



Kegata Ltd.
Residential Development, Rosshill, Galway
Statement of Consistency with Ministerial Guidance
Design Manual for Urban Roads and Streets (2019)



Residential Development, Rosshill, Galway

Statement of Consistency with Ministerial Guidance DMURS (2019)

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Client Address:	1 st Floor, Fairgreen House, Fairgreen Rd, Galway, H91 AXK8
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Galway Office Fairgreen House, Fairgreen Road, Galway, H91 AXK8, Ireland. Tel: +353 (0)91 565 211	Dublin Office Block 10-4, Blanchardstown Corporate Park, Dublin 15, D15 X98N, Ireland. Tel: +353 (0)1 803 0406	Castlebar Office Market Square, Castlebar, Mayo, F23 Y427, Ireland. Tel: +353 (0)94 902 1401	London Office 17 Bowling Green Lane, Clerkenwell, London, EC1R 0QB, United Kingdom. Tel: +44 (0)203 915 6301
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1 INTRODUCTION

TOBIN Consulting Engineers were appointed in May 2019 to provide design consultancy services for the proposed residential development at Rosshill, in Galway City (Figure 1.1). As part of these services, TOBIN were required to provide a statement of consistency with Ministerial Guidance in relation to the *Design Manual for Urban Roads and Streets (DMURS) 2019*.

This statement of consistency confirms that the roads and streets proposed as part of the Residential development in Rosshill, Galway have been designed in accordance with the principles and guidance as set out in the Design Manual for Urban Roads and Streets (DMURS) 2019.



Figure 1.1 – Site Location

1.1 DMURS (2019) Design Principles

1.1.1 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.

The site is situated within lands which are, for the majority, zoned for ‘residential’ use. The overall proposed layout of the development has adhered to the restrictions in the Galway City Development Plan by ensuring the residential areas are located within the areas outlined in the development plan and with consideration of the adjoining developments and surrounding areas.

The objective of this zoning is “to provide for residential development and for associated support development, which will ensure the protection of existing residential amenity and will contribute to sustainable residential neighbourhoods”.

The site is currently a green field site with remnants of a number of old derelict stone sheds located to the centre of the site.

The development proposes to demolish the existing stone buildings on site and to develop a sustainable residential development in the area with strong links to the adjacent link roads and recreational and amenity zones in line with the assigned zone in the Galway City Development plan 2017-2023.

The site layout incorporates two locations where future roads from the zoned lands to the south can be connected which will ultimately increase interconnectivity between the proposed development and any future adjacent development located to the south.

Additionally, the proposed site layout includes provision for possible future cycleway, located in the south west corner, as outlined in the Galway City Council Development Plan 2017-2023.



Figure 1.2 – Site Connectivity (ONOM Design Statement)

