## 2021

### **DMURS** Compliance Statement



Prepared by: L. Donadel



#### **DMURS Compliance Statement**

The Green Quarter SHD at Cartrontroy, Kilnafaddoge, Lissywollen and Ardnaglug (townlands), Athlone, Co. Westmeath

#### **Document Control Sheet**

Client:	Avenir Homes Limited
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#### 1 Introduction

The Design Manual for Urban Roads and Streets (DMURS), published by Department of Transport, Tourism and Sport and the Department of Environment, Community and Local Government, in 2013, provides guidance relating to the design of urban roads and streets. It presents a series of principles, approaches and standards that are necessary to achieve balanced, best practice design outcomes with regard to networks and individual streets.

DMURS promotes and encourages four Key Design Principles which are:

- 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
- Multi-functions streets: The promotion of multi-functional, place-based streets that balance the needs of all users within a self-regulating environment
- Pedestrian focus: The quality of the street is measured by the quality of the pedestrian environment
- Multidisciplinary approach: Greater communication and co-operation between design professionals through the promotion of a plan-led, multidisciplinary approach to design.

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#### 2 Description of the Proposed Development

Avenir Homes Limited is seeking planning permission for the development will consist of 122No. residential units with ancillary creche, 46No. student apartments consisting of 283 bed spaces, and all associated site development works. The proposed development makes provision for 60No. dwelling houses comprising 38No. 2-storey 3-bed townhouses, 7No. 2-storey 4-bed townhouses, 7No. 3-storey 4-bed townhouses, 6No. 2 storey 4-bed semi-detached and 2No. 2 storey 4-bed detached. The proposed development includes 62No. apartments / duplexes to be provided as follows: Block R1 containing 38No. apartments (16No. 1 bed units and 22 no. 2 bed units) in a 3-6 storey building, and Block R2 containing 20No. duplex units (10No. 2 bed units and 10No. 3 bed units) over 4 storeys with 4No. apartments (4No. 2 bed units) in one 5th storey feature area. The proposed student accommodation makes provision for 283No. bed spaces in 3No. blocks to be provided as follows: Block S1 containing 18 apartments with 117 bed spaces over 5-6 storeys, Block S2 containing 16 apartments with 107 bed spaces over 6-7 storeys, and Block S3 containing 12 apartments with 59 bed spaces over 4-5 storeys.

The proposed development will provide for two new vehicular accesses as well as pedestrian entrances onto Lissywollen Avenue east-west access road (as permitted under An Bord Pleanála Reference ABP-309513-21). Minor modifications to ABP-309513-21 are proposed to cater for these access points, alterations to cycle/pedestrian paths, the removal of a central island to facilitate the south-eastern entrance, and provision of bus stop infrastructure. Ancillary site works include public and communal open spaces, hard and soft landscaping, pedestrian / cycleways, car parking, cycle parking, bin storage, public lighting, solar panels, ESB substation and supporting distribution kiosks, and all other ancillary works above and below ground. The proposal includes pedestrian and cycle linkages onto the Old Rail Trail Greenway to the south and Blackberry Lane (L40061) to the west.

The site is located to the southwest of junction 9 of the National Road N6, and it is bounded by the ESB headquarters to the east, by the Old Rail Trail greenway to the south and by green fields to the west. The development will have 2No. vehicular entrances, one for the residential area and one for the student accommodation, off the proposed Lissywollen Avenue, which will run around the proposed site and connect the R916/Moydrum Road roundabout to Brawney Road.



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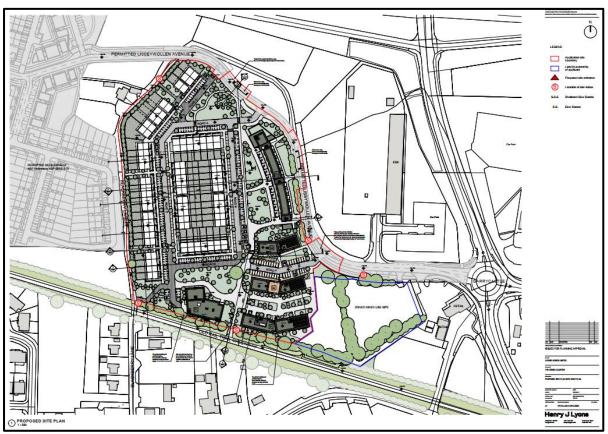


Figure 2.1: Proposed Site Layout (Source: Henry J Lyons)



#### **3** Overview

This DMURS Compliance Statement seeks to outline the specific design features that have been incorporated within the proposed Green Quarter SHD with the objective of delivering an integrated design that complies with the guidance outlined within DMURS.

