

# PROPOSED STRATEGIC HOUSING DEVELOPMENT

AT KILBARRY, CORK

ON BEHALF OF CORK COUNTY GAA BOARD

DMURS COMPLIANCE STATEMENT



**JUNE 2022**

DMNA  
ARCHITECTS – LANDSCAPE ARCHITECTS  
21 Patrick's Hill, Cork, T23XV63  
+00353 21 4518371  
[info@dmnarchitects.ie](mailto:info@dmnarchitects.ie)

## Introduction

This document outlines the approach taken in the design of this development and how it follows the Guidance contained in the Design Manual for Urban Roads and Streets (DMURS). In this regard the vision for the scheme is to put well designed streets at the heart of the development. This is because well designed streets can create connected physical, social and transport networks that promote real alternatives to car journeys, namely walking, cycling or public transport. This involves striking a balance between the needs of all users. This document follows the structure of the DMURS.

## Hierarchy of Roads and Streets

The proposed layout has a clear hierarchy of roads within the scheme. A new link road connecting from the entrance to the development off the Old Whitechurch Road continues through the southern portion of the site to form an east west link to connect to the Delaney's GAA pitch and its access road which affords connection from the development to Dublin Hill. Public transport connections to Cork City are available from Dublin Hill and it will also allow access to the retail services and other facilities in Ballyvolane. This road is tree lined with development in the form of 3 storey Duplex Housing, a Creche and wide terraced housing fronting the road. The duplex units and Creche which have their parking either behind or to the side of the buildings are pushed out to front the road, creating a more urban form along this road. This road is 6m, wide with a verge of 1m to both sides and a combined 3m wide pedestrian and cyclepath.



Figure 1: Proposed Link Road from the Old Whitechurch Road to the existing GAA access road off Dublin Hill

Two access points to the residential development are proposed off this proposed link road. The first of these access points occurs at a new public space, formed by the three Duplex Apartment blocks A, C and D and the creche. The two access roads connect at the second public plaza, with the access road travelling north towards the apartment block G. These access routes are 5.5 m wide with footpaths on both sides. At key locations the road is narrowed such as adjacent to the proposed pocket park as shown on figure 2 below. Off these linked access roads are minor access roads, which are designed as 5 metre roads and finally shared surfaces and home-zones which are 4.8 metre wide within the quieter residential areas. As one travels from each road type other details such as turning radii, surface finishes and detailing all change to differentiate each road type.



## Street Permeability

In accordance with the Design Manual for Urban Streets and Roads, the roads and streets are designed to maximise permeability. As outlined in the DMURS guidance in section 3.4.1

*A network of integrated/self-regulating streets provides the framework for higher levels of accessibility for slow modes (including motor vehicles at slow speed)... Drivers are more likely to maintain lower speeds over shorter distances than over longer ones. As drivers are able to access individual properties more directly from Access/Link streets (where speeds are more moderate) they are more likely to comply with lower speed limits on Local streets..... Permeable layouts provide more frequent junctions which have a traffic-calming effect as drivers slow and show greater levels of caution.*



Figure 2: showing looped streets, traffic calmed areas and homezones.

The street network in the scheme is designed to maximise that number of streets that are looped. This maximises the number of junctions and through the addition of narrower carriageways (as shown on the main access route), will ensure that traffic is slowed down naturally through driver caution.

### Gateway and Wayfinding

DMURS in section 3.3.4 states

*Gateways are used to demarcate a point of arrival from one place to another. They are important placemaking tools as they form the 'first impression' of a place. Gateways are also an important traffic-calming tool as they can be used to inform drivers of a change in driving conditions ahead.*

The design proposes a new entrance building in the form of a 3 storey duplex block as you enter the site from the Old Whitechurch Road. This block which has its parking in a courtyard to the rear creates an urban edge to the proposed new road into the development, and also to the existing Old Whitechurch Road.



Figure 3: Duplex Block A at the entrance to the development from the Old Whitechurch Road.

The Guidance also states under wayfinding that

*Wayfinding, or legibility, relates to how people can find their way around an area. For pedestrians and cyclists this is of particular importance as they are more likely to move through an area if the route is clear. There are many tools that designers can use to provide a series of design cues by which people can orientate themselves. For example, changes in building height and form, materials and finishes and landscape features. From a broader perspective designers should ensure that journeys through the network are relatively straightforward.*

*In general:*

- *The more the orthogonal street layout the more legible it will be (as well as being the most connected).*
- *The network should be structured to draw people towards Focal Points such as Landmarks, Gateways and other civic buildings and spaces.*



As an example, it shows the image below of surface treatments in Dundalk, Co. Louth.



*Figure 3.16: Illustration of surface treatments in Dundalk, Co. Louth. These treatments enhance the sense of place by expanding the square into the adjacent streets and are an effective way of improving pedestrian mobility and calming traffic.*

Figure 4: Excerpt from DMURS section 3.3.4 Wayfinding

The proposed development uses two main focal points in the form of two different public spaces, a public space along the main link road (figure 4 below) and a second public space at the junction of the two access routes into the scheme (figure 5 below)



Figure 5: Excerpt from site plan showing proposed public plaza along link road.





