John Fleming Architects

Building Lifecycle Report

Western Way SHD

Proposed Shared Living Accommodation and Neighbourhood Uses

by Western Way Developments Ltd

at

36 – 40 Dominick Street Upper

Phibsborough

Dublin 7

103 Upper Leeson Street, Dublin 2
01 668 9888
www.jfa.ie

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Disclaimer

Without Prejudice to the generality of this Building Lifecycle Report, it provides information which is indicative and subject to change following a review when a more detailed specification of scope of works becomes available and it is intended that this study would form the basis of pre-application discussions with the planning department and other relevant authorities.

0.0 Introduction

The 2018 adopted *Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities* (March 2018) provide policy guidance on the operation and management of apartment developments, to include a statement of the aim of certainty regarding their long-term management and maintenance structures. This certainty is to be provided via legal and financial arrangements supported by effective and appropriately resourced maintenance and operational regimes.

The Guidelines state that consideration is to be given matters of the long-term running costs and the manner of compliance of the proposal which should now be considered as part of any assessment of a proposed apartment development to achieve this policy objective, planning applications for apartment developments now need to include a *Building Lifecycle Report* with the Multi-Unit Developments Act, 2011; these are to include 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 specific measures have been considered to effectively manage and reduce costs for the benefit of residents.

Section 6.13 of the Apartment Guidelines 2018 requires that:

"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"***

"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 document sets out to address the requirements of Section 6.13 of Apartment Guidelines 2018, and is divided into 2 sections:

Section 01 - *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 - *demonstrate what measures have been specifically considered by the proposer to effectively manage and reduce costs for the benefit of residents.*

This document has been compiled in collaboration with the following design team:

Client - **Western Way Developments Ltd**
Planning Consultant - **John Spain Associates**
Architect - **John Fleming Architects**
Mechanical & Electrical Engineers - **Waterman Moylan Consulting Engineers**
Landscape Architect - **Parkhood**
Waste Management – **AWN Consulting**

1.0 Proposed Development

Western Way Developments Ltd, intend to apply to An Bord Pleanála for permission for a strategic housing development at this site of approximately 0.3285ha at nos. 36 – 40 Dominick Street Upper, Dublin 7, D07 X4HW. The site includes the Hendrons Building (and western railings) protected structure no. 8783 and the boundary wall of the application site on Western Way, protected structure no. 8483.

The development, which ranges from 4 to 9 no. storeys across 5 no. blocks (Block A over basement) and includes the re-use and extension of the protected structure, c. 10,953.9 sq.m. of Build-to-Rent Shared Living accommodation (inclusive of amenity space), 280 no. units [281 no. bedspaces], c. 434.5 sq.m. of publicly accessible uses including a gym, café/shop and yoga studios. The development will consist of:

- Demolition of the existing vacant warehouses and dwelling at no. 36 Dominick Street Upper (c. 2356sqm);
- Retention and re-use of the existing Hendrons building (including retention of existing 'Hendrons' signage), a protected structure under RPS Ref.: 8783, including alterations and additions and an additional storey (resulting in a 5 no. storey building [Block B]) to facilitate the proposed redevelopment, including removal of non-original internal dividing walls, 2 no. external emergency exit stairs, reinstatement and restoration of original window openings on the front façade and retention of the existing glass blocks, original railings, stairs and lift shaft;
- Construction of 4 no. additional buildings on site including; Block A fronting Palmerston Place (4 – 5 no. storeys), Block C on the corner of Dominick Street Upper and Western Way (9 no. storeys), Block D fronting Western Way (7 – 8 no. storeys) and Block E fronting Western Way (5-6 no. storeys);
- Block C will accommodate a gym, yoga/pilates studio and changing rooms at lower ground floor level (259.7sqm);
- Resident internal amenity space is provided within the upper levels of the Hendrons Building and throughout the site including; living, kitchen dining areas, co-working spaces, a sky lounge, laundry, cinema room, games room, waste management facilities, bicycle repair station, storage and lounge areas (2186.3sqm);
- External amenity space is provided in the form of 2 no. roof terraces at Blocks A (fourth floor level) and D (seventh floor level) and within a central courtyard and entrance plaza (1267.1sqm);
- Provision of an ancillary single storey ESB substation and switch-station including access via Western Way (and partial demolition of the boundary wall (protected structure no. 8483) to accommodate this],
- Provision of site wide landscaping including pathways, lighting, sedum roofs and all ancillary site development works including boundary treatments.

