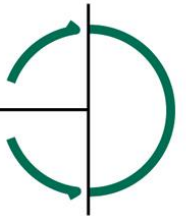




Proposed Large Scale Residential Development – Lands at Sarsfield Road, Wilton, Cork

Applicant: Land Development Agency

DMURS and Cycle Design Manual Compatibility Statement



LDA WILTON SARFIELD ROAD - PROPOSED LARGE-SCALE HOUSING DEVELOPMENT

Description:

DMURS & Cycle Design Manual Compatibility Statement

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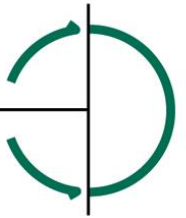
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LDA WILTON SARFIELD ROAD - PROPOSED LARGE-SCALE HOUSING

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1 STATEMENT ON DMURS COMPATIBILITY

1.1 Overview

- 1.1.1 The proposed development consists of 348 no. residential units, in addition to non-residential units, creche and community facilities and public open space.
- 1.1.2 This statement sets out the overall design approach and principles that guided the overall design development process in accordance with the *Design Manual for Urban Roads and Streets* (DMURS) and the *Cycle Design Manual* (2023) having regard to the location of the proposed development.
- 1.1.3 The proposed site layout is illustrated in Figure 1.1. A full scale version of this drawing is included as part of the Barret Mahoney Consulting Engineers (BMCE) planning pack.

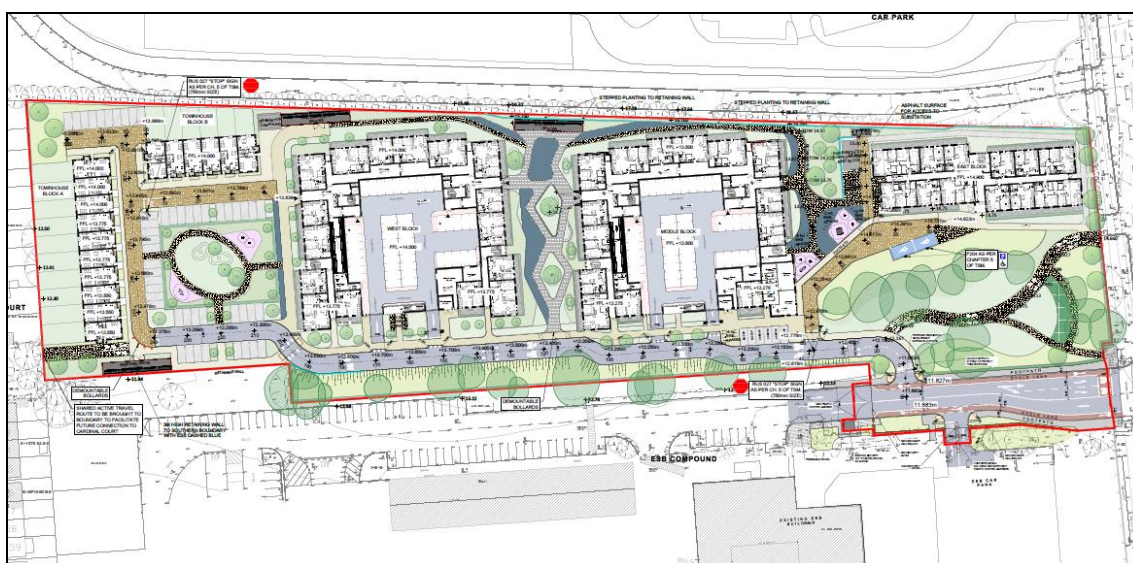


Figure 1.1 Proposed Road Layout (Source: BMCE)



2 APPLICATION OF DMURS PRINCIPLES

2.1 Introduction

- 2.1.1 The following sets out the overall principles which guided the design approach to the overall proposed scheme.

2.2 Overview

- 2.2.1 In developing the overall scheme, the design team had regard to the principles as set out in the *Design Manual for Urban Roads and Streets* (DMURS). The final scheme design proposals are an outcome of an integrated design approach that ensures the promotion of sustainable travel modes are integrated into the overall design layout.
- 2.2.2 The overall design approach sought to firstly ensure that regard was given to user priorities and secondly towards ensuring appropriate legibility for all road users. The orderly integration of the development into the surrounding residential and employment areas, and the wider urban environment, was also promoted through making provision for appropriate pedestrian, cycle and vehicular linkages to adjacent lands and the adjoining transport network.

2.3 Design Approach – User Hierarchy

- 2.3.1 The overall design approach was informed by the principles as set out in DMURS. Table 2.21 of DMURS, titled '*User hierarchy that promotes and prioritises sustainable forms of transport*', reproduced as Figure 2.1, has significantly informed the design approach, which places the needs of pedestrians and cyclists at the highest order of priority amongst road users.

