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TECHNICAL NOTE 170182/002

Subject: DMURS Design Statement	Produced by: DMW
Project: Strategic Housing Development at Colpe West, Drogheda, Co. Meath	Checked by: DJR
Job No: 170092	Date: 04.10.2019

1.0 INTRODUCTION

- 1.1.1 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) 2013. The scheme proposals are the outcome of an integrated design approach that seeks to implement a sustainable community connected by well-designed streets which deliver safe, convenient, and attractive networks in addition to promoting a real and viable alternative to car-based journeys.
- 1.1.2 The following section outlines 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.

2.0 DESIGN ATTRIBUTES

2.1 Strategy Development

- 2.1.1 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.
- 2.1.2 The development strategy also incorporates a hierarchy of streets with **Arterial** links including the M1 and N2 to the west of the subject site. **Link** streets adjacent to the

site, include Colpe Road to the south, and the R132 and R150 to the west and east of the site respectively, which provide connections between the proposed development and the above **Arterial** links and with local centres and community infrastructure such as schools, sports clubs and shopping areas. This application includes proposed modifications to the link street approved under LB180620 which will connect the proposed development with the above link streets and **Arterial** Links.

2.1.3 The internal road network has been designed to deliver a hierarchy of **link and** primary and secondary **local** streets that provide access within the proposed new residential community and between the development and **link** streets adjacent to the site. The movement function of each of the internal **link and local** streets has sought to respect the different levels of motorised traffic whilst optimising access to/from public transport and catering for higher number of pedestrians and cyclists. In parallel, the adopted design philosophy has sought to consider the context / place status of each residential **local** street in terms of level of connectivity provided, quality of the proposed design, level of pedestrian / cyclist activity and vulnerable users requirements whilst identifying appropriate 'transition' solutions between different street types. Refer to *Appendix A* for "Street Hierarchy" plan.

2.1.4 High levels of internal connectivity are also delivered for motorised vehicles, via **link** and primary and secondary **local** streets. The layout offers a well-connected traffic calmed 'by design' street network. In addition to pedestrian and bicycle facilities at the key **link** streets, the provision of a dedicated pedestrian and bicycle connection over the railway line and through the open space to the west of Park Wood and connecting to the existing pedestrian and road infrastructure at Park View maximises permeability along this travel desire line and delivers a convenient, attractive and safe linkage for pedestrians and cyclists. Refer to *Figure 1* below.





Figure 1: Proposed Pedestrian Link over Railway

2.2 Design Parameters

2.2.1 The adopted design approach successfully achieves the appropriate balance between the functional requirements of different network users whilst enhancing the sense of place. The implementation of self-regulating streets actively manages movement by offering real modal and route choices in a low speed high quality residential environment. Specific attributes of the schemes design which contribute to achieving this DMURS objective include;

- a) A strong sense of street enclosure is achieved utilising the adopted building height to street width ratios internally; in parallel with the provision of street trees.
- b) The potential dominance of on-street car parking for the apartment area is actively management through the provision of landscaped buffers, the provision of street trees and the provision of landscaped communal open space areas.



- c) On-street activity is promoted internally along the residential streets through the adoption of 'own-door' dwellings and access to the apartments and duplex units from the proposed *local* and *link* streets.
- d) The proposed design has sought to specify minimal signage and line markings along the internal *local and link* streets with such treatments used sensitively throughout.
- e) Footpaths of generally 2.0m width are provided throughout the scheme and with connections / tie-in to existing external pedestrian networks.
- f) Appropriate clear unobstructed visibility splays, as per DMURS requirements; are provided / safeguarded at all internal nodes and at the site access junctions to the external road network.
- g) Well designed and frequently provided pedestrian crossing facilities are provided along key travel desire lines throughout the scheme in addition to those located at street nodes. All courtesy crossings are provided with either dropped kerbs or a raised flat top treatment thereby allowing pedestrians to informally assert a degree of priority.
- h) Formal signalised crossings are provided at the more heavily trafficked *external local street/ link street* for the benefit of both pedestrians and cyclists. Such crossings are provided with a single straight direct movement to minimise crossing distance and enhance pedestrian / cyclist convenience and comfort levels.
- i) All informal pedestrian crossing facilities are at least 2.0m wide, whilst all controlled pedestrian crossings are at least 2.4m wide.
- j) All toucan crossings are 4.0m wide or more.
- k) With the objective of encouraging low vehicle speeds and maximising pedestrian safety and convenience, corner radii at *Local / Local* nodes have been generally been specified as 3.5m.
- l) Contrasting materials are specified in the 'Homezone', (shared area), to indicate that the carriageway is an extension of the pedestrian domain.
- m) Internally within the development carriageway kerb heights have been specified as 75-80mm in accordance with the objectives of DMURS.



- n) The proposed residential developments internal hierarchy of **Link** streets include 6m/6.5m with **Local** streets incorporating 5.5m/6m wide carriageways. Proposed **'Homezone' Local** streets are 4.8m wide with a 1.2m wide utility corridor.
- o) The main access routes will be formed using standard macadam / asphalt finishes, however for **'Homezone' Local** streets, a colour contrast is to be achieved by way of a textured / colour surface to reinforce the lower design speed in these areas. Refer to *Figure 2* below.

