



# LIMERICK CITY AND COUNTY COUNCIL

## FATHER RUSSELL ROAD CYCLE SCHEME PHASE 1

PART 8 PLANNING REPORT

**APRIL 2022** 

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## **Revision Control Table**

Rev.	Status	Prepared By	Checked By	Date
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## 1. INTRODUCTION

#### 1.1 Background

MRG Consulting Engineers Limited were appointed by Limerick City & County Council to provide engineering consultancy services to prepare designs, planning documentation and tender documentation to include this Part 8 Planning Report for the provision of Cycling Facilities on the L-1429 Father Russell Road. The Scheme is located in the greater Raheen / Dooradoyle area which is a large residential area in the Southwest of Limerick City with a number of local schools and employers in the locality. University Hospital Limerick is located on the R526 to the south of the Scheme. The Crescent Shopping Centre is situated off the R926 adjacent to Ballykeeffe Roundabout and is adjacent to Limerick City & County Council's County Hall building and library. See Figure 1.1 below which identifies the location of Father Russell Road with the extents of Phase 1 highlighted in red.

This cycle project is based on the recommendations of the Limerick Metropolitan Cycle Network Study (LMCNS) which identified Father Russell Road as part of the secondary cycle network with facilities linking between the primary cycle network at the R510 at Quinns Cross Roundabout and the R526 at St. Pauls Roundabout. The route is therefore part of the strategic urban and transport planning for Limerick and has been identified to provide safe, coherent, direct, attractive and comfortable facilities to encourage cycling as a sustainable transport option. The Sanctioning Authority is the National Transport Authority. An objective of the LCCC Southern Environs Local Area Plan notes the requirements of 'Smarter Travel' and that the Local Authority will continue to seek the development of cycle and pedestrian routes throughout the plan area.

The objective of the Scheme is to provide high quality cycling facilities on sections of the L-1429 Father Russell Road in the south Limerick environs. The provision of the cycling facilities will involve an upgrade of the current road corridor to accommodate pedestrian, cycling and vehicular movements. This will be achieved by re-construction of the existing footpaths, construction of cycle tracks/lanes and narrowing of the existing road carriageway. Land acquisition is required at the Racefield Centre to accommodate the proposed upgrade works included in Phase 1 of the Scheme.

Details of the proposed works are shown on the attached drawings which are contained within the Part 8 Planning Pack ;

- 120051-401 Site Location Map
- 120051-401 Site Layout Plan
- 120051-411 Proposed Layout Plan Sheet 1 of 4
- 120051-411 Proposed Layout Plan Sheet 2 of 4
- 120051-411 Proposed Layout Plan Sheet 3 of 4
- 120051-411 Proposed Layout Plan Sheet 4 of 4
- 120051-421 Typical Cross Sections



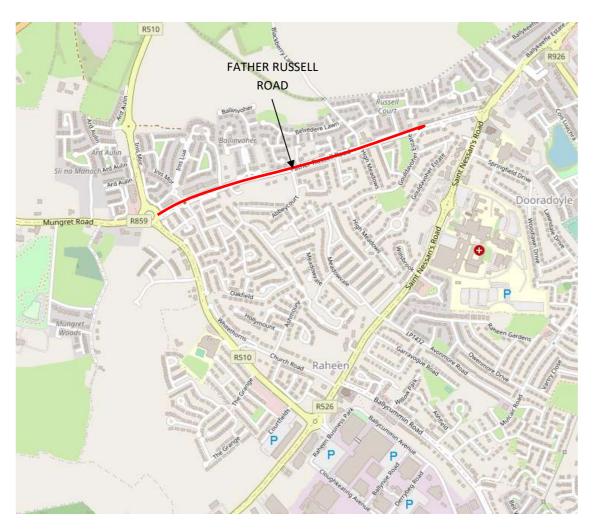


Figure 1.1 Site Location Map showing Father Russell Road



### 1.2 Policy Context and Relevant Design Standards

#### 1.2.1 Smarter Travel – A Sustainable Transport Future 2009 – 2020

Smarter Travel - A Sustainable Transport Future, was published in February 2009 and represented a new transport policy for Ireland for the period 2009-2020. The policy recognised the vital importance of continued investment in transport to ensure an efficient economy and continued social development, but it also sets out the necessary steps to ensure that people choose more sustainable transport modes such as walking, cycling and public transport. The policy is a direct response to the fact that continued growth in demand for road transport is not sustainable due to the resulting adverse impacts of increasing congestion levels, local air pollution, contribution to global warming, and the additional negative impacts to health through promoting increasingly sedentary lifestyles.

The following five key goals form the basis of the Smarter Travel policy document:

- Improve quality of life and accessibility to transport for all.
- Improve economic competitiveness through maximising the efficiency of the transport system and alleviating congestion and infrastructural bottlenecks.
- Minimise the negative impacts of transport on the local and global environment through reducing localised air pollutants and greenhouse gas emissions.
- Reduce overall travel demand and commuting distances travelled by the private car.
- Improve security of energy supply by reducing dependency on imported fossil fuels.

