

# BUILDING LIFECYCLE REPORT

Proposed Residential Development at  
Clonminch Road, Tullamore, Co. Offaly

Prepared by:

Van Dijk Architects

Morely Walsh Consulting Engineers

DBFL Consulting Engineers

Stephen Ward Planning Consultants

Park Hood Landscape Architects



July 2020

## INTRODUCTION

---

The following report has been prepared in compliance with Section 6.13 of the 2018 Guidelines on design Standards for New Apartments as set out below:

*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.*

Section 01 outlines the process to preparing the long term running and maintenance costs as they would apply on a per residential unit basis at the time of the application. Section 02 outlines the measures specifically considered by the proposer to effectively manage and reduce costs for the benefit of the residents.

## PROPOSED DEVELOPMENT

---

The proposed development consists of 186 No. Apartments in 2-5 storey buildings [mansionettes/ apartment block] with associated community rooms, landscape, cycle storage facilities and associated site works.

## SECTION 01

---

As required by the Multi-Unit Developments Act 2011, an owners management company must be set up, and the common areas of the development transferred to it, before the developer sells any unit. An assessment of long term running and maintenance costs is undertaken 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 dealt with for the development and that the running and maintenance costs of the common areas of the development are kept within the agreed annual operational budget. 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. The Property Management Company also has 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 & 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 once adopted by the OMC, determines an adequate estimated annual cost provision requirement based on the needs of the development over a 30-year cycle period. The BIF report will identify those works which are necessary to maintain, repair, and enhance the premises over the 30year 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. A sample format of the typical BIF report is set out in Appendix A.

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 therefore the sinking fund requirements are listed to show what elements must be covered by this service charge.

## SECTION 02

---

### 2.1 ENERGY AND CARBON EMISSIONS

The proposed development is subject to compliance with current Part L and also a residential policy (Chapter 8) of the Offaly County Council Development Plan (2014-2020) & Renewable Energy Directive 2009/28/EC and the National Renewable Energy Action Plan (NREAP) as the current Part L development is under review, the apartment dwellings have been designed to comply with the proposed Part L requirements which is a Near Zero Energy ( NZEB) standard.

NZEB requires *“that, the nearly zero or very low amount of energy required is covered to a very significant extent by energy from renewable sources including energy from renewable sources produced on-site or nearby”*.

The proposed development has been assessed by M&E consultants for compliance and is appended. ( Appendix B).

## 2.2 MATERIALS- ENERGY EFFICIENCY

As set out in building energy report, the proposed U-value for the primary element have been significantly improved on in the new proposed regulations as set out below.

Element	Current Part L	Proposed Part L
Walls	0.21	0.18
Floors	0.21	0.18
External doors, windows and rooflights	1.6	1.4
Maximum Permitted Energy Performance Coefficient (MPEPC)	0.4	0.3
Maximum Permitted Carbon Performance Coefficient (MPCPC)	0.46	0.35
Renewable Energy Ratio (RER) is the ratio	N/A	0.2
Air permeability	7m <sup>3</sup> /hr/m <sup>2</sup>	5m <sup>3</sup> /hr/m <sup>2</sup>

The Fabric energy efficiency for the main elements of the project is set out as follows.

- Walls 0.13 W/m<sup>2</sup>K
- Windows 0.8W/m<sup>2</sup>K (solar fraction ( g factor) of 0.65, frame factor of 0.7 or better)
- Floors 0.13W/m<sup>2</sup>K
- Doors 1.2 W/m<sup>2</sup>K
- Air permeability 3m<sup>3</sup>/m<sup>2</sup>/hr
- Thermal Bridging Factor of 0.08

As evident from this, the materials proposed will be of a very high performance in terms of energy efficiency. This results in a reduction of running energy costs for the dwellings.

## 2.3 ROBUST MATERIALS:

The materials within the development have been chosen to find a balance between the outgoing costs for purchasers and ongoing maintenance. The life cycle of the materials is outlined in Appendix A ( Life expectancy/ BIF fund).

External Walls: The following variety of materials has been chosen.

215mm High Density Concrete Blockwork Inner Leaf with 12mm Plaster Finish  
150mm Cavity Fully Filled with High Density Rigid Insulation. Selected Brick or Render / External Window / Door Operes to have a 215mm deep Brick or Block Reveal

- Aluminum Rainscreen Cladding.
- Metal Cladding panel to Staircores in apartments.
- Brick in select colours, grey and white as per the elevations.
- In sheltered areas, the use of timber cladding is proposed.

Windows: Powder coated Aluminium.

Balconies: Toughened laminated glazing / Galvanised Steel balconies.

Roof:	Gravel/Paving slabs on a Single Ply Roof Membrane with Separation Layer on 150-250mm Rigid Insulation on Vapor Control Membrane on 200 mm Concrete roof slab.
	Slate Roof + Truss
	Zinc / Metal Roofing
Canopies:	Zinc / Metal Canopies

Warranties for all products within the project will be contained within the Health and Safety File and be retained by the Property management company on behalf of the OMC. A minimum of 25 years will be required for the primary elements.

## 2.3 LANDSCAPE

A Landscape Management & Maintenance Plan has been prepared by Landscape Architects Park Hood and is submitted under separate cover. The following design and management measures will be undertaken in relation to landscape maintenance:

1. Robust high slip resistance materials to be used for paving, fencing, furniture, bin and bicycle storage units to minimise ongoing maintenance inputs.
2. Pedestrian and cyclist friendly hierarchy of streets and open spaces are complemented by generous and high-quality landscape treatments providing long term high quality residential environments.
3. Sustainability aspects of the proposed development include the retention of trees and hedgerows where feasible and the use of native trees where possible across the site. Other species have been carefully selected for compatibility with the size of available spaces which is an important factor in long term management of the housing estate. The overall objective is to enhance the biodiversity potential of the site in addition to providing seasonal interest and variety.
4. Maintenance and management requirements have been considered through the design process. Complex planting arrangements have been omitted thus avoiding onerous maintenance and management requirements

## 2.4 WASTE MANAGEMENT

The following measures will be undertaken in relation to waste management in order to help reduce potential waste charges:

5. An Operational Waste Management Plan has been prepared by AWL Consultants and forms part of the EIAR submitted under separate cover. This will be integrated into the Final Management Plan.
6. Competitive tender for waste management collection, separation of Grey, brown and green waste.
7. Provision of organic waste bins to be provided.

APPENDIX A- LIFE EXPECTANCY/ SINKING FUND CALCULATIONS

---

## BUILDING INVESTMENT FUND (Sinking Fund Calculations)

Ref	Element	Life Expectancy	Amount
1.00	Roofs		
1.01	Repair of flat roof covering.		20
1.02	Replacement of specialist fall arrest system		25
2.00	Elevations		
2.01	Repair and preparation for decorations of timber areas		10
2.02	Replace exist/ entrance doors		25
2.03	Replace rainwater goods		25
2.04	Replace metal cladding		30
3.00	Stair core and lobbies		
3.01	Decorate ceilings and walls		2
3.02	Decorate joinery (stairwells & lobbies)		2
3.03	Replace Firedoors (stairwells & lobbies)		25
3.04	Replace floor finish (stairwells & lobbies)		10
3.05	Replace entrance mats (stairwells & lobbies)		10
3.06	Replace nosings (stairwells)		10
4.00	M&E services		
4.01	General - Internal re-lamping (stairwells & lobbies)		7
4.02	Replace Internal light fittings (stairwells & lobbies)		18
4.03	Replace external light fittings (at entrance lobbies)		18
4.04	Replace smoke detector heads		18
4.05	Replace manual break glass units/ disabled refuge call points		18
4.06	Replace fire alarm panel		18
4.07	Replace lift car and controls		25
4.08	Replace AOV's		25
4.09	Replace security access control installation		15
4.10	Emergency lighting		20
4.11	Overhaul of waste pipes, stacks & vents		20
5.00	Landscaping		
5.01	Replace external signage		18
5.02	15-year cutback & thinning of trees and general overhaul of the landscaping		15
5.03	Replace cctv provision		10
5.04	External handrails and balustrade		18
5.05	Repaint parking spaces and numbering		5
5.06	Replace bicycle stands		25

APPENDIX B - ENERGY ASSESSMENT REPORT

---