Section 1

2.0 Property Management Arrangements (PMA)

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

Western Way Developments Ltd will anticipate maintenance costs for the operators from the commencement of the design process, and establish a Property Management Company from the outset, with the aim to manage and minimise potential unnecessarily high running costs for expenditure on a per residential unit basis. This will result from the study from previously undertaken residential projects by related companies and the application of changes in the standards arising from the new apartment guidelines.

6.14 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.

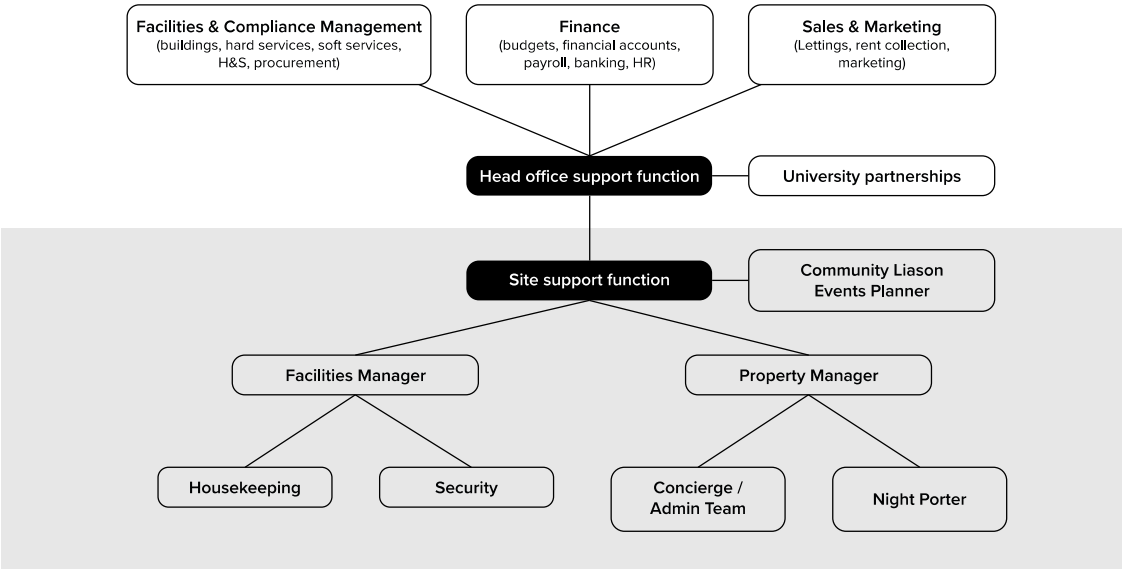
OUTLINE WESTERN WAY SHD SHARED LIVING ACCOMMODATION SCHEME MANAGEMENT PLAN

Operations & Property Management

Our efficient management structure and effective use of ICT systems (utilising our bespoke and wholly owned web-based Accommodation Management System – 'AMS' and full CAFM Facilities Management Software – 'FMS') allows us to work and manage efficiently and effectively. Both our AMS and FMS systems are fully capable of handling an asset that is designed and operated as shared living accommodation.

Staffing at each site is ultimately dependant on number of bed spaces (and any client specific requirements). Hendrons will require a dedicated on-site team of 9 employees headed by a property manager, overseen by our Irish Operations Director and supported by our existing Head Office function. CityLiving will look to employ from the local community

Hendrons Site Operating Structure



The property

Hendrons is formed from a sensitive conversion of a protected structure on part of the site and a replacement of dilapidated existing buildings with new build shared living accommodation across the rest of the site, creating 280 shared living studios. There are extensive communal spaces on the ground floors which include Hendrons café and Lobby Located on the lower ground floor are the resident and community access facilities including, TRX studio, yoga, Pilates and dance studio, cinema, residents laundry, bike storage and E-Scooter charging stations. The Hendrons building also offers the City View lounges, Sky Lounge and Roof Farm located on the rooftop.