These aims will be achieved through 49 specific actions listed within the Smarter Travel Policy, which can be broadly grouped into 4 key areas:

- Actions to reduce distance travelled by private car and encourage smarter travel,
- Actions aimed at ensuring that alternatives to the private car are more widely available,
- Actions aimed at improving the fuel efficiency of motorised transport through improved fleet structure, energy efficient driving and alternative technologies, and
- Actions aimed at strengthening institutional arrangements.

The Smarter Travel policy also includes for a comprehensive range of supporting 'actions' including mode specific (e.g. walking, cycling and public transport etc.) and behaviour change initiatives which both encourage and provide for sustainable travel practices for all journeys.

#### 1.2.2 Draft Limerick City & Council Development Plan 2022 – 2028

Chapter 6 - Sustainable Mobility and Transport of the draft Limerick City & Council Development Plan 2022 – 2028 outlines the Council's strategy to provide an effective, sustainable and accessible transport system. A functional and effective transport network is fundamental to the creation of a compact and connected place. The National Planning Framework (NPF) and the Regional Spatial and Economic Strategy (RSES) seek to reduce dependency on the private car and secure a shift towards sustainable modes of transport, including walking, cycling and public transport.

The Plan notes that a Key project critical to enabling growth in Limerick includes the delivery of a comprehensive cycling and walking network for the Limerick City Metropolitan Area. The following objectives are included in the plan.

#### **Objective TR O14 - Walking and Cycling Infrastructure** - It is an objective of the Council to:

a) Improve and provide clear, safe and direct pedestrian linkages, cycle networks as identified in the Limerick Shannon Metropolitan Area Transport Strategy (LSMATS), including the greenways and



primary segregated cycle routes, between the employment zones, shopping areas and residential areas throughout Limerick;

b) Maintain and expand the pedestrian route network, infrastructure and where possible retrofit cycle and pedestrian routes into the existing urban road network, to provide for accessible safe pedestrian routes within Limerick.

**Objective TR O15 - Limerick Cycle Network -** It is an objective of the Council to implement in full, the Cycle Network, which will be set out in the final LSMATS, with priority given in the short term to delivering the primary cycle network and cycle routes serving schools.

#### 1.2.3 Limerick Shannon Metropolitan Area Transport Strategy (LSMATS)

The National Transport Authority published the draft Limerick Metropolitan Cycle Network Study in April 2022. The LSMATS sets out a framework for investment in transport for the Limerick Shannon Metropolitan Area for the next 20 years and includes proposals for the significant development of the cycle network.

Section 7 of LSMATS outlines the proposals to develop a consistent, clear and continuous network of urban and suburban cycle networks throughout the Limerick Metropolitan Area to ensure cycling becomes a realistic choice as a mode of transport. The Study has identified high capacity corridors which includes the Crescent Shopping Centre and the residential areas in Dooradoyle which adjoin the Scheme under consideration in this report.

#### 1.2.4 National Cycle Manual - 2011

The National Cycle Manual is a national guidance document that details the principles of sustainable safety that offers a safe traffic environment for all road user including cyclists. The manual provides guidance on integrating the bicycle in to the design of urban areas. The manual sets out five principle requirements for providing an adequate, safe cycle facility:

- Road Safety: Providing cycle infrastructure along a route should seek to maximise road safety for all road users, including cyclists. Any perception of a lack of safety could be a deterrent to cycling.
- Coherence: A cycling network should link all main origin and destination zones/centres for cyclists. Cycling routes should be logical and continuous.
- Directness: Cycling infrastructure should be as direct as possible and should minimise delays or detours. A well designed urban cycle network should confer an advantage in terms of average distance or journey time when compared with other transport networks.
- Attractiveness: The cycling environment along a route should be pleasant and interesting.
- Comfort: Cycling infrastructure should be designed, built and maintained for ease of use and for comfort. This is particularly important for beginners, tourists and recreational cyclists. Providing adequate comfort includes design aspects such as width, gradients, surface quality, stopping and delays and shelter.

The width of a cycle facility as well as the type of facility proposed (Integrated or segregated) are two key factors for providing adequate, safe facilities and a sub-standard cycle lane/track is never recommended.

The width of a cycle facility as well as the type of facility proposed (Integrated or segregated) are two key factors for providing adequate, safe facilities and a sub-standard cycle lane/track is never recommended. The designed width of a cycle facility is comprised of the effective width as well as clearances that are required in different circumstances. The Width Calculator table provides details for determining the actual width required for cycle lanes and tracks. It comprises of three main factors, A,B and C, as well as an additional factor, D, which is only relevant in certain circumstances.



#### 1.2.5 Design Manual For Urban Roads And Streets (DMURS)

DMURS 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 street networks and individual streets.

