

Planning Department
South Dublin County Council
County Hall
Belgard Square North

Sent By: Upload

Job Ref: D116

A - FB

Date: 31-Mar-25

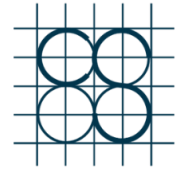
RE: Kishoge/Clonburris, Lot 2, Site 4
DMURS Statement of Consistency

1.0 Introduction

Cronin & Sutton Consulting Engineers (CS Consulting), as part of a multi-disciplinary design team, have been commissioned by South Dublin County Council to develop a DMURS Statement of Consistency to accompany a planning application for a residential planning application located within the Clonburris SDZ lands.

The proposed development comprises 436no. residential units in a mix of house, apartment, duplex and triplex units comprising 141no. houses (133no. 3-bedroom and 8no. 4-bedroom), 124no. apartments units (62no. 1-bedroom and 62no. 2-bedroom), 106no. duplex units (53no. 2-bedroom and 53no. 3-bedroom), 57no. triplex units (57no. 2-bedroom), 3no. age-friendly apartment units (3no. 1-bedroom), and 5no. garden apartment units (5no. 2-bedroom). Non-residential accommodation proposed (c. 1,550 m² total) includes: A childcare facility (c. 544sqm), retail unit (c. 150sqm), employment use within the existing Grange House (c. 173 sq m) and a community building/ pavilion (c. 683 sq m) fronting Griffeen Valley Park. All associated and ancillary site development and infrastructural works including 408no. surface level car parking, 793no. bicycle parking (591no. long term and 202no. short term spaces), hard and soft landscaping and boundary treatment works, including public, communal and private open space, public lighting, substations, bin stores and foul and water services.

The development site extends to approximately 11.6ha and is bounded to the north by the Irish Rail Railway line and to the south, east and west by lands zoned for development. The site is bisected by



the permitted Southern Link Street (reg ref. SDZ20A/0021) from which vehicular, cycle and pedestrian access shall be provided.

It is a requirement of the regulations that the proposed development be compliant with the requirements of the Design Manual for Urban Roads and Streets (DMURS).

The stated objective of DMURS is to achieve better street design in urban areas. This will encourage more people to choose to walk, cycle or use public transport by making the experience safer and more pleasant.

It will lower traffic speeds, reduce unnecessary car use and create a built environment that promotes healthy lifestyles and responds more sympathetically to the distinctive nature of individual communities and places.

The implementation of DMURS is intended to enhance how we go about our business; enhance how we interact with each other and have a positive impact on our enjoyment of the places to and through which we travel.

This document has been prepared taking cognisance of the objectives of the Planning Scheme.

2.0 Traffic & Transportation

The proposed scheme is designed in compliance with the following:

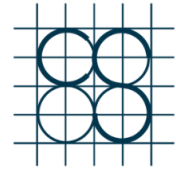
- Design Manual for Urban Roads and Streets (2019)
- South Dublin County Development Plan (2022-2028);
- Cycle Design Manual (2023); and
- Greater Dublin Area Cycle Network Plan.

2.1 Local Road Network

The existing road network around the proposed development consists primarily of arterial routes including Grange Castle Road (R136) and Adamstown Avenue. There are existing laneways in proximity to the subject development site which shall be replaced by the planned Clonburris SDZ road network as described below.

2.2 Road network development

Development of the transport infrastructure within the Clonburris SDZ is guided by the *Clonburris SDZ Planning Scheme* and the Clonburris SDZ Transport Assessment and Transport Strategy. These set out the prescribed road hierarchy for the Strategic Development Zone, as well as the form of future



pedestrian and cyclist infrastructure. Figure 1 shows the road hierarchy, road naming, and junction identifiers given in the *Clonburris SDZ Planning Scheme*.