Property Manager

The person co-ordinating and leading the Hendrons shared living team is the property manager. They will lead the interaction with residents on behalf of CityLiving and will ensure the building operates in line with this management plan and other best practice guides. Residents will interact with the property manager and their team as the first point of contact.

The Concierge

Upon entering Hendrons, residents and visitors alike will encounter the concierge desk in the reception area. The concierge will provide support to residents to enhance their experience. For example, the Concierge will assist with greeting building visitors, maintaining the reception communal area and taking delivery of oversized parcels or deliveries requiring signature. An important element of this role is maintaining the schedules for use of the various communal areas and ensuring the areas are ready for Resident's use and members of the public when booked in advance.

All inclusive rent package

The proposed rental structure for residents will comprise an all-in monthly fee which will include rent of studio, use of communal facilities, high speed internet access, electricity and utility charges (swipe cards in rooms to minimise over usage), waste removal, common area cleaning, concierge service, security and access to events/social groups.

WIFI and Hendrons Hub

High speed WIFI connection will be installed throughout the development for all residents to use. Visiting members of the public will have access to the Communal space WIFI via registration on the Hendrons Hub. Each resident will be invited to download and register for the Hendrons Hub, a dedicated Hendrons software platform that will handle all elements of their resident experience journey while living in the building. Visiting members of the public using any of the public access facilities will automatically be notified when initially accessing the WIFI to download and join the Hendrons Hub. The Hendrons Hub will be a channel for notifications of events, public space booking platform and marketing channel for the Hendrons building.

Security of Tenure

All residents will be provided with a fully compliant Tenancy Agreement offering flexible terms from 1 week through to 12 months or longer.

The Shared Living Accommodation and Neighbourhood Uses at 36-40 Dominick Street Upper will be managed by the operational management team with a residential manager available during the working hours of a typical week. Emergency out-of-hours services will also be available to residents who will be provided with details of same.

Access Control to Residential Blocks

Restricted access control using designated SMARTair app will be implement throughout Hendrons. Residents and authorised visitors will be required to ‘tap’ in and out of the building and communal areas such as the TRX studio, SkyLounge, dance studio etc using their mobile phone or smart watch. Registered visiting members of the public who are verified via the Hendrons Hub that have made bookings to use the public community spaces will also have the ability in a controlled way to tap for access to the desired areas of visit. This access control will be linked to the Building Management System (BMS). CCTV will also be utilised throughout the communal and service areas. All CCTV and BMS data recorded will be managed and securely stored in accordance with GDPR regulations.

Each Resident will be provided with a door entry fob registered to their name and address which can be cancelled remotely in the event they are lost or stolen. Residents will also be provided with keys for their units. Visitors to the building will be asked to dial directly to the apartments via the door entry system and will not be permitted access into the Residential areas without this access being permitted.

Resident Services and Amenities Facilities – Private and Public Access

The proposed residential services and amenity facilities will be the responsibly of the management operator who will manage the booking of facilities where required. Cleaning of this space will be organised and managed by the management operator.