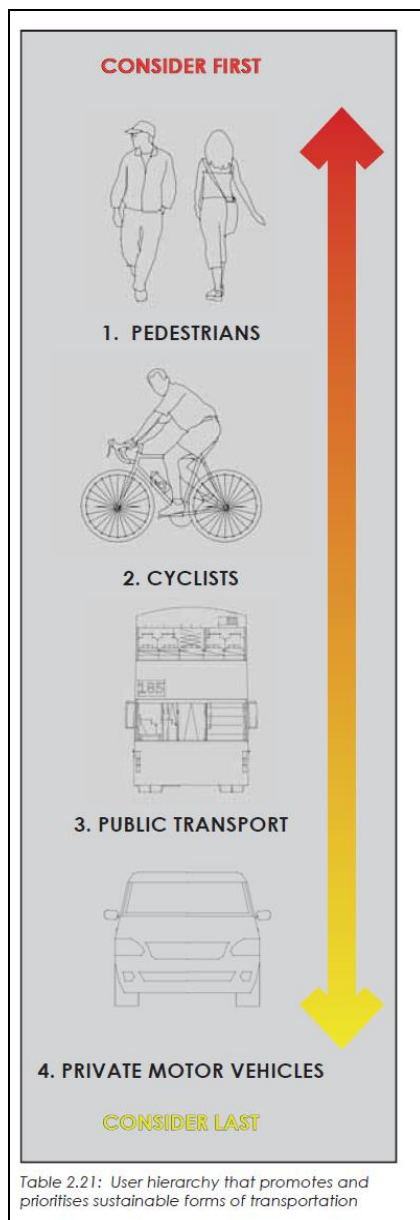
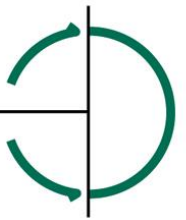


Figure 2.1: User Priorities (Source: DMURS Table 2.21)

- 2.3.2 The design approach therefore puts pedestrians and cyclists at the top of the user priorities, followed by access to public transport and then access to the wider road network via a street hierarchy consistent with those set out in DMURS.

2.4 Cycle Design Manual 2023

- 2.4.1 The design approach also sought to ensure that the overall design was consistent with the principles as set out in the *Cycle Design Manual 2023* and to ensure that appropriate and sufficient cycle parking and facilities were also included in the overall development.



3 APPLICATION OF DESIGN PRINCIPLES TO THE PROPOSED SCHEME

3.1 Overview of Proposed Design Layout

- 3.1.1 Central to the overall design approach was the need to ensure that pedestrians and cyclists were given higher priority and more direct linkage than the private car.
- 3.1.2 It is proposed that pedestrians and cyclists can travel to and from the site the proposed accesses off Sarsfield Road. In addition, a dedicated pedestrian and cycle route is provided through the site, which were designed to ensure that the needs of cyclists and pedestrians were considered ahead of vehicular traffic. Provision has also been made for the provision of a future pedestrian and cycle connection to Cardinal Court to the west. The overall internal street, cycle and pedestrian network is illustrated in Figure 3.1.

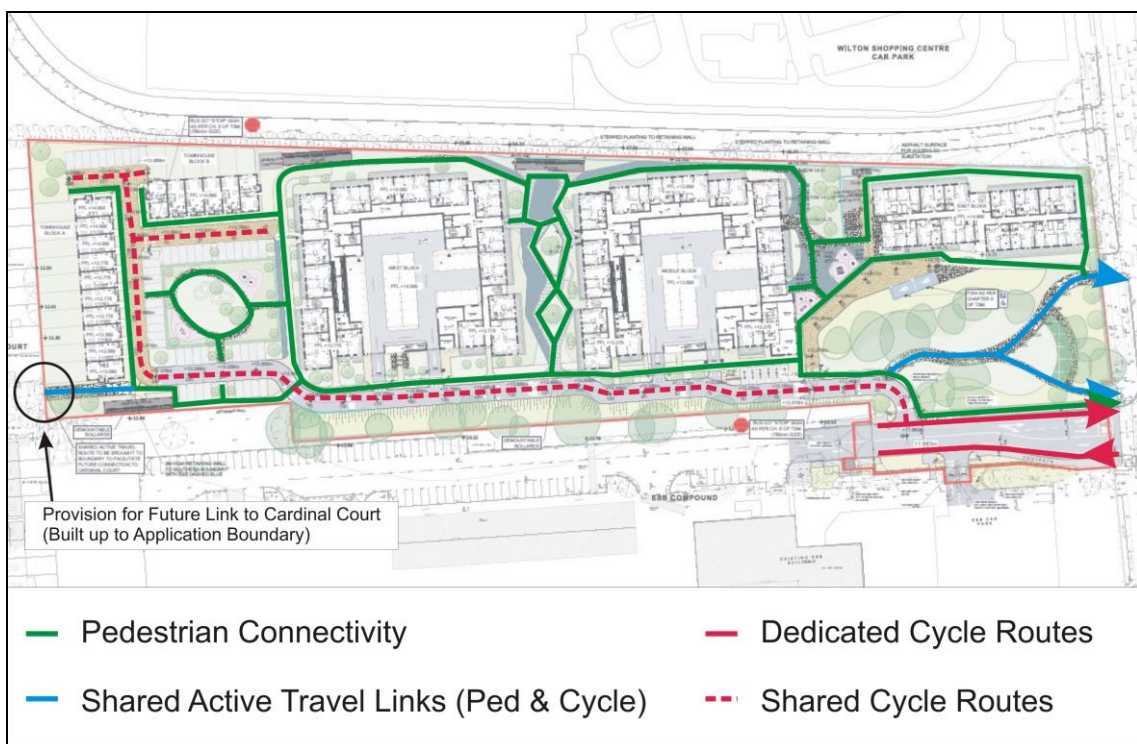


Figure 3.1 Proposed Connectivity (Background Image Source: BMCE)