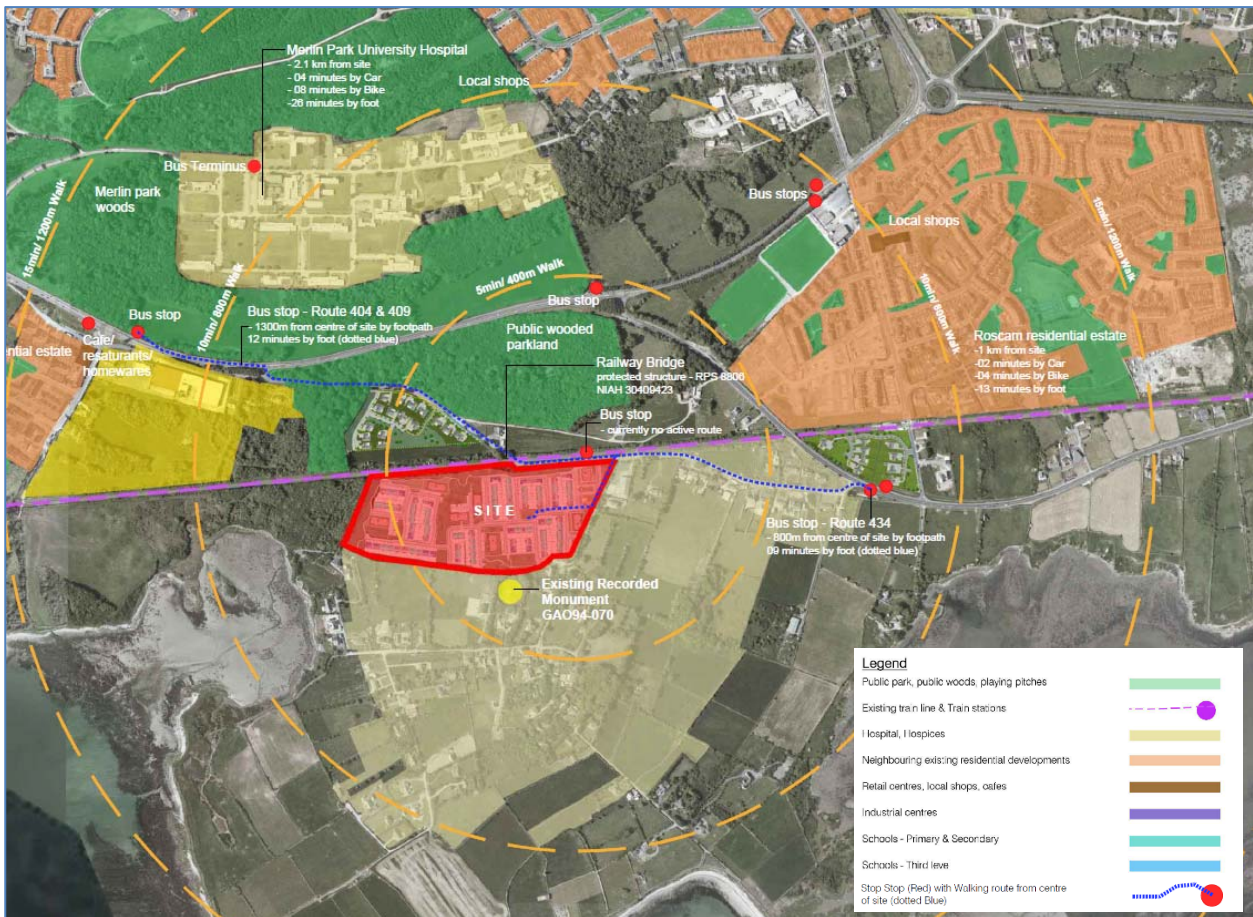


Figure 1.3 – Site Connectivity (ONOM Design Statement)

The main design objectives of the residential scheme are as follows:

- Create a series of strong links to the adjacent amenities while providing a new local centre along Rosshill Road.
- Provide a new community creche and commercial properties on a ground floor (with apartments over), adjacent to the main development entrance to the north east of the site. Keeping in line with the nature of the section of the development, the Creche is located directly south of the commercial units on the southern side of the proposed main link road through the development with dedicated pedestrian access linking both areas. This apartment block and commercial units are located within the proposed homezone area where preference is given to pedestrians.
- Ensure site layout is optimised to provide passive surveillance to open areas which will discourage anti-social behaviour.
- Ensure the layout and design allow for pedestrian permeability for access to the larger recreational areas for all residents including outdoor gym, green areas for ball games and a significant network of walking tracks.

- Retention of large portions of existing mature trees and vegetation where possible to provide a sense of maturity to the development as a whole.

The above objectives are in accordance with the principles of DMURS and the layout for the proposed housing scheme has been carefully developed to provide residential clusters which centre around open public spaces. Additionally, the development is completed with a number of varied walking routes which provide excellent permeability throughout the entirety of the development.