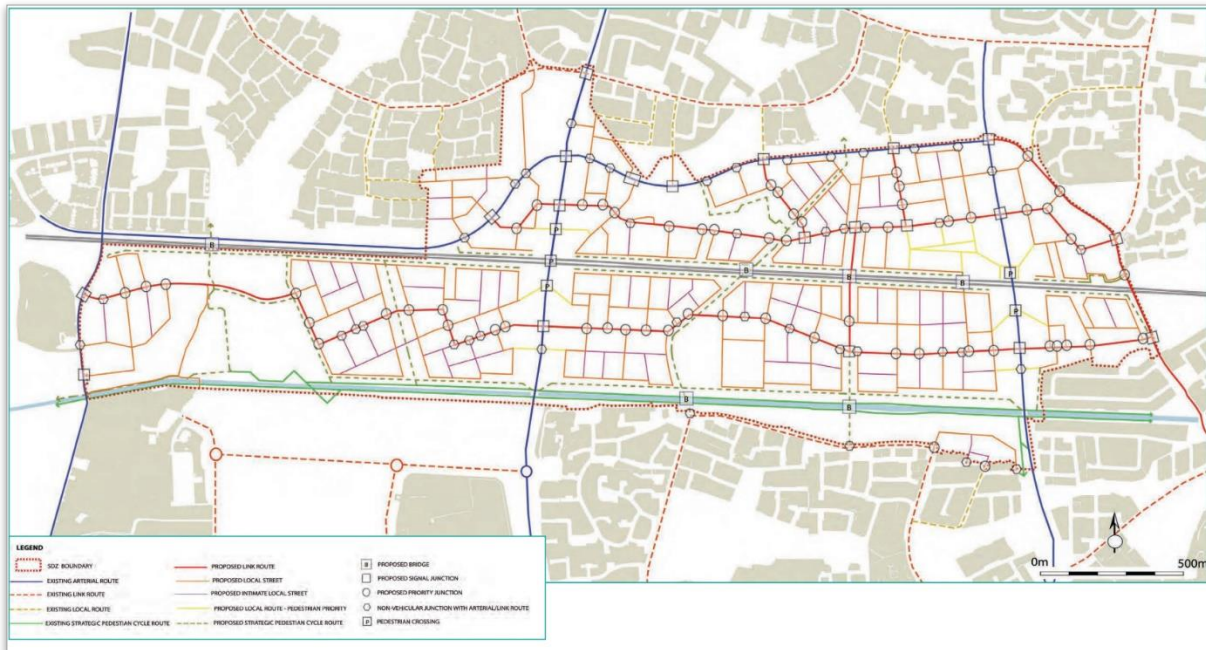


Figure 1 - Street Hierarchy and junction types

(source: Clonburris SDZ Planning Scheme)

Permission for the development of the SDZ Southern Link Street has been granted under planning reg. ref. SDZ20A/0021.

2.3 Development Access and Internal Streets

Access to the proposed development shall be via the permitted Southern Link Street (as granted under planning reg. ref. SDZ20A/0021). The development shall include the provision of local streets in accordance with the Clonburris SDZ Planning Scheme.

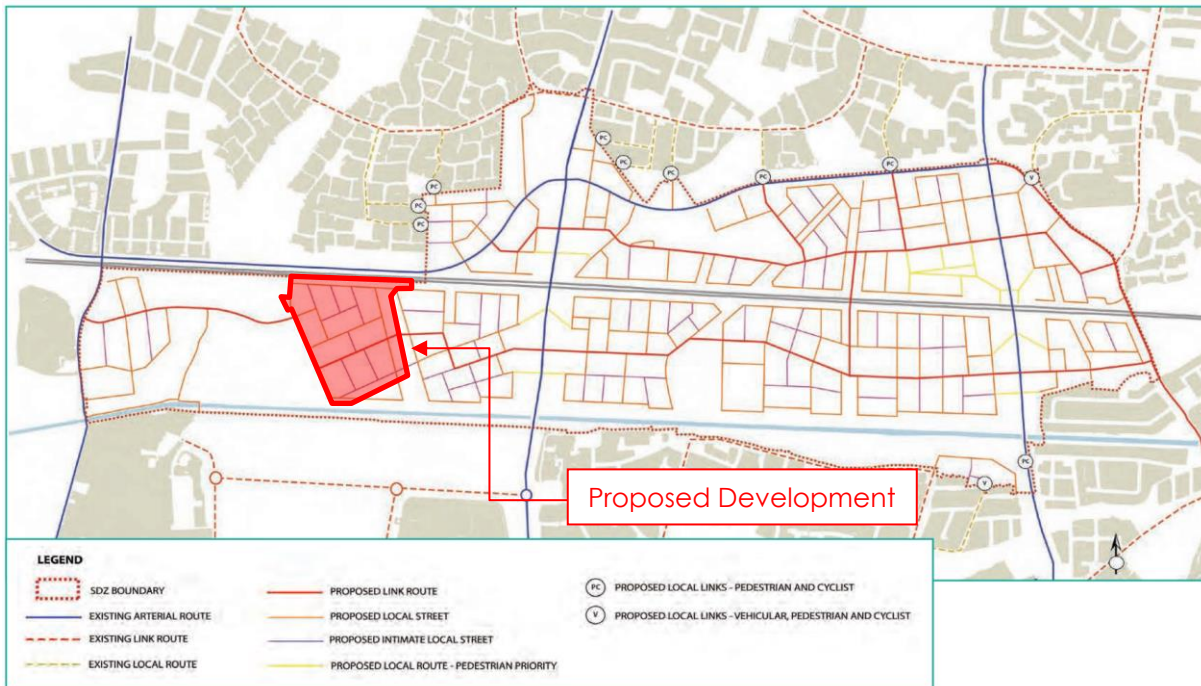
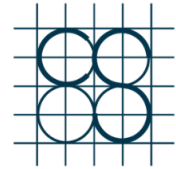


Figure 2 – Proposed Road network for Clonburris SDZ (development site highlighted)

(source: Clonburris SDZ Planning Scheme)

3.0 Creating a Sense of Place

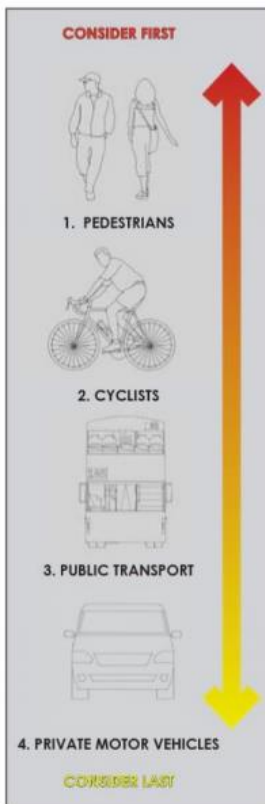
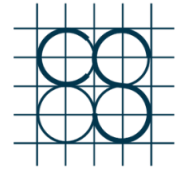
DMURS defines four characteristics which represent the basic measures that should be established in order to create people friendly streets that facilitate more sustainable neighbourhoods. These are:

- a) Connectivity;
- b) Enclosure;
- c) Active Edge; and
- d) Pedestrian Activity/Facilities.

Each of these characteristics are set out in the sections below together with a commentary setting out how the proposed commercial development complies with each of these characteristics.

3.1 Connectivity

"The creation of vibrant and active places requires pedestrian activity. This in turn requires walkable street networks that can be easily navigated and are well connected."



In order of importance, DMURS prioritises pedestrians, cyclists, public transport then private cars.

This is illustrated in the adjacent image extracted from DMURS.

The proposed development has been designed with pedestrians and cyclists taking precedence over other modes of transport. Pedestrian and cyclist's connectivity is provided throughout the development with filtered permeability connections provided to the permitted Southern Link Road (reg. ref. SDZ20A/0021) at strategic locations in accordance with Figure 1. The street typologies proposed within the proposed development and within permitted infrastructure serving the proposed development site are designed for pedestrian and cyclist movement. The site is provided with good links to the Grand Canal Green Route which runs through and along the southern boundary of the overall SDZ lands. These transport solutions will not only benefit the Clonburris/Kishoge lands, but also the surrounding neighbourhoods of Adamstown and Kilmahuddrick.

Further details are also provided in the Traffic and Transport Assessment (TTA) and will clearly demonstrate the dominance of pedestrian/cycle connectivity within the proposed development and to the surrounding area.

It is considered that the proposed development is fully compliant with the connectivity objectives of DMURS design guidance.

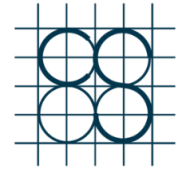
3.2 Enclosure

"A sense of enclosure spatially defines streets and creates a more intimate and supervised environment. A sense of enclosure is achieved by orientating buildings towards the street and placing them along its edge. The use of street trees can also enhance the feeling of enclosure."

The proposed development has been designed so that the residential units are overlooking streets and public open spaces which provide passive surveillance. Landscaping and tree planting are provided along the roads/streets which assist in providing a sense of enclosure. The proposed street cross-sections have been designed in accordance with the *Clonburris SDZ Planning Scheme*.

There will also be cul-de-sacs which provide enclosed residential communities and give a sense of place to these individual communities.

3.3 Active Edge



"An active frontage enlivens the edge of the street creating a more interesting and engaging environment. An active frontage is achieved with frequent entrances and openings that ensure the street is overlooked and generate pedestrian activity as people come and go from buildings."

Residential units are located so that they front directly onto the roads and streets, including the permitted Southern Link Road (reg. ref. SDZ20A/0021). The proposed creche also provides an active frontage onto the permitted Southern Link Road. Entrances to these units are provided directly from the street which will ensure that there is plenty of activity as residents, staff and visitors come and go.

Although some of the streets/roads are cul-de-sacs for general vehicular traffic, the pedestrian and cycle links at the end of these cul-de-sacs provide short cuts which will further encourage walking/cycling, enhance activity, and enliven the street/road scape.

3.4 Public Realm and Pedestrian Facilities

"The sense of intimacy, interest and overlooking that is created by a street that is enclosed and lined with active frontages enhances a pedestrian's feeling of security and well-being. Good pedestrian facilities (such as wide footpaths and well-designed crossings) also makes walking a more convenient and pleasurable experience that will further encourage pedestrian activity."

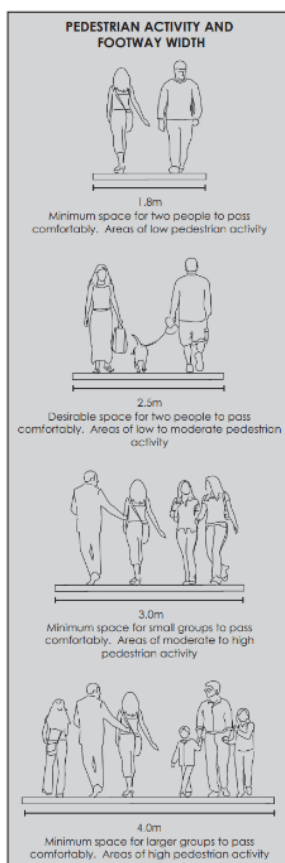
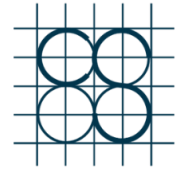


Figure 4.34: Diagram showing the amount of space needed for pedestrians to pass each other with regard to pedestrian activity levels.

As outlined in the items above the proposed development has been designed to provide excellent pedestrian and cycle connectivity. The residential units are located so that they front directly onto the roads and streets, which will create activity and also provide surveillance to enhance pedestrians feeling of safety and wellbeing. Direct frontage also helps to slow and calm traffic speeds.

The local streets within the proposed development function predominantly as residential accesses, with limited permeability for private car use and providing cyclist and pedestrian filtered priority, allowing these to become the most intimate streets of the network.

The proposed development will be designed to reduce traffic speeds. In this regard, where there is a straight section of road, raised table junctions/flush kerbs have been provided along the internal local streets. Furthermore, on street parking and frequent pedestrian crossing facilities are present to encourage drivers to be more aware of their surroundings and reduce driving speed.



The primary pedestrian routes within the site shall be a minimum of 2.0m wide, with convenient connections to the primary pedestrian routes along the Southern Link Road. This ensures suitability for areas of low-moderate pedestrian activity, to ensure minimum space for two people to pass comfortably.

4.0 Key Design Principles

The key principles, elements of street design and layouts of the subject development and the masterplan are set out within the Clonburris SDZ planning scheme. DMURS sets out four core design principles which designers must have regard to in the design of roads and streets in new developments. These four core principals are set out below together with a commentary setting out how these design principals have been incorporated into the design of the proposed commercial development.

4.1 Design Principle 1 (Connected Networks)

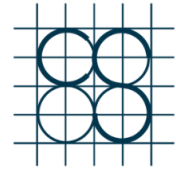
"To support the creation of integrated street networks which promote higher levels of permeability and legibility for all users and in particular more sustainable forms of transport."

The proposed development has been carefully designed to ensure that the focus on connectivity is centred on pedestrians and cyclists. The provision of high levels of connectivity for pedestrians and cyclists are intended to promote walking and cycling by making them a more attractive option to the private car.

The development layout design ensures pedestrian permeability through the development site and includes open spaces at surface level, accessible to pedestrians and cyclists directly from the Southern Link Road via filtered permeability links, and local access roads.

Place Context (DMURS Section 3.2.2)

The site falls between the categories of (lower end) "Neighbourhood" and (higher end) "Suburban" as defined at section 3.2.2 of DMURS and will generate low-moderate levels of pedestrian activity. The proposed development provides a clearer and safer transition by the creation of a strong street frontage along the Southern Link Road and internal streets. Paths, cycle lanes, car parking, verges, trees and signage, are provided to communicate to road users that they are entering an urban area and to reduce road speed.



Permeability and Legibility (DMURS Section 3.3)

Development Access

The internal road network of the development site comprises local streets which shall tie-into the previously permitted Southern Link Road infrastructure (reg. ref. SDZ20A/0021). The Southern Link Road shall connect to the R136 Grange Castle Road to the east of the proposed development and to the Adamstown Road to the west of the development site.

Access to the development internal local streets shall be via new vehicular junctions on the Southern Link Road with additional filtered permeability junctions for pedestrians and cyclists. Parallel car parking is permitted on the Southern Link Street which can be used by visitors accessing the subject development.

All connections between the development's internal road network and the existing external road network have been designed in accordance with the requirements of the Design Manual for Urban Roads and Streets (DMURS).

Internal Streets Layout

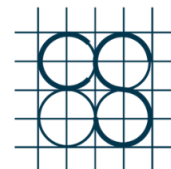


The street layout design approach for this scheme is an "Orthogonal" layout as described in section 3.3.1 of DMURS, Fig. 3.8(a), shown below. DMURS indicates that "*street networks that are orthogonal (see figure below) in nature are the most effective in terms of permeability (and legibility)*". The internal orthogonal layout not only makes pedestrian and cyclist movement through the scheme direct, efficient and safe, but also

allows for multiple link points to new paths along the permitted link street (Southern Link Road).

The Southern Link Road will form the main spine road of the wider masterplan site, providing pedestrian and cyclist access to the subject development site. The permitted southern link road shall create a new street with a segregated footpath, segregated cycle paths, public lighting, and planting along the development in line with DMURS. Local access roads will lead to residential areas providing access to surface level car parking, cycle parking and entrances to residential and creche blocks.

The proposed vehicular junctions along the Southern Link Road shall provide vehicular access to the proposed development. The main vehicular accesses shall be provided at 4no. points in proximity to the site's eastern and western boundaries. 4no. filtered permeability junctions are provided in order to prioritise pedestrian and cyclist movement. Additional pedestrian and cyclist access shall be



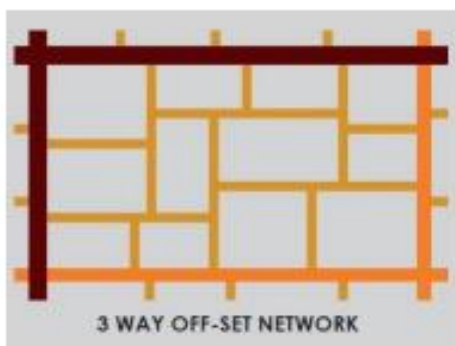
provided at the site's southern boundary, connecting to neighbouring developments and ultimately providing connection to the Grand Canal Green Route.

Wayfinding (DMURS Section 3.3.4)

As outlined in "street layout" section earlier herein, the layout has been designed in an "Orthogonal" manner, which DMURS states (Section 3.3.4), *"the more the orthogonal street layout the more legible it will be (as well as being the most connected)"*. DMURS Section 3.3.4 goes on to state *"the network should be structured to draw people towards Focal Points such as Landmarks, Gateways and other civic buildings and spaces"*. The buildings within the site have been designed to ensure that civic buildings such as the proposed creche shall function as landmarks. Larger buildings have been positioned at key locations within the scheme to assist with the wayfinding.

Vehicle Permeability (DMURS Section 3.4.1)

The internal layout shall be designed as a "3 Way Off-Set Network" as defined at Section 3.4.1 of DMURS, which states: *"3 Way Off-Set Networks allow through movement for all modes, however, they discourage faster modes by requiring vehicles to slow, stop and/or change direction repeatedly*

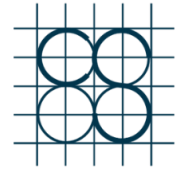


when travelling along Local streets. Such networks are suitable to all contexts but there are limitations to their overall effectiveness. The use of multiple junctions off-sets can reduce legibility. This can discourage walking/cycling as the network is difficult to navigate and the route unclear (as well as increasing journey times). It can also result in driver frustration, as noted above."

The modest scale of the development and the limited use of 3 way off-set junctions exploit the advantages of this design approach (slowing vehicular movements) but avoids the disadvantages by providing a legible, permeable layout for pedestrians and cyclists and a reasonable number of strategically located entry/exit points for vehicles to avoid driver frustration. The use of filtered permeability for pedestrians and cyclists at key locations serves to reduce the volume of vehicular traffic in these areas and provide priority to vulnerable road users. Design elements that reflect poor design standards (such as wide roads, unnecessarily large junction corner radii, and large junction visibility splays) are omitted to the extent possible within the site layout, to reduce vehicle speeds within and on approach to the development.

The objectives of the site layout design are:

- to keep vehicle speeds low;
- to minimise the intrusion of vehicle traffic;



- to ensure ease of access for emergency services;
- to encourage walking and cycling;
- to create short walking routes to shops, public transport, etc.;
- to create a safe, secure, and pleasant environment for people, particularly vulnerable road users (VRUs) such as children.

Traffic calming and VRU protection measures to be implemented within the design include:

- designated and marked pedestrian crossing points;
- smaller corner radii;
- horizontal alignment constraints to restrict vehicle speeds;
- landscaping to frame vehicle sightlines;
- local street design with a maximum vehicle speed of 30km/h.

The proposed development shall incorporate numerous design features such as distinctive surface materials and colours, strong landscaping proposals and modern furniture structures, in order to establish a sense of place within an urban neighbourhood environment.

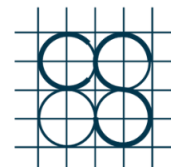
The final development layout shall incorporate features that benefit vulnerable road users by encouraging low vehicle speeds (such as reduced road corner radii, raised tables, plantings, etc.), following the principle that roads should serve a community and not dominate it. The provision of good permeability for pedestrians, cyclists & public transport are all key objectives of the proposed site layout.

Signage and Line Marking (DMURS Section 4.2.4)

In line with section 4.2.4 of DMURS, only mandatory street signage, as outlined in the Traffic Signs Manual (TSM) (2010) have been incorporated in the development. This allows for the implementation of a self-regulating street environment so that drivers are forced to navigate the development with full regard to their own behaviour and the behaviour of those around them.

Street Furniture & Street Lighting (DMURS Section 4.2.5)

Street furniture including bench seating is proposed throughout the scheme as specified in the Landscape Masterplan. Seating is located in verges or off the public footpaths as required. A site-specific public lighting plan has been designed for the scheme and is included with the application. This public lighting scheme shall be designed in accordance with the requirements of South Dublin County Council and shall be consistent with the guidance contained in DMURS. The proposed public lighting scheme will ensure that both the vehicular carriageway and pedestrian / cycle paths are sufficiently illuminated. The public lighting design has been taken into account by the Landscape Architect to ensure that trees would not interfere with public lighting performance.



Materials and Finishes (DMURS Section 4.2.6)

Materials and finishes have been chosen to provide a robust finish.

Tactile paving will be used at crossing points to assist the visually impaired and the use of tactile paving is consistent throughout the development.

4.2 Design Principal 2 (Multi-Functional Streets)

“Designers must balance speed management, the values of place and reasonable expectations of appropriate speed according to Context and Function”

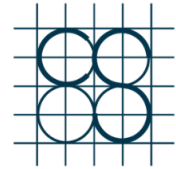
The subject development has been designed with a particular focus on vulnerable road users such as pedestrians and cyclists. As such, the internal road network shall be subject to a reduced speed limit (20km/h) in accordance with Table 4.1 of DMURS (replicated below).

FUNCTION		PEDESTRIAN PRIORITY	VEHICLE PRIORITY			
	ARTERIAL	30-40 KM/H	40-50 KM/H	40-50 KM/H	50-60 KM/H	60-80 KM/H
	LINK	30 KM/H	30-50 KM/H	30-50 KM/H	50-60 KM/H	60-80 KM/H
	LOCAL	10-30 KM/H	10-30 KM/H	10-30 KM/H	30-50 KM/H	60 KM/H
		CENTRE	N'HOOD	SUBURBAN	BUSINESS/ INDUSTRIAL	RURAL FRINGE
CONTEXT						

Table 4.1: Design speed selection matrix indicating the links between place, movement and speed that need to be taken into account in order to achieve effective and balanced design solutions.

The proposed internal street network shall balance the needs of different road users and provide a sense of place, thereby managing vehicle speed and street function. The proposed street layout includes many design elements which serve to increase the sense of place and control vehicle speeds, such as;

- Active frontages at ground floor level and associated pedestrian activity,
- Frequent pedestrian crossing points
- Minimising road signage
- Reduced visibility splays and on-street parking
- Tighter Corner Radii



As a result the street functions for vehicles while providing priority to pedestrians and cyclists.

4.3 Design Principal 3 (Pedestrian Focus)

"The quality of the street is measured by the quality of the pedestrian environment."

The design of the scheme has placed a particular focus on pedestrian movement. In this regard, connectivity throughout the scheme is heavily weighted towards the pedestrian and away from the private car. The streetscape has been designed to provide a sense of enclosure and to be active with good passive surveillance in order to enhance pedestrians sense of safety and wellbeing. The street design incorporates well thought out pedestrian facilities such as appropriate footpaths, pedestrian crossings, and raised tables. For the proposed development raised tables shall be provided along the internal streets. All footpaths within the proposed development are a minimum of 2m wide.

Pedestrian Crossings (DMURS Section 4.3.2)

Due to the lightly trafficked and low speed nature of the development, uncontrolled crossing points are provided within the development, in the form of dropped kerbs and tactile paving to align with key desire lines such as crossing points to main desire line to the site access.

Reduced corner radii significantly improve safety for both pedestrians and cyclists at junctions therefore reduced corner radii is used for side street cul-de-sac streets in line with section 4.3.3 of DMURS to improve the pedestrian and cyclist environment. Local streets and link roads adjoining the previously permitted Southern Link Road will have a corner radii of 6.0m to ensure medium sized rigid and service vehicles can safely negotiate turning manoeuvres.

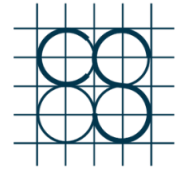
DMURS promotes the *"consolidation of development along strategic connections and around nodes (including city, town and village centres)"*. The proposed development is a natural continuation of the adjacent neighbourhoods providing compact development alongside the provision of improved physical infrastructure.

Cycle Facilities (DMURS Section 4.3.5) and Provision of Cycle Parking within the Proposed Development at Basement and Street Level

The recently published Cycle Design Manual (2023) has been used to design the proposed connections to the cycle path proposed along the permitted Southern Link Road. Vehicle junctions crossing the cycle lane shall be designed in accordance with TL409 of the Cycle Design Manual.

A total of 793no. bicycle parking spaces shall be provided within the development. These include:

- 591no. long-term storage spaces, located in secure cycle storage areas;



- 202no. short stay cycle parking spaces for visitors, in the form of Sheffield type stands at suitable external locations;

4.4 Design Principal 4 (Multi-disciplinary Approach)

"Greater communication and co-operation between design professionals through promotion planned multidisciplinary approach to design."

The design of the proposed development has been developed through the design team working closely together. The proposed development design is led by DTA Architects working together with CS Consulting Engineers, Stephen Little and Associates Planning Consultants and Bernard Seymour Landscape Architects. The site is being developed on behalf of South Dublin County Council. Each member of the design team is committed to delivering a high-quality development which complies with the recommendations of DMURS.

Fionnán Burke

Civil, Traffic and Transport Engineer

BSc (Hons), ME, MIEI

for Cronin & Sutton Consulting