

UNIVERSAL DESIGN STATEMENT

LONGVIEW STRATEGIC RESIDENTIAL
HOUSING DEVELOPMENT

AT: LAHARDANE & BALLINCOLLY, CORK.

FOR: LONGVIEW ESTATES LIMITED



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NOVEMBER 2019

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1.0 Introduction.

What is Universal Design?

Universal Design is the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people, regardless of their age, size or disability. This includes public places in the built environment such as buildings, streets or spaces that the public have access to; products and services provided in those places; and systems that are available including information and communications technology (ICT).

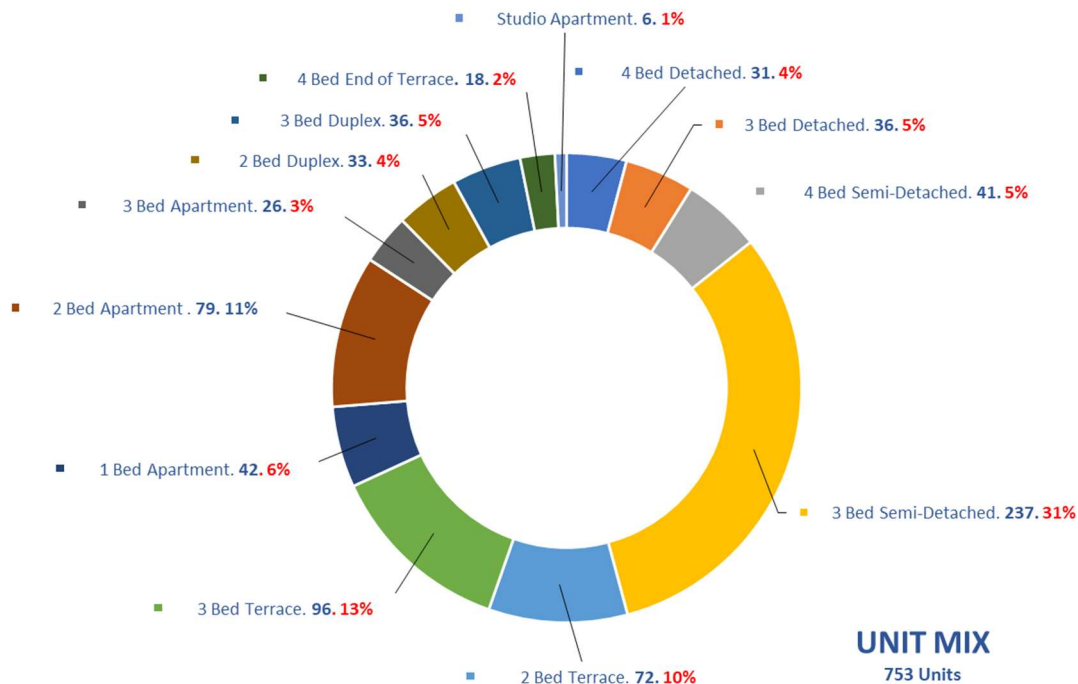
(Disability Act, 2005)

This Universal Design Statement is provided to confirm that the proposed development has been designed to comply with the Principals of Universal Design, the relevant Building Regulations, relevant Development Plan requirements taking cognisance of other national and international guidelines and best practice.

2.0 Summary of Proposed Development

The proposed development will consist of a strategic housing development including 753 residential units to be constructed in a series of phases (six neighbourhoods in total), a local centre including retail (2 no. units), a crèche, doctors surgery and community use unit and all associated and ancillary infrastructure, services and site development works on a site to the east of the Ballyhooly Road at Lahardane and Ballincolly (Townlands), Ballyvolane, Cork City

The proposed 753 no. residential units are comprised of the following:



The proposed development includes a number of open spaces and play areas in addition to general landscaping, boundary treatments (including walls and landscaping to the houses to the north) and lands to the east, and landscaped parkland / greenway.

The proposal includes an internal distributor road providing access to neighbouring lands, associated internal roads, car parking, pedestrian and cycle paths (providing access to neighbouring lands), public lighting, internal

bus stops and turning area, bin storage (in apartment locations) and cycle parking and all site services infrastructure.

