brian dunlop architects

15 Patrick Street Kilkenny +353 (0)56 7813015 www.briandunloparchitects.com



SHD at Carleys Bridge, Enniscorthy, Co. Wexford For Torca Developments Ltd. **Building Lifecycle Report**

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brian dunlop architects

Tel: +353 (0)56 7813015

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1. Introduction:

This lifecycle report has been prepared by Brian Dunlop Architects Ltd. on behalf of Torca Developments Ltd. in support of a Strategic Housing Development application for a residential development at Carleys Bridge, Enniscorthy, Co. Wexford. The report demonstrates the measures which have been considered to effectively manage and reduce costs for the benefit of future residents and the environment.

1.1 Planning Policy Context

The Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities (December 2020) provides policy guidelines on the operation and management of apartment developments with the stated aim of introducing certainty regarding their long-term management and maintenance structures. This certainty is to be supported via robust legal and financial arrangements supported by effective and appropriately resourced maintenance and operational regimes.

Section 6.13 of the Apartment Guidelines requires that all planning applications which incorporate apartments 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 tie 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 6.14 of the Apartment Guidelines states:

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.

This building lifecycle report sets out to address the requirements of Section 6.13 of the "Design Standards for New Apartments" above.





1.2 Description of the Proposed Development

Torca Developments Ltd. intend to apply for planning permission for the following at Carleys Bridge, Enniscorthy, Co. Wexford:

The proposed Strategic Housing Development will comprise

- a residential development of 233 no. units (53 no., 3-4 bed houses and 180 no. 1/2/3 bed duplexes/apartments).
- Provision of a creche.
- Associated car parking, bicycle parking, and open spaces/landscaping.
- Vehicular and pedestrian accesses provided via Carley's Bridge Road to the north west, pedestrian/cyclist access via Carley's Bridge Road to the north and Millbrook Residential Estate to the east of the site.
- All associated site works including boundary treatments, plant, bin stores, site services and connections to facilitate the development.



Figure 1: Site Location

This building lifecycle report relates to the proposed apartments arranged within the 21 No. 2-4 storey buildings.





2.0 Assessment of Long Term Running and Maintenance Costs

Torca Developments Ltd. considered the long term running and maintenance costs for future residents from the outset of the design of this development with a view to managing and minimising the expenditure on a per unit basis. This exercise has taken account of learning outcomes from previous residential projects together with a consideration of the changes in standards arising as a result of the new guidelines.

2.1 Property Management Company and Owners Management Company

A Property Management Company (PMC) will be engaged at an early stage in the development to ensure that all functions are dealt with for the development and that the maintenance and running costs of the developments common areas 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 completed development.

The PMC will also have the following responsibilities for the apartment development upon completion:

- Formation of an OMC which will be a company limited by guarantee having no share capital. All future purchasers will be obliged to become members;
- Preparation of an annual service charge budget for the development common areas;
- Fair and equitable apportioning of the annual operational charges in line with the MUD Act;
- Engagement of independent legal representation on behalf of the OMC in keeping with the MUD Act - including completion of the Developer OMC Agreement and transfer of the 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 service and staff administration.

Common areas are areas including:

- The external walls, foundations and roofs and any internal load bearing walls; •
- Entrance halls, landings, staircases and common hallways;
- Access roads, footpaths, paved and planted areas and boundary walls; .
- Ancillary buildings including all bin and bike stores;
- All ducts and conduits which service two or more units in the development; .
- Cisterns, tanks, sewers, drains, pipes, wires, central heating boilers, servicing two or more units in the development;
- Other areas that are from time to time provided for common use.







2.2 Service Charge Budget

The PMC will have a number of key responsibilities, most notably, the compiling of the service charge budget for the development for agreement with the OMC. In accordance with the Multi-Unit Developments Act 2011 (MUD Act), the service charge budget typically 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.

The service charge budget also includes the following:

Sinking Fund

A fund formed by setting aside money periodically for the replacement of a wasting asset (for example, major items of plant and equipment, such as heating plant etc). It is usually intended that a sinking fund will be set up and collected over the whole life of the wasting asset.

Reserve Fund

A fund formed to meet the anticipated future costs of maintenance and upkeep in order to avoid fluctuations, or an anticipated large, one off increase in the amount of service charge payable each year (for example, regularly recurring items such as external cleaning and redecorating).

The allowance for the sinking fund and reserve fund within the service charge budget is determined by establishing the Asset Register. The Asset Register 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 MUD Act and the costs required to achieve it. The Asset Register will form part of the initial report for the OMC. A sample Asset Register is set out in Appendix A (this is a sample only based on the estimation of the types of assets that will ultimately be incorporated in to the developed scheme as the final specification and estimate of the costs will only be determined during the detailed design and construction stage of the development).

The OMC must prepare an annual report and hold an annual meeting to discuss this report. The report must include details of income and expenditure, annual service charges, insurance costs and any contracts entered into by the company. Members must be given 21 days' notice of the meeting and be provided with the report at least 10 days prior to the meeting.