- 3.1.3 The proposed development also includes extensive pedestrian-only paved areas and green areas throughout the site to facilitate greater comfort and ease of movement for pedestrians.
- 3.1.4 The entire development will also be within a 30kph Slow Zone within the proposed development boundary.
- 3.1.5 Low speed will also be promoted with junction radii designed in accordance with Cl.4.3.3 of DMURS to be between 3 - 6 metres. By providing reduced corner radii this will improve pedestrian and cyclist safety at junctions by lowering the speed at which vehicles can turn corners.



- 3.1.6 In addition, raised table crossings are used at junctions and other key locations throughout the site to slow the movement of vehicular traffic and afford movement priority to non-motorised users.
- 3.1.7 The proposed main access junction has been configured to minimise the traffic impact of the overall development. The measures such as providing a pedestrian and cycle route through the site separate from the main junction means that conflicts between more vulnerable road users is reduced.
- 3.1.8 An independent Quality Audit (*Stage 1 Road Safety Audit and Cycle and Pedestrian Audit*) has been undertaken MHL Consulting Engineers and final Quality Audit Reports (including signed feedback forms) are included as part of the planning application.
- 3.1.9 Detailed designs will also be undertaken in accordance with DMURS. *Stage 2 - Detailed Design Stage and Stage 3 - Post Construction* Road Safety Audits will also be undertaken to ensure that road safety remains part of the overall design and delivery process up to scheme completion.

3.2 Street Hierarchy

- 3.2.1 The proposed street hierarchy is shown in Figure 3.2. This shows the primary access route to the proposed development off Sarsfield Road.

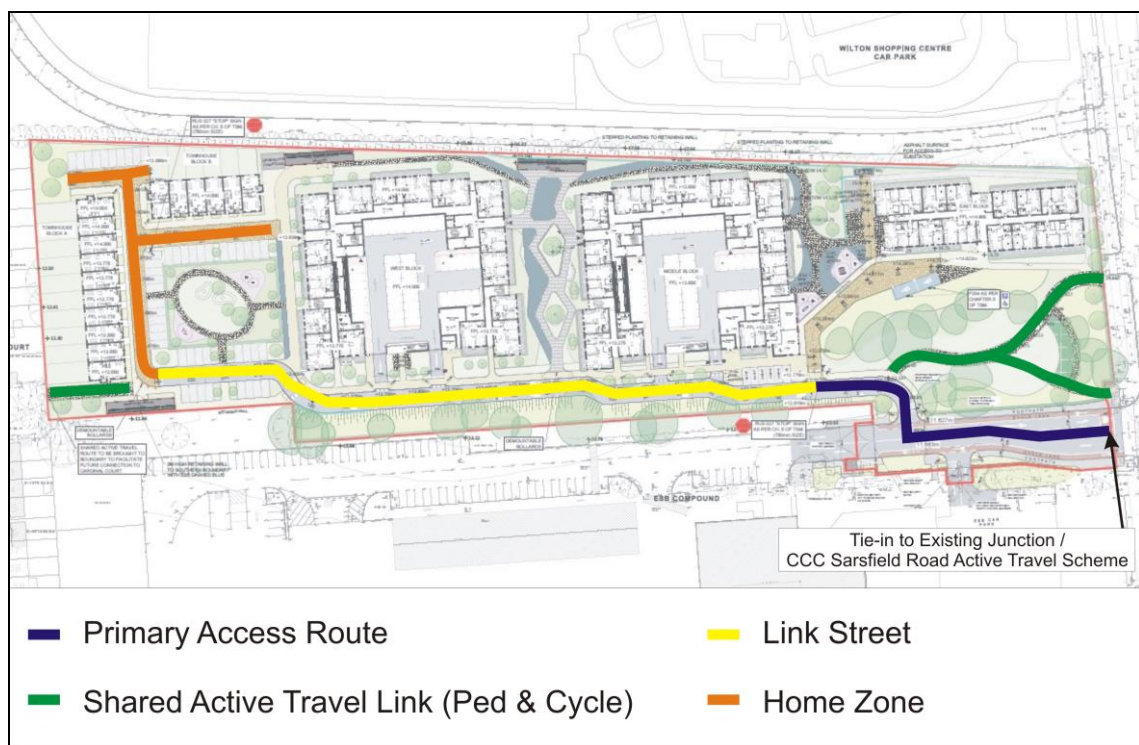


Figure 3.2: Proposed Street Hierarchy

- 3.2.2 This design approach is in accordance with the principles set out in DMURS, but more importantly will actively promote the use of the more sustainable travel modes.



- 3.2.3 A fundamental feature of the proposed development is the overlooking of the main external access points by the proposed development and overlooking provided onto all key internal streets and open spaces.