Two no. vehicular accesses are proposed from the Ballyhooly Road and one no. access to / from the local road to the north of the site (pedestrian access points will also be allowed for to the local road to the north), all including local road widening within applicant lands, re-surfacing and boundary works signalisation of the Lower Dublin Hill / Ballyhooly Road Junction is also proposed along with the provision of a new bus stop on the eastern side of the Ballyhooly Road close to the junction of Lower Dublin Hill and the Ballyhooly Road. The application also provides for the reservation of lands to accommodate the widening of the Ballyhooly Road and the provision of new pedestrian and cyclist infrastructure along the eastern side of the Ballyhooly Road with crossing of same close to Mervue Lawn south of the proposed development.

3.0 Standards & Guidelines

The Development is required and designed to provide compliance with the following:

- The Building Regulations 1997-2019, Specifically Technical Guidance Document Part M (Access & Use)
- Cork County Development Plan – Non-Residential Development requirement for 5% Part M compliant parking.
- Cork City Development Plan

The design team has been guided in its approach from preliminary design stage by the following documents:

- The National Disability Authority in Ireland (NDA) - Building for Everyone
- The National Disability Authority in Ireland (NDA) – Principals of Universal Design
- BSI (2018), BS8300-1: Design of an accessible and inclusive built environment, Part 1: External Environment – Code of Practice
- BSI (2018), BS8300-2: Design of an accessible and inclusive built environment, Part 1: Buildings – Code of Practice
- DMURS – Design Manual for Urban Roads and Streets.

4.0 Compliance

Technical Guidance Document Part M provides guidance in relation to providing compliance with the requirements of Part M of the second schedule of the Building Regulations and provides as follows:

Access And Use	M1 Adequate provision shall be made for people to access and use a building, its facilities and its environs.
Application of the Part	<p>M2 Adequate provision shall be made for people to approach and access an extension to a building.</p> <p>M3 If sanitary facilities are provided in a building that is to be extended, adequate sanitary facilities shall be provided for people within the extension.</p> <p>M4 Part M does not apply to works in connection with extensions to and material alterations of existing dwellings, provided that such works do not create a new dwelling.</p>

Part M aims to foster an inclusive approach to the design and construction of the built environment. The requirements of Part M (M1-M4) aim to ensure that regardless of age, size or disability:

- (A) New buildings other than dwellings are accessible and useable:
- (B) Extensions to existing buildings other than dwellings are where practicable, accessible and useable;
- (C) Material alterations to existing buildings other than dwellings increase the accessibility and usability of existing buildings where practicable.

- (D) Certain changes of use to existing buildings other than dwellings increase the accessibility and usability of existing buildings where practicable; and
- (E) New dwellings are visitable.

In doing so, the requirements, underpin the principal of Universal Design. Universal design is defined in the Disability Act 2005 as the *“the design and composition of an environment so that it may be accessed, understood and used to the greatest practical extent, in the most independent and natural manner possible, in the widest possible range of situations and without the need for adaptation, modification, assistive devices or specialised solutions, by persons of any age or size or having any particular physical, sensory, mental health or intellectual ability or disability.”*

4.1 Design & Compliance Approach

Where works are carried out in accordance with the guidance within Technical Guidance Document Part M 201, this will, prima facie, indicate compliance with Part M of the Second Schedule of The Building Regulations (as amended). The Design team is committed to achieving universal access throughout the proposed development within the built environment and the public realm.

In development and progression of a design concept, the Design Team referred to, and assessed the design for compliance with (Examples of compliance included):

THE UNIVERSAL ACCESS STRATEGY:

- **PUBLIC REALM AND APPROACH:**

The provision of independently accessible means of approach to the accessible entrance(s) of a building and means of circulation within a building, in accordance with **Section 1.1** of TGD Part M 2010.

The following are provided in accordance with TGD Part M Section 1.1

- **Accessible car parking is provided throughout the site including:** within close proximity to the Creche, Doctors surgery, retail units, apartment building at N2 & Duplex units. Undercroft spaces are provided at the apartment complex at N6.
- Apartment buildings, Creche facility, Retail units, Doctor surgery, Community Room, Duplex/ Apartments and Dwelling Houses are provided with level access.
- **First floor duplex units are provided with Ambulant Disabled stairways in accordance with TGD Part M Section 1.1.3.5 stepped access.**

- **INDEPENDENT ACCESSIBILITY:**

The provision of entrances to buildings that are independently accessible and avoid segregation based on a person’s level of ability in accordance with **Section 1.2** of TGD Part M 2010.