The proposed Publicly Accessible amenity facilities are located within the Lower and Upper Ground floors of Blocks B, C and D and include:

- Reception, Café, Shop, indoor seating and toilet in Block B (Hendrons Building)
- Gymnasium, Reception, Toilets and changing rooms in Block C
- Yoga/Pilates Studio in Block D

The proposed Private Access services and amenity facilities are located within all proposed Blocks and include in:

Block A

- Laundry 1 (Lower Ground floor)
- Communal living and kitchen space (on all floors, exc. Basement)
- Roof Terrace / Outdoor zone (4th floor)

Block B (Hendrons Building)

- Co-working space. Meeting Room and storage (1st floor)
- Sports / Cinema Room with Kitchenette (2nd floor)
- Games Room (3rd floor)
- Sky Lounge (4th floor)
- Communal living and kitchen space (1st,2nd and 3rd floor)

Block C

- Communal living and kitchen space (on all floors, exc. Lower Ground Floor)

Block D

- Laundry 2 (Lower Ground floor)
- Communal living and kitchen space (on all floors, exc. Lower Ground Floor)
- Roof Terrace (7th floor)

Block E

- Refuse Drop-off Room (Lower Ground floor)
- Bicycle Store
- Communal living and kitchen space (on all floors)

The meeting rooms will be utilised by the management operator and will also be available for booking for private use by residents.

The residents' Sky Lounge and Roof Terrace space will be available through key fob access for all residents. The lounge will be an area for residents to relax, meet friends and organise small parties.

The publicly accessible Gym will have high-quality equipment. Information will be made available regarding the correct use of gym equipment. It will be the responsibility of the management operator to manage and organize gym inductions for all user's safety when using the equipment.

Outdoor Spaces

The Operator will appoint an approved landscape maintenance contractor to maintain landscaped areas on site.

On the 4th floor on the southern side & 6th floor on the Northern side there is an external social terrace available for residents to use. Suitable furniture will be provided in these spaces so that the residents can enjoy the panoramic views of Kings Inn and Royal Canal Bank park. Use of this area will be managed to ensure use by Hendrons residents doesn't negatively impact the building's neighbours. The property manager will closely monitor and control these areas. Availability being restricted to pre-agreed times

Sections of the flat roof have been designed for residents to cultivate their own fruit, vegetables and herbs, giving a real sense of meaning and to further strengthen the long term resident rather than transient dwellers. The Roof Farm is a great creation of outside amenity space and help Dublin provide increased amounts of Green Space.

The central Courtyard at ground floor area is designed to be interconnecting through the clever design of vegetation creating different external areas for different uses. In the Courtyard are private seating areas, group seating areas and external sports options such as ping pong.

Motorcycles Parking

Motorcycles parking will be managed by the management operator who will control access to ensure that spaces are utilised only by designated persons. It is not proposed that the ownership of any motorbike parking spaces will be included in the sale or leasing of any apartment unit. It is intended that residents will apply to the management operator in order to lease a space for a specified length of time. This will ensure that all residents who require a motorcycle space can avail of one whilst spaces are not needlessly assigned to those who do not require one.

Cycle Parking

The scheme will provide 112 no. double rack spaces and 31 no. EV spaces which will be located within large internal lower ground Bicycle Store and 32 no. within external Bicycle Store. Apart from it an additional external bike stands will be provided and their number regulated and increased on an ongoing

basis to meet current needs. The management operator will have responsibility for the maintenance of bike storage areas and external stands with CCTV in operation to improve safety and security.

CityLiving understands that many Residents of Hendrons will use the bicycle as their primary mode of transport. With this is in mind, the provision of secure bicycle parking was a key design consideration with ample secure bike parking being provided inside the building. The area will be under CCTV surveillance and access to the yard will be controlled using tap in and out.

We will investigate the provision of bicycle sharing, E-bike sharing and E-scooter sharing schemes to further encourage this form of transport.

The bike storage includes a maintenance station alongside a commercial arrangement for maintenance with a local bike shop. A key element of the Bike storage area is to create a biking community so we will be integrating social seating for biker groups to use.

2.1 Service Charge Budget

The property management company (PMC) has a number of 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)

All inclusive rent package

The proposed rental structure for residents will comprise an all-in monthly fee which will include rent of studio, use of communal facilities, high speed internet access, electricity and utility charges (swipe cards in rooms to minimise over usage), waste removal, common area cleaning, concierge service, security and access to events/social groups.