3.3 Cycle Design Manual - Compatibility

- 3.3.1 In developing the overall scheme, the design team had regard to the principles as set out in the *Cycle Design Manual*, 2023. First and foremost, the design proposals acknowledge the vulnerability of cyclists relative to motorised modes of transport as set out in the *Cycle Design Manual*. The proposals therefore seek to ensure that cyclists generally have higher priority in accessibility and connectivity throughout the development.
- 3.3.2 The specific measures proposed to prioritise and facilitate safe, comfortable, and efficient cycle movements in accordance with the *Cycle Design Manual* include:
- A low-speed environment is proposed throughout, including 30kph on all roads within the development.
 - The internal streets are located to minimise traffic levels within the proposed development and to minimise conflict with vulnerable road users throughout residential areas and reduce speed of motorised traffic.
 - Raised pedestrian and cycle platforms are also proposed internally to give greater priority to these more sustainable road users.
 - The proposed pedestrian and cycle facilities afford direct linkages to other facilities in the area or connect with low traffic flow routes that can better accommodate these road users. These facilities will also improve pedestrian and cycle facilities by existing residents in the area.
 - Full visibility will be maintained at all proposed access points to the site, with road user priority clearly established at potential conflict points.
- 3.3.3 The proposed new infrastructure set out in accordance with the *Cycle Design Manual* is also to be subject to the Quality Audit. The audit process emphasises safety and accessibility for all road users, particularly for vulnerable road users including pedestrians and cyclists.



3.4 Proposed Cross Section of Streets – DMURS & Cycle Design Manual Compatibility

3.4.1 The locations of the cross sections are shown in Figure 3.3.



Figure 3.3: Cross Section Locations

3.4.2 The proposed cross sections of the various streets within the development are detailed in Figures 3.4 – 3.9. Full scale cross section drawings are included as part of the BMCE drawing pack.

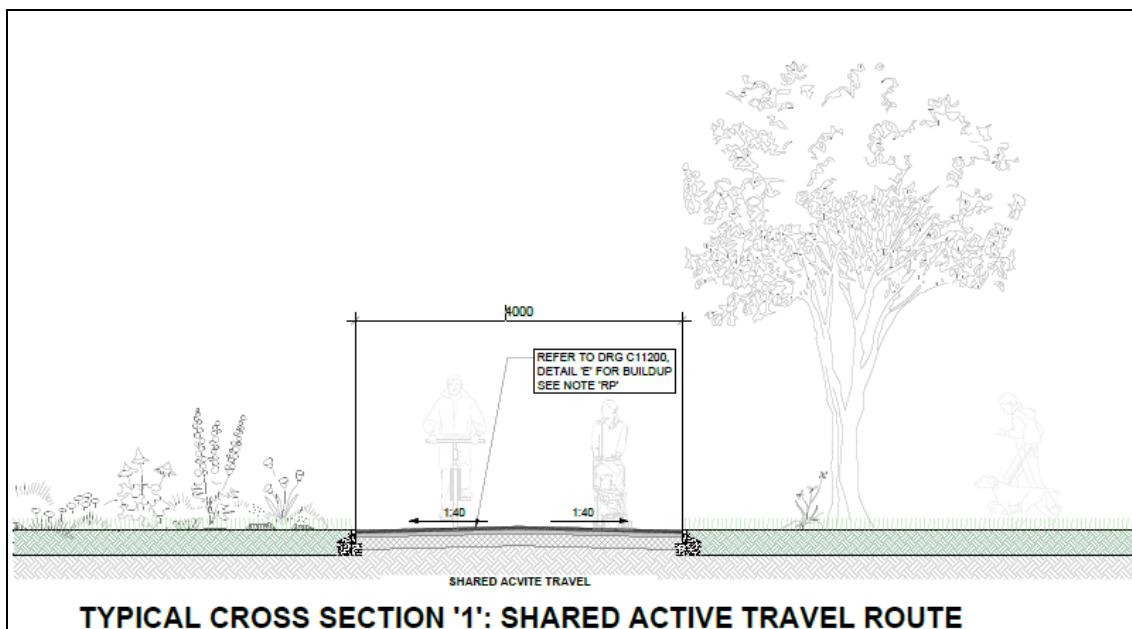
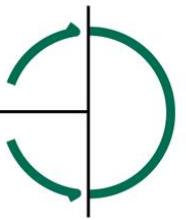


Figure 3.4: Proposed Cross Section 1 – Shared Active Travel Route (West) (Source: BMCE)



- 3.4.3 The shared pedestrian and cycle route provided for a future link to Cardinal Court is same as desired. The provision of this link up to the site boundary ensure that the planned development facilitates and provides for such a link in the future.