3.0 Measures to Manage & Reduce Costs for Residents Benefit

3.1 Fabric, Materials & Finishes

Brian Dunlop Architects Ltd. considered the materials proposed for use on the block elevations and in the public areas based on experience of comparative developments. The proposed materials are durable and will not require regular maintenance or replacement outside general day to day care. The use of rendered blockwork, brickwork and slates will contribute to lower maintenance costs for future residents and occupiers.

It is also intended to establish a sinking fund allowance to account for any major works that may be required into the future.

Consideration has been given to the requirements of the Building Regulations including reference to BS 7543:2015, 'Guide to Durability of Buildings and Building elements, Products and Components', which provides guidance on durability, design life and predicted service life of buildings and their parts.

All common areas of the proposed apartments 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 BS7543:2015 including:

- 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. •

3.2 Buildings

The buildings are designed in accordance with the Building Regulations, in particular Part D relating to materials and workmanship, and the following measures have been implemented to reduce maintenance and running costs:

- Use of brickwork and render systems to the building envelope which requires no on-going maintenance:
- Natural/passive ventilation eliminating the need for any mechanical ventilation systems and maintenance of same;
- Daylighting to circulation areas to reduce the need for artificial lighting;
- Landscaped areas designed require low/minimal maintenance (refer to accompanying landscape documentation prepared by Landscape Design Services Landscape Consultants);







- Installation of factory finished aluminium / uPVC windows and doors require low/minimal maintenance and do not require regular replacement;
- Installation of factory finished precast steel / glass balcony railings require low/minimal maintenance.

3.3 Waste Management

The following measures illustrate the intentions for the management of waste for the proposed development:

- Domestic waste to be a 3-bin system to reduce potential waste charges;
- Competitive tender for waste management collection to reduce potential waste charges; •
- Organic waste bins to be provided throughout to reduce potential waste charges. •

3.4 Health and Well Being

The following measures illustrate how the health and wellbeing of future residents have been taken into account during design of the proposed development:

- The design, separation distances and layout of the apartment blocks have been designed to maximise the amount of natural light within the units which reduces the reliance on artificial lighting and helps to reduce potential costs;
- All units will comply with Part M and K of the building regulations in relation to accessibility reducing the potential cost of adaptation of any unit;
- The scheme has been designed to minimise inactive frontage to incorporate passive security surveillance throughout the development to reduce potential security/management costs. See figure 2 below indicating areas of active and inactive frontage in the development;
- Open landscaped areas throughout the site along with the green link running through the centre of the site from Millbrook to the riverside park provides the community with facilities to interact, socialise and play with each other resulting in improved wellbeing.









Figure 2: Passive Observation

3.5 Management

Once a purchaser completes the sale of a unit a homeowner box will be provided which will include the following:

- A homeowner manual containing important information including, but not limited to, the MPRN and GPRN, information in relation to connecting with utilities and communication providers, contact details for all relevant suppliers and user instructions for appliances and devices within the unit;
- A residents pack prepared by the OMC which will typically provide information on contact details for the managing agent, emergency contact information, transport links in the area and a clear set of rules and regulations.

This is to ensure that residents are as informed as possible so that any issues can be addressed in a timely and efficient manner.



3.6 Transport

The proposed development entrance is located off Carleys Bridge Road approximately 1km from the centre of Enniscorthy.

A dedicated pedestrian entrance is provided through an existing gate to the western corner of the site which provides access to the riverside park along the edge of the River Urrin. A new footpath is proposed along the Carleys Bridge Road site boundary with an associated crossing point and additional 2m wide footpath to the north of Carleys Bridge Road proposed to connect the development to the existing footpath into town.

Within the development a shared pedestrian / cycle path is provided to the north of the main spine road running west-east from the development entrance to the eastern site boundary. There are two roads running on a north-south axis which connects the spine road to the remainder of the development. A green link corridor is provided on a north-south axis through the middle of the development which links the riverside park to the south of the site to the neighbouring Millbrook estate to the north. This pedestrian link to Millbrook connects the new development to the rest of Enniscorthy town also.

The provision of high-quality secure bicycle parking facilities for both short- and long-term parking is provided through storage incorporated in the buildings and in sheltered and gated enclosures throughout the site. This encourages the uptake of cycling and reducing the reliance on the private motor vehicle.

3.7 Energy and Carbon Emissions

The proposed dwellings / buildings will be detailed to comply with the requirements of Part L 2019/ NZEB (typical values outlined below) with opportunities for individual owners to add further energysaving or renewable- energy measures, e.g. heat-recovery systems and additional photovoltaic or solar thermal panels.

Air-tightness: Min. compliance 5m3(m2.hr) Minimum U-Value Floors: 0.19 (W/m2K) Minimum U-Value Roofs: 0.16 (W/m2K) Minimum U-Value Walls: 0.18 (W/m2K) Minimum U-Value Doors: 1.6 (W/m2K) Minimum U-Value Windows: 1.0 (W/m2K)

Lighting: Minimum 90% Low Energy Lighting

Tel: +353 (0)56 7813015





A combination of the provisions will be provided to result in an Energy Performance Co-efficient no greater than the Maximum Permitted Energy Performance Co-efficient. In addition, the Carbon Performance Co-efficient will be no greater than the Maximum Permitted Carbon Performance Coefficient.