The manual places a significant emphasis on car dominance in Ireland and the implications this has had regarding the pedestrian and cycle environment. The document encourages more sustainable travel patterns and safer streets by proposing a hierarchy for user priorities. This hierarchy places pedestrians at the top, indicating that walking is the most sustainable form of transport and that by prioritising pedestrians first, the number of short car journeys can be reduced and public transport made more accessible.

Second in the hierarchy are cyclists with public transport third in the hierarchy and private motor vehicles at the bottom. By placing private vehicles at the bottom of the hierarchy, the document indicates that there should be a balance on street networks and cars should no longer take priority over the needs of other users.

The focus of the manual is to create a place – based sustainable street network that balances the pedestrian and vehicle movements. The manual references the different types of street networks, including arterial streets, link streets, local streets, and highlights the importance of movement.

#### 1.2.6 Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors

The NTA have published the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors and have notified Limerick City & Council that the guidance included is to be adopted on Active Travel Schemes including the upgrade works to the L-1429 Father Russell Road.



#### 1.3 Scheme Objectives

This Scheme aims to deliver improved safety, comfort and security for cyclists, pedestrians and the mobility impaired on the L-1429 Father Russell Road. The Scheme is being delivered to encourage an uptake in cycling as a viable and safe commuter travel mode. This objective is to be achieved through the delivery of facilities which are designed in compliance with the National Cycle Manual (NCM), the Design Manual for Urban Roads and Streets (DMURS) along with National Transport Authority (NTA) input.

The design has been developed to achieve the following objectives:

- To improve safety, comfort and security for cyclists, pedestrians and motorists;
- To provide safe cycling facilities in both directions;
- To promote and encourage cycling as a transport mode;
- The facilities shall provide appropriate integration or segregation in line with the principles of the National Cycle Manual. The overall vision for the route is to provide a segregated cycling facility where the existing road corridor permits;
- The facilities shall be to a target Quality of Service as specified in the National Cycle Manual. In the case of Father Russell Road which is an existing road corridor with existing side road junctions and entrances it is agreed with Limerick City & County Council that the target Quality of Service is a Level B. The available width can cater for a 1 + 0 cycle facility, which is a Level C facility, however 4 of the remaining 5 criteria will be designed to achieve a Level A or B Quality of Service which will allow an overall Level B Quality of Service to be assigned to the route. The number of conflicts per 100m of the route which can comprise side roads and entrances will be in the range of 1 3 which is Level B;
- To tie into the Draft Limerick Shannon Metropolitan Area Transport Strategy (LSMATS);
- To provide junction solutions in line with the Principles of Sustainable Safety, that meets with the five needs of cyclists and the target Quality of Services outlined in the National Cycle Manual (NCM);
- To design a facility that complies with the National Cycle Manual published by the National Transport Authority and the Design Manual for Urban Roads and Streets and any other relevant guidelines.

The primary deliverables for the project are the provision of cycle facilities to the National Cycle Manual incorporating improvements to crossing facilities for pedestrians and cyclists particularly at junctions. It is proposed to provide segregated cycle facilities on both sides of the road where feasible with a minimum clear cycle track width of 1550mm (or 1500mm). The cycle track will be separated from the road carriageway by a 200mm (or 250mm) wide upstand kerb. The scheme will also include modifications to the footpath widths with a minimum footpath width of 1800mm proposed. Other elements to be delivered in conjunction with the above include junction improvements as required, works to bus lanes/stops, pedestrian facilities with associated modification to drainage, line markings and signage etc. Figure 1.2 shows the extents of Phase 1 and Figure 1.3 shows the proposed typical cross section to be provided for the extent of the Scheme.

The current situation on the L-1429 Father Russell Road is considered to be unsafe and unattractive for cyclists due to the absence of dedicated cycle facilities and the traffic volumes on the road with multiple vehicular side roads and accesses that are designed with the prioritisation of motorised vehicles in mind. Existing side road junction arrangements are difficult for the vulnerable road user due to wide carriageway approach widths, large junction radii, wide circulating carriageway and resultant high vehicular speeds.



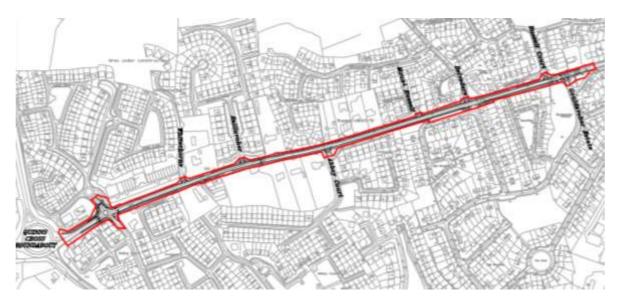


Figure 1.2 Proposed Site Extents of Phase 1

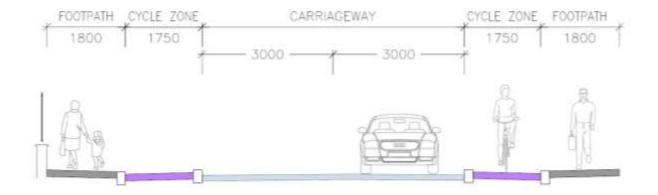


Figure 1.3 Typical Cross Section showing proposed footpath, cycle and road carriageway arrangement.