This DMURS compliance statement should be reviewed in conjunction with the architectural, landscape and engineering site layout drawings and the following key planning documents all of which form part of the submitted planning application documentation:

As part of the preliminary design process, ORS has carried out a Traffic and Transport Assessment (TTA), a Mobility Management Plan (MMP) and a Road Safety Audit (RSA) in relation to the proposed development. All recommendations made in these audits were evaluated and incorporated in the final design where possible. A copy of the TTA, MMP and RSA are included in the planning submission.



#### 4 DMURS Engineering Criteria

Guidance will be taken from the Department of Transport, Tourism and Sport document – "Design Manual for Urban Roads and Streets" (DMURS) which is now seen as industry best practice in the development of road design suited to urban areas.

#### 4.1 Parking

The site will not provide perpendicular parking on opposite sides of any of the internal roads. Where parking is proposed on both sides of the internal access road, it has been designed in accordance with figure 4.76 from DMURS, as shown in **Figure 4.1** below. All perpendicular parking spaces within The Green Quarter SHD have minimum dimensions of 2.4m x 4.85m, whereas parallel parking spaces have a minimum dimension of 2.4m x 6.0m as per Section 4.4.9 of DMURS.

In addition to this all-car parking spaces are proposed to be finished in a different surface which makes the spaces clearly distinguishable from the main carriageway, as required by Section 4.4.9 of DMURS. The car parking ratio for the residential element of The Green Quarter SHD is 1.3 spaces per residential unit, which is the same car parking ratio designed for the proposed development to the west of the site, recently granted planning permission by An Bord Pleanála through the same SHD process.

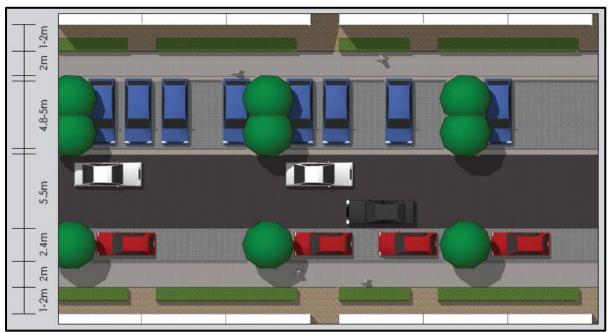


Figure 4.1 – Figure 4.76 from DMURS

#### 4.2 Sightline Availability

Sightline visibility splays are informed by Table 4.2 of DMURS, where the Safe Stopping Distance (SSD) Standard is provided. This table is reproduced on **Figure 4.2** below. Visibility

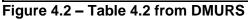
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splays are typically applied at 2.4m from the stop line at priority junctions.

The site will be located off the proposed Lissywollen Avenue, an urban road of design speed of 50km/h within a bus route, the required SSD is 49m, which is achievable on the two entrances on both sides of the road. The Green Quarter SHD complies with the SSD standard.

Design Speed (km/h)	SSD Standard (metres)	Design Speed (km/h)	SSD Standard (metres)	
10	7	10	8	
20	14	20	15	
30	23	30	24	
40	33	40	36	
50	45	50	49	
60	59	60	65	
Forward Visibility		Forward Vi	Forward Visibility on Bus Routes	



#### 4.3 Internal Road Widths

Carriageway widths are outlined in section 4.4.1 of DMURS. In the case of 'local' streets, lane widths should lie in the range 2.5-2.75m (road width of 5m-5.5m). Figure 4.55 from DMURS, reproduced on **Figure 4.3** below, provides some typical carriageway widths. The Green Quarter SHD proposes to provide a carriageway width of 5.5m throughout the development, which is in accordance with the guidelines set out in DMURS.

