

Lehenaghmore Road Improvement Scheme (Cork City Council Compulsory Purchase Order No. 2 of 2022

CPO HEARING

Lehenaghmore Road Improvement Scheme

Detailed Description of the Scheme

Brief of Evidence Mark Condron

May 2024

1 QUALIFICATIONS AND EXPERIENCE

My name is Mark Condrón (BE CEng MIEI) and I am the Transport Director for RPS Consulting Engineers. I hold a Bachelor of Engineering Degree from University College Cork. I am a Chartered Engineer since 2013 and have 18 years' experience in the transportation field. I am responsible for the overseeing the management and design of varying types of infrastructure upgrade schemes including major motorways, local improvement schemes, active travel schemes and greenways.

I have been involved in the Lehenaghmore Road Improvement Scheme as Project Director since 2021, with responsibility for overseeing design delivery and supporting the Project Manager.

2 SCOPE OF EVIDENCE

The scope of my evidence is to provide a detailed description of the background to and design of the Lehenaghmore Road Improvement Scheme and to outline the need for the acquisition of the lands proposed to be acquired herein and how the scheme accords with the proper planning and sustainable development of the area, the need for the scheme in question, the proportional nature of the land to be acquired comparing the public good to be achieved by the scheme vis-à-vis the interference with property rights of affected landowners, lessees and occupiers, and the proposed extinguishment of public rights of way and the replacements for same. I also include a description of how the scheme is envisaged to be implemented during construction.

3 BACKGROUND TO THE SCHEME

The lands adjoining the Lehenaghmore Road (L2455) and Togher Road (L2454) have been significantly developed over recent years. Residential estates such as Matthew Hill, Coolkellure, Manor Park, Aisling Court etc. have all resulted in a higher demand for improved transport infrastructure between Lehenaghmore and the broader City with particular demands for improved public transportation services and safe active travel infrastructure.

Plans for the provision of a new footpath were drawn up by Cork County Council in 2004 however these plans did not progress beyond the preliminary design stage. A comprehensive review and redesign of the affected roads was undertaken following the transfer of this area into Cork City Council's administrative responsibility. Cork City Council are the Road Authority responsible for the delivery of the scheme as well as being the planning authority for the area in question.

Part XI of the Planning and Development Act, 2000 as amended / Part 8 of the Planning and Development Regulations was complied with in relation to the scheme underlying the CPO herein in January 2020.

The proposed works consist of the following measures:

- A 2.0m wide outbound footpath on the L2455 from Pouladuff Roundabout to Togher Community Grounds, 1.5 kilometres in length
- A 2.0m wide inbound footpath on the L2455, 1.45 km in length
- An on-road segregated 2.0m wide uphill and outbound cycle lane (L2455), 1.5 kilometres in length
- A minimum 6.0m wide road carriageway with new drainage, lining, signage, etc. *Note the carriageway will be wider than 6m at certain locations to facilitate the safe movement of public transport and other large vehicles.*
- A priority junction with safe pedestrian and cycle facilities at Barrett's Junction
- A 4.0m wide pedestrian and cycle bridge on the eastern side of the existing stone bridge (Bandon Railway Bridge)
- New links onto the old railway line (Future Greenway)
- A 2.0m wide footpath on the eastern side of the L2454 Togher Road from Barrett's Junction to just north of Ashbrook Heights (740 metres in length)
- A 2.0m wide footpath on the western side of the L2454 Togher Road (extent of existing residential frontage)
- A 3.0m wide footpath on the eastern or outbound side of the road (Pouladuff Road Roundabout to Tramore Road - 300 metres in length)
- Bus shelters and bays at suitable locations
- Controlled and uncontrolled crossing facilities
- Raised entry treatment crossings at junctions with access roads where possible
- The Forge Hill/ Pouladuff Road junction will be signalised
- A new surface water drainage system will be provided
- A new low energy LED public lighting scheme will be provided
- Utility and other services will be provided
- New road lining, signage, hard landscaping, soft landscaping, boundary treatments, etc. will be provided
- Acquisition of certain adjoining lands will be undertaken to facilitate the construction of the above transportation infrastructure.
- Other work associated with the above will also be undertaken.