The street networks within the development have been designed to maximize connections between the existing Rosshill road to the north and a potential future development to the south. Weaving pedestrian routes are prevalent throughout the entirety of the development including interconnection between cul de sacs. This ensures pedestrians living in the cul de sacs can access the main walking routes, creche and commercial units by the shortest route (i.e. along northern boundary) and avoid having to walk back up to the main spine road.

A high degree of permeability and legibility have been provided with the proposed layout creating a legible network of streets and footways which are easy to navigate for both drivers and pedestrians. The overall design delivers a road networks that is generally curvilinear in nature. The connectivity and permeability is shown in Figure 1.3 below.

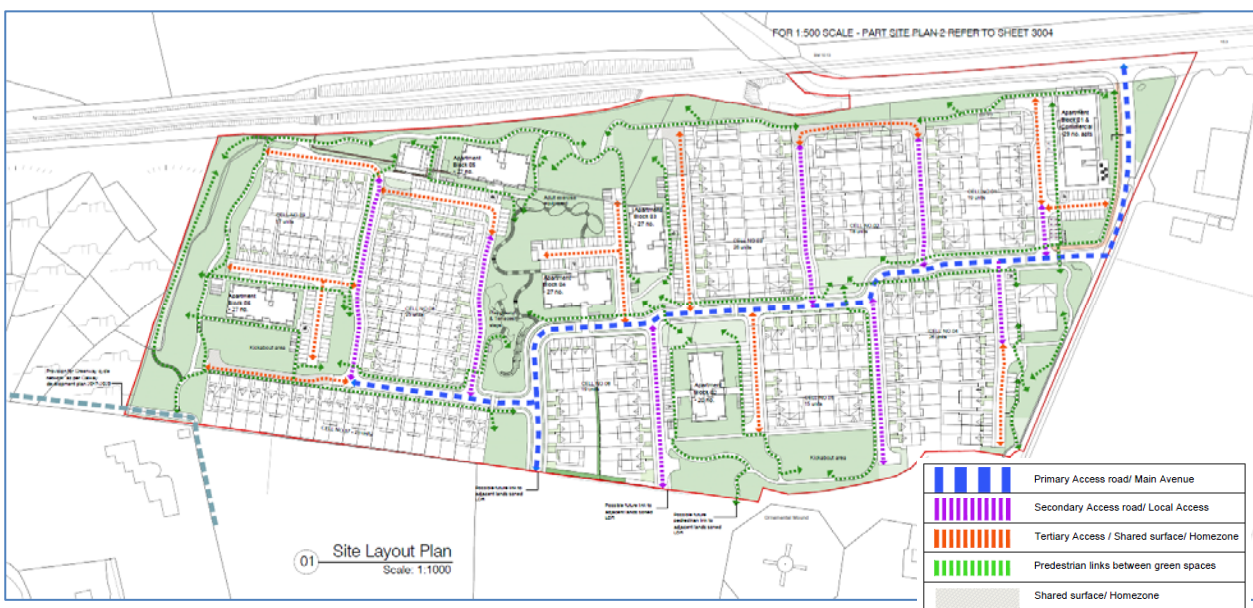


Figure 1.3 – Site Connection routes (ONOM Design Statement)

The main pedestrian and cyclist access route to the proposed development will be from the proposed new entrance off Rosshill road. Once outside the extent of the development, pedestrians shall utilise the existing pedestrian arrangements. It is proposed that footway repairs will be carried out along section of Rosshill Road to ensure a complete and adequate walking link route is provided up to the main Dublin Road. These proposals are demonstrated in more detail on drawing 10690-2014. See Figure 1.4 below for walking distances and bus routes. Similarly, cyclists will utilise the main access route the north east of the site while a provision for a cycle has been allowed for as indicated in the south west corner to align with the proposals of the Galway City Council Development Plan 2017-2023.

Vehicular access to the site will be via the proposed realigned access route off Rosshill road. Rosshill road connects to the R338 (Coast Road) some 560m to the east of the development entrance and to the R338 (Old Dublin Rd) some 780m to the west of the proposed development entrance.