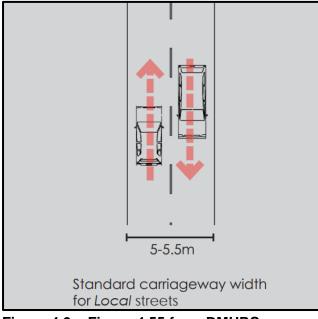
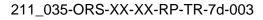


Figure 4.3 – Figure 4.55 from DMURS





#### 4.4 Corner Radii (Main access and internal junctions)

The Green Quarter SHD will provide corner radii of 3.0m for all internal junctions and 6.0m for the main access, which is in accordance with Section 4.3.3 of DMURS.

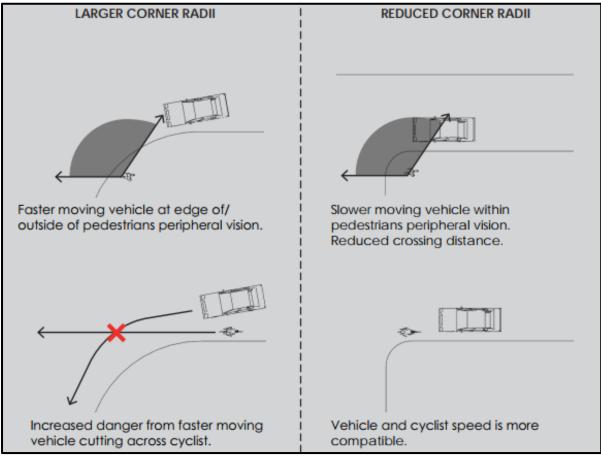


Figure 4.4 – Figure 4.43 from DMURS

#### 4.5 Pedestrians Linkage/Crossing Points

The Green Quarter SHD will provide pedestrian pathways which will have crossings points with dropped kerbs and tactile paving. The pedestrian network will link the site internally and also to Blackberry Lane to the west, the Greenway to the south and Lissywollen Avenue to the east. The site will have similar design to that shown in Figure 3.23 of DMURS, shown in **Figure 4.5** below, where all buildings located beside these routes are dual aspect, so as to provide passive supervision of these spaces.





Figure 4.5 – Figure 3.23 from DMURS

#### 4.6 Footpaths

The footpaths throughout The Green Quarter SHD will be 2.5m wide to accommodate areas of low to moderate pedestrian activity, which provides minimum desirable space for two people to pass comfortably. This width is in accordance with Figure 2.5 of DMURS, shown in **Figure 4.6** below.

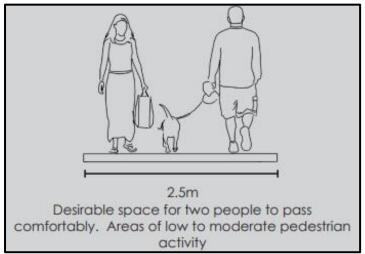
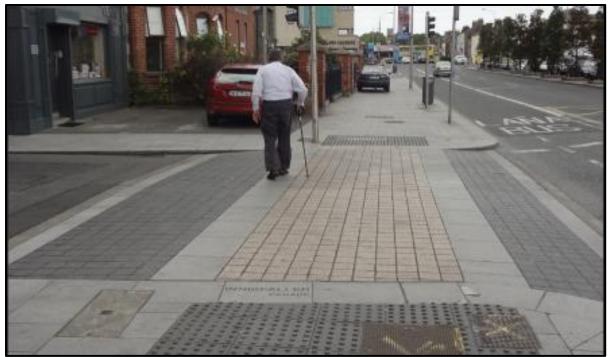


Figure 4.6 – Figure 4.34 from DMURS



#### 4.7 Internal Road Junctions

The Green Quarter SHD is designed to provide perpendicular road junctions within the site, where possible. Raised tables and shared surfaces have been strategically placed at selected junctions to reduce speed, slow turning vehicles at junctions and to enable pedestrians to cross the street at grade, as stated in Section 4.4.7 and Figure 4.69 of DMURS. It is proposed to use varying robust surface materials at these locations to differentiate to other roads.



#### Figure 4.7 – Figure 4.69 DMURS

#### 4.8 Turning Areas for Vehicles

All turning areas have been checked with swept path analysis (AutoTrack) to ensure sufficient space to allow for refuse and emergency vehicles within The Green Quarter SHD. In addition, all turning heads have been designed in accordance with Figure 2.2 of Recommendation for Site Development Works for Housing Areas, as shown in **Figure 4.8**.