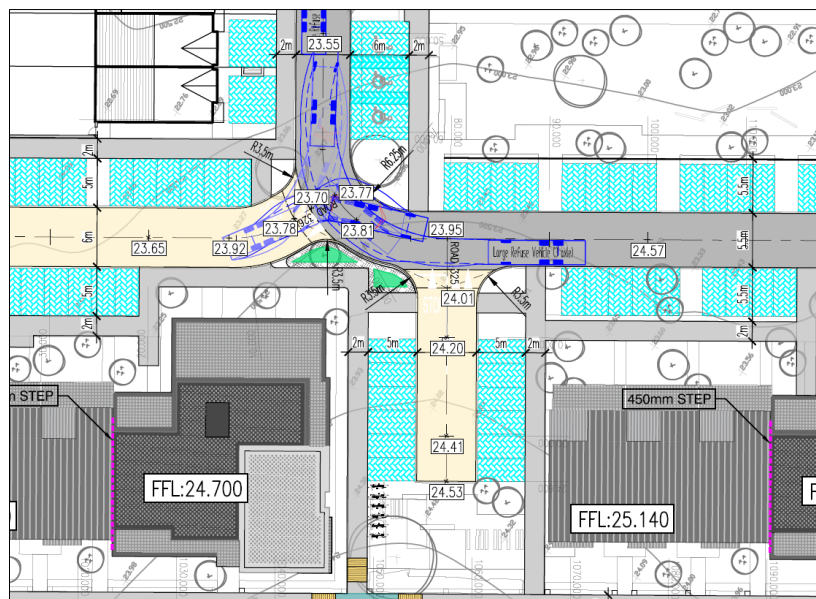


Figure 2: Extract of Road Layout Plan Showing Contrasting Materials in Homezones

- p) Similarly, at each of the at-grade flat top pedestrian crossing / traffic calming table treatments, different surface material treatments are proposed to alert and subsequently influence driver behaviour and vehicle speeds. Refer to *Figure 3* below.



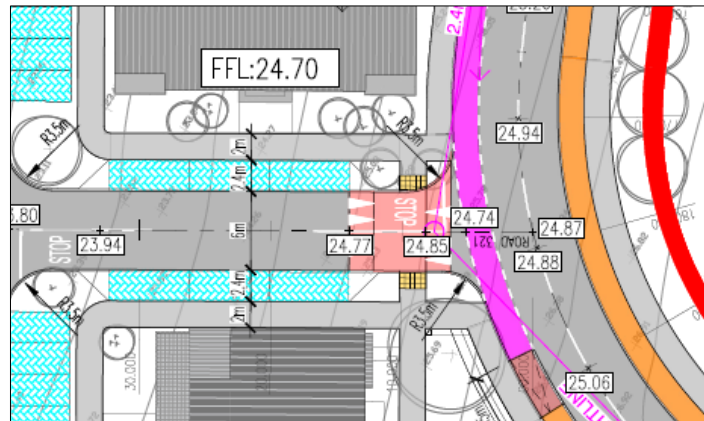


Figure 3: Extract of Road Layout Plan Showing Flat Top Pedestrian Crossing

- q) Vertical deflections in the form of raised tables have been strategically placed across the internal **Local** street network to promote lower design speeds and enable pedestrians to cross the street at-grade. These features have been located at (i) equal priority junctions, (ii) on straights where there is more than 70m between nodes, (iii) at entrance treatments to reinforce a change between design speeds, (iv) at pedestrian crossings; The maximum height of these raised flat top treatments is designed to be 75mm with a minimum flat top width of 2.0m.
- r) Horizontal deflections are proposed at strategic locations to control speed and to facilitate soft landscaping features such as street trees.
- s) The provision of on-street car parking includes perpendicular parking bays along either one or both sides of the internal **local** streets. In accordance with DMURS the perpendicular parking spaces are a generally 5m long x 2.4m wide.

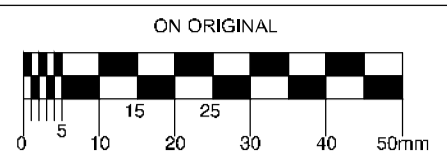


APPENDIX A

STREET HIERARCHY PLAN



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- NOTES
1. DO NOT SCALE. ALL MEASUREMENTS AND COORDINATES TO BE CHECKED ON SITE.
 2. ALL ROAD MARKINGS & SIGNS SHALL COMPLY FULLY WITH THE TRAFFIC SIGNS MANUAL, PUBLISHED BY THE DEPARTMENT OF TRANSPORT, JUNE 2010.
 3. ALL CO-ORDINATES ARE TO IRISH NATIONAL GRID.
 4. ALL LEVELS ARE TO ORDINANCE DATUM AND ARE IN METRES.
 5. ALL BOUNDARIES AND ADJOINING ROADS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION.

LEGEND

	RED LINE BOUNDARY
	LINK STREET
	PRIMARY LOCAL
	SECONDARY LOCAL
	HOMEZONE
	PEDESTRIAN FOOTWAY

ORDNANCE SURVEY IRELAND LICENCE
No EN 0017917
© ORDNANCE SURVEY IRELAND
GOVERNMENT OF IRELAND

REV.	DATE	DESCRIPTION	BY	CHKD.
		PLANNING SHD STAGE 2		

DESIGNED	DMW	PREPARED	JP
DATE	AUG 2019	CHECKED	DJR

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PROJECT
PROPOSED RESIDENTIAL DEVELOPMENT AT COLPE WEST, DROGHEDA, CO. MEATH

DRG. TITLE
ROAD HIERARCHY

CLIENT
SHANNON HOMES DROGHEDA LTD.

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