WIFI and Hendrons Hub

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Security of Tenure

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Section 2

3.0 Building Design

Measure	Description	Benefit
Daylighting to units	Where possible, as outlined in '*Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities* (March 2018)' *to have regard for quantative performance approaches to daylight provisions 'outlined in guides like the BRE guide 'Site Layout Planning for Daylight and Sunlight' (2nd edition) or BS 8206-2: 2008 – 'Lighting for Buildings – Part 2: Code of Practice for Daylighting' when undertaken by development proposers which offer the capability to satisfy minimum standards of daylight provision'.*	Reduces the requirement for continuous daylighting, thus reducing the expense of artificial lighting
Daylighting to circulation areas	Where possible natural light is provided.	Reduces the requirement for continuous daylighting
External Lighting	External lighting will comply with the latest standards and achieve: Low level lighting Utilise low voltage LED lamps Minimum upward light spill Be pre-approved by / in accordance with the local authority/FCC Each light fitting is to be controlled via an individual Photoelectric Control Unit (PECU). The operation of the lighting shall be on a dusk-dawn profile.	Lighting will be designed to achieve required standards, provide a safe environment for pedestrians, cyclists, provide surveillance and limit the impact on the artificial lighting on surrounding existing flora and fauna

4.0 Energy & Carbon Emissions

The minimum energy performance standards and renewable energy contributions for a development of this nature are defined in Part L 2017. This document sets out the minimum performance criteria for the building fabric, the efficiency of HVAC systems and artificial lighting, overall energy and carbon emission performance and the required renewable energy contribution.

In order to determine the most efficient and effective means of complying with the requirements of Part L Part L 2017 Part (b) a detailed assessment of the various renewable energy systems available will be conducted during the design stage.

Ensuring that the correct approach is adopted for compliance with Part L 2017 will minimise the energy use and carbon emissions of the building throughout its operational life, thereby minimising the life cycle impacts of the development.

4.1 Building Fabric Performance

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 and this in turn will reduce the consumption of fuel and the associated carbon emissions and operating costs.

It is the intention of the design team to exceed the requirements of the building regulations. Target U-Values are identified below.

U-Values	**Range of Target Values Proposed**	**Part L 2017 (Commercial) Compliant Values**
Floor	0.15 to 0.21 W/m^{2}K	0.21W/m^{2}K
Roof (Flat)	0.15 to 0.20 W/m^{2}K	0.20 W/m^{2}K
Roof (Pitched)	0.10 to 0.16 W/m^{2}K	0.16 W/m^{2}K
Walls	0.14 to 0.21 W/m^{2}K	0.21 W/m^{2}K
Windows	0.9 to 1.6 W/m^{2}K	1.6W/m^{2}K

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.

With good design and strict on-site control of building techniques, infiltration losses can be significantly reduced, resulting in equivalent savings in energy consumption, emissions and running costs. A design air permeability target of 5 m3/m2/hr should be targeted for the development.

4.2 HVAC Strategies

A range of possible solutions will be assessed in terms of their technical suitability; ease of operation for end-users; operating costs to be borne by end users and capital costs of the plant and equipment required.

4.3 District Heating Approach

A central or “district heating” approach could be adopted which would involve the generation of heat and/or hot water in a central location on the site and the distribution of this heat to each shared living unit via a network district heating pipework. The central plant used to generate the heat could include gas boilers and a renewable energy contribution such as a combined heat and power (CHP) plant or heat pumps.

CHP units use gas as its energy source to create electricity which can be utilised within the proposed development. This process of creating electricity results in the generation of waste heat which can then be used to meet a proportion of the heating and hot water demands of the development. The waste heat is considered to be renewable energy and will therefore contribute to the renewable energy required to meet the requirements of Part L 2017.

Air source heat pumps (ASHPs) utilise grid supplied electricity to extract thermal energy from a heat source, in this case, the external ambient air. While the electricity consumed is obviously not renewable energy, the efficiency at which a heat pump operates (over 400%) allows a significant portion of the heat delivered to be considered as renewable energy. The amount of heat considered to be renewable is determined by the efficiency of the heat pump and the “primary energy conversion factor” for grid supplied electricity. Typically, 40% to 50% of the heat supplied is considered to be renewable energy.