4 NEED FOR THE SCHEME

4.1 Policy Context

Sustainable transport improvements to the Lehenaghmore Road (and Togher Road) are supported in a number of key policy documents including:

- Project Ireland 2040: The National Development Plan 2018-2027
- Project Ireland 2040: The National Planning Framework
- National Development Plan 2021-2030
- National Investment Framework for Transport in Ireland (NIFTI), 2021
- Cork Metropolitan Area Transport Strategy 2040 (CMATS)
- Cork City Development Plan, 2022-2028

Cork City is the second largest city in the Republic of Ireland and is currently experiencing considerable expansion in population and economic activity. The city has much to offer as a compact mid-sized European city with ambition to expand in a resilient and sustainable way so that it remains a vibrant and globally competitive second city with a great quality of life.

The current population of Cork City is circa 210,000 with Project Ireland 2040 envisaging a further growth in Population up to 330,000 by 2040. A key part of attracting additional people and jobs to Cork is an enhanced urban environment and quality transport linkages throughout the City.

Project Ireland 2040: The National Development Plan 2018-2027

The National Development Plan 2018-2027 (NDP) sets out the investment priorities that will underpin the successful implementation of the new National Planning Framework (NPF). This will guide national, regional and local planning and investment decisions in Ireland over the next two decades, to cater for an expected population increase of over 1 million people.

Project Ireland 2040: The National Planning Framework

Project Ireland 2040 – the National Planning Framework (NPF) is a long term plan which will shape spatial, social and economic policy in Ireland for the next 20+ years.

The NPF supports the need to promote sustainable transport modes, while also recognising the importance of investment in improved road infrastructure.

National Investment Framework for Transport in Ireland (NIFTI)

The Department of Transport has prepared and finalised the National Investment Framework for Transport in Ireland (NIFTI). NIFTI is the Department of Transport's high-level strategic framework to support the consideration and prioritisation of future investment in land transport. It represents the Department's contribution to Project Ireland 2040, Government's long-term, overarching strategy to make Ireland a better country for all and to build a more sustainable future. NIFTI has been developed to ensure sectoral investment is aligned with the National Planning Framework (NPF) and supports the delivery of the ten National Strategic Outcomes (NSOs).

Cork Metropolitan Area Transport Strategy 2040 (CMATS)

In accordance with the recommendations of the Cork Metropolitan Area Transport Strategy 2040 (CMATS), Cork City Council, in conjunction with the National Transport Authority intend to upgrade the Lehenaghmore Road (L2455) and Togher Road (L2454).

In line with CMATS, Cork City Council with the assistance of the National Transport Authority incorporated a number of CMATS recommendations into the proposed new road layout. These proposals prioritise investment in sustainable transportation to enable the city to achieve growth of the type anticipated.

Cork City Development Plan 2022-2028

The Cork City Development Plan 2022-2028 is a land use and strategic planning strategy that sets out how the city can best enable growth and investment over the plan period (2022 to 2028), while continuing to be an innovative, vibrant, healthy and resilient city. The core strategy sets out a growth plan for Cork City that includes population targets and locations for future growth up to 2028 and beyond.

Chapter 4 of the Development Plan under the heading 'Towards an Integrated Transport System' states as follows:

- 4.1** *This projected population and associated economic growth planned for Cork City will result in a significant increase in the demand for travel. This demand needs to be managed and planned for carefully to safeguard and enhance the city's attractiveness to live, work, visit and attract investment.*
- 4.2** *Therefore it is important that transport plans for Cork City consider the implication for climate change mitigation. Cork City Council, working with partners such as the NTA, TII, CIE and Iarnrod Eireann, will work to achieve a considerable modal shift to reduce the car dependence of residents of Cork City.*
- 4.3** *In 2020 the National Transport Authority (NTA) published the Cork Metropolitan Area Transport Strategy. Key objectives of the Strategy are to improve current mobility in the City, plan for the transport needs of the population growth of the metropolitan area and support modal shift towards more sustainable transport modes; walking, cycling and public transport. The Socio Economic Profile of Cork City, which was prepared to inform this Draft Development Plan, highlights that there is slightly higher than average dependence on private car to commute to school or work (at 62.6%), and a lower than average uptake of public transport at 9.1% of journeys.*

The Lehenaghmore Road Improvement Scheme, as confirmed in the brief of evidence of Mr. Robert Farrell, is consistent with the objectives of the Cork City Development Plan 2022-2028.