#### 1.4 Proposed Design

The proposed cross section design is based on P65 of the National Cycle Manual which relates to cycle facilities on collector roads with speed up to 50km/h with a continuous upstand to be provided between the cycle track and roadway. Refer to Figure 1.4 below. This arrangement is adapted in the BusConnects guidance with the upstand kerb arrangement illustrated on P5. Refer to Figure 1.5 below.



Figure 1.4: Cycle Track on Collector Road – P65 NCM

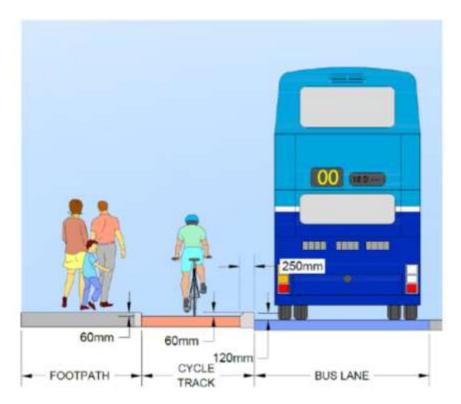


Figure 1.5: Cycle Track Segregation – P5 BusConnects Design Guidance Booklet



The existing carriageway width on Father Russell Road is typically 7.5m. DMURS includes guidance on carriageway widths and recommends that designers should minimise the width of the carriageway. Father Russell Road is largely a residential access road linking the residential estates to the R510 to the west and the R526 to the east. There is no parking provided on the roadway with very little frontage development that would encourage parking. Low to moderate speeds should be encouraged on the roadway with the recommended width in DMURS being 6 - 6.5m. BusConnects recommends a traffic lane width of 3.0m in areas with a speed limit of  $\leq 60$  km/hr. In view that the existing roadway is straight and there is infrequent use of the road corridor by larger vehicles it is proposed to adopt a 6m wide carriageway.

DMURS also recommends reducing corner radii to improve pedestrian safety at junctions with low design speeds encouraged in the turning movements and where movements by larger vehicles are infrequent. This recommendation would apply to Father Russell Road with the side roads accessing mostly residential areas. Maximum corner radii of 1 to 3m are recommended. In view that cycle tracks are also traversing the side road junctions it is proposed to adopt 1m radii to the footpath kerb. A 3m turning radius is proposed to the outside cycle kerb.

Landscaping layouts have been prepared for the Scheme and are included in the Planning Pack. The layouts show the locations of tree, shrub and hedge planting to be carried out in conjunction with the road corridor upgrade.



#### 1.5 Part 8 Planning Process

All developments by a Local Authority of certain scale are subject to a public consultation process as set out in the Planning and Development Regulations. The process is referred to as a 'Part 8 Planning Process'. The process requires that a notice of the proposed development is given in the public press and that a site notice is erected. The notice will set out where the plans and details of the proposal are available for inspection by the public, the dates during which the plans and details are available and the dates for which written submissions have to be received by the Local Authority.

Submissions (or observations) which are received by the Local Authority are then considered in the preparation of a Part 8 'Managers Report' which is subsequently presented to the Councilors for adoption. The 'Managers Report' lists those who made a submission together with a summary of the points made in the respective submissions. The report then addresses each submission. Arising from consideration of the representations, the 'Manager's Report' sets out whether or not to proceed with the originally planning proposal or proceed with a modified proposal. It is then put to the members of the Council to grant Part 8 Planning Approval or not.

In accordance with Part XI of the Planning & Development Acts 2000 (as amended) and Part 8, Article 81 of the Planning and Development Regulations 2001 (as amended), notice is hereby given that Limerick City & County Council proposes to carry of the following development:-

- Construction of dedicated cycle track / lane facilities on both sides of the L-1429 Father Russell Road over an approximate length of 1000m between the tie in with the existing cycle facilities at Quinns Cross Roundabout on the R510 and the Gouldavoher junction. The cycle facilities are to segregated where feasible with a minimum clear cycle track width of 1550mm;
- Re-construction of pedestrian footpaths on both sides of the L-1429 Father Russell Road over an approximate length of 1000m;
- Alterations to carriageway widths over approximately 1000m of the L-1429 Father Russell Road with a minimum carriageway width of 6m to be provided;
- Re-construction of a section of the boundary wall to the Racefield Shopping Centre along with amendments to the pedestrian access arrangements to the Centre from the public footpath;
- Re-construction of existing bus stop facilities including the provision of an off line bus stop opposite Belvedere Court;
- Upgrade of existing controlled pedestrian crossing adjacent Russell Court to a controlled toucan crossing;
- Installation of traffic calming measures on the L-1429 Father Russell Road to include raised zebra crossings on the 4 arms of the Racefield Roundabout, a raised zebra crossing adjacent the entrance to Ballinvoher, a raised uncontrolled pedestrian crossing adjacent the entrance to Mount Russell and upgrades to existing junction arrangements to side roads off the L-1429 Father Russell Road with raised pedestrian crossings at certain junctions;
- Installation of LED public lighting and improvements to surface water sewers, foul sewers, watermains, gasmains and further utility services where required;
- New road markings and coloured surfacing to cycle facilities where required;
- Existing trees to be removed / cut back as required for the construction of the footway and cycle facilities. New trees and landscaping to be provided to compensate for removal of trees.