The following are provided in accordance with TGD Part M Section 1.2

- **Entrances to Apartment buildings, Creche facility, Retail units, Doctor surgery, Community Room, Duplex/ Apartments including:**
 - **Entrances close to designated parking and set down areas.**
 - The design including materials and lighting of entrance doors makes them easily identifiable.
 - **Level access landings measuring a minimum 1800 mm x 1800mm are provided externally to each door.**
 - Entrance doors are a minimum clear width of 1000mm.
 - **Entrance doors are provided with a minimum leading edge of 300mm.**
 - Entrance lobbies to Apartment buildings, Creche facility, Retail units, Doctor surgery, Community Room are designed to comply with 1.2.5 & Diagram 11.

- **HORIZONTAL & VERTICAL CIRCULATION:**

The objective for people to travel horizontally and vertically within a building conveniently and without discomfort in order to make use of all the relevant facilities in accordance with **Section 1.3** of TGD Part M 2010.

The following are provided in accordance with TGD Part M Section 1.3

- **Within Apartment buildings, basement car parks, Creche facility, Retail units, Doctor surgery, Community Room**
 - **Internal doors are minimum widths as required by Table 2 & Diagram 10.**
 - **All internal circulation doors are provided with 300mm leading edges.**
 - **Corridors are designed to have minimum widths of 1.20m (Generally in excess of same) as required by 1.3.3.3.**
 - **Turning heads are provided at the ends of corridors at N2 & N6 as required by 1.3.3.3 (biii)**
- **Passenger lifts are provided within apartment complex's at N2, N6 and the Doctors Surgery as per section 1.3.4**
- **First floor duplex units are provided with ambulant disabled stairs from entrance to the level containing the primary habitable room as per Section 1.3.4.3.**

- **SANITARY FACILITIES:**

The objective to provide independently accessible sanitary facilities that meet the needs of people with a wide range of abilities in accordance with **Section 1.4** of TGD Part M 2010.

The following are provided in accordance with TGD Part M Section 1.4

- **Within the Creche facility, Retail units, Doctor surgery and Community Room**
 - **Independently accessible sanitary facilities, that meet the needs of people with a wide range of abilities, will be provided including wheelchair accessible, unisex and ambulant toilets are provided.**
- **Staff changing facilities in accordance with Section 1.4.3.5 within the Creche facility and Doctors surgery.**

- **OTHER FACILITIES IN BUILDINGS:**

The objective to ensure that all facilities within a building are accessible to and useable and that they are designed and constructed to facilitate active participation where appropriate in accordance with **Section 1.5** of TGD Part M 2010.

The following are provided in accordance with TGD Part M Section 1.5

- **Other facilities within communal areas, the Creche facility, Retail units, Doctor surgery and Community Room will be accessible and useable, designed and constructed to facilitate active participation where appropriate.**
- **Light switches controls and sockets will be designed in accordance with Section 1.5.7 & Diagram 30.**

- **AIDS TO COMMUNICATION:**

The objective to provide adequate aids to communication to ensure people can independently access and use a building and its facilities in accordance with **Section 1.6** of TGD Part M 2010.

The following are provided in accordance with TGD Part M Section 1.6

- **Adequate aids to communication will be provided within the common areas of Apartment buildings, Creche facility, Retail units, Doctor surgery, Community Room, Duplex/Apartments to ensure people can independently access and use buildings and their facilities in accordance with Section 1.6 of TGD M 2010 including the following :**
 - **Signage in accordance with 1.6.3**
 - **Visual Contrast as per section 1.6.4**
 - **Lighting as per Section 1.6.5**
 - **Audible aids as per Section 1.6.6**

- **APARTMENTS AND DUPLEX UNITS:**

The objective to provide adequate means of approach to the main entrance of a dwelling to facilitate visitors from a point of access as well as providing accessible WC's suitable for visitors etc, approach to the main entrance of a dwelling to in accordance with **Section 3.0** of TGD Part M 2010.

Apartment and Duplex Apartments will be provided with the following:

- **Adequate entrances for visitors including ambulant disabled stairs.**
- Accessible toilets for visitors at first floor level/ habitable room level.
- **Adequate circulation within the entrance storey.**

THE 7 PRINCIPALS OF UNIVERSAL DESIGN:

- **PRINCIPLE 1: EQUITABLE USE**

The design is useful and marketable to people with diverse abilities.

Guidelines:

- 1a. Provide the same means of use for all users: identical whenever possible; equivalent when not.
- 1b. Avoid segregating or stigmatizing any users.
- 1c. Provisions for privacy, security, and safety should be equally available to all users.
- 1d. Make the design appealing to all users.

- **The same means of access to buildings within the scheme is provided for all.**
- All dwellings are designed to provide Part M compliant level access via the front door for visitors.
- **The majority of dwelling houses are provided with on curtilage car parking located in close proximity to the front door.**
- All dwellings with on curtilage car parking have at least a single space a minimum 3.3m in width.
- **The reception area for the creche facility, retail units and community center are at ground floor level, located close to the front door and will be provided with communication aids.**
- Amenity outdoor space within the Creche and Community Room is provided with level access. External amenity spaces are designed in accordance with TGD Part M 2010.
- **The western side of the development, Neighbourhoods 1,3,4 & 6 provide challenging topography. In response to this, the distributor road which serves the neighbourhoods, meanders between N1, N3 and N4 to achieve DMURS compliant gradients and connectivity at grade to each neighbourhood.**

A greenway (running north to south) is provided following the desire lin. The Greenway provides a pedestrian & Bicycle priority route from N1 to N1 before extending to the Neighbourhood centre and the southern end of N5.

The route provides:

- **1:20 gradient pathways with tactile and visual aids at road crossings.**
- **Regular Local & Neighbourhood play areas at with seating and rest areas which assist with passive security.**
- **Sensory and visual variation by means of a considered landscaping plan.**
- **Forms part of a circuitous amenity route extending to 3.766 km within the development with opportunities for connectivity to North, south and east.**
- **By means of separation from traffic and passive surveillance from houses and apartments which overlook the site a secure environment for recreation by all.**

- **PRINCIPLE 2: FLEXIBILITY IN USE**

The design accommodates a wide range of individual preferences and abilities.

Guidelines:

- 2a. Provide choice in methods of use.
- 2b. Accommodate right- or left-handed access and use.
- 2c. Facilitate the user's accuracy and precision.
- 2d. Provide adaptability to the user's pace.

- **The proposed development provides for a wide variety of house and apartment types including:**
 - **2,3 & 4 Bedroom houses.**
 - **1,2 & 3 bedroom apartment and Duplex Apartments**
 - **Studio Apartments.**
- The Development is designed to comply with the Building Regulations, in particular TGD Part M Access and Use and TGD Part D, Materials and workmanship. Providing an emphasis and to facilitate, access and use, user mobility, accuracy and precision among others.
- **Dwelling houses and apartments have been designed to provide for adaptability as resident requirements change over time. Reference to The National Disability Authority in Ireland (NDA) - Building for Everyone – A5 Lifetime Home Standards (Refer to Diagram 1 & 2).**
Provision includes for:
 - **Where car parking is provided on the curtilage of a house, it is located close to the front door and at least one space has a minimum width of 3.30m.**
 - Level access or gently sloping (max 1:21) is provided from car parking space to front door.
 - **Stairwells and lifts are located centrally and close to the front door. Distances between entrance stairwells is kept to a minimum.**
 - Internal spatial design is such as to provide adequate space for wheelchair turning.
 - **The majority of living rooms are located at entrance level.**
 - Two and three storey houses have adequate space to allow for the provision of a ground floor bedroom if required.
 - **Two and three storey houses are designed to allow for horizontal and vertical extension for the provision of additional space if so required.**
 - Glazing to living room windows commences a maximum of 450mm above floor level with easy openings at a maximum 900mm above floor level.
 - **Entrance doors to Apartment stairwells are covered.**
 - Generally Internal walls within apartments constructed in lightweight stud partitions providing for future adaptability.
 - **Apartment and dwelling houses with on-street car parking are provided with a percentage of designated car parking spaces in accordance with TGD Part M Diagrams 8 & 9 as required under the Cork County and Cork City Development plans.**

A5 Lifetime Homes Standards

Car Parking	Where car parking is adjacent to the home, it should be capable of enlargement to attain 3300mm width.
Access for Car Parking	The distance from the car parking space to the home should be kept to a minimum and should be level or gently sloping.
Approach	The approach to all entrances should be level or gently sloping.
External Entrances	All entrances should be illuminated, have level access over the threshold and have a covered main entrance.
Communal Areas	Communal stairs should provide easy access and, where homes are reached by a lift, it should be fully accessible.
Doors and Hallways	The width of internal doorways and hallways should conform to Part M, except that when the approach is not head on and the hallway width is 900mm, the clear opening width should be 900mm rather than 800mm. There should be 300mm nib or wall space to the side of the leading edge of the doors on entrance level.
Wheelchair Accessibility	There should be space for turning a wheelchair in dining areas and living rooms and adequate circulation space for wheelchairs elsewhere.
Living Room	The living room should be at entrance level.
Two or more storey requirements	In houses of two or more storeys, there should be space on the entrance level that could be used as a convenient bed space.
WC	In houses with three bedrooms or more there should be a wheelchair accessible toilet at entrance level with drainage provision enabling a shower to be fitted in the future. In houses with two bedrooms the downstairs toilet should conform at least to Part M.

Diagram 1: The National Disability Authority in Ireland (NDA) - Building for Everyone – A5 Lifetime Home Standards.

Bathroom and WC Walls	Walls in the bathroom and WC should be capable of taking adaptations such as handrails.
Lift Capability	The design should incorporate provision for a future stair lift and a suitably identified space for a through the floor lift from the ground floor to the first floor, for example to a bedroom next to the bathroom.
Main Bedroom	The design and specification should provide a reasonable route for a potential hoist from a main bedroom to the bathroom.
Bathroom Layout	The bathroom should be designed for ease of access to the bath, WC and wash basin.
Window Specification	Living room window glazing should begin no higher than 800mm from the floor level and windows should be easy to open/operate.
Fixtures and Fittings	Switches, sockets, ventilation and service controls should be at a height usable by all (i.e. between 450 and 1200mm from the floor).

Source: Joseph Rowntree Foundation

Diagram 2: The National Disability Authority in Ireland (NDA) - Building for Everyone – A5 Lifetime Home Standards Cont'd.

- **PRINCIPLE 3: SIMPLE AND INTUITIVE USE**

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

Guidelines:

- 3a. Eliminate unnecessary complexity.
- 3b. Be consistent with user expectations and intuition.
- 3c. Accommodate a wide range of literacy and language skills.
- 3d. Arrange information consistent with its importance.
- 3e. Provide effective prompting and feedback during and after task completion.

- **Pedestrian and bicycle routes throughout the development provide direct connectivity between destination points on desire lines. Examples:**
 - **A Pedestrian and bicycle priority corridor providing connectivity between the Neighborhood 5 and the Neighbourhood Centre/ Bus stops and thereafter via the greenway to the site entrance and Ballyvolane District Centre.**



Diagram C – Pedestrian and Cyclist priority route through N5 providing connectivity on a clear defined desire line to the neighbourhood centre.

- Pedestrian and bicycle priority corridor on the greenway providing a desire line route between Neighbourhoods 1, 3, 4 and 6 to the Neighbourhood Centre and Bus Stops.
- **The majority of pedestrian and bicycle priority routes are provided with a gradient of less than 1:20. All roads & Footpaths are DMURS compliant.**
- A clear street hierarchy provides a consistent appreciation of place and of way finding.
- **Node houses are situated at prominent positions on the distributor roads with features such as first floor projecting corner windows and the use additional brick / stone to provide landmark points to assist for wayfinding for pedestrians, cyclists and motorists.**
- Two and a half/ three storey houses with various material differences are located at street junctions to assist in placemaking and to provide visual reference points.



Diagram D – Node buildings on the pedestrian priority routes and the road network.

- Dwelling doors are easily located with familiar features such as entrance canopies, recessed front doors in various colours and various material finishes surrounding front doors to provide variation and familiarity.

- **PRINCIPLE 4: PERCEPTIBLE INFORMATION**

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

Guidelines:

- 4a. Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
- 4b. Provide adequate contrast between essential information and its surroundings.
- 4c. Maximize "legibility" of essential information.
- 4d. Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
- 4e. Provide compatibility with a variety of techniques or devices used by people with sensory limitations.

