

Castle Park

Universal Design Statement

Castle Park, Castlelands (Townland), Mallow, Co Cork

LRD Planning Application - October 2024



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1.0 Introduction

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)

Deady Gahan Architects have been appointed to produce this Statement of Compliance with Universal Design to accompany the Large-Scale Residential Development (LRD) planning application to Cork County Council for the proposed development in Castle Park, Castlelands (Townland), Mallow, Co Cork.

The proposed development relates to a 18.2 Ha site with a developable area of 12.7 Ha. The land is a greenfield site of a flat to steep topographical nature. St. Joseph's Road provides access to the site, running along the site's northern boundary, with the dwellings within the scheme being accessed from Kingsfort Avenue within the existing Castle Park development. The site is flanked by the existing Castle Park development to the west, a public park to the south and a residential dwelling and agricultural lands to the west. Scoil Aonghusa National School is located to the north of the site. The site is also a short distance from the N20 Road, providing the site with excellent connections to Cork City/County, North Cork, Limerick and nationally thereafter.

The proposed development will consist of the development of 469 no. residential units, consisting of 164no. apartments/duplexes (ranging from 1 - 2 bedrooms) and 305 no. houses (ranging from 1 - 4 bedrooms). The scheme will also include for car parking, cycle parking, new pedestrian/cycle links, storage, services, plant areas, a 122 child crèche and an interpretive centre / cafe.

Landscaping will include for high quality private open space, communal amenity areas and public open space provision.

2.0 Summary of Proposed Development

The proposed development has been designed to provide high-quality units that will contribute positively to Mallow and deliver much needed housing to the area. The proposed scheme is located on a key site to promote connections to the immediate context of Mallow Town Centre and to the wider context of Cork City.

Deady Gahan Architects have been appointed to produce this “*Universal Design Statement*” to accompany the LRD Planning Application to Cork County Council for the proposed development which consists of the construction of 469 no. residential units (305 no. houses and 164 no. apartments/duplexes) comprising: 1, 2, 3 and 4 bed houses and 1 and 2 bed apartments/duplexes.

The unit mix will focus on providing affordable homes for both individuals and families alike:

- No. 068 – 4-bed houses (Semi-detached)
- No. 192 – 3-bed houses (Semi-detached & Townhouses)
- No. 042 – 2-bed houses (Townhouses)
- No. 003 – 1-bed houses (Bungalows)
- No. 082 – 2-bed apartments; (Duplexes)
- No. 082 – 1-bed apartments; (Ground Floor Apartments)

The site has an area of 18.2 HA. The development has a density of c. 36.9 units/HA considered on a net developable area of 12.7 HA (access streets, existing open spaces, the creche, and the zoned public open space are excluded from the net developable area).

Connectivity, legibility and permeability are some of the key themes of the scheme and develops from the wider surrounding area to the local environment. Permeability and connections between the variety of public spaces will be incorporated throughout the site. The existing public park to the south provides a unique existing feature and will be integrated into the landscaping concept.

In the local context, the provision for future connections from the proposed development to Mallow Town Centre will foster a sense of identity and community for the area. The main entrance of the site is from St. Joseph's Road along the northern boundary of the Castle Park development along with additional connections through the adjacent Castle Park scheme. The Greenway connection through the public park to the south will also provide an important link to Mallow Town Centre. The internal connections within the site will provide easy access from the dwellings to the proposed amenities and are a crucial element in providing passive surveillance and promote active neighbourhoods.

The existing site topography is of a flat to sloped nature. The proposed buildings are arranged in line with the existing contours to minimise the visual impact on the surrounding environment and to reduce the cut and fill and the movement of ground on site.

To ensure the visual integration of the site, the proposed development will promote the protection and enhancement of natural features surrounding the site, including hedgerows/vegetation. These features are integrated within the proposed development to emboss the identity of the proposed 4 no. Character Areas.

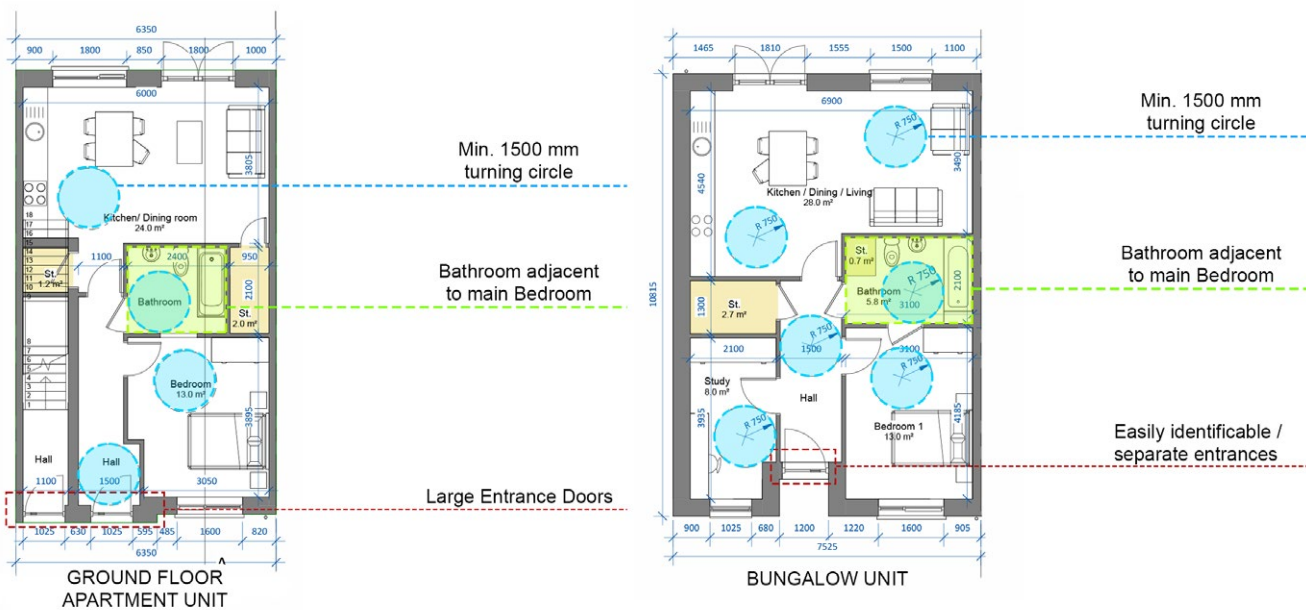
Particular attention was placed in the design of the public open spaces to create a strong and well connected network of usable and enjoyable green areas, pedestrian paths, plazas and shared surfaces via the proposed Greenway. These features will enhance/contribute in creating a sense of place.

The larger and more usable open spaces are located in the central areas and act as node points as you progress through the development. These open spaces are carefully positioned in order to take full advantages of the sites natural features.

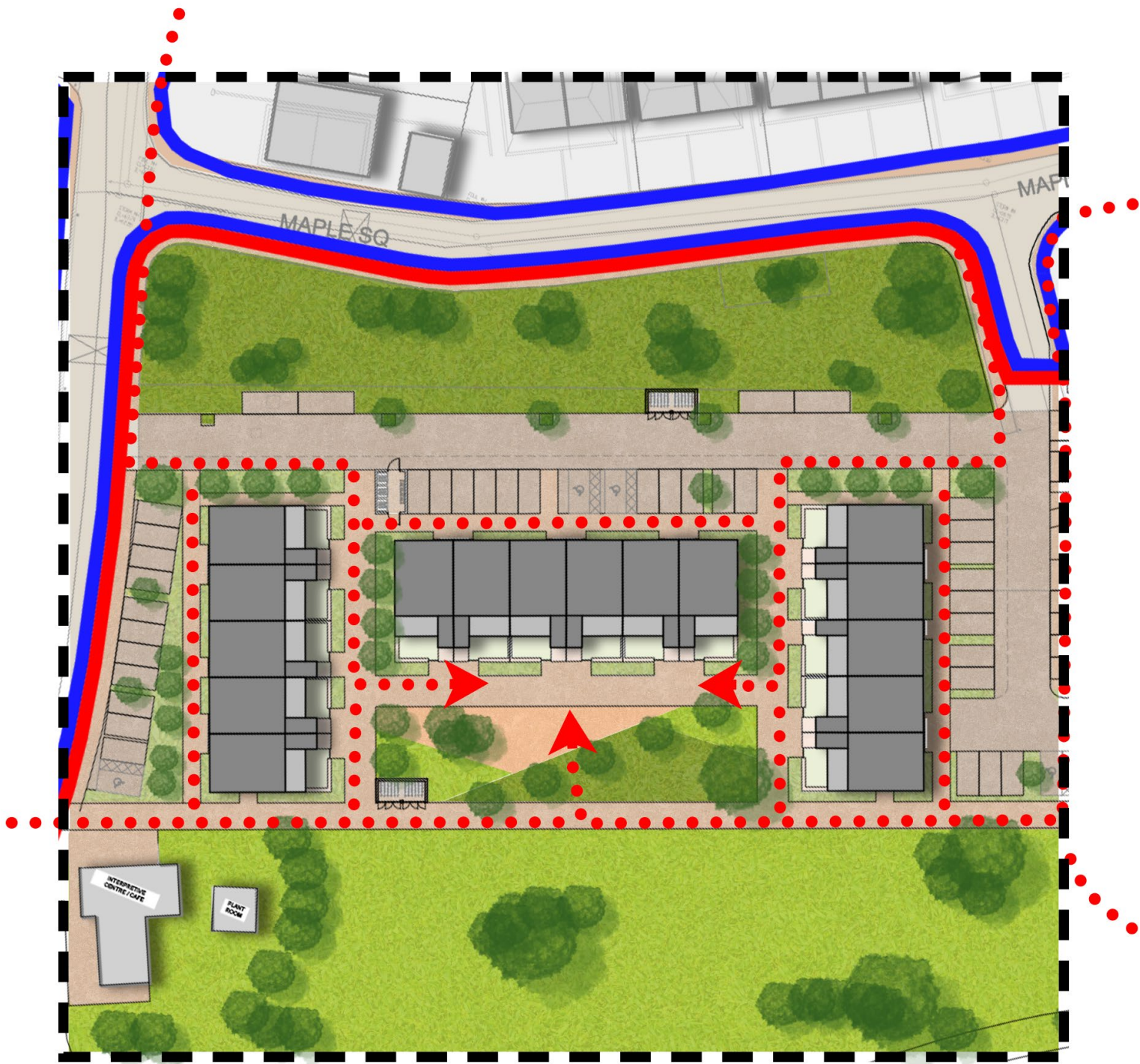
All the open spaces will be enhance by the creation of active and architecturally appropriate urban frontages, designed having particular regard to the site context and the topographical nature of the site. The proposed dwellings are also orientated to overlook the open spaces, providing opportunities for passive surveillance of these areas and create strong edges within the scheme.

