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TECHNICAL NOTE 210100/001

Subject:	DMURS Design Statement	**Produced by:**	HG
Project	Proposed Residential Development, Rosemount, Northern Cross, Dublin 17	**Checked by:**	MK
Job No.:	210100	**Date:**	29/06/2022

1.0 INTRODUCTION

1.1.1 DBFL Consulting Engineers have been commissioned by Walls Construction to prepare a DMURS Design Statement with regards to the proposed residential development located in Dublin 17. The proposal includes the demolishment of the existing on-site office block (3,300m^2) to accommodate a residential development of 176 no. residential apartment units, comprising 72 no. 1-bed apartment units, 57 no. 2-bed apartment units and 47 no. 3-bed apartment units. The development also comprises 134 no. on-site car parking spaces and 392 no. cycle parking spaces as well as a small onsite office space (1,050.8m^2) and café amongst other residential amenities.

1.1.2 It is DBFL's opinion that the proposed residential development is consistent with both the principles and guidance outlined within the *Design Manual for Urban Roads and Streets* (DMURS) 2019. The scheme proposals are the outcome of an integrated design approach that seeks to implement a sustainable community connected by well-designed vehicular accesses and internal layouts which deliver safe, convenient, and attractive networks in addition to promoting a real and viable alternative to car-based journeys.

1.1.3 This report outlines DMURS objectives and principles as well as the specific design features that have been incorporated within the proposed residential scheme with the objective of delivering a design that is in full compliance with DMURS.

1.1.4 The following documents, which are included with the Planning submission, were reviewed among others:

- DBFL Consulting Engineers Report 210100-DBFL-CS-SP-RP-001-TTA Titled 'Traffic and Transport Assessment'
- Proposed Roads Layout: Drg. No. 210100-DBFL-RD-SP-DR-C-1011
- Proposed Basement Layout: Drg. No. 210100-DBFL-RD-SP-DR-C-1012

2.0 DMURS OBJECTIVES

2.1.1 DMURS seeks to balance the needs of all users, creating well designed streets at the heart of sustainable communities. It states that:
"Well designed streets can create connected physical, social and transport networks that promote real alternatives to car journeys, namely walking, cycling or public transport".

2.1.2 DMURS also seeks to create streets which are attractive places and encourage designs appropriate to context, character and location that can be used safely and enjoyably by the public.

3.0 DMURS PRINCIPLES

3.1.1 At the heart of DMURS is a place-based, integrated approach to road and street design with the following four overarching design principles to be applied to the design of all urban roads and streets. These four principles are as follows:

3.1.2 At the heart of DMURS is a place-based, integrated approach to road and street design with the following four overarching design principals to be applied to the design of all urban roads and streets:

- ***Design Principle 1:*** 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

- ***Design Principle 2:*** The promotion of multi-functional, place-based streets that balance the needs of all users within a self-regulating environment
- ***Design Principle 3:*** The quality of the street is measured by the quality of the pedestrian environment
- ***Design Principle 4:*** Greater communication and co-operation between design professionals through the promotion of a plan-led, multi-disciplinary approach to design

3.1.3 The ways in which the proposed development complies and adheres to the design principles of DMURS is described in the following sections, with details of how the various design elements will be implemented throughout the scheme.

4.0 DESIGN ATTRIBUTES

4.1 Development Strategy

4.1.1 The development strategy maximises connectivity between key local destinations through the provision of a high degree of permeability and legibility for all network users, particularly for sustainable forms of travel. Accordingly, the proposed residential scheme delivers greater mode and route choices along direct, attractive and safe linkages to a range of amenities and local service destinations.

4.1.2 The internal basement layout has been designed to deliver a one-way circulatory arrangement to provide safe access for pedestrians within the basement car park. Designated cyclist access at surface level to the bicycle parking areas enables a safer development layout with no requirement to access the basement unless utilising vehicle parking spaces. across the proposed new residential community.

4.1.3 The adopted design philosophy has sought to consider the context / place status of the residential development in terms of the level of connectivity provided, quality of the proposed design, level of pedestrian / cyclist's activity at surface and basement levels and the requirements of vulnerable users.