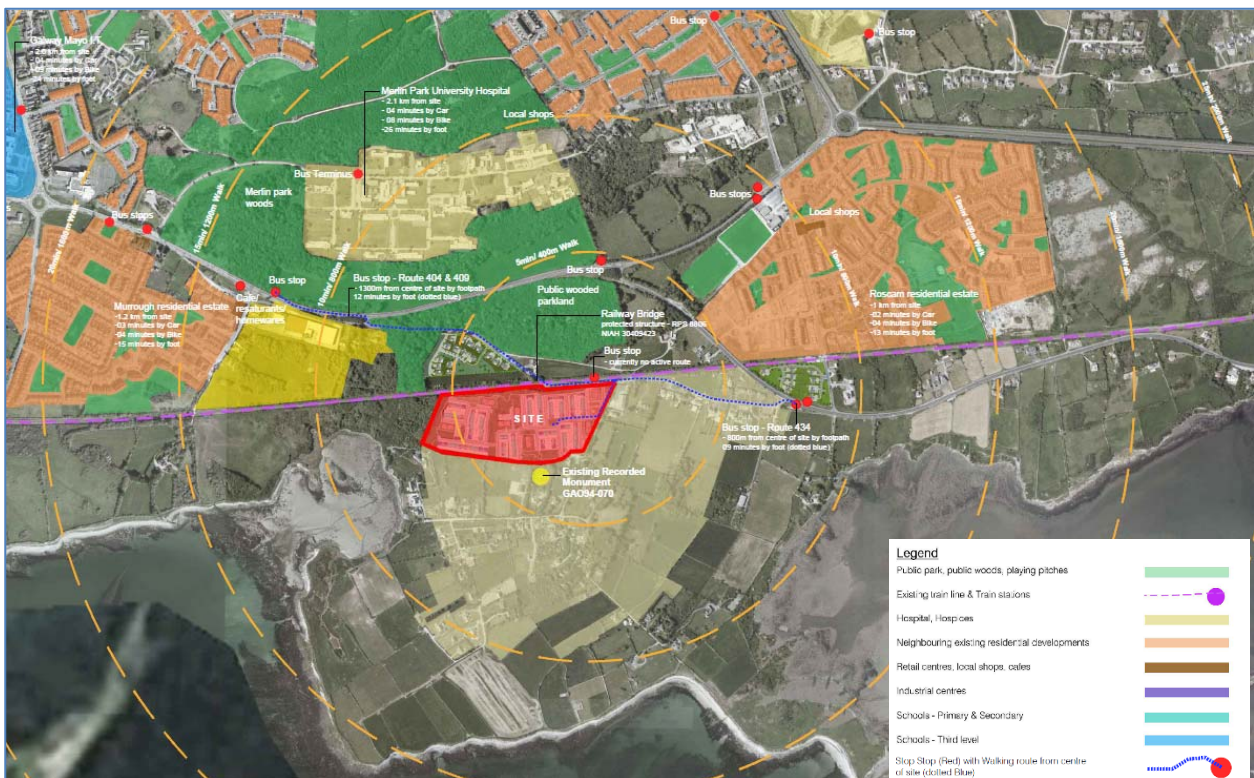


Figure 1.4 – Walk to Bus Stops

The site is organised around a number of large public open space situated throughout the entirety of the development allowing for use by all residents. All public areas are well serviced by interconnected footways.

The footways along the western boundary and northern boundary will meander through large clusters of existing mature and semi-mature trees providing a sense of place to users while somewhat creating a visual barrier to the Rail infrastructure to the north.

The layout also proposes to retain a portion of the existing dry stone boundary walls which currently runs along the front of apartment block 5 and the wastewater pumping station. This will give a sense to the homeowners of a rural setting while subtly recognising the former use of the site as agricultural lands. An attractive former boren lies along the western boundaries and is lined on either side with mature Beech trees which will provide a unique walking route for pedestrian which will be virtually untouched by engineering works. For more detail on how this is achieved please refer to the Landscape Design Statement and drawings.