# ORS

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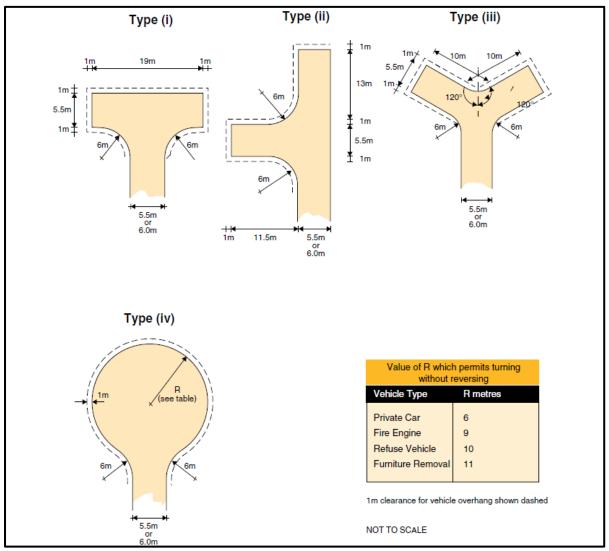


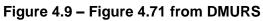
Figure 4.8 – Figure 2.2 of Recommendation for Site Development Works for Housing Areas

#### 4.9 Horizontal & Vertical Deflections

The Green Quarter SHD has been designed to provide horizontal deflection on the road network in form of raised tables and outstands, which limit straight road stretches in accordance with 4.4.7 section of DUMRS. 3No. pinch points have been on the internal north-south road. These pinch points have been designed in accordance with Figure 4.71 of DMURS, shown in **Figure 4.9** below, and will act as a traffic calming measures by creating a horizontal deflection on the internal road alignment.







#### 4.10 Cycle Facilities

The Green Quarter SHD will provide a north-south link, which will be a 4m shared pedestrian and cyclist lane. The proposed link width exceeds the minimum requirement of 3m, as outlined in Section 1.9.3 of The National Cycle Manual.

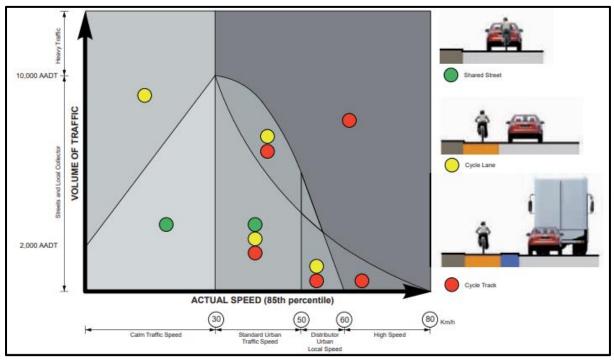


Figure 4.10 – Extract from the National Cycling Manual.



In addition to the above the north-south link, the cycle route travels through a central location, to the north the apartment "R1" and the student accommodation block "S1". This central location is also where the shared surfaces meet and provides a Wayfinding, which has been designed in accordance with Section 3.3.4 of DMURS and is similar in design to Figure 3.14, shown in **Figure 4.11** below.



Figure 4.11 – Figure 3.14 from DMURS

#### 4.11 Bus Stops

As part of the proposed Green Quarter SHD development, it is intended to provide 2No. bus stops located on Lissywollen Avenue, to the east of the site. The bus tops will be on-line stops, with bus cage road markings which were agreed in writing with Westmeath County Council (WCC) and the National Transport Authority (NTA).

#### 4.12 Internal Road Markings

Internal road markings at the Green Quarter SHD are proposed to be limited to the approach to internal junctions and 'STOP' lines. A 'STOP' sign will be provided at each internal junction where a 'STOP' line is proposed. 'STOP' line markings are in accordance with the Traffic Signs Manual Chapter 7 as per 7.2.5.

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#### 5 Conclusion

It can be concluded that the proposed Green Quarter SHD development has followed the Guidelines set in DMURS and has been designed to promote a safe environment for vulnerable users and to promote more sustainable forms of transport through the integration of pedestrian linkages, shared surface and public transport provisions.