4.4 Localised Heating Plant Approach

As an alternative to a centralised district heating solution, individual heating and hot water plant could be provided in every shared living unit. There are various means of generating heat and hot water on an individual basis, either using gas boilers or Exhaust Air Heat Pumps (EAHPs)

Gas fired boilers are a widely used and well understood technology while EAHPs are a relatively new technology which operate in a very similar manner to air source heat pumps and utilise grid supplied electricity to extract thermal energy from a heat source, in this case, the internal air within an occupied space.

Technically, either option could be adopted however in practical and financial terms it is unlikely that it would be feasible to provide individual plant within every unit within the scheme.

Direct acting electric heating offer another alternative with modern storage heaters and direct acting electric convector heaters now significantly improved on their predecessors that were used in the 1990s. The hot water demand could then be satisfied using localised hot water heat pumps, operating ins a very similar manner to exhaust air heat pumps).

A third option that may offer a benefit in terms of overall installation costs and the Part L compliance would be the adoption of a scheme that incorporates both central plant approach and individual heating in the units by combining Option 1B with 2C.

If electric heating was adopted, consideration could also be given to implementing a centralised hot water only central plant and distribution network to meet the domestic hot water needs of the development. By incorporating high temperature heat pumps and central storage vessels into the central plant the renewable energy demands of the scheme could also be satisfied.

5.0 Materials & Materials Specification

Implementation of the Design and Material principles to the design of building position, internal layouts, facades and detailing has informed the materiality of the proposed development.

The proposed envelope of the building is selected brick, cladding panels and render finish, with aluminium double-glazed and glass block windows. Based on comparison with similar schemes developed, the proposed materials are durable and would not require regular replacement or maintenance.

To improve on building standards there has been an increase in the expected build cost. Materials have been selected with a view to longevity, durability and low maintenance. Consideration has been given to Building Regulations and includes reference to BS 7543:2015 ‘Guide to Durability of Buildings and Building elements, Products and Components’.

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.

Measure	Description	Benefit
Implementation of the Design and Material principles to the design of the proposed development.	Materials have been selected with a view to longevity, durability and low maintenance with Consideration given to Building Regulations and includes reference to BS 7543:2015 'Guide to Durability of Buildings and Building elements, Products and Components'	longevity, durability and low maintenance of materials
Brickwork to the building envelope	Materials have been selected with a view to longevity, durability and low maintenance with Consideration given to Building Regulations and includes reference to BS 7543:2015 'Guide to Durability of Buildings and Building elements, Products and Components'	Requires minimal maintenance and does not require regular replacement
Installation of factory finished, glass block and aluminium windows to be finalised at tender stage	Materials have been selected with a view to longevity, durability and low maintenance with Consideration given to Building Regulations and includes reference to BS 7543:2015 'Guide to Durability of Buildings and Building elements, Products and Components'	Requires minimal maintenance and does not require regular replacement
Installation of factory finished cladding panels	Materials have been selected with a view to longevity, durability and low maintenance with Consideration given to Building Regulations and includes reference to BS 7543:2015 'Guide to Durability of Buildings and Building elements, Products and Components'	Requires minimal maintenance and does not require regular replacement

6.0 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 pathways 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 use of native trees and shrub species 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.