A large number of interconnecting pedestrian routes which run internally and along the Rosshill road to the north ensures it remains well connected to the nearby bus stops which in turn provides good access to local amenities within east of the city and the nearby Merlin area of Galway City.

1.1.2 Design Principle 2:

The promotion of multifunctional streets that balance the needs of all users within a self-regulating environment.

The road network design throughout the proposed development deliberately avoids long, straight stretches of carriageway whereby road users might be able to use higher vehicle speeds. The short, curving roads not only create a passive method for controlling the speed of the vehicular movements throughout the development but also create a pleasing experience for the pedestrians and drivers.

The development provides a good mix on both on street and 'in-curtilage' parking for residents. Adequate on street parking is provided in close proximity to each of the apartment blocks. The main form of parking for homeowners in the development shall be 'in-curtilage'. This has been specifically designed to align with homeowner's preference to have their private vehicles positioned within the limitations of the individual site ownership and to avoid a feeling of over dominance associated with having the majority of parking located on-street. Figure 1.5 below illustrates the street surfaces and therefore demonstrate the hierarchy of street users.



Figure 1.5 – Proposed Development Site Layout

Pedestrians, cyclists, and vehicular traffic will be integrated in this proposed development as per section 1.7.1 of the National Cycle Manual (NCM). There are proposed shared surfaces throughout the development to help highlight same, the integration of cyclist & pedestrians onto the road. A total of 741 bicycle parking spaces will be provided through out the development with a number of these being covered. Most bicycle parking locations have been provided near the apartment blocks & the creche to help promote cycling. A total of 595 no. car parking spaces are proposed for the development as a whole. Refer to TTA for further details.

An allowance for designated Go Car Hire Scheme has been catered for within the development to encourage car hire/sharing thus reducing the requirement for individuals to have their own car. A letter of support has been obtained from GoCar and EV charging points are proposed for the

apartment blocks with houses having the necessary ducting provided should the residents wish to install an EV point.

A total of 741 bicycle parking spaces are proposed in the scheme and a number of locations throughout the site. All bicycle stores are abutting footpaths or roads for accessibility. Refer to Figures 1.6 & 1.7 below for a typical example of the bicycle parking area. A possible bike share location, as part of the Galway bike share scheme is shown adjacent to the commercial development adjacent to the site and will consist of approximately 10 no. spaces.

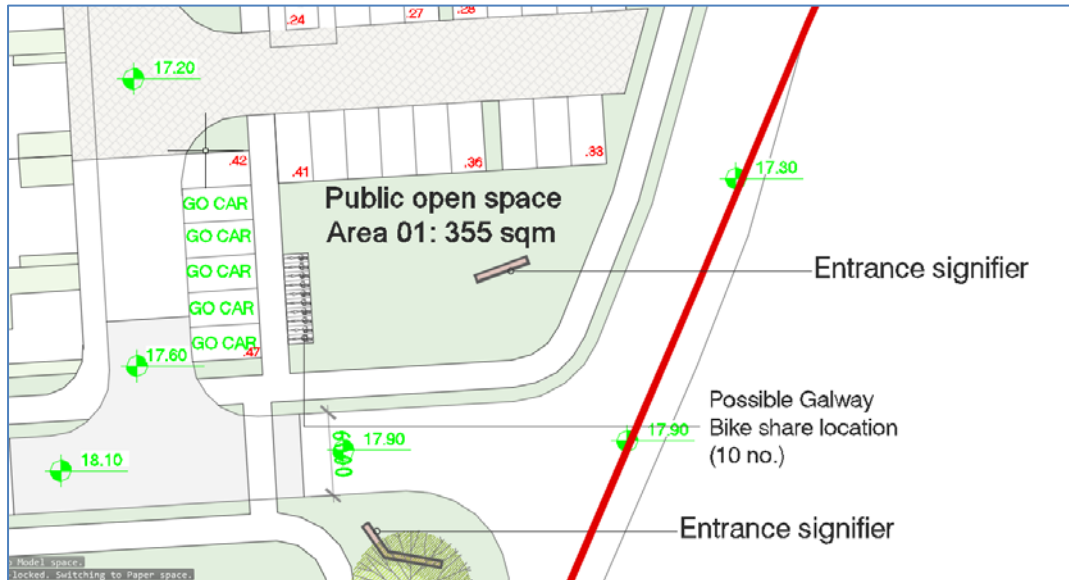


Figure 1.6 – Proposed Possible Bike Share Storage

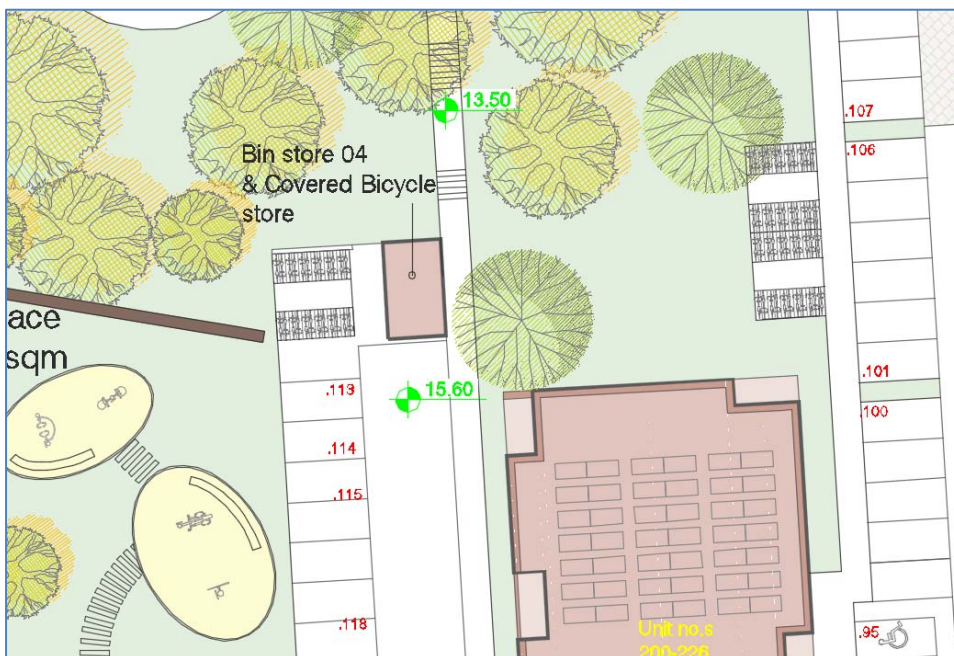


Figure 1.7 – Typical Bikre Storage

Refer to architect's drawings 18128-3003 & 18128-3004 for the proposed locations of the bicycle parking areas. Pedestrians can gain access to all areas of the proposed development by way of the pathways and formal and informal crossings. This will result in a continuous pedestrian route from all locations within the proposed development and to the other local developments.

In accordance with section 4.3.5 of DMURS, which refers to the NCM, this proposed development promotes cycling as a sustainable form of transport and seek to rebalance design priorities to promote a safer and more comfortable environment for cyclists. To achieve these goals, the NCM recognises the importance of slowing vehicular traffic within cities, villages, and the design advocates many of the measures contained within this manual, such as narrow vehicular carriageways and tighter corner radii.

The principle source for guidance on the design of cycle facilities is the NCM published by the National Transport Authority. The NCM provide designers with a comprehensive set of design measures aimed at achieving an overall quality of service that is appropriate to user needs. e.g.

Figure 4.52 from the NCM (Figure 1.8 below), provides an overview of the integration and segregation of cycle traffic within the carriageway based on vehicle speeds and traffic volumes. On lightly-trafficked/low speed streets, as proposed on this development, designers are generally directed to create shared streets where cyclists and motor vehicles share the carriageway, as shown by the green symbol in the figure below.

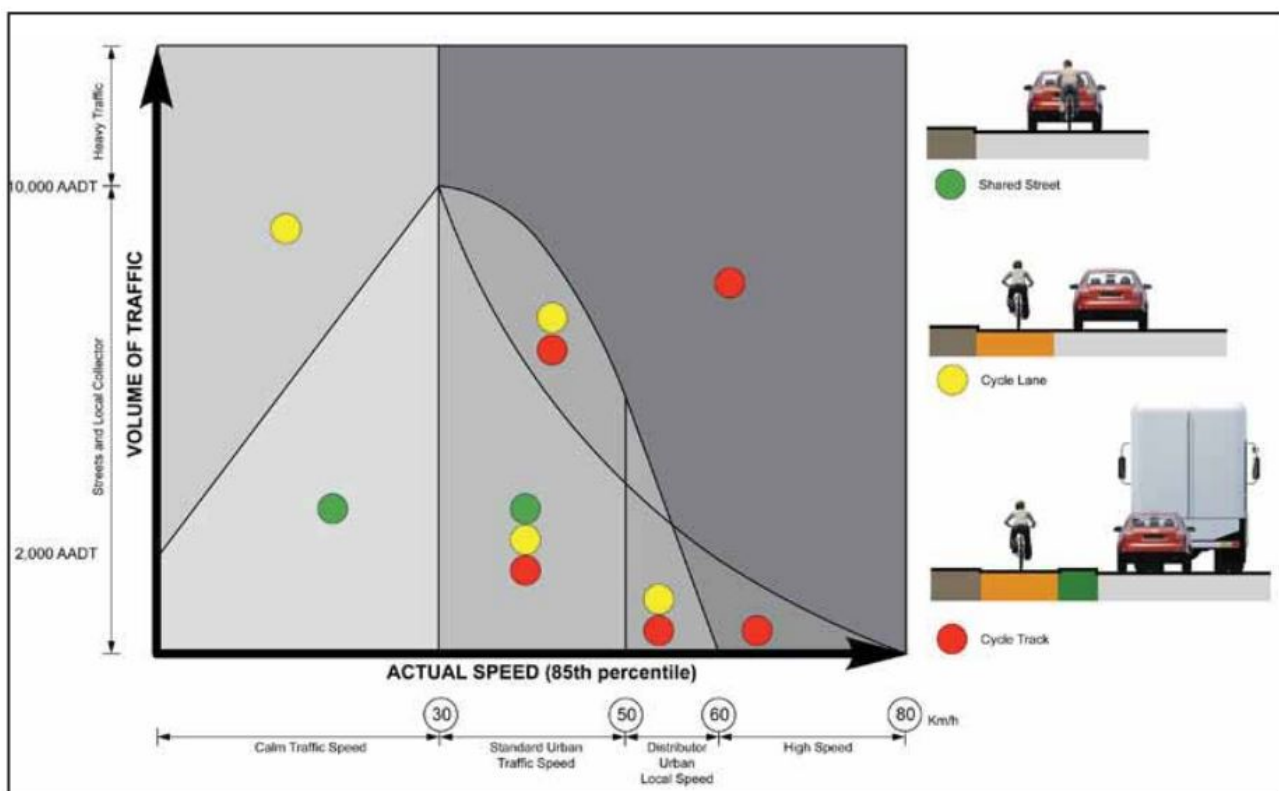


Figure 1.8 – Extract from national Cycle Manual

Therefore shared cycle and vehicle surface shall be provided within the proposed development in line with the guidelines. For commuter journeys, cycling can be considered as a feasible means of transport for those working within 8km of the development. The city centre is located approximately 5.0km to the West. This represents a 16 - 20 min cycle time for the average cyclist from the proposed estate.

1.1.3 Design Principle 3:

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

Vertical deflections or raised crossing areas have been positioned throughout the proposed development at specific considered locations to promote lower speed limits in addition to providing suitable crossing points for pedestrian at-grade. These raised crossings shall provide the pedestrian with a sense of priority over vehicular movements at these interfaces. While footways adjacent to the roads have been provided through the development, a further independent network of footways is included through the open spaces away from vehicular routes as illustrated on Architectural drawings 18128-3003 and 18128-3004 and Landscaping drawing 19112-3-100.

The pedestrian crossings located throughout the development are strategically positioned along key travel desire lines with the crossings having a min width of 2.0 m wide in accordance with DMURS 2019 guidelines. Pedestrian footways adjacent to the carriageways are min 2.0m wide with the footway meandering through the open spaces particularly along the northern boundary. Road widths throughout the development are predominantly 5.5m wide with the exception the main entrance adjacent to the creche increase to 6.0m wide (to accommodate the junction) in accordance with the guidance in DMURS (2019) section 4.4.1. Refer to drawing 10690-2006 and 10690-2007 which illustrates the proposed crossing location throughout the site.

DMURS suggests that measures should be considered that reduce the dominance of the vehicle in favour of pedestrian and cyclists having dominance within a street. The internal layout of the proposed development incorporates a number of design features such as distinctive surface materials and colours which will establish a sense of place while increasing the overall safety of providing a shared surfacing for all road users. The inclusion of a shared paved vehicular and pedestrian areas and an abundance strategically positioned planting/vegetation will also lower vehicle speeds throughout the development and give the pedestrian a sense of priority as shown in the context of the site in Figures 1.9 – 1.13 below which demonstrates the quality of the pedestrian environment.

Strategically placed planting is known to have a positive effect on drivers to help reduce speeds through residential areas and this philosophy has been adopted during the detailed landscaping design.



Figure 1.9 – Example of raised pedestrian crossing



Figure 1.10 – Example of street surfaces



Figure 1.11 – Example of raised pedestrian crossing



Figure 1.12 – Example of street surfaces



Figure 1.13 – Example street surfaces and vehicular control measures

1.1.4 Design Principle 4:

Greater communication and cooperation between design professionals through the promotion of a planned, multidisciplinary approach to design.

The design of the proposed housing development has been carried out taking into account considerations from many disciplines including Town planning, architecture, landscape architecture, engineering and environmental specialists. Additionally, the developer has engaged with the adjacent site owners, in a collaborative approach, to arrangement for water and foul rising mains to be laid as part of the adjected development's needs along Rosshill road in order to greatly reduce excavation needs for the proposed development further down the line.


The design team have progressed through several iterations of the layout in line with comments received from each discipline while also taking into consideration comments received from Galway City Council to arrive at a solution which meets the guidance outlined in the DMURS.

Discussions were held with Galway City Council during the formal Stage 1 Section 247 meeting and feedback received during the meeting was brought through to subsequent revisions of the site layout. A number of additional discussions/ meetings were held with Galway City Council (particularly the Roads and Water Services departments) in a collaborative manner to culminate in proposals that ultimately reflect a positive design which both satisfies the Developers objectives and meets the Council's requirements.

The resulting layout provides a development of high standard which incorporates spatial requirements and takes into account relevant plans and policies.

www.tobin.ie

 TOBIN Consulting Engineers

 @tobinengineers

Galway
Fairgreen House,
Fairgreen Road,
Galway,
H91 AXK8,
Ireland.
Tel: +353 (0)91 565 211

Dublin
Block 10-4,
Blanchardstown Corporate Park,
Dublin 15,
D15 X98N,
Ireland.
Tel: +353 (0)1 803 0406

Castlebar
Market Square,
Castlebar,
Mayo,
F23 Y427,
Ireland.
Tel: +353 (0)94 902 1401

London
17 Bowling Green Lane
Clerkenwell
London,
EC1R 0QB,
United Kingdom.
Tel: (+44) (0)203 915 6301