The open spaces vary with a mix of soft and hard landscaping to further enhance the quality of life in the area. Distinct corner units with individual features address the main corners along the main streets and on the open spaces to provide distinctiveness to the site. The variety and quality of the proposed open spaces support active neighbourhoods within the site as well as promoting connections and integration with the adjacent settlements of Mallow Town Centre.

Apartment and Duplex Units surrounding a Communal Square



Ground Floor Apartment Types N/J and F type Bungalows which have been designed to incorporate Universal Design elements to accommodate a range of end users.



Ground Floor Apartments (Types J) situated near the Public Park to the south. These units have been arranged to form a semi-private courtyard to create a smaller neighbourhood community within the scheme.

PROPOSED SITE LAYOUT



3.0 The 7 Principles of Universal Design

Care has been taken in the design of the proposed development to address each Principle of Universal Design. Each Principle has been addressed below and references the Technical Guidance Documents Part M regarding Access and Use.

3.1 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.

DESIGN APPROACH

- The site is quite flat in parts: this helped in making the development accessible by all users.
- The same means of access to buildings within the scheme is provided around the development where possible.
- All dwellings are accessed via the ground floor and are designed to provide Part M compliant access via front door for visitors.
- A large portion of dwelling houses are provided with on curtilage car parking located in close proximity to the front door.
- All upper duplex units are accessed via ambulant stairs that are Part M compliant and they have the car parking located nearby.
- All dwellings have public open spaces nearby and the majority of them overlook a landscaped area.
- Pedestrian and cycle links connect these open spaces and all the dwellings around the site.
- All the streets and footpaths are designed in accordance with TGD Part M: the gradient of the pathways is lower than 1:20 with tactile and visual aids at road areas which assist with passive security.
- External amenity spaces have been designed in order to appeal to all users and in accordance with TGD Part M.
- The Part V allocation has been pepper-potted around the site to avoid segregated and stigmatised communities.

3.2 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.

DESIGN APPROACH

- The proposed development provides for a wide variety of houses and apartment types including:
 - 3/4 bed semi-detached units,
 - 2/3 bed townhouse units,
 - 1 bed bungalows,
 - 2 bed duplexes,
 - 1 bed ground floor apartments.
- Each of these unit types are compliant with the Building Regulations, in particular TGD Part M Access and Use and TGD Part D Materials and Workmanship.
- Houses and apartments have been designed to provide for adaptability as resident requirements change over time. Provisions includes for:
 - Level access or gently sloping (max 1:21) is provided from car parking space to front door
 - The majority of living rooms are located at entrance level
 - Houses are designed to allow for horizontal and/or vertical extension for the provision of additional space if so required
 - Internal spatial design is such as to provide adequate space for wheelchair turning and all units have an accessible WC.
- The majority of the proposed houses are an appropriate size to be family homes, but we are also providing smaller dwellings, such as 2-bed townhouses, 1 bed bungalows, and 1-bed apartments, in order to appeal to different end-users (young couples, single person, elderly etc.).
- The ground floor 1 bed apartments and bungalow units have been designed following the principles of the "Universal Design Guidelines for Homes in Ireland" document and are fully accessible.

3.3 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 cycle routes throughout the development provide direct connectivity between destination points on desire lines. Particularly important is the connection of this internal network with the wider network: connections between the adjacent Castle Park residential development to the west, the public park to the south, and the development entrance located on the northern boundary.
- The majority of pedestrian and cycle routes are provided with a gradient of less than 1:20. All roads and footpaths are DMURS compliant.
- A clear street hierarchy provides a consistent appreciation of place and way finding:
 - the Main Access Street runs through the scheme from the northern entrance with dedicated pedestrian paths either side;
 - the Secondary Streets create looped systems with the Main Access Street
 - we are allowing for vehicular, cycle and pedestrian connection throughout the scheme
 - Shared Surfaces branch off the Secondary Streets and provide variety within the public realm/streetscape
- Public Open Spaces with pedestrian and cycle links are incorporated throughout, they define and connect the various neighborhoods.
- The site is divided in 4 Character Areas. Each character area will form a different neighbourhood characterised by specific architectural and landscaped treatments. Character Area 1 is located on the northern part of the site and consists of medium to higher density townhouse units. Character Area 2 is medium density and is located in the central area, Character Area 3 is also medium density and is located to the east of the scheme, while Character Area 4 consists of higher density apartments/duplexes and is located on the southern part of the site.
- Node apartments and houses that address the corners/greenway/main routes throughout the site are situated at prominent positions to provide landmark points to assist wayfinding.
- The entrance doors to houses and apartments/duplexes are easily located with familiar features such as entrance canopies and pop-outs
- Each unit is designed in such a way as to eliminate unnecessary complexity. Typical layouts are designed in order to promote easy access to each unit and intuitive navigation within.

3.4 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.

DESIGN APPROACH

- A selection of different coloured surfaces and sections of raised tables have been introduced to the design to clearly identify hazards such as street crossing, the variations will be visual and tactile.
- Variation in materials, architectural expressions and colours assist in providing legibility between the different character areas and the neighbourhoods.
- Clear signage will assist in way finding and be provided in compliance with TGD Part M.

3.5 Tolerance for Error

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

Guidelines:

- 5a. Arrange elements to minimise 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.

DESIGN APPROACH

- Different coloured surfaces and sections of raised tables have been introduced to clearly identify hazards such as street crossing and level changes.
- The streets have been designed in accordance with DMURs to aid in traffic calming and the use of Shared Surfaces increase pedestrian priority within the development.
- Several pedestrian and cycle paths cross large open spaces creating safer routes segregated from the streets.
- Landscaping is used to minimise risk at embankments.

3.6 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. Minimise repetitive actions.
- 6d. Minimise sustained physical effort.

DESIGN APPROACH

- Pedestrian and cycle routes have been designed to minimise gradient and mitigate the requirement of extensive excavation/change of levels
- All the pedestrian and cycle routes are provided with a gradient of less than 1:20 to ease accessibility and to reduce fatigue.
- The majority of units have parking provided within its curtilage or in close proximity to allow for easy access to the unit.
- The apartments/duplexes are designed with Part M ambulant compliant stairs to minimise sustained physical effort while accessing the units.

3.7 Size and Space 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.

DESIGN APPROACH

- Each unit has been designed in accordance with TGD Part M and allow for easy access and use both internally and externally.
- The ground floor 1 bed apartments and bungalow units have been designed following the principles of the "Universal Design Guidelines for Homes in Ireland" document and are fully accessible.
- All open spaces will be provided with public seating in order to appease all users.

4.0 Conclusion

The proposed development has been designed so that it can be accessed, understood and used by the widest possible extent of people, regardless of their age, size, and disability. This includes houses, apartments, streets, footpaths, pedestrian and cycle routes and open spaces.

The ground floor 1 bed apartments and bungalow units have also been designed following the principles of the “Universal Design Guidelines for Homes in Ireland” document and are fully accessible.