4.2 Scheme Objectives

The primary project objectives are as follows:

- Improve road safety in the vicinity of Lehenaghmore along the L2455 and L2454 Togher Road
- Deliver facilities for all road users but with particular benefits for bus users, cyclists and pedestrians.
- Improve the level of service for users of the L2455 between Pouladuff Roundabout and Barrett's Junction and the L2454 Togher Road from Togher Community Grounds to south of Ashbrook Heights.
- Enhance the public realm along the route and improve the overall built environment.
- To enhance pedestrian, cyclist and public transport connectivity and promote the use of sustainable modes of transportation in the Lehenaghmore and Togher areas
- Improve the living natural environment along the relevant routes.

4.3 Condition of Existing L2455 and L2454

The present layout of the Lehenaghmore Road (L2455) and Togher Road (L2454), within the scheme extents has no formal facilities for cyclists and sporadic sub-standard facilities for pedestrians. There are bus stops located at narrow footpaths with no shelters or hardstand areas.

Significant development has taken place along the L2455 and L2454 in recent years but improvements to the existing carriageway and sustainable transport infrastructure has been largely neglected. These sections of the L2455 and L2454 are part of a legacy route corridor which fits within the existing landscape without consideration of, or compliance with, modern

road design requirements and standards. Consequently, the corridor is significantly below standards and is narrow, hilly and bendy (see image).



The L2455 and L2454 within the scheme extents are generally urban in nature. There are several housing estates, individual dwellings, industrial estates, commercial enterprises and community facilities with accesses directly onto the L2455 and L2454. The L2455 caters for a significant amount of heavy goods vehicles, particularly in the vicinity of Tramore Road, the N40 slip roads and Pouladuff Road roundabout.

The following paragraphs describe the condition of the sections of the L2455 and L2454 subject to this proposed scheme.

On the L2455 (Pouladuff Road) between the Tramore Road roundabout and the Pouladuff Road roundabout (incl. the N40 overbridge), the existing cross-section and road surface are reasonably good, however there are significant capacity issues at both roundabouts leading to regular delays. There are footpaths in this area but designated crossing points, dropped kerbs and tactile paving are practically non-existent. The footpaths are generally in poor condition and less than 2.0m wide. This is the busiest section in terms of traffic volumes.

As we travel south along the L2455 (Pouladuff Road) from the Pouladuff Roundabout as far as Togher Community Association's Lehenaghmore Park, the cross-section becomes narrower and facilities for pedestrians become progressively worse, eventually disappearing altogether to the south of the Forge Hill junction. There are no hard shoulders over most of this section, making it extremely dangerous for anyone walking or cycling. There are short sections of footpath, outside Manor Farm for example, but no continuity. The Forge Hill junction currently operates as a priority junction and making a right-turn can be difficult at peak times due to traffic queues from the Pouladuff Roundabout extending beyond the junction.

Due to the narrow cross-section and the poor horizontal and vertical geometry, sight lines for vehicles accessing the L2455 (Pouladuff Road) from adjacent properties (residential, industrial and commercial) are sub-standard. The road surface over this section of the L2455 is extremely poor (bleeding, cracking and rutting) and in need of improvement.

The Togher Road (L2454) from Barrett's junction has a narrow cross-section with no hard-shoulders or footpaths (see image). The road surface over this section of the L2454 is extremely poor (bleeding, cracking and rutting) and in need of improvement. Towards the northern tie-in (just north of Ashbrook Heights) the cross-section does improve with the introduction of a ghost island and right turn lane. There is an existing footpath on the western side of the L2454 from the southern boundary of the Alderbrook Estate as far as the tie-in. This footpath is less than 2.0m in width and there are no designated crossing points, dropped kerbs and tactile paving are non-existent. There is also a short section of sub-standard footpath on the eastern side of the L2454 at Aisling Court. The L2454 carries less traffic than the northern end of the L2455.



The posted speed limit on both the Lehenaghmore Road (L2455) and Togher Road (L2454), within the scheme extents, is 50kph. The existing horizontal and vertical alignment does not comply with standards. Several side roads do not have 'dwell areas' where they meet the local road.

Applying current design standards, the majority of these curves would require the granting of Departures from Standards. It is noted that for a 50kph design speed the desirable minimum stopping sight distance (SSD) is 70m. As a result of the existing horizontal and vertical alignments of the Lehenaghmore Road (L2455) and Togher Road (L2454), the available stopping sight distance throughout much of the route is well below current design standards.