3.8 Landscaping

Please refer to the accompanying landscape report prepared by Landscape Design Services Landscape Architects for detailed guidance on the landscape proposal and ongoing maintenance works required. The following measures have been considered and implemented to reduce the frequency of required repair and maintenance:

- Paving and decking materials have been selected to be sustainable and robust with high slip resistance. Durable and hardwearing equipment for fencing and play and exercise equipment will be used throughout the development;
- Planting proposals have been formulated to complement the local setting as well as being fit for purpose in respect of private and public realm uses and spatial constraints imposed by garden sizes and the width of planting strips. Native tree species have been selected in significant numbers for planting along boundaries and across open spaces while non-native species have also been selected where spatial constraints are a factor;
- The landscaping will be fully compliant with the requirements for Part M/K of the Technical Guidance Documents and will provide level access and crossings for wheelchair users and pedestrians with limited mobility. Plenty of room for cyclists and pedestrians along with car spaces provides a good balance between pedestrians and car users;
- Maintenance and management requirements have been considered through the design process. Complex planting arrangements have been omitted thus avoiding onerous maintenance and management requirements;
- Use of balconies and openable windows allow individuals to clean windows themselves reducing the cost and reliance on 3rd party contractors for cleaning and maintenance;
- Sustainability aspects of the proposed development include the retention of trees and hedgerows along site boundaries and in the woodland which surrounds the site to the west and south. Other species of trees 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.



Appendix A – Sample Asset Register

This Asset Register is a sample only, based on the estimation of the types of assets that will ultimately be incorporated in to the developed scheme. The final specification and estimate of the costs will only be determined during the detailed design and construction stage of the development.

| Ref | Element | Life Expectancy (years) | Amount (€) |
|-----|---|-------------------------|------------|
| 1.0 | Roofs | | |
| | | | |
| 1.1 | Replacement of flat roof covering including insulation | 18 | |
| | to warm roof build ups | | |
| 1.2 | Replacement of roof slates | 18 | |
| 1.3 | Replacement of parapet details / flashings | 18 | |
| 1.4 | Replacement / repair of fascia and soffits | 18 | |
| 1.5 | Replacement of roof access hatches | 25 | |
| 1.6 | Specialist roof system i.e. fall arrest system | 25 | |
| | | | |
| 2.0 | Elevations | | |
| | | | |
| 2.1 | Repairs & preparation for decorations of rendered | 18 | |
| | areas | | |
| 2.2 | Replace external doors / windows | 25 | |
| 2.3 | Replace rainwater goods | 25 | |
| 2.4 | Recoat powder coated finishes | 20 | |
| 2.5 | Replacement of external fixings | 5 | |
| 2.6 | Replace balcony floor finishes | 25 | |
| | | | |
| 3.0 | Stair Cores and Lobbies | | |
| | | - | |
| 3.1 | Decorate ceilings | 7 | |
| 3.2 | Decorate walls | 7 | |
| 3.3 | Decorate joinery | 7 | |
| 3.4 | Replace fire doors | 25 | |
| 3.5 | Replace carpets | 10 | |
| 3.6 | Replace entrance matts | 10 | |
| 3.7 | Replace stair nosings | 12 | |
| 3.8 | Replace ceramic tiles | 20 | |
| 3.9 | Replace fitted furniture | 18 | |
| 4.0 | M&E Services | | |
| 4.0 | | | |
| 4.1 | General lighting maintenance | 7 | |
| 4.2 | Replace internal light fittings | 18 | |
| 4.3 | Replace external light fittings | 18 | |
| 4.4 | Replace smoke detector heads | 18 | |
| 4.5 | Replace break glass units / disabled call refuge points | 18 | |

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15 Patrick Street, Kilkenny info@bdarchitects.ie Brian Dunlop Architects Ltd. is registered as a private limited company. Registration No. 481365

Tel: +353 (0)56 7813015





| 4.6 | Replace fire alarm panel | 18 |
|------|---|----|
| 4.7 | Replace AOVs | 25 |
| 4.8 | Replace security access control installation | 15 |
| 4.9 | External mains water connection | 20 |
| 4.10 | Electrical mains and sub mains distribution | 20 |
| 4.11 | Emergency lighting | 20 |
| 4.12 | Overhaul and/or replace waste pipes, stack or vents | 20 |
| 5.0 | Exterior | |
| 5.1 | External boundary treatments – recoat powder coated finishes to railings etc | 60 |
| 5.2 | Replace external signage | 15 |
| 5.3 | Replace paved areas | 20 |
| 5.4 | Replace CCTV provision | 15 |
| 5.5 | External handrails and balustrade | 15 |





Appendix B – Phases of the Life Cycle BS7543:2015

| Figure 4 | Phases of the | life cycle |
|----------|----------------|------------|
| Figure 4 | Filases of the | inte cycle |