4.2 Linkages

4.2.1 The street layout was derived from several factors which include the *Dublin City Development Plan*, the *Clongriffin-Belmayne Local Area Plan*, the *Draft Belmayne and*

Belcamp Lane Masterplan, boundary conditions, future and existing developments, adjacent facilities etc. As part of the design and development of the site layout, pedestrian linkages were prioritised around the development to tie into existing and future developments, existing facilities, public transport nodes, existing schools etc. **Figure 1** below shows the proposed BusConnects linkages which could be utilised by the development.

4.2.2 In addition to the BusConnects proposals, the delivery of the Movement and Transport Objectives within the Clongriffin-Belmayne Local Area Plan 2012 – 2018 (as Extended to 2022) would facilitate improved access to the Clongriffin Railway Station, located approximately 2.7km from the subject site.

4.2.3 The NTA's Cycle Network Plan for the Greater Dublin Area includes a number of key route proposals in the vicinity of the proposed development, such as primary route 1C, radial route 1B, and orbital route NO5. The proposed and existing footpaths encircling the site will facilitate connections to these planned cycle routes.

4.2.4 The linkages detailed above demonstrate that permeability has been considered from a very early stage in the design and all links that can be provided by the applicant, have been accommodated.

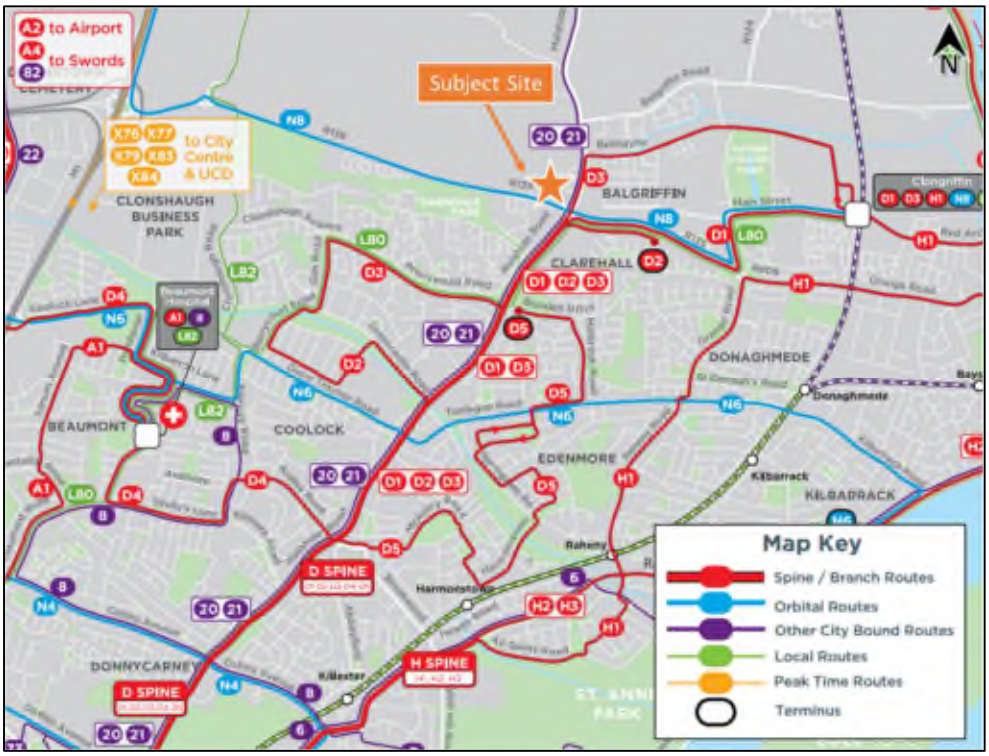

Figure 1 – Proposed Linkages for the Development

4.3 Design Parameters

4.3.1 The adopted design approach (**Figure 2** and **3**) successfully achieves the appropriate balance between the functional requirements of different network users whilst enhancing the sense of place through the implementation of a low speed, high quality residential environment. Specific attributes of the schemes design which contribute to achieving this DMURS objective include;

a) The provision of 4 no. on-street car parking spaces in two parallel parking bays on Mayne River Avenue complies with the standard width of 2.4m and length of 6.0m. Where the parallel surface parking is provided, the four spaces are broken up by landscaping to minimise the visual dominance of the on-street parking. Additionally, the spaces will enhance pedestrian and cyclist safety and comfort by providing a buffer between the street and the footpath.