Figure 6: Pedestrian Public Plaza at junction of two access roads.

### Street Design

As outlined above along the main link road through the scheme taller building heights, reduced setbacks are used with the proposed duplex units to create a more urban form to the development as you enter the scheme. Where possible the effective sense of enclosure of the street has been reduced through the use of parallel parking and reduced street widths.

Where possible home-zones have been designed within the quieter residential areas. These spaces which will have narrow roads at 4.8 metre widths, small narrow refuge areas for more vulnerable pedestrians as they exit the house curtilage and are at a raised level with differentiated surface treatment and clear signage to alert drivers of the change in priority. An example is shown in figure 7 below where the home-zone acts as an extension of the open space to the north of it.



Figure 7: Pocket Park with traffic calmed section of access road to north and homezone to south.

In the case shown above the access road to the north of the open space is traffic calmed, by reducing its width, and by giving it a raised table with a different surface treatment through the use of coloured tarmac to signify to drivers that there is a change in priority along this section of road. This ensures that the open space will be safe to use by children and will be easy to access by housing on the northern side of this road. To the south of the open space, a section of the road in front of the houses has been turned into a home-zone which allows for the road space itself to become integrated with the open space and to become an extension of this.

The public realm is therefore being considered as a usable integrated element in the design of the development. Further evidence of this is in the design of public plaza space shown below is located along the north-south combined pedestrian and cycle route which traverses the site connecting the distributor road to the public park. The plaza incorporates the road adjacent to make it a pedestrian friendly space while also assisting in reducing traffic speeds at a key junction in the overall development.

Each street will be detail designed at construction stage to incorporate tactile paving and homezone signage as appropriate. The homezone streets will provide uncluttered environments. The space will be accessible for all and will have a clear prioritisation of pedestrian and bicycle use, be attractive, encourage social interaction and outdoor activity.





Figure 8: example of homezone shared surface street which uses paving materials combined with embedded kerbs to encourage a low-speed shared environment

Each homezone streetscape is designed to be attractive as well as accessible and street tree planting is incorporated together with seating where there are links with open space areas. The incorporation of the street trees is achieved with the creation of lined planting pits, recessed along the edge of the street. This enables the streetscape to be softened and made more attractive to users without negative impact on underground utility services. This will ensure that in the future the trees will not be damaged, removed or require unnecessary limb or root pruning by utility providers in the maintenance of their service networks.

The street trees selected as outlined on the Landscape Masterplan by DMN Architects are appropriate to a street environment and will in most cases have a mop head shape and, at maturity, a limited height and spread to their canopy. They will have a positive impact, softening the street and importantly will require minimal future maintenance or be the cause of nuisance to residents. Attractive public lighting posts and lanterns are designed into the streetscape to provide appropriate night time illumination for the safety and security of all users.

## Pedestrian and Cyclist Environment

The development proposes a significant network of footpaths and cycleways throughout the layout. These routes consist of

1. A combined pedestrian and cycleway travelling from east to west on both sides of the link road connecting the Old Whitechurch Road through the Delaney's GAA grounds (refer to figure 2 above). This links in to the access road to the GAA pitch which has footpath connections to Dublin Hill in the short term however it will link into the proposed new Northern Distributor Road, which is proposed to be located within the lands immediately to the east of the Delaney's GAA grounds.
2. A combined pedestrian and cycleway linking with this link road at the public plaza and connecting with the public park at the western end of the site (see figure 9 below)
3. A north south combined pedestrian and cycleway connecting the link road to the public park through the centre of the development including the recreation facilities contained within the development along this route. (See figure 10 below)
4. A series of pedestrian and cycleways located within the proposed public park to the north of the site. These will link into the neighbouring lands which are earmarked for significant residential development as well as any future link to a riverside park to the west towards the old Mallow Road.



Figure 9: Showing cycleway from plaza heading north to connect to public park





Figure 10: Combined pedestrian and cycle route through the development linking link road to public park.



Figure 11: Network of cycleways and pedestrian amenity paths through the public park to the north of the site.

### Pedestrian Crossings

Throughout the scheme pedestrian routes are prioritised along desire lines heading both east west and north south through the scheme. At junctions raised table crossings are proposed along each of these routes. An example of this can be seen in the public space shown in figure 12 below. Here the plaza extends out across the junction in a raised table level with the footpaths on either side and a differentiated surface finish.





Figure 12: Public space with raised tables at key junctions to prioritise pedestrian connection routes.

### Carparking

The development proposes a mix of on-curtilage parking and shared on-street parking to the houses throughout the scheme. The parking proposed varies depending on the road type and unit type. Shared parking is also used to create a natural traffic calming area to the north of the pocket park as shown in figure 13 below. Along with a horizontal deflection in the road to reduce forward visibility, a slight arrowing in the road width and a change in tarmac colour this will assist in calming traffic around this public space which will be a well-used resource accessed by children and adults alike.



Figure 13: Showing area where a variety of different forms of parking are provided, with on-curtilage parking, and shared parking both perpendicular and parallel to reduce impact, with landscaping included.