In summary, the existing road is an unimproved section of single lane carriageway with a substandard horizontal alignment and restricted forward visibility. The road carriageway width is narrow with little or no verge space. Sections of the existing road are raised above the adjacent ground due to historical build-ups, which results in steep gradients on field accesses and local roads.

There are a number of local road junctions, property entrances and field accesses where the sightlines to and from the junctions are below standard due to the poor horizontal and vertical alignment.

Thus, the Lehenaghmore Road Improvement Scheme would significantly improve safety for users of the Lehenaghmore Road (L2455) and Togher Road (L2454) particularly cyclists and pedestrians.

5 DESCRIPTION OF THE SCHEME

5.1 Overview

The scheme is located on the Lehenaghmore Road (L2455) and Togher Road (L2454) in the southern suburbs of Cork City. It involves the improvement of c. 0.7km of the L2454 (Togher Road) and c. 1.85km of the L2455 (Lehenaghmore Road). It includes on-line and off-line sections, balancing the aims of improving the alignment and minimising costs by making use of the existing roadway.

The key elements of the works to be carried out as part of the scheme include:

- The provision of c. 4.5km of new and improved footpaths
- The provision of a 2.0m wide on-road segregated uphill cycle lane c. 1.5km in length
- Realigned and regraded junctions and accesses with improved sight distances
- A new signalised junction at the Forge Hill/Pouladuff Road junction
- 1 no. new single-span pedestrian and cycle bridge
- Cut and fill earthworks operations
- Surface and sub-surface drainage including petrol interceptors and outfalls
- New road signage and road markings
- Extensive retaining walls
- Other ancillary works including boundary treatments, ducting, utility diversions, etc.

Existing roadside boundaries are to be set back to accommodate road widening, new footpaths and cycle tracks. This space will be formed of standard 100mm – 150mm concrete footpath on 150mm Cl.804 sub base. The cycle tracks are likely to be constructed of 100mm surface course macadam on Cl.804. Existing trees and hedgerows that are to be removed as part of the works will be replaced by similar native variety semi-mature trees and hedging.

5.2 Environmental Studies

Environmental studies have been carried out to ensure that all environmental considerations and impacts are taken into account. Various issues, such as Noise, Visual, Landscape, Archaeology, Water Quality, Flora and Fauna etc have been assessed. The findings of these studies are detailed in the following documents:

- *Appropriate Assessment Screening Report - Lehenaghmore Road Improvement Scheme, October 2020*
- *Environmental Impact Assessment Screening Report - Lehenaghmore Road Improvement Scheme, October 2020*
- *Pre-construction Bat Survey Report - Lehenaghmore Road Improvement Scheme, April 2022*
- *Pre-construction Mammal Survey Report - Lehenaghmore Road Improvement Scheme, September 2022*
- *Pre-construction Tree Survey Report - Lehenaghmore Road Improvement Scheme, June 2022*
- *Tree Survey & Arborist Report - Lehenaghmore Road Improvement Scheme, July 2022*

5.3 Design Details of the Scheme

The scheme has been designed in accordance with the Design Manual for Urban Roads and Streets (DMURS), May 2019 and the Cycle Design Manual (CDM), Sept. 2023, where possible.

The L2455 (Pouladuff Road) is designed with a typical cross-section of 2.0m wide footpath (western side), 2 x 3.0m wide carriageways, 2.0m wide cycle lane (eastern side), 2.0m wide footpath (eastern side).

The L2454 (Togher Road) is designed with a typical cross-section of 2.0m wide footpath or 2.0m wide grass verge (western side), 2 x 3.0m wide carriageways, 2.0m wide footpath (eastern side).

The posted speed limit on the existing Lehenaghmore Road (L2455) and Togher Road (L2454) in the vicinity of the proposed scheme is 50kph. Therefore, a Design Speed of 50kph has been adopted for the proposed scheme.

The scheme includes for the design of a kerb and gully surface water drainage system. Petrol interceptors will intercept flow prior to outfall.

The proposed pedestrian/cyclist bridge has been designed as a single-span structure supported on reinforced concrete abutments at each end.

5.4 Construction Stage Considerations

The Lehenaghmore Road Improvement Scheme is to be constructed predominantly on-line, with a short section of off-line realignment on the L2454 (Togher Road) in the vicinity of Barrett's junction. The existing cross-section is being widened to introduce facilities for public transport, pedestrians, and cyclists. Local access is to be maintained at all times during construction.