b) In complying with DMURS, footpaths no less than 2.0m wide are provided throughout the scheme and with connections / tie-in to existing and proposed external pedestrian networks. Future pedestrian and cyclist linkages to the north of the development have been designed to tie into a potential future development.

c) Appropriate clear unobstructed visibility splays are provided on both the horizontal and vertical planes. This adheres to DMURS's requirements at the site access junction with Priorswood to the external road network. The proposed site access achieves a visibility splay of 2.4m x 23m onto Priorswood for a 30km/h speed zone.

d) Well designed pedestrian crossing facilities will be provided across the site access junction. The informal pedestrian crossing facility is at least 2.0m wide in accordance with DMURS.

e) At the vehicular entrance to the site, a raised pedestrian crossing is provided, thereby allowing pedestrians to informally assert a degree of priority. The maximum height of these raised flat top treatments is designed to be 75mm with a minimum flat top width of 2.0m. Different surface material treatments are proposed to alert and subsequently influence driver behaviour and vehicle speeds.

f) With the objective of encouraging low vehicle speeds and maximising pedestrian safety and convenience, corner radii have been provided as per DMURS guidance as 4.5m for the site access junction with Priorswood.

g) The use of tactile paving has been applied at the pedestrian crossing in accordance with the guidance contained within the Traffic Management Guidelines (2003) and the UK Guidance on the use of Tactile Paving Surfaces to ensure a logical and navigable pedestrian environment is delivered for those with visual impairments.

h) The proposed residential development's internal vehicular ramp and internal basement carriageway widths are compliant with DMURS, incorporating a mimimum 5.5m wide carriageway for two-way movements on the ramp.

i) The access route into the development basement will be formed using standard macadam / asphalt finishes.

j) The provision of perpendicular car parking within the basement layout is in accordance with DMURS, at a minimum of 5m long 2.5m wide. Where perpendicular parking is provided on either side at basement level, the minimum carriageway width is 6m in compliance with DMURS, with a one-way circulatory route implemented at basement level to enhance pedestrian safety.