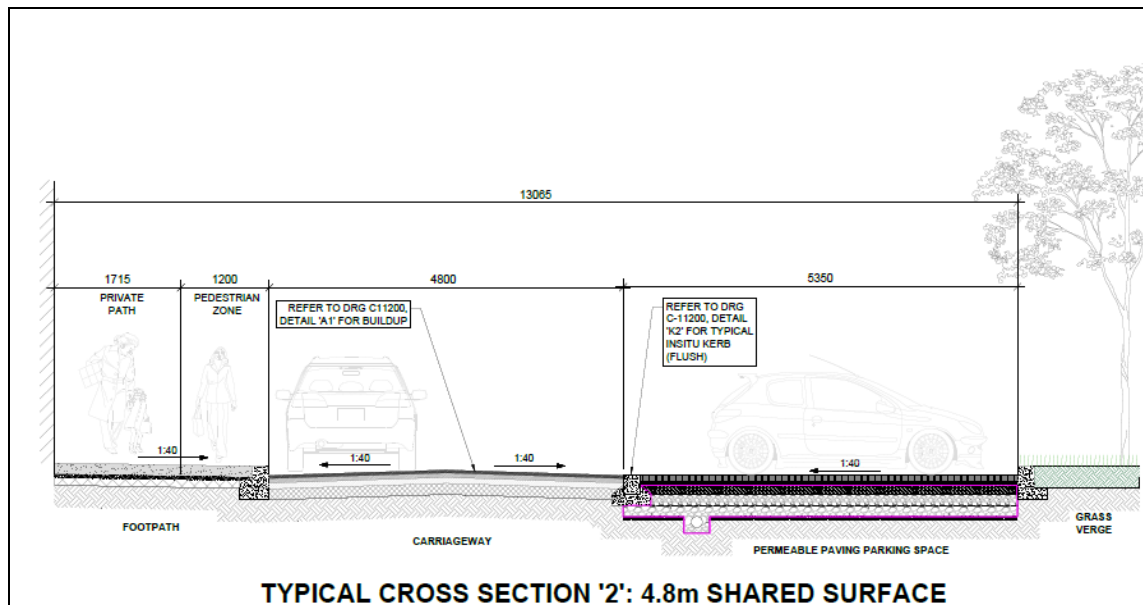


Figure 3.5: Proposed Cross Section 2 – 4.8m Shared Surface (Source: BMCE)

- 3.4.4 The proposed shared surfaces adjacent to the houses to the west of the proposed development allows for the provision of shared surface that is consistent with DMUR and the cycle design manual.

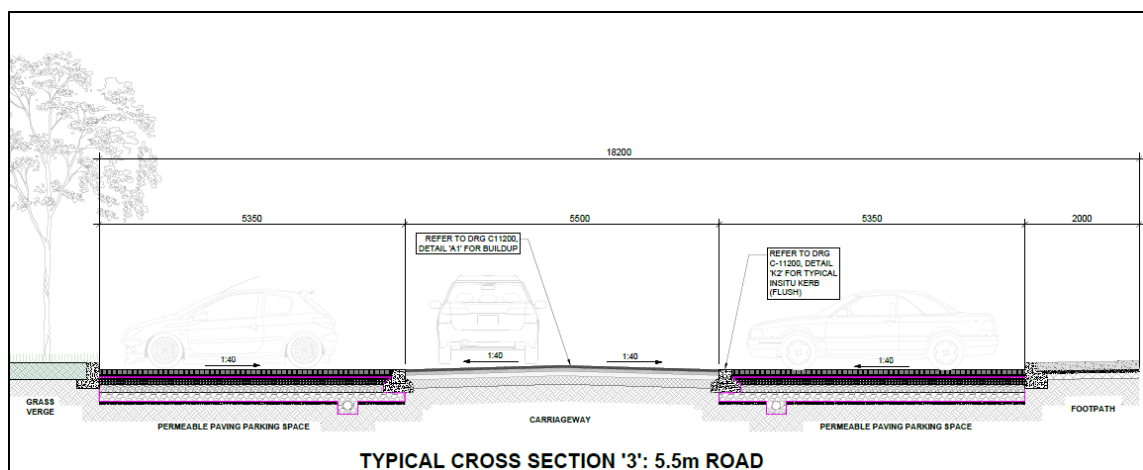


Figure 3.6: Proposed Cross Section 3 – 5.5m Road with Car Parking (Source: BMCE)