7.0 Waste Management

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

Measure	Description	Benefit
Construction & Demolition Waste Management Plan	This application is accompanied by a Construction & Demolition Waste Management Plan prepared by AWN Consulting	The Plan demonstrates how the scheme will comply with national, regional, and local waste legislation along with best practice.
Operational Waste Management Plan	This application is accompanied by an Operational Waste Management Plan prepared by AWN Consulting	The Plan demonstrates how the scheme has been designed to comply with national regional, and local waste legislation, waste bye-laws, along with best practice.
Storage of Non-Recyclable Waste and Recyclable Household and Commercial Waste	Residential Inclusion of a centralised communal waste storage area for residents, with enough space to accommodate weekly storage of bins for dry mixed recyclable, organic waste and mixed non-recyclable waste. Glass, WEEE, batteries and lightbulbs will also be provided for in shared WSA. Commercial Inclusion of centralised communal waste storage areas for tenants, with enough space to accommodate weekly storage of bins for dry mixed recyclable, organic waste, glass and mixed non-recyclable waste.	Easily accessible by all residents, tenants, facilities management personnel and the waste contractor(s), minimises potential littering of the scheme, reduce potential waste charges and does not limit waste contractor selection.
	Domestic waste management strategy (Residential Units): Dry mixed recyclable, glass, mixed non-recyclable waste, organic, WEEE, Batteries and lightbulb waste segregation. Commercial waste management strategy (Commercial Units): Dry mixed recyclable, mixed non-recyclable waste, glass and organic waste segregation.	Helps reduce potential waste charges and does not limit waste contractor selection.
	Security restricted waste storage rooms.	Reduce potential for fly tipping by residents and non-residents.
	Well signed waste storage rooms and waste receptacles.	Help reduce potential cross contamination of waste and reduce waste charges.
Composting	Organic waste receptacles to be provided in the communal waste storage areas. Residents and tenants will be provided with organic waste receptacles.	Helps reduce potential waste charges and compliance with national policy and legislation regarding segregation of biodegradable waste.

8.0 Human Health & Well-being

Emerging research has proven how valuable a role a co-ordinated resident life programme plays in ensuring a positive resident experience in shared living developments and how this can differentiate properties. Recognising that we are not merely 'providing a roof over people's heads', CityLiving have developed a unique programme 'Hendrons Life' to support and engage our residents. The residents we want living in Hendrons are the type who will invest in the enjoyment of the building and the amenities on offer, not be transient short stay dwellers.

The programme is built around four core pillars, entertainment & activity, wellbeing, knowledge and sense of community. While the programme will be heavily influenced by residents interests it will likely include a mix of regular events such as:

- Movie nights in our cinema.
- Table quizzes.
- Topical 'soap box' presentations.
- Socially responsible community activities.
- Group excursions.
- 'Come dine with me' nights.
- Festive celebrations.
- Regular Yoga, Pilates and mindfulness groups.
- Charitable activity.

The aims of the programme are:

- To build a vibrant and engaged community.
- To be viewed as an operator who is relevant, and who understands and places importance on the positive and transformative role a programme of events and activities can play in the wider residential experience.
- To provide our residents with numerous free opportunities to meet other residents, get to know the property team and feel part of a caring community and get involved in the wider community.
- To build and improve upon relationships with leading corporate employers and their key departments by leveraging the programme to seek out opportunities to support campaigns and events of importance to them.
- To improve the experience of living in our properties by gathering data on the success of the CityLiving Hendrons Life programme via resident surveys, focus groups and anecdotal feedback and utilising all feedback to improve the experience of living in our properties.

How human health and well-being is been considered:

Measure	Description	Benefit
Natural daylight	Design of the layout of the development has been optimised to achieve a good quality of natural daylight to the units	Demonstration of how the scheme has been designed to comply with best practice
Security	Passive surveillance is incorporated into the design	Access to all residents to reduce risk of littering within the scheme and reduces potential waste charges
Accessibility	All units, egress routes and stair cores to comply with the requirements of Technical Guidance Documents Part M/K	Helps to reduce waste charges and the amount of waste going to landfill
Amenity	Provision of both internal and external public / communal amenity space	Facilitates socialising, community interaction
Private Open Space	Private open space is provided and is illustrated in the Landscape Masterplan prepared by Park Hood	Facilitates interaction with outdoors

9.0 Transport & Accessibility

A Traffic and Transport Assessment (TTA) has been developed by Waterman Moylan Engineering Consultants as part of the planning documentation for the development, and is submitted under separate cover. The TTA includes a Travel Plan with Mobility Management Measures, outlining measures to provide a positive atmosphere for residents, staff and visitors to the proposed development with regards to transportation and accessibility.