The development is to be carried out in the townlands of Ballykeeffe and Gouldavoher, Limerick.



#### 2. IMPACT OF THE SCHEME

#### 2.1 Ecological Constraints

#### 2.1.1 Special Area of Conservation (SAC)

The scheme is greater than 1 kilometer from the Lower River Shannon Special Area of Conservation and greater than 1 kilometer from the proposed National Heritage Area of the Inner Shannon Estuary Southern Shores. The scheme is greater than 500m from the proposed NHA of Loughmore Common Turlough. Any potential improvement options will need to be checked for potential downstream impact on the above sites arising from potential construction stage site works spillage or contaminated run-off. Water pathways will need to be checked for storm water road surface water runoff and collection system.

The scheme is not close enough to any of the Natura 2000 protected sites to be a cause for concern and based on the current proposed arrangement of the cycle facilities and associated development works no significant ecological constraints have been identified at this stage.

#### 2.1.2 Flood Risk

Flood maps from the OPW for both Fluvial and Coastal Flooding events were reviewed as part of identifying constraints. There are no know flooding issues associated with the scheme.

#### 2.1.3 AA Screening

An Appropriate Assessment (AA) Stage I Screening Report has been completed in respect of the development works and has determined that a full Stage II Appropriate Assessment is not required.

Further detail is set out in the Doherty Environmental Consultants Ltd. AA Screening Report which is included with the Planning Documents.

#### 2.1.4 EIA Screening

An Environmental Impact Assessment (EIA) Screening Report has been completed in respect of the development works and the evaluation undertaken has identified that the development works do not meet the thresholds for which preparation of an EIAR is a mandatory requirement. The EIA Screening Report recommends that the Local Authority takes account of the information provided in the Report and can conclude that the development works do not have the potential to have likely significant effects on the environment.

Further detail is set out in the Minogue & Associates EIA Screening Report which is included with the Planning Documents.

#### 2.1.5 Arboricultural Constraints

An Aboricultural Impact Assessment was completed in February 2022 by Aborecare including a survey of existing trees along the route of the Scheme. The survey included an assessment of the trees, their quality and value in accordance with BS 5837:2012. A total of 76 trees were individually surveyed with two trees noted in Category A – High Quality, 58 trees noted in Category B – Good Quality and 16 trees noted in Category C – Low Quality. The Arboricultural Impact Assessment is included in Appendix E of this report.

Overall, it is proposed to remove 17 existing trees in the public area as identified on the accompanying layout drawings to facilitate the provision of the cycle tracks, improvements to the pedestrian footpaths and construction of an off line bus stop. A further hedgegrow comprising lawson cypress trees on a neighbouring private property are also proposed to be removed. The hedgegrow trees are greater than 30 years old, are non-native trees and currently overhang the existing footpath to Father Russell Road. The hedgegrow trees are prone to windblown damage and pruning of same would be unattractive. It is proposed to replace the existing hedgegrow trees with new native hedgegrow screening and inset specimen trees.

Planters with shrubs along the wall to the Racefield Centre are also to be removed. Landscaping works to be carried out with the development works will include for new tree and shrub planting to compensate for the removal of the existing trees. Measures are also to be undertaken during the development works



to protect the remaining tree vegetation. The proposed Landscape Layouts are included in Appendix G of this report.

Section 7.4.4 of the LCCC Southern Environs Local Area Plan related to trees for preservation within the plan area notes that the 'lime trees in open space' off Fr. Russell Road are of landscape interest. 12 of the 20 trees to be removed are in the vicinity of Racefield Roundabout and are immature trees less than 10 years old and are not referred to in the LCCC Southern Environs Local Area Plan. 3 larger trees are to be removed in the southern verge space at High Meadows to facilitate the construction of an off line bus stop.

#### 2.1.6 Bat Survey

A bat roost potential evaluation survey was completed in February 2022 by Minogue Environmental Consultants. The survey was completed to identify the potential for trees and vegetation to be removed to allow construction of the Scheme to function as tree roost habitats for bats. The bat roost potential was assessed in accordance with the guidelines in Chapter 6 of the Bat Conservation Trust's Bat Surveys for Professional Ecologists (2016). The survey noted that generally the trees to be removed have smooth bark, absence of cankers or knotholes and ivy growth and provide negligible potential to function as a hibernating roost for bats. One tree for removal (tree no. 4589, mature lime) was identified as having low potential roost features. A further inspection of this tree is required prior to felling to confirm the continued absence of roosting bats. A copy of the Survey Report is included with the Planning Documents.