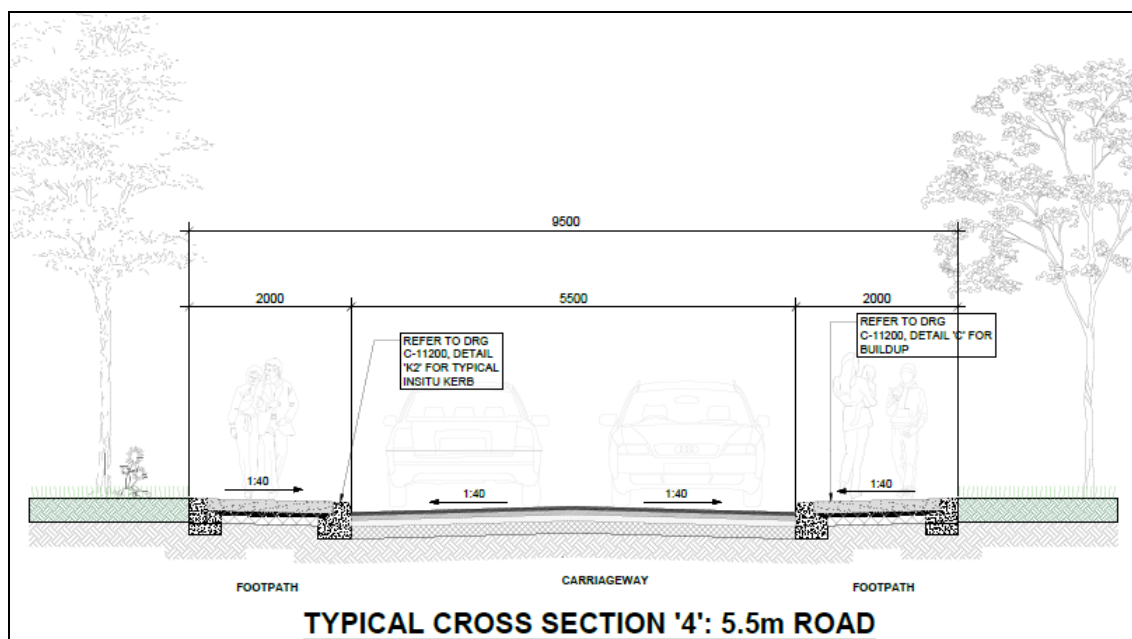


Figure 3.7: Proposed Cross Section 4 – 5.5m Road (Source: BMCE)

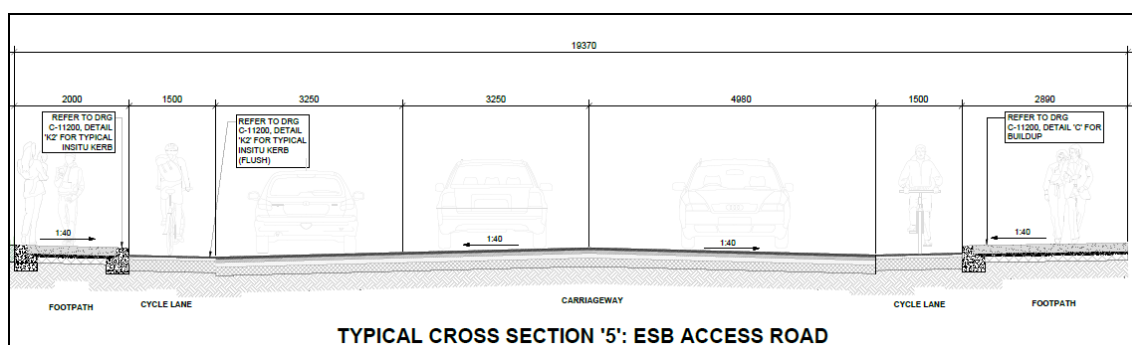


Figure 3.8: Proposed Cross Section 5 – ESB Access Road (Source: BMCE)

- 3.4.5 The existing ESB access route into the proposed development has been modified to accord with DMURS and the cycle design manual and includes for segregated cycle lane on both sides of the access route. This will serve both the existing EBS facility and the proposed development.

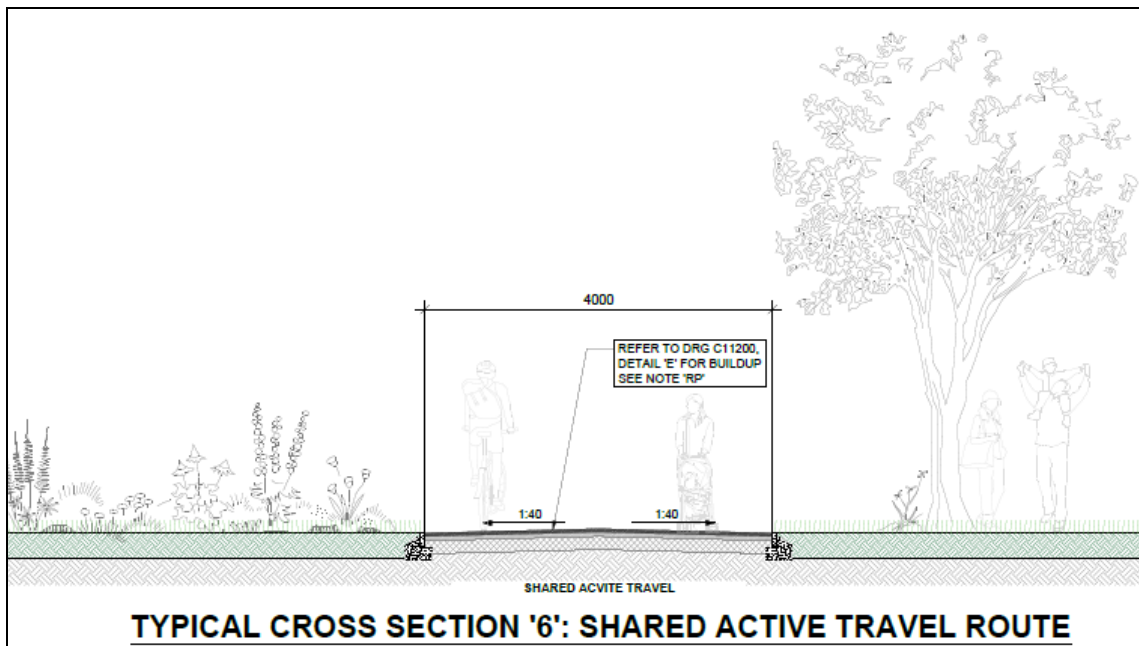
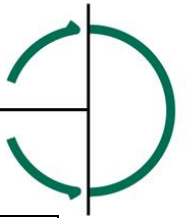