- **Road crossings, pedestrian and bicycle priority routes, Creche, Retail and Apartment entrances are provided with visual and tactile variations.**
- Variations in materials and architectural expression assist in providing legibility between neighbourhoods, Apartment blocks and the Neighborhood centre among others assists in way finding and placemaking.
- **Clear signage will assist in way finding and be provided in compliance with TGD Part M**

- **PRINCIPLE 5: TOLERANCE FOR ERROR**

The design minimizes hazards and the adverse consequences of accidental or unintended actions.

Guidelines:

- 5a. Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.
- 5b. Provide warnings of hazards and errors.
- 5c. Provide fail safe features.
- 5d. Discourage unconscious action in tasks that require vigilance.

- **Raised traffic tables, bends and landscaping on the distributor and feeder roads in conjunction with visual contrasts to surface and footpaths within home zones provides for a pedestrian and cyclist priority environment, designed to encourage low vehicular speed.**
- Traffic barriers are provided roadside and footpath side, where deemed beneficial to minimize hazards where variations in levels arise. Typically provided at locations where the distributor road interacts with N1, N3 & N4.
- **Where gradients greater than 1:20 occur, footpaths are provided with handrails i.e. connectivity between N4 and the distributor road.**
- Landscaping is used to minimise risk at embankments.
- **2.40m high impermeable fencing and defensive planting is utilised where the proposed development abounds the commercial site, located on the western boundary of the site off of the Ballyhooly Road.**

- **PRINCIPLE 6: LOW PHYSICAL EFFORT**

The design can be used efficiently and comfortably and with a minimum of fatigue.

Guidelines:

- 6a. Allow user to maintain a neutral body position.
- 6b. Use reasonable operating forces.
- 6c. Minimize repetitive actions.
- 6d. Minimize sustained physical effort.

- **As described at Principal 1, notwithstanding the nature of the topography at N1, N3, N4 and N6, pedestrian and bicycle pathways have been designed to minimise gradient and mitigate the requirement for extensive excavation / change of levels.**
- The majority of pedestrian and bicycle priority routes are provided with a gradient of less than 1:20.
- **The majority of dwelling houses are provided with on curtilage car parking which is located close to the front door and at least one space has a minimum width of 3.30m and has a maximum 1:21 gradient route to the front door.**
- All entrance doors (dwelling houses, apartment entrances and commercial entrances) are provided with an external level landing in accordance with TGD Part M.
- **Lift access is provided to all upper floor apartments within the development.**

- **PRINCIPLE 7: SIZE AND SPACE FOR APPROACH AND USE**

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Guidelines:

- 7a. Provide a clear line of sight to important elements for any seated or standing user.
- 7b. Make reach to all components comfortable for any seated or standing user.
- 7c. Accommodate variations in hand and grip size.
- 7d. Provide adequate space for the use of assistive devices or personal assistance.

- **All entrance doors and lobbies (dwelling houses, apartment entrances, doctor's surgery, community centre and commercial entrances) are provided with an external level landing in accordance with TGD Part M in conjunction with flush access (max. 15mm upstand).**
- **All entrance and internal doors are designed in accordance with TGD Part M 1.3.3.2 & 3.3.1.**
- **All internal corridors are design to comply with TGD Part M 1.2 & 3.3.2.1.**
- **Internal stairways, landings and lifts are designed to comply with TGD Part M.**

5.0 Conclusion

The development has been designed to so that it can be accessed, understood and used to the greatest extent possible by all people, regardless of their age, size or disability. This includes public places in the built environment such as buildings, streets or spaces that the public have access to.

Prior to construction Disability Accessibility Certificates will be required for the following:

- N1 Duplex Apartment block, Units 67-75 incl. associated landscape and amenity areas.
- N2.1 Duplex Apartment block, Units 1-12 & 68-75 incl. associated landscape and amenity areas.
- N2.2 Apartment Complex units 76 – 102, Retail units, Doctors Surgery & Creche incl. associated Public realm, landscape and amenity areas.
- N2.3 Duplex Apartment block, Units 142 – 156 incl. associated landscape and amenity areas.
- N5 Duplex Apartment Block, Units 69-80 & 81-92 incl. associated landscape and amenity areas.
- N6 126 Apartment complex including Block A & B and associated landscape and amenity areas.

The Building Control (Amendment) (No.2) Regulations 2015 (S.I. No. 365 of 2015) **BCAR**, will be applicable to all Residential Apartments, Dwelling houses, Creche, Community Centre, Doctors Surgery and retail units. Evidence of compliance with the Building Regulations will be provided to the Local Authority under this process.