#### 2.2 Artificial Constraints

Artificial Constraints affecting the project design proposals are as follows :

- Allowing for access to and from the residential estates and commercial premises.
- Allowing for vehicular access to the residential properties on both sides of the road. Levels to be carefully considered at the driveway tie-ins. Existing junction layouts to be reviewed against DMURS and NTA Guidance.
- Inclusion of existing bus stop provisions in the design.
- Designing safe cycling facilities at the Racefield Roundabout

#### 2.3 Archaeological and Built Heritage Constraints

There are no recorded monuments impacted by the development works identified on Map No. 4 Recorded Monuments Map from the LCCC Southern Environs Local Area Plan.

There are no protected structures impacted by the proposed development works identified on Map No. 5 Protected Structures Map from the LCCC Southern Environs Local Area Plan. There is a protected structure No. 1647 Dunmore House to the north of Father Russell Road opposite Gouldavoher. Dunmore House is marked with a green dot in Figure 2.1 below. Saint Teresas marked with the blue dot is recorded as being of special Architectural interest.

The proposed development works under Phase 1 of the Scheme do not impact on either structure or any know archaeological or built heritage constraints.





Figure 2.1 Map showing Record of Protected Structures with Dunmore House and Saint Teresa's Highlighted

### 2.4 Public Utility Constraints

Existing Public Utility Constraints affecting the project design proposals are as follows :

- 200mm uPVC watermain in the road/footpath on the southside of the road running from Quinns Cross Roundabout Ballinvoher.
- 125mm Cast Iron/Upvc watermain in the road/footpath on the northside of the road running from Ballinvoher to St. Pauls Roundabout.
- 300mm dia. foul sewer crossing the road adjacent Abbey Court.
- 150mm dia. surface water sewer crossing the road adjacent Abbey Court.
- 525mm dia. surface water sewer crossing the road at Belvedere Court.
- 525mm/600mm dia. surface water in the southside footpath/verge running from Belvedere Court to Gouldavoher Estate
- 600mm dia. surface water sewer crossing the road at Gouldavoher Estate.
- 125mm GNI gasmain in the roadway running from Racefield Roundabout to St. Pauls Roundbaout
- Underground ESB service from Racefield Roundabout to Ballinvoher
- Overhead ESB Service from Ballinvoher to St. Pauls Roundabout
- Public Lighting
- Eir ducting in the footpath on the northside of the road running from Racefield Roundabout to Abbey Court
- Eir ducting in both footpaths running from Abbey Court to St. Pauls Roundbout

The design of the scheme will have to take particular account of the depths to the existing services, particularly the Eir & ESB ducting in the southern footpath where the existing footpath is to be mostly removed and replaced with a cycle track. It is envisaged that the public utilities listed above will not overly impact the design of the scheme.



#### 2.5 Construction Management Plan

A Construction Management Plan will be prepared for the Scheme and shall be submitted to and agreed with the Limerick City and County Council Environment & Planning Department prior to commencement of the works. This plan shall provide details of intended construction practices for the duration of the works, including hours of working, acceptable noise/vibration limits, traffic management measures and off-site disposal/recovery of construction/demolition waste.

#### 2.6 Landscaping

The overriding design intention is to improve the sense of space, create a variety of quality public spaces along existing residential developments to increase potential uses / improve the sense of ownership and to enhance the biodiversity in the area.

It is proposed to plant 46 no. specimen trees at selected locations to improve the character of the road corridor, provide additional screening and compensate for loss of existing trees (refer to section 2.1.5 above), whilst bands of native hedgerows and swaths of wildflowers along existing tree lines will create a linear green buffer strip.

Site biodiversity will be improved through the use of native and non-invasive adaptive planting, including landscape planting measures to protect and enhance pollinators as set out in the All Ireland National Pollinator Plan 2015, through the provision of pollinator friendly planting, wildflower meadow and shade tolerant planting under trees and native hedges.

Bird and bat boxes will be installed on existing trees as part of this development to encourage nesting in the area and attract wildlife.

Planting on the site will commence with the completion of each stage of the works and as a result the programme is closely tied to construction operations. Ground preparation will precede planting and will include weed clearance and amelioration where necessary. Planting of specimen trees and hedging will be carried out in the dormant period from November – March, with grass seeding carried out from April – September, this will unsure ample opportunity for planting to establish properly and reduce casualties during the maintenance period.

#### 2.7 Storm/Surface Water Drainage / SuDS

Storm water flows can have a significant detrimental impact on the available capacity of combined sewer networks and at treatment plants. Inadequate treatment of surface waters can result in pollution of the receiving watercourses. There are many approaches to management of surface water that take account of water quantity (flooding), water quality (pollution), biodiversity (wildlife and plants) and amenity and these are collectively referred to as Sustainable Urban Drainage Systems (SuDS). The use of SuDS to address surface water and its diversion from combined sewers is encouraged, in particular in infill/brownfield sites and higher density areas as appropriate.