For the online sections, sufficient space has been made available within the landtake to allow for construction of the proposed works insofar as possible. For critical works such as pavement tie-ins, construction of retaining walls etc. it will be necessary to utilise traffic management techniques such as STOP/GO, temporary traffic signals, one-way shuttle systems on a temporary basis. Where temporary road closures are inevitable, such as lifting the pedestrian/cyclist bridge into place, these will be for short durations or night-time working.

6 LANDS TO BE ACQUIRED

The lands to be acquired, permanently and temporarily, were included in Cork City Council's *Lehenaghmore Road Improvement Scheme, Acquisition Order No. 2 of 2022*. I confirm that all lands to be permanently acquired are necessary for the road construction and operation. I confirm that all lands to be temporarily acquired are necessary to facilitate the road construction. I also confirm having considered the extent and location of the lands to be acquired pursuant to the CPO herein and the effect of such acquisition on the owners, lessees and occupiers of same, and comparing such impacts and the interference with the property rights of those parties as against the significant public good to be served by the scheme underlying the CPO and which requires the acquisition of these lands that the CPO herein is proportionate and that the level of interference with property rights has been kept at a minimum while being in a position to achieve the necessary road improvements described herein.

I further refer to the amendments to the CPO schedule herein and say that same are necessary and will still provide sufficient land for the scheme herein.

Regarding the Public and Private Rights of Way proposed to be extinguished over the lands to be Compulsorily Acquired, the following sets out the proposed extinguishment and proposed alternative access arrangements in each case:

- The section of public road (L2454) between the lines A1-A1 to A2-A2 as shown on Drawing No LEH-CPO-001 of the Deposited Maps: alternative access is provided via the realigned L2454 (Togher Road) from its' junction with the Pouladuff Road (L2454).
- The section of private access road and access track between the lines B1-B1 to B2-B2 as shown on Drawing No LEH-CPO-001 of the Deposited Maps: alternative access is provided via a new field gate directly off of the L2455 (Pouladuff Road).
- The section of private access road (Chestnut Drive) between the lines C1-C1 to C2-C2 as shown on Drawing No LEH-CPO-001 of the Deposited Maps: alternative access is provided at the same location following junction improvements.
- The section of private access road between the lines D1-D1 to D2-D2 as shown on Drawing No LEH-CPO-001 of the Deposited Maps: alternative access is provided at the same location following junction improvements.

7 OBJECTIONS & SUBMISSIONS

In relation to the objections and submissions raised and which are outstanding, and noting that the vast majority of persons affected have not objected in light of the necessity for the road development in question, while a number of those objecting still acknowledge the necessity and desirability of the scheme in question, the Council have prepared individual responses to same and I will go through each of same in turn (copies have been provided to the landowner's/ person making submission's representative where available or to the individual in question): (Witness will make reference to separate response letters)

Drawing No.	CPO ref.	Objector	Status
AC0002	67(A) & 67(B)	Tony and Suzanne Donworth	Live
AC0007	59(A) & 59(B)	John and Margaret Deane	Withdrawn
AC0017	43(A) & 43(B)	Samuel Geary and Ruden Homes Ltd.	Withdrawn
AC0024	11(A) & 11(B)	Niamh Buckley (& Gavin Delaney)	Live
AC0052	49(A) & 49(B)	Ruden Homes Ltd.	Withdrawn
AC0057	32(A) & 32(B)	John Deane & John Ruane (Ruden Homes Ltd.)	Withdrawn
AC0057A	32(A) & 32(B)	John Deane & John Ruane (Ruden Homes Ltd.)	Withdrawn
AC0058	74(A) & 74(B)	Donworth & Company Ltd.	Live
AC0086	86	Denrue Holdings Ltd.	Withdrawn
AC0094	94	Frank Urell	Live

8 CONCLUSION

The Lehenaghmore Road Improvement Scheme is for the public good and is consistent with Local, Regional and National policy.

The land acquisition is proportionate and does not exceed what is reasonable. In the case of temporary acquisition, these lands will be returned to the appropriate landowner post-construction. Overall, land acquisition and the impact on property rights has been minimised.

The scheme design complies with the Part 8 Planning consent which was received in January 2020.

In conclusion I would recommend the confirmation without further modification of the CPO made herein and the approval of the development of the road scheme as proposed and the subject matter of the assessment.