 1 beds; 2 beds and 3 beds) with commercial/employment units, creche, café and library. Provision of car, cycle and motorbike parking. Vehicular accesses from Parkmore Estate Road and additional pedestrian/cyclist accesses from the Long Mile Road and Robinhood Road. Upgrade works to the estate road and surrounding road network. All associated site development works and services provision, open spaces, ESB substations, plant areas, waste management areas, landscaping and boundary treatments.



CGI from The Long Mile Road looking East.

SECTION 01

An assessment of long-term running and maintenance costs as they would apply on a “per residential unit” basis at the time of application

1.1. Property Management of the Common Areas of the development

A property management company will be engaged at an early stage of the development to ensure that all property management functions are set in place in a timely manner for the development and that the operational and maintenance costs of the common areas of the development are kept within an agreed Annual operational budget. There will be a structured management approach to the entire scheme.

The Estate Management Company which will be responsible for the maintenance, repair and day-to-day management of each building and associated landscape, all external common areas (those areas not taken in charge by SDCC) including roads, landscaping, lighting, insurances and car parking as well as combined waste management system for the entire estate.

The Management Company will establish house rules with regard to noise, anti-social behaviour, treatment of exterior façade to ensure a consistent and the delivery of a positive residential environment for everybody who lives and works on the site.

The Management Teams’ key responsibility will include the management of day-to-day operations including customer engagement, both in person and electronically.

The property management company will enter into a contract directly with the Owners Management Company (OMC) for the ongoing management of the built development. This contract will be for a maximum period of 3 years and in the form prescribed by the PSRA.

Section 6.13 of the Apartment Guidelines identifies the requirements of the Multi-Unit Developments Act, 2011 (MUD Act):

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:

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

The Management Company duties will include the following responsibilities for the apartment development once constructed:

- Timely formation of an Owners Management Company (OMC) – which will be a company limited by guarantee having no share capital. All future purchasers will be obliged to become members of this OMC
- Preparation of annual service charge budget for the development common areas.
- Fair and equitable apportionment of the Annual operational charges in line with the Multi Units Development Act 2011 (MUD Act).

- Engagement of independent legal representation on behalf of the OMC in keeping with the MUD Act - including completion of Developer OMC Agreement and transfer of common areas.
- Transfer of documentation in line with Schedule 3 of the MUD Act.
- Estate Management.
- Third Party Contractors Procurement and Management.
- OMC Reporting.
- Accounting Services.
- Corporate Services.
- Insurance Management.
- After Hours Services.
- Staff Administration

1.2. Service Charge Budget

The property management company has a number of key responsibilities, primarily the compiling of the service charge budget for the development for agreement with the OMC. The service charge budget covers 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). This service charge budget also includes an allowance for a Sinking Fund and this allowance is determined following the review of the Building Investment Fund (BIF) report prepared for the OMC. The BIF report will identify those works which are necessary to maintain, repair, and enhance the premises over the 30-year life cycle period, as required by the Multi Unit Development Act 2011. In line with the requirements of the MUD Act, the members of the OMC will determine and agree each year at a General Meeting of the members, the contribution to be made to the Sinking Fund, having regard to the BIF report produced.

Note: the detail associated with each element heading i.e. specification and estimate of the costs to maintain / repair or replace, can only be determined after detailed design and the procurement/ construction of the development and being completed and therefore this information has not been included in this document.

SECTION 02

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

2.1. Energy Performance and Carbon Emissions

A Building Energy Rating (BER) certificate will be provided for each apartment which will provide detail of the energy performance and carbon emissions associated with each of the dwellings. It is proposed to target a BER Rating for each apartment of A2/A3. This will equate to the following emissions:

A2 – 25-50 kWh/m²/yr. with CO₂ emissions approx. 10 kgCO₂/m²/yr.

A3 – 51-75 kWh/m²/yr. with CO₂ emissions approx. 10 kgCO₂/m²/yr.

The following table outlines the proposed passive and active, energy and carbon emission reduction measures which will directly benefit occupants in terms of reducing operational costs.

Measure	Description	Benefit																				
Building Fabric Efficiency	<p>The U-Value of a building element is a measure of the amount of heat energy that will pass through the constituent element of the building envelope. Increasing the insulation levels in each element will reduce the heat lost during the heating season. It is possible to exceed the requirements of the current building regulations. The current target U-Values are identified below:</p> <table border="1"> <thead> <tr> <th rowspan="2">Element</th><th colspan="2">U value (W/m².K)</th></tr> <tr> <th>Part L 2021 (NZEB)</th><th>Targeted</th></tr> </thead> <tbody> <tr> <td>Flat Roof</td><td>0.20</td><td>0.20</td></tr> <tr> <td>Walls</td><td>0.18</td><td>0.18</td></tr> <tr> <td>Ground Floors</td><td>0.18</td><td>0.18</td></tr> <tr> <td>Exposed floors</td><td>0.18</td><td>0.18</td></tr> <tr> <td>External doors, windows and roof lights</td><td>1.40</td><td>1.40</td></tr> </tbody> </table> <p>To avoid excessive heat losses and local condensation problems, consideration will be given to ensure continuity of insulation and to limit local thermal bridging, e.g., around windows, doors and other wall openings, at junctions between elements and other locations. Heat loss associated with thermal can heavily impact the calculated energy use and CO₂ emissions. The proposed design is targeting a thermal bridging Ψ value of at least 0.08 to reduce the heat loss due to thermal bridging.</p> <p>Another major consideration in reducing the heat losses in a building is the air infiltration. This essentially relates to the ingress of cold outdoor air into the building and the corresponding displacement of the heated internal air. This incoming cold air must be heated if comfort conditions are to be maintained. In a traditionally constructed building, infiltration can account for 30 to 40 percent of the total heat loss; however, construction standards continue to improve in this area.</p> <p>With good design and strict on-site control of building techniques, infiltration losses can be significantly reduced. To ensure that a sufficient level of air tightness is achieved, air permeability testing will be specified, with the responsibility being placed on the main contractor to carry out testing and achieve the targets identified in the tender documents.</p> <p>A design air permeability target of 5 m³/(m².hr) @50Pa has been identified. Air testing specification will require testing to be carried out in accordance with: BS EN 13829:2001 'Determination of air permeability of buildings, fan pressurisation method' CIBSE TM23: 2000 'Testing buildings for air leakage'</p>	Element	U value (W/m ² .K)		Part L 2021 (NZEB)	Targeted	Flat Roof	0.20	0.20	Walls	0.18	0.18	Ground Floors	0.18	0.18	Exposed floors	0.18	0.18	External doors, windows and roof lights	1.40	1.40	Reduction in the consumption of fuel and the associated carbon emissions and operating costs.
Element	U value (W/m ² .K)																					
	Part L 2021 (NZEB)	Targeted																				
Flat Roof	0.20	0.20																				
Walls	0.18	0.18																				
Ground Floors	0.18	0.18																				
Exposed floors	0.18	0.18																				
External doors, windows and roof lights	1.40	1.40																				

Lighting Efficiency	It is proposed to provide 100% of lighting outlets to be low energy (CFL/LED)	Reduction in the consumption of electricity and the associated carbon emissions and operating costs.
Sanitary ware	Showers are proposed with a max flow rate at 3 Bar to be no greater than 6 litres per minute. Bath volume to be no greater than 150 litres	Reduction in the consumption of potable water and energy associated with domestic hot water heating

The following Low Energy / Carbon & Renewable Energy Solutions that are being considered for the development.

Measure	Description	Benefit
Heat Pumps	<p>The general principal of heat pump technology is the use of electrical energy to drive a refrigerant cycle capable of extracting heat energy from one medium at one temperature and delivering this heat energy to a second medium at the desired temperature.</p> <p>The efficiency of any heat pump system is measured by its coefficient of performance (CoP). This is a comparison between the electrical energy required to run the heat pump and the useful heat output of the heat pump, e.g., a heat pump requiring 1kW of electrical power to deliver 3kW of heat energy has a CoP of 3.0.</p> <p>This operating principle can be applied to different situations, making use of the most readily available renewable heat source on any given site. The most common types are.</p> <ul style="list-style-type: none"> • Ground Source • Water Source • Air Source <p>Air source heat pumps are being considered. This will be clarified during the detail design process.</p>	Reduction in the consumption of fuel and the associated carbon emissions and operating costs.
Photovoltaic (PV) Panels	<p>PV Panels can generate direct current electricity from the sun's energy, which can then be converted to alternating current and used within the building. They are generally a "maintenance free" technology as there are no moving parts. They also typically have a 20-year manufacturer's guarantee on electrical output and can be expected to operate effectively for 30 years or more.</p> <p>Capital costs have also reduced significantly in recent years due to worldwide increase in production levels. They are adaptable and scalable in that the amount installed can be selected to suit the budget available.</p> <p>PV Panels are being considered. This will be clarified during the detail design process.</p>	Reduction in the consumption of electricity and the associated carbon emissions and operating costs.
Ventilation	<p>Mechanical heat recovery ventilation (MVHR) or Demand Controlled ventilation (DCV) are being considered for this project.</p> <p>MVHR provides tempered external fresh air to occupied spaces and extract ventilation from rooms with "Bad Air" such as Bathrooms, utility stores etc.</p> <p>Heat is recovered from exhaust air streams and transferred to the fresh air stream negating the requirements to use heating energy to heat incoming cold external fresh air.</p> <p>DCV is an extract only system. A negative pressure is created within the dwelling, this draws in fresh air through natural openings (wall opes, trickle vents)</p>	Reduction in the consumption of fuel and the associated carbon emissions and operating costs. Increases comfort conditions for occupants Prevents mould growth.

Electric Vehicle (EV) Charging Points	20% of the carparking spaces will have EVC charge points. Ducting shall be provided from local distribution boards to remaining car park spaces. This will give FOLD the option to install several EV charging points to cater for future demand.	Providing the option for EV charging points will futureproof the development.
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2.1.1. CIBSE Life Expectancy Analysis

MECHANICAL		
	EQUIPMENT ITEM	INDICATIVE LIFE (YEARS)
	Condensing Boilers (MTHW/LTHW)	20
	Dosing Pots	15
	Flue (stainless steel)	30
	Gas Burners (atmospheric)	20
	Base Mounted Pumps	20
	Expansion Vessel (unvented hot water)	15
	Heating Pressurisation Unit	20
	Mains Cold Water Booster	15
	Sprinkler Booster	20
	Condensate Pipework System	12
	Steel Pipework (closed)	25
	Copper Pipework (open)	30
	Water Treatment Plant	15
	Steel Radiators	20
	Computer Rooms Air Conditioning	15
	Axial Fans	15
	Galvanised Ductwork (rectangular and circular)	40
	Plastic Ductwork	15
	Ductwork Ancillaries: External Louvres (steel painted)	20
	BMS: Head End (Supervisor)	5
	BMS: Outstations	10
	BMS: Plant Controller	10
	BMS: Operating System	5
	BMS: Remote Display Panels	10
	BMS: Communications Network (hardwiring)	25
	Leak Detection: Gas	10
	Above Ground Drainage (plastic)	25
	Sanitary Ware	25
	Gas Meter	20
	Water Meter	20
	Dry Risers	25
	Sprinklers: Wet	25
	Sprinkler Heads	30
	Heat Pumps	15

ELECTRICAL		
	Mains Cables	35
	Switchgear	30
	Transformer	30
	Protective Installation: Earth Bonding (major)	30
	Protective Installation: Earth Bonding (domestic)	25
	Consumer Units	25
	Distribution Boards	20
	Feeder Pillar	20
	Final Circuits and Outlets	20
	Inverter	20
	Lighting Installations (external)	15
	Lighting Installations (internal)	20
	Miniature Circuit Breakers (MCB)	20
	Moulded Case Circuit Breaker (MCCB)	25
	Power Distribution Unit (PDU)	20
	Residual Current Breaker (RCB)	20
	Switched Socket Outlet (SSO)	15
	Emergency Lighting	25
	Switches	10
	Electricity Meters	20
	Access Control	15
	Call Points (BGU's)	15
	CCTV: Internal	20
	CCTV: External	15
	Fire Alarms (battery support & electrical)	20
	Heat Detectors	20
	Smoke Ventilation Systems	30
	Clock Systems	15
	CCTV & Video System	10
	Communication System (voice & data)	20
	Electric Heaters	12
	Lighting Control and Management Systems	15
	Lightning Protection	15
	Television and Satellite Systems	15
	Escalators	30
	Uninterruptable Power Supply Systems (UPS)	20

2.2. Materials


The practical implementation of the Design and Material principles has informed design of building facades, internal layouts and detailing of the proposed scheme.

2.2.1. Building

The building is designed in accordance with the Building Regulations, in particular Part D 'Materials and Workmanship', which includes all elements of the construction. The Design Principles and Specification are applied to the apartments, community space and the common parts of the building and specific measures taken include:

Measure Description	Benefit
Daylighting to circulation areas where possible	Avoids the requirement for continuous artificial lighting
Natural/Passive ventilation system to circulation areas where possible	Avoids costly mechanical ventilation systems and associated maintenance and future replacement.
External paved and landscaped areas	All of these require low/minimal maintenance

2.2.2. Material Specification

Measure Description	Benefit
<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 life 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. (Please see Appendix A for this figure). The common parts are designed to incorporate the guidance, best practice principles and mitigations of Annexes of BS 7543: 2015 including:</p> <ul style="list-style-type: none"> • Annex A Climatic Agents affecting Durability • Annex B Guidance on materials and durability • Annex C Examples of UK material or component failures • Annex D Design Life Data sheets 	Ensures that the long-term durability and maintenance of Materials is an integral part of the Design and Specification of the proposed development.
<p>The use of brickwork on the facades will be the primary material.</p> 	Requires minimal on-going maintenance.

The use of Brickwork and Aluminium Cladding on the Secondary façade on parts of Blocks C & D



The use of primarily Brickwork with small areas of render and reconstituted stone on the Primary façade used on areas of Block A & B. Small areas of render are used in areas with large overhangs at high level, or accessible areas at ground level for ease of maintenance.



Factory finished alu-clad/aluminium windows and external doors.

Requires minimal on-going maintenance.

Use of Galvanised Steel balconies and handrails with a PPC finish on exposed visual surfaces. Composite self-finished board for deck of the balcony.

Requires minimal on-going maintenance.

2.3 Landscape

Measure	Description	Benefit
Site Layout & Landscape design	The proposed landscape design aims create a strong green framework through the proposed development providing high quality open space. Proposed tree, shrub and groundcover planting is found throughout the riparian zone and communal courtyard. Planting is chosen for its robust nature and yearlong interest. The overriding design intention is to create an inclusive and coherent new community based on best practice urban planning principles, giving residents a sense of place, ownership and identity.	Natural attenuation, reduced surface water runoff from site and increased biodiversity.
Green Roofs	Use of green roofs and traditional roof coverings with robust and proven detailing to landscape roof elements.	Attenuation reduces the need to construct large attenuation systems on site.
Paving and Decking materials	Use of robust, high-quality and high slip-resistance materials throughout the development.	Required ongoing maintenance significantly reduced through use of robust materials installed with proven details.
Materials	Sustainable, robust materials with high slip-resistance to be used for paving. Durable and robust street furniture and play equipment to be used throughout	Robust materials and elements installed with proven details reduces the frequency of required repair and maintenance.
Sustainable drainage systems	Use of green roofs across the development. Interception trays incorporated into the build-ups. Additional use of a combined drainage/reservoir board across some roof areas (blue roofs). Use of bio-retention areas and filter drains across the development to treat and intercept rainwater at source.	SuDS measures treat and reduce rainwater runoff from the site protecting surrounding watercourses. They have additional amenity and biodiversity benefits.
Planting details	Planting and landscape works will be carried out in accordance with BS4428. Trees will be advanced/semi-mature rootballed stock, in accordance with BS 8545. Low level, low maintenance shrub and groundcover planting will be used in planting beds containerised with a minimum size of 1 litre pots, with a 75mm well composted fine bark mulch. Proposed meadows will follow the guidelines set out by the All-Ireland Pollinator Plan with the aim to increase Biodiversity on site. Please refer to the outline landscape specification that will be submitted as part of the landscape planning application.	Correctly installed planting will develop into well established and robust soft landscaping, reducing future maintenance and replacement of failures.

2.4 Waste Management

The following measures describe the intentions for the management of Waste.

Measure	Description	Benefit
Operational Waste Management Plan	This application will be accompanied by an Operational Waste Management Plan prepared by Traynor Environmental	The report demonstrates how the scheme has been designed to comply with local, regional, and national waste legislation along with best practice
Storage of Non-Recyclable Waste and Recyclable Household Waste	Inclusion of centralised waste storage area, with enough space to accommodate a weekly/bi-weekly collection of bins	Easily accessible by all residents, minimises potential littering of the scheme, reduce potential waste charges and not limit waste contractor selection
	Domestic waste management strategy: General waste, mixed recyclable, and organic bin distinction	Helps reduce potential waste charges and not limit waste contractor selection
	Security restricted waste storage room	Reduce potential for fly tipping by residents and non-residents
	Well signed waste storage rooms and bins	Help reduce potential cross contamination of waste and reduce waste charges.
Composting	Organic waste bins to be provided in waste storage areas	Helps reduce potential waste charges

2.5. Health and Wellbeing

The following are illustrations of how the health and wellbeing of future residents are considered.

Measure	Description	Benefit
Natural / Day Light	The design, layout and separation distances of the building has been designed to optimize the ingress of natural daylight/ sunlight to the proposed dwellings to provide good levels of natural light. Please refer to the daylight and sunlight report prepared by Chris Shackleton Consulting submitted with this planning application.	Reduces reliance on artificial lighting thereby reducing running costs.
Accessibility	All units will comply with the requirements of Building regulations Parts M and K.	Reduces the level of adaptation, and associated costs, potentially necessitated by residents' future circumstances.
Security	<p>The scheme is designed to incorporate passive surveillance with the following security strategies available for adaptation into the design:</p> <ul style="list-style-type: none"> • CCTV monitoring details • Secure resident bicycle stores – covered by CCTV • Controlled access to circulation cores • Routine access fob audits • Appropriately lit external spaces. 	Aids in reducing potential security/management costs. Enhances safety for residents and visitors.
Natural Amenity	Good quality central amenity space in the two courtyards with varying themes and activities to provide active and passive use of the spaces.	Facilitates community interaction, socialising and play – resulting in improved wellbeing. Proximity and use of external green spaces promote a healthy lifestyle.

2.6 Management

Consideration has been given to ensuring the residents have a clear understanding of the scheme.

Measure	Description	Benefit
Home User Guide	<p>Once a Resident signs their lease, a Resident pack of information will be provided which will include:</p> <p>Resident manual – this will provide important information for the Resident on details of their new home. It typically includes details of the property such as MPRN, information in relation to connect with utilities and communication providers, contact details for all relevant suppliers and user instructions for appliances and devices in the property.</p> <p>A Residents Pack prepared by the Management Company which will typically provide information on contact details for the facilities manager, emergency contact information, transport links in the area and a clear set of rules and regulations.</p>	Residents are as informed as possible so that any issues can be addressed in a timely and efficient manner.

2.7 Transport

Measure	Description	Benefit
Access to Public Transport (Bus & Luas)	<p>The Luas Red line and the S4 Bus are within a 10-minute walk of the scheme. The Luas provides high quality radial connections to Tallaght and the city centre whilst the S4 provides high quality orbital connections to UCD and Liffey Valley.</p> <p>As part of the Bus Connects programme, it is proposed to further enhance the number and frequency of bus services in the area, which will increase the connectivity and accessibility of the site, in particular with the consolidation of existing routes into the D Spine.</p>	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.
Permeable Connections	The site's redevelopment presents significant opportunities for enhanced local permeability and connectivity, for the integration of the wider neighbouring community. The creation of an East/West route through the site is recognised as presenting opportunities to enhance local connectivity and permeability.	Ensure the long-term attractiveness of walking and cycling to neighbourhood centres.
Bicycle Storage	<p>It is proposed to provide 1004 no. bicycle spaces on site using Sheffield stands and two-tier bike racks – 218 no. for visitors and 786 no. for residents in compliance with SDCC requirements.</p> <p>The 786 no. bicycle spaces for residents will be in a secure covered store shared with space for mobility scooter parking.</p>	Accommodates the uptake of cycling and reducing the reliance on the private motor vehicle for both residences and guests.

APPENDIX A

BS 7543:2015



BSI Standards Publication

Guide to durability of buildings and building elements, products and components

Figure 4 Phases of the life cycle