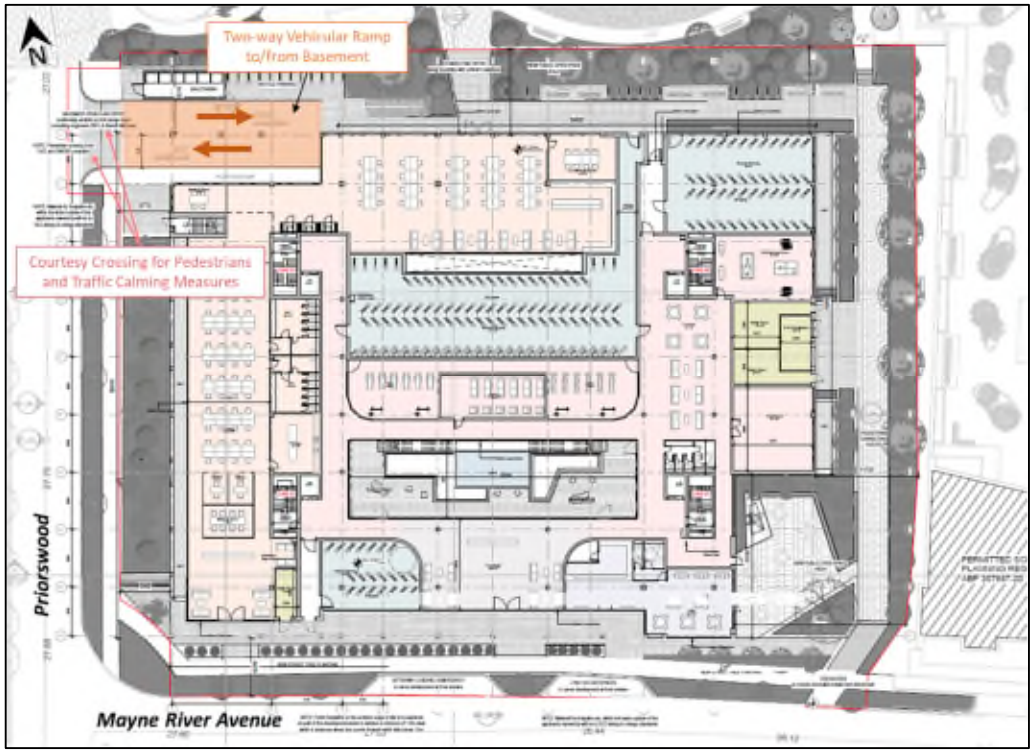

Figure 2 – DBFL Roads Layout

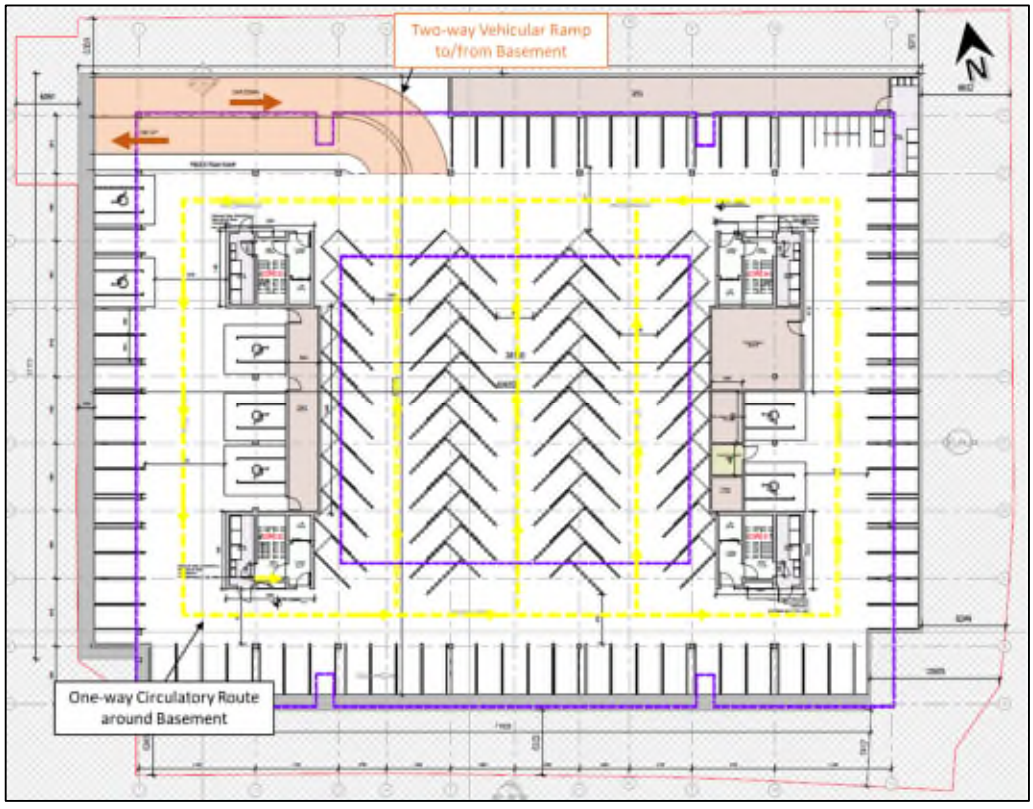

Figure 3 – DBFL Basement Layout

5.0 CONCLUSION

5.1.1 DBFL Consulting Engineers have been commissioned to prepare a Design Manual for Urban Road and Street (DMURS) Design Statement with regards to the proposed Rosemount residential development, Dublin 17. The report has sought to identify how the scheme is consistent with and adheres to the principle and guidance within DMURS and supporting guidance such as the National Cycle Manual (NCM).

5.1.2 The development layout has been prepared with careful consideration of optimising connectivity between key local areas through the provision of pedestrian permeability and legibility for all network users and particularly prioritising sustainable forms of travel.

5.1.3 Furthermore, the provision of a footpaths to the north and east of the subject site connecting to the existing footpaths on Priorswood and Mayne River Avenue will enable enhanced accessibility from all site frontages and facilitate more direct connections to active and sustainable travel opportunities in the site environs.

5.1.4 It is DBFL's opinion that the proposed residential development is consistent with both the principles and guidance outlined within the Design Manual for Urban Roads and streets (DMURS) (Version 1.1, 2019). This report outlined the specific design features that have been incorporated within the proposed development that had the objective of delivering a design that is in full compliance with DMURS.