Figure 3.9: Proposed Cross Section 6 – Share Active Travel Route (East) (Source: BMCE)

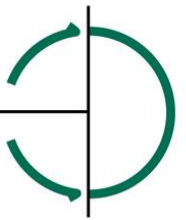
3.4.6 The proposed street cross sections vary throughout the proposed development and include a range of parallel and perpendicular car parking, but overall, on street parking is kept to a low level with the bulk of the car parking provided under the development blocks. The entire development is proposed to be a 30kph slow zone, which will facilitate a more comfortable cycling environment for cyclists on carriageway.

3.4.7 The proposed street cross sections within the development are designed in accordance with DMURS and the cycle design manual and are included in the planning application in further detail.

3.5 Access to Public Transport

3.5.1 The existing bus routes in the immediate vicinity of the subject site provide good access from the proposed development lands to the existing public transport network, which links to various destinations including Cork City Centre and to existing employment lands and local services.

3.5.2 The overall proposed development has good linkage to the surrounding locality and to Cork City Centre. Again, the priority was to provide cycle and pedestrian linkages to and from the site which in turn will connect with existing and planned routes surrounding the proposed development lands. The overall design philosophy was to promote sustainable travel modes, by first encouraging and promoting greater use of non-motorised trips, followed by access to existing and future public transport links that serve the site, has been achieved through the design process by having full regard for the DMURS principles.



3.6 Planned Cycle Linkages

- 3.6.1 There are also significant improvements planned for the bicycle network in the vicinity of the subject lands, as set out in the CMATS. The planned network in the vicinity of the subject site is shown in Figure 3.5 and includes a secondary cycle route along Sarsfield Road which borders the site to the east.

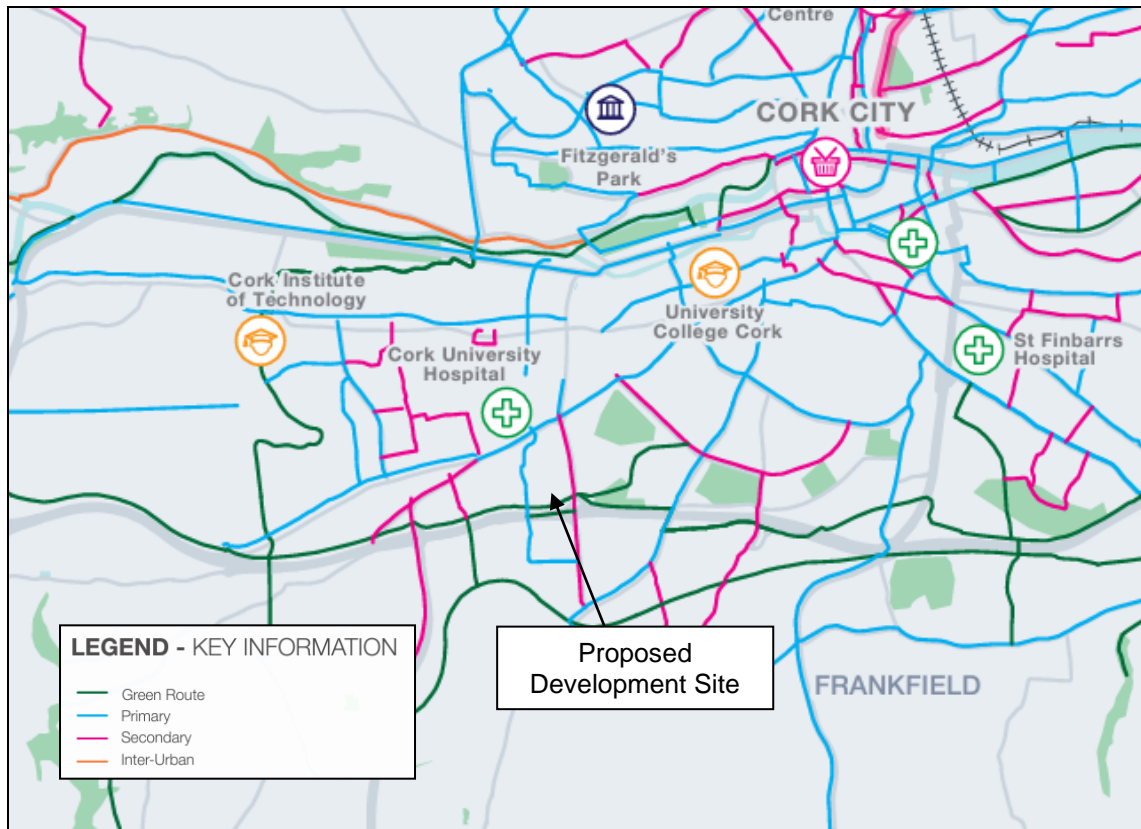


Figure 3.5: Planned Cycle Network (Source: Cork Metropolitan Area Strategic Plan)

- 3.6.2 The proposed development by virtue of its layout will further promote sustainable travel patterns to and from the proposed development over time.
- 3.6.3 In addition to the proposed upgrades in CMATS, CCC are also developing an Active Travel Scheme also Sarsfield Road. The scheme is approximately 4km in length and runs along Sarsfield Road from Munster Technological University (MTU) and Clashduv Road. The scheme aims to deliver high-quality pedestrian and cycle routes and also to upgrade the major junctions along the route to bring them in line with DMURS.
- 3.6.4 The extent of the scheme is shown in Figure 3.6.