The existing surface water runoff from Father Russell Road is collected by road gullies and discharges to a separate piped storm water network. LCCC will explore the introduction of SuDS measures during the detailed design stage of the project through the introduction, where feasible, of nature-based SuDS solutions and there will be minimal increase in surface water discharge volumes associated with the scheme.

#### 2.8 Public Lighting

The existing public lighting is provided on the northside of the road with the standards located at the rear of the existing footpath adjacent to the boundary walls. Proprietary lamp standards are in place on that section of roadway from the Racefield Roundabout to Abbey Court and are spaced at 30- 40m centres. The existing public lighting lanterns are fixed to ESB poles on that section of roadway from Abbey Court to Gouldavoher. LCCC recently carried out upgrade works to the lighting to include replacement of existing lanterns.

New lamp standards will be required along the Racefield Centre set-back to the existing boundary wall with the existing standards encroaching on the new footpath. Upgrade of the public lighting will also be required at pedestrian crossings and at other conflict locations.



#### 3. SITE TRANSPORT CONTEXT

#### 3.1 Local Road Network

The L-1429 Father Russell Road connects the R510 at Quinns Cross Roundabout to the R526 at St. Pauls Roundabout. There are a number of side roads off the L-1429 accessing the mostly residential areas to the north in Ballykeeffe and to the south in Gouldavoher. There is an existing 4-arm roundabout at the Racefield Centre. The overall corridor width of the L-1429 along the extent of the Scheme is 12m wide with two lanes of traffic. The existing carriageway width is typically 7.5m. There are various side road priority junctions along the Scheme which access the residential housing areas which are spaced at greater than 100m. There are a number of private accesses/driveways which are typically greater than 30m apart where they occur.



Figure 3.1 Local Road Network



#### 3.2 Public Transport Network

There is a Limerick City Bus Service running along Father Russell Road - the 301 City Bus Route - Father Russell Road/Raheen to Westbury, Athlunkard which has its terminus on Fr. Russell Road and travels south west along Fr. Russell Road to Quinns Road, then southeast along the R510 to Raheen Roundabout from where it follows the R526 St. Nessans Road towards the City Centre. See Figure 3.2 below which shows the Limerick City Bus Route Plan with the 301 service shown with a pink line.

The 301 bus is a regular city service operated by Bus Éireann, running from 7.00am to midnight every 30 minutes, 7 days a week, with an additional morning peak hour bus. The 301 runs from Fr. Russell Road in Raheen, through the city centre to Westbury in County Clare. It stops at five locations on St. Nessans Road before crossing the R526 Ballinacurra Road motorway overbridge on the inbound journey to the city centre.

The existing 4 no. bus stops on Father Russell Road are to be retained as part of the development works with a proposed off line bus stop to be provided at the Rosebrook Estate Stop ID: 609021 in lieu of the existing in line bus stop as this stop is the route terminus.

The draft LSMATS published in April 2022 includes for the delivery of the BusConnects programme which will include a review of the capacity, frequency, speed, directness, coverage and interchange on the bus network in Limerick. The L-1429 Father Russell Road will form part of this review and is included as part of the indicative future bus network for 2040 included in the draft LSMATS.



Figure 3.2 Extract of Limerick City Bus Transport Plan showing the 301 route to the City Centre in pink. The route commences on Father Russell Road at the Rosebrook Estate stop.



#### 3.3 Existing & Proposed Cycle Network

There are currently no cycle facilities on the L-1429 Father Russell Road. To the west of the Scheme, upgrade works were completed at Quinns Cross Roundabout on the R510 including for raised off road cycle tracks which link to the new cycle tracks on the R859 Mungret Road. 1.5m wide raised cycle tracks are provided at footpath level on the R859 Mungret Road. To the east the adjoining R526 St. Nessans Road has on road facilities between Raheen Roundabout through St. Paul's Roundabout to Ballykeeffe Roundabout in the form of an inbound bus lane and an outbound (southbound) cycle lane. The R526 continues to the south towards Patrickswell with an off-road shared pedestrian/cycle facility outbound and an on-road cycle lane citybound.

The proposed cycle facilities for the most part will be segregated from vehicular traffic through the provision of a segregation 200mm wide kerb and raised cycle tracks.

#### Limerick Metropolitan Cycle Network Study 2016

The Limerick Metropolitan Cycle Network Study (LMCN) proposed a Raheen Cycle Network as part of the city network given the importance of Raheen / Dooradoyle as a densely populated suburb and important economic hub. The cycle network was prepared taking cognisance of the major trip attractors, the major residential trip generators and the desire lines connecting the Raheen network area to the Limerick Metropolitan Area.

