

Banduff Road, Banduff, Cork

Universal Design Statement

Proposed Residential Development at
Banduff Road, Banduff, Cork.



Table of contents

1.0	Introduction	3
2.0	Summary of Proposed Development	4
3.0	The 7 Principles of Universal Design	7
	3.1 Equitable Use	7
	3.2 Flexibility in Use	8
	3.3 Simple and Intuitive Use	8
	3.4 Perceptible Information	9
	3.5 Tolerance for Error	10
	3.6 Low Physical Effort	10
	3.7 Size and Space Approach and Use	11
4.0	Conclusion	12

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 Strategic Housing Development (SHD) planning application to An Bord Pleanála for the proposed development of 162 no. residential units (74 no. townhouses, 44 no. apartments and 44 no. duplex apartments), crèche and associate site works at Banduff Rd., Banduff, Cork.

2.0 Summary of Proposed Development

The proposed development has been designed to provide high-quality houses that will contribute positively to Banduff and deliver much needed housing to Metropolitan Cork. The proposed scheme is located on a key site to promote connections North of the North Ring Road, and link existing developments.

The housing mix will focus on providing a stock of homes for both individuals and families alike and it includes 162 no. residential units comprising:

- No. 06 – 4-bed townhouse units
- No. 49 – 3-bed townhouse units
- No. 19 – 2-bed townhouse units
- No. 06 – 1-bed apartment units
- No. 38 – 2-bed apartment units
- No. 44 – 2-bed duplex apartment units

The proposed scheme has a density of 38 units/HA considered on a net developable area of 4.25 HA. For this calculation open space land to the South of the stream have been omitted from the developable area. This zone is not incorporated into open space calculations for the site. A portion of land reserved for future possible link road developments is also excluded (from the developable area) to the West of the site. An 40-50 child childcare facility is provided towards the Northern end of the site. It has been placed adjacent the site entrance to allow for convenient accessibility and to address the Banduff Road by creating a feature corner.

Connectivity, legibility and permeability are some of the main key themes of the scheme, developed from the wider context of the local environment. The site has vehicular and pedestrian connectivity to the North onto the Banduff Road and pedestrian connectivity to the South onto the North Ring Road (via paths through an amenity open space).

In the local context, the provision for future connections from the proposed development to the existing residential developments adjacent will foster a sense of identity and community for the area. The two vehicular entrances to the site have been placed on the northern side of the proposed

development. 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 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 on site, including hedgerows and tree lines. These features are integrated within the proposed development to emboss the identity of the proposed 2 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, cycle and pedestrian paths, plazas/shared surfaces and home zones. These features will enhance/contribute to a sense of place. The larger open spaces are located to act as node points as you progress through the development. These open spaces are carefully positioned in order to take full advantages of passive surveillance.

All the open spaces will be enhanced by the creation of active and architecturally appropriate urban frontages, designed with particular regard to the site context. The proposed dwellings are also orientated to overlook the open spaces, provide opportunities for passive surveillance of these areas and create strong edges within the scheme. To add variety, the larger 3 storey units are located around edges creating a varied backdrop to the open spaces.

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 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 adjacent residential developments.

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

- Design Approach
- 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.
- The majority of dwelling houses are provided with on curtilage car parking located in close proximity to the front door.
- All the duplex-apartments have own door access at the ground floor, are designed to provide Part M compliant access and have the car parking located nearby.
- The majority of the roads and footpaths are designed in accordance with TGD Part M: 1:20 gradient pathways with tactile and visual aids at road crossing and seating and rest 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 crèche is located on the northern end of the site. It has been placed adjacent to the site entrance to allow for convenient accessibility and to address the Banduff Road by creating a corner feature.

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 apartments types including: 3/4 bed townhouse units, 2/3 bed townhouse units, 2 bed duplex units and 1/2 bed apartments units.
- 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 1:20) is provided from car parking space to front door
 - The majority of living rooms are located at entrance level
 - Townhouses are designed to allow for horizontal and 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 bathroom.

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.
- 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.
- Node duplex-apartments and houses that address the corners are situated at prominent positions to provide landmark points to assist wayfinding.
- The entrance doors are easily located with familiar features such as entrance canopies, pop-out and recessed front doors.
- Each unit is designed in such a way as to eliminate unnecessary complexity. Typical layout are designed in order to promote easy access to each unit and intuitive navigation within.
- Each duplex and each apartment with own door access has defined entrances to provide clearly established ingress points.
- The crèche is centrally located in Maryborough Ridge estate to provide easy access from both the entire development and from adjoining developments. The entrance and reception area are visible from the road and has adequate drop off space, with parking and disabled parking spaces. A second entrance has been located on the main access road near the bus stop to enhance accessibility.

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.

- A selection of different coloured surfaces and sections of raised tables have been introduced to the design to clearly identify hazards such as road 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 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.

- Different coloured surfaces and sections of raised tables have been introduced to clearly identify hazards such as road crossing and level changes.
- The roads have been designed in accordance with DMURs to aid in traffic calming and the use of Homezones and Plazas increase pedestrian priority within the development.
- Where gradients are greater than 1:20, footpaths are provided with handrails.
- Landscaping is used to minimise risk at embankements.

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. Minimize repetitive actions.
- 6d. Minimize sustained physical effort.

- Notwithstanding the topography of the site, pedestrian and cycle routes have been designed to minimise gradient and mitigate the requirement of extensive excavation/ change of levels.
- The majority of 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.
- All duplexes are designed with Part M ambulant compliant stairs to minimise sustained physical effort while accessing the units.
- The apartment blocks have lift access along with communal ambulant compliant stairs.

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.

- Each unit has been designed in accordance with TGD Part M and allow for easy access and use both internally and externally. The communal areas in the apartments blocks, such as hallway, lift and stairs have been designed in accordance with TGD Part M.
- 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 buildings, houses, apartments, roads, footpath, pedestrian and cycle routes and open spaces.