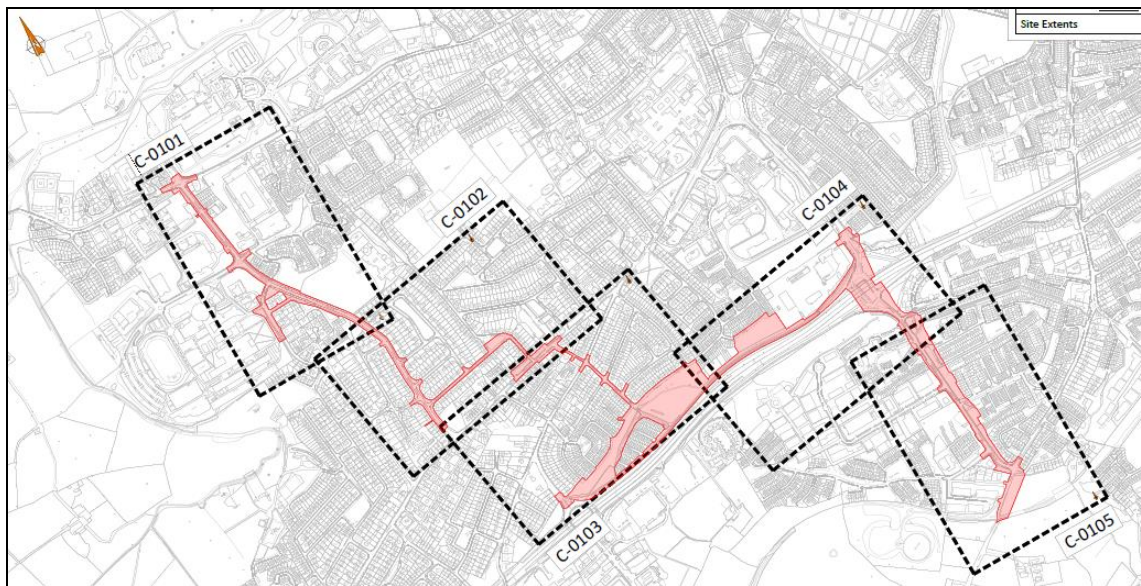


Figure 3.6: Extent of Sarsfield Road to MTU Active Travel Scheme (Source: Cork City Council)

- 3.6.5 The proposed scheme layout of the Sarsfield Road/ESB Access Junction is shown in Figure 3.7. It includes signalised parallel crossings on the ESB Access Road and Sarsfield Road south of the junction.



Figure 3.7: Sarsfield Road/ESB Access Road Junction - Sarsfield Road to MTU Active Travel Scheme (Source: Cork City Council)



- 3.6.6 It is likely this active travel scheme will be delivered in advance or in tandem with the proposed LRD scheme. The applicant will coordinate with Cork City Council to ensure that detailed design of the proposed LRD access arrangements off Sarsfield Road are appropriately integrated with the planned active travel scheme.

3.7 Complimentary Mobility Management Measures

- 3.7.1 Establishing sustainable travel patterns from the outset in any new development is preferable. It is well recognised that achieving subsequent changes to more sustainable travel modes is both difficult and costly to implement and can take years to achieve. The promotion of travel mode changes in favour of sustainable modes such as walking and cycling, and greater public transport usage is a long-standing policy objective at national and local levels. The proposed development is also fortunate to be able to link into the public transport services already available and will also avail of future public transport upgrades planned in the area.
- 3.7.2 Mobility Management Plans (MMP) are a transport demand management mechanism that aim to provide for the transport needs of people and goods. Mobility Management Plans seek to lessen the demand for the use of cars by increasing the attractiveness and practicality of other modes of transport.
- 3.7.3 The MMP included as part of a separate report, sets out the complimentary measures that will support the DMURS design philosophy that underpins the overall design of the development.

3.8 Summary

- 3.8.1 The proposed development fully promotes the sustainable transport principles as set out in DMURS and the Cycle Design Manual. The design process commenced with establishing User Priorities in accordance with DMURS. This was followed by developing a permeable and legible street layout and street hierarchy that minimises car traffic movements in the new residential areas and prioritises pedestrian and cycle linkages to the wider area.
- 3.8.2 ILTP would commend the overall design approach as one that is in keeping with the DMURS and Cycle Design Manual principles and is a largely residential development that is appropriately integrated into the existing and planned urban fabric of Wilton and the wider area.
- 3.8.3 The above compatibility statement sets out the rationale and principles of the design for the internal streets, access, and linkages through the lands within the applicant's ownership. The proposed layout adheres to the design principles as set out in the *Design Manual for Urban Roads and Streets* (DMURS) and the *Cycle Design Manual* (2023).