The Limerick Metropolitan Cycle Network Study outlines a primary cycle route which travels along the R526 from the city centre via O'Connell Avenue, Ballinacurra Road and then St. Nessans Road to the Raheen Roundabout. A primary cycle route is also shown on the R859 Mungret Road leading onto the R510 and also to Raheen Roundabout which was partially completed as part of the Mungret Road works mentioned above. The proposed cycle facilities on Father Russell Road which are the subject of this Part 8 Planning Application form a secondary route which will provide access from the residential areas to the primary cycle network in the area and the Retail/Community facilities on the R526 St. Nessans Road and the R926 Dooradoyle Road at the Crescent Shopping Centre. See Figure 3.3 below which shows the proposed Cycle Network which was extracted from the LMCN Study.

It is proposed to remove the left slip lane at Racefield Roundabout to Oakfield as part of the development works. Conflicts between vehicles and cyclists/pedestrians at left slip lanes present a significant risk and removal of such facilities is recommended in the National Cycle Manual.

The draft LSMATS published in 2020 includes similar designations of cycle facilities as the LMCN Study with the L-1429 noted as part of the secondary cycle network.



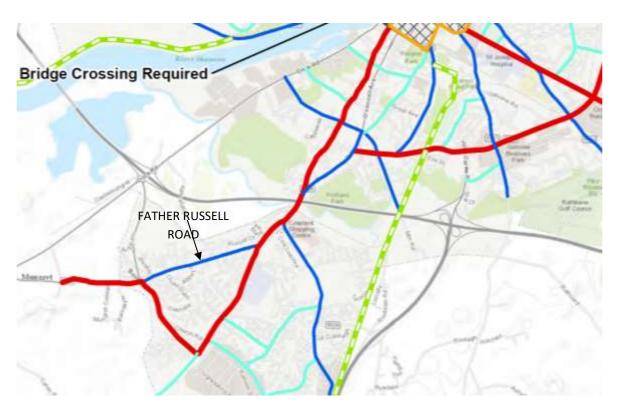


Figure 3.3 Proposed Cycle Infrastructure showing intended Quality of Service (Ref.: Limerick Metropolitan Cycle Network Study)

## 3.4 Existing & Proposed Pedestrian Facilities

Walking is currently accommodated in the form of footpaths along both sides of Father Russell Road. There are however an inadequate number of pedestrian crossing facilities on Father Russell Road with poor quality footpaths in areas. It is proposed to increase footpath widths where required in conjunction with the provision of the cycle facilities. An absolute minimum footpath width of 1.8m is to be provided where the road corridor width allows. The proposed footpath widths are in accordance with DMURS in view of the suburban setting of the Scheme.

The pedestrian crossing facilities on the four arms of the Racefield Roundabout are to be raised to footpath level in conjunction with the provision of segregated cycle facilities at the roundabout. The AADT on Father Russell Road is greater than 10,000 vehicles per day and for this volume the National Cycle Manual recommends fully segregated pedestrian and cycle facilities. It is proposed to set back the crossings approximately 6m from the roundabout to allow for a vehicle to queue at the yield line of the roundabout after crossing the pedestrian and cycle facilities.

Additional pedestrian crossings are proposed which will allow for a crossing at approximately every 300m along Father Russell Road.

#### 3.5 Existing Traffic Conditions

The current speed limit on Father Russell Road is 50km/hr. Traffic counts were carried out by Limerick City & County Council in 2014 & 2018 as part of the Mungret Masterplan Strategy. Using this data a 2-way AADT on the L-1429 Father Russell Road is greater than 10,000 vehicles per day.

A further traffic count was undertaken on the 10<sup>th</sup> December 2021 at the Racefield Roundabout and the Abbey Court junction on the L-1429 Father Russell Road. The traffic counts were undertaken over 12 hours from 7.00 to 19.00. The AADT on Father Russell Road remains greater than 10,000 vehicles in view of the above 12-hour and 24-hour traffic counts.



#### 3.6 Road Safety Issues

As part of the proposed design a Stage I Road Safety Audit has been completed and the recommendations of the Audit are being implemented in the Scheme design.

An analysis of the Road Safety Authority Collision Map 2005-2016 was undertaken as part of the RSA which indicates collisions on Father Russell Road consisted of 7 minor collisions or which 2 involved pedestrians, with the remaining 5 collisions involving cars only. There was 1 series collision recorded in 2012 located just outside the extent of the development works at Quinns Cross Roundabout.



#### 4. CONCLUSIONS

This Part 8 Planning Report has been prepared in accordance with Part 8 of the Planning and Development Regulations 2001 as amended. The Report and associated drawings outlines the Preliminary Design of the Father Russell Road Cycle Scheme Phase 1.

The Scheme has been designed to improve road safety for vulnerable cyclists through the provision of dedicated cycle facilities which are mostly segregated from traffic through the provision of an upstand kerb.

The Scheme has also been designed to improve road safety for vulnerable pedestrians with a minimum footpath width of 1800mm proposed with raised pedestrian crossings to be provided. The footpaths will be raised above the cycle track level by 60mm.

The Scheme as proposed, provides for safer active travel journey to work, school or local businesses and conforms with national policy and the policies of Limerick City & County Council to promote sustainable travel.