No substantial changes are proposed to the road network. The development proposes no car parking at the site and does not allow for any residential parking at or near the premises. Instead, green modes of transport are to be promoted in order to minimise the energy use and air emissions as a result of the development. The development will not typically generate new primary trips to the local road network, and any visitation will either be Non-Primary Diverted trips or Non-Primary Pass-By trips resulting in little or no uplift in traffic volume on the adjacent road network.

The proposed development includes provision of 144 no. bicycle parking space racks and 31 electric vehicle spaces provided within the bicycle storeroom, for Electric Scooters and similar small personal

vehicles. The site is in close proximity to the Luas, bus services, several Dublin Bikes stations and is within walking distance of many city centre destinations.

The primary access for all residents and staff will be from Dominick Street Upper via a gated access to the courtyard. Robust slip-resistant permeable paving is proposed in the courtyard, which will minimise ongoing maintenance inputs.

Inbound delivery and service vehicles will arrive from Western Way, travelling from Mountjoy Street towards Constitution Hill, and taking the slip road onto Dominick Street Upper to access the existing loading bay in front of the existing Hendrons building.

Refuse vehicles will make regular collections. The proposed refuse room has an access ramp at the west of the site, for staff only, which bypasses the main entrance to the development. Refuse vehicles will pull into the existing loading bay on Dominick Street Upper to collect waste from the bins which will be brought out to the street via this ramp.

Appendix A

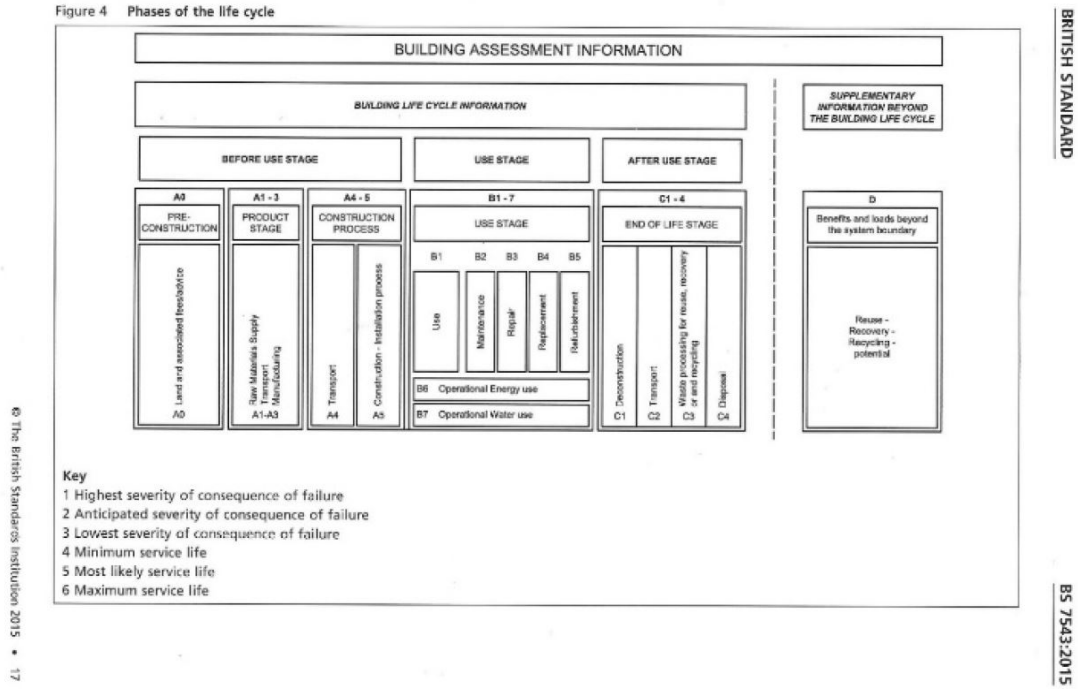

Figure 1 - BS 7543:2015 Figure 4