Chapter 1

Introduction

Chapter 1 Introduction

Chapter 1

Outline Summary

This chapter is an introduction to this Environmental Impact Assessment Report (EIAR) for the proposed Foynes to Limerick Road (including Adare Bypass), which implements the EU TEN-T (Trans-European Network - Transport) Regulation in County Limerick for both the Core Network Route to Shannon-Foynes Port, and the Comprehensive Network Route from Attyflin, east of Adare, to Rathkeale. The proposed road development will also provide a bypass of Adare Village to the north which will alleviate the significant congestion through the removal of through traffic.

Limerick City and County Council propose to construct a new road that will replace part of existing the N69 route to Foynes and part of the existing N21 route between Attyflin and Rathkeale. The proposed road development is needed to significantly improve both the road connection to Shannon-Foynes Port and to relieve the very significant and critical traffic congestion on the national road network in the central area of County Limerick, by also including a bypass of Adare on the N21. The proposed road development will provide numerous benefits for the local community and road users by improving road safety, significantly reducing congestion and removing considerable traffic from existing poor-quality roads in the area, thereby improving the quality of life for the communities in the necklace of villages along the existing N69 between Limerick and Foynes. In addition to addressing these objectives the proposed road development has been designed to minimise potential impacts on the local environment in this very environmentally sensitive area of Co Limerick.

An Environmental Impact Assessment is required for this development due to the length and type of the proposed road and because the proposed crossing of the River Maigue is greater than 100m. All likely significant environmental effects of the new road have been assessed and appropriate mitigation measures have been incorporated into the design of the proposed development as set out in this EIAR. These mitigation measures have been designed in accordance with National guidelines from the Environmental Protection Agency and Transport Infrastructure Ireland.

This EIAR has been prepared in accordance with guidance documents from the European Commission, the Department of Housing, Planning and Local Government and the Environmental Protection Agency.

1.1. Introduction to this Document

This Environmental Impact Assessment Report (EIAR) has been prepared for the proposed Foynes to Limerick Road (including Adare Bypass) in accordance with the requirements of section 50(1) of the Roads Act 1993 (as amended) and Annex IV of Directive 2011/92/EU (as substituted by Directive 2014/52/EU).

This EIAR is presented in five volumes:

- Volume 1: Non – Technical Summary
- Volume 2: Main Text
- Volume 3: Figures
- Volume 4: Appendices
- Volume 5: Photomontages

This EIAR forms part of the application that will be submitted by Limerick City and County Council to An Bord Pleanála for their approval of the proposed road development. This project is considered to be of strategic economic and social importance and will contribute substantially to the fulfilment of a number of the objectives identified in European and National transport policy documents and in the hierarchy of planning documents from the National Planning Framework to Local Area Plan level (Please refer to Chapter 2).

Limerick City and County Council are seeking approval for a Motorway Scheme, a Protected Road Scheme and a Service Area Scheme under section 49 of the Roads Act, 1993 (as amended). The proposed road development is one for which approval is required under section 51 of the Roads Act 1993 (as amended) and which requires the submission of an EIAR under section 50(1) of the Roads Act 1993 (as amended). All land required for the construction and operation of the proposed road development is to be compulsorily acquired under the above schemes.

Appropriate assessment of the proposed road development and the approval of An Bord Pleanála is required in accordance with the provisions of Part XAB of the Planning and Development Act 2000 and a separate Natura Impact Statement (NIS) has been prepared in respect thereof.

1.2. Requirement for Environmental Impact Assessment

1.2.1 Introduction

The requirement for environmental impact assessment is imposed by Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (as amended by Directive 2014/52/EU) (the EIA Directive). In the case of proposed road developments, the provisions of the EIA Directive have been transposed into Irish law by the provisions of the Roads Act 1993 (as amended by the European Union (Roads Act 1993) (Environmental Impact Assessment) (Amendment) Regulations 2019) (S.I. No. 279 of 2019).

1.2.2 Requirement for Environmental Impact Assessment

Section 50(1) of the Roads Act 1993 (as amended) stipulates that the following categories of road development are required to be the subject of an environmental impact assessment:

(i) the construction of a motorway;

(ii) the construction of a busway;

(iii) the construction of a service area;

(iv) any prescribed type of road development consisting of the construction of a proposed public road or the improvement of an existing public road.

In accordance with regulation 8 of the Roads Regulations 1994 (S.I. No. 119 of 1994), the prescribed types of proposed road development for the purpose of section 50(1)(iv) are:

(a) the construction of a new road of four or more lanes, or the realignment or widening of an existing road so as to provide four or more lanes, where such new, realigned or widened road would be eight kilometres or more in length in a rural area, or 500 metres or more in length in an urban area;

(b) the construction of a new bridge or tunnel which would be 100 metres or more in length.

An environmental impact assessment is required for the proposed road development because it is approximately 35km in length, including a section of motorway of approximately 17.5km in length and a new bridge of over 100 metres length is required to be constructed over the River Maigue.

1.2.3 Environmental Impact Assessment

Environmental impact assessment is defined in Article 1 of the EIA Directive to mean a process consisting of:

(i) the preparation of an EIAR by the developer, as referred to in Article 5(1) and (2);

(ii) the carrying out of consultations as referred to in Article 6 and, where relevant, Article 7;

(iii) the examination by the competent authority of the information presented in the EIAR and any supplementary information provided, where necessary, by the developer in accordance with Article 5(3), and any relevant information received through the consultations under Articles 6 and 7;

(iv) the reasoned conclusion by the competent authority on the significant effects of the project on the environment, taking into account the results of the examination referred to in point (iii) and, where appropriate, its own supplementary examination; and

(v) the integration of the competent authority's reasoned conclusion into any of the decisions referred to in Article 8a.

An Bord Pleanála is the competent authority for the purpose of carrying out an environmental impact assessment of the proposed road development.

1.2.4 Environmental Impact Assessment Report

Where an environmental impact assessment is required, there is an obligation on the developer to submit an EIAR as part of the application for development consent.

The contents of an EIAR are specified in section 50(2) of the Roads Act 1993 (as substituted by regulation 4 of the European Union (Roads Act 1993) (Environmental Impact Assessment) (Amendment) Regulations 2019) and Annex IV of the EIA Directive.

This EIAR has been prepared by Roughan & O'Donovan – AECOM Alliance Consulting Engineers (ROD-AECOM)[1] and a team of specialists on behalf of Limerick City and County Council.

1.3. Background and Context

1.3.1 Background to the Proposed Road Development

ROD-AECOM were appointed by Limerick City and County Council in March 2014 as consultants to carry out the planning, design and environmental assessment of the proposed development, in accordance with phases 1 to 4 of the Transport Infrastructure Ireland (TII) Project Management Guidelines, i.e. to bring the proposed road development through the planning and design phases and the statutory processes.

The TII Project Management Guidelines (Publication No. PE-PMG-02041, latest version January 2019) is a guidance document in line with the Capital Works management Framework adopted by the Department of Public Expenditure and Reform (DPER) to deliver the Government's objectives for managing the development and delivery of capital projects in Ireland.

In accordance with the process outlined in the TII Project Management Guidelines for National Road and Public Transport projects there are a number of phases involved in the planning of a proposed road scheme as shown in Plate 1.1 below:

Plate 1.1 TII PMG Project Phases

In Phase 1 of this project a Constraints Study was undertaken that identified the extent of a suitable Study Area within which a number of alternative routes could be assessed, based on key physical, environmental, and legislative constraints that could impede the development of particular route options.

In Phase 2 of this project a Route Selection Report was published in June 2016. The purpose of the Route Selection Report was to outline the process undertaken to

[1] Please see Appendix 1.1 (see Volume 4 of this EIAR) of this Chapter for the details of the technical competences of the EIAR Team.

determine the preferred route for the development. The route selection study led to the identification of alternative reasonable route corridor options; and a systematic assessment of each of these corridor options resulted in the selection of a Preferred Route Corridor.

Following more detailed studies of the preferred route corridor in Phase 3, the development of the design of the proposed road development progressed and design updates of the proposed development were published on the project website www.foyneslimerick.ie during 2016, 2017 and 2018. These studies are summarised in Chapter 3 Alternatives Considered, of this EIAR.

As required under the TII Project Management Guidelines and the relevant national guidelines for Environmental Impact Assessment prepared by the Environmental Protection Agency (EPA) and the Department of Housing Planning and Local Government (DHPLG), an extensive consultation process was undertaken during the planning and design of the proposed road development. A summary of the consultations with the people affected by the proposed road development; with government and other statutory bodies such as the National Parks and Wildlife Service (NPWS); and with the public, are also outlined in Chapter 3 of this document.

1.3.2 General Overview of the Proposed Road Development

The proposed road development extends from Foynes, at the western end to the existing M20 motorway, at Attyflin, a short distance east of Adare, as illustrated in Plate 1.2 (more detailed Figures and maps are available in Volume 3 of this report). In general, the proposed road development is located in central County Limerick in a predominantly rural area located close to a number of communities, including from west to east: Foynes, Askeaton, Rathkeale, Croagh, Adare and Patrickswell.

The total length of the proposed road development will be 35km (comprising 15.6km of Type 2 Dual Carriageway from Foynes to Rathkeale, 1.9km of single carriageway road from Ballyclogh towards Askeaton, 17.5km of dual carriageway M21 Motorway from Rathkeale to Attyflin, of which 14km is new build (and the remainder of which is improvement of existing N21 Motorway).

The proposed road development can be divided into four sections, as follows:

1. Section A starts at the southern edge of the village of Foynes and extends south and eastwards for approximately 6.3km to Ballyclogh, 2km west of the town of Askeaton, where a roundabout will be provided and the route is split into two roads, Section B and Section C.
2. Section B: A single carriageway link road extending eastward from the Ballyclogh roundabout for approximately 1.9km, to connect with the existing N69 route at the western edge of Askeaton.
3. Section C: The main dual carriageway port access route heading south-eastwards towards the town of Rathkeale for approximately 9.3km where it will join with the existing N21 (Limerick to Tralee) road on the northern side of Rathkeale. At Rathkeale, a roundabout will be provided where the new road from Foynes will connect to the existing N21.
4. Section D: To the west of the proposed new roundabout at Rathkeale there will be 0.65km of new single carriageway road to connect to the existing N21 at the R518 Askeaton Road. From the proposed new roundabout at Rathkeale, a new M21 motorway will extend eastward for 14.1km to the north of the existing N21 bypassing the villages of Croagh and Adare. At the eastern end, a further 2.3km

of the development will involve the widening and upgrading of the existing N21 to motorway standard as far as the M20 Junction at Attyflin.

Junctions will be provided on the proposed road development at Foynes, Ballyclogh, Askeaton, Rathkeale, Croagh and Adare, with a Heavy Goods Vehicle Service Area also being provided near Foynes.

A detailed description of the proposed road development is provided in Chapter 4. The proposed road development has been designed in accordance with TII Standards and the TII Environmental Assessment and Construction Guidelines[2], which are available on the TII website www.tiipublications.ie. Following these guidelines in the design and construction of the proposed road development minimises any adverse environmental effects through the incorporation of appropriate environmental mitigation measures.

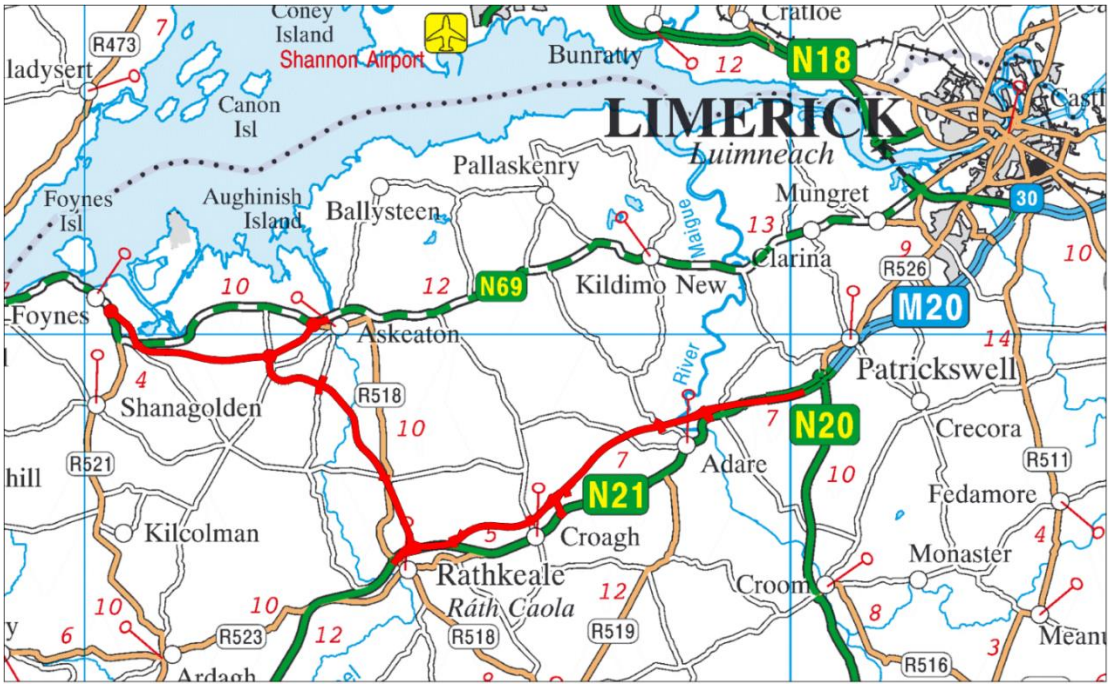

Plate 1.2 **Proposed Route of the Foynes to Limerick Road (including Adare Bypass) shown in red.**

1.3.3 Outline of the Need for and Objectives of the Proposed Road Development

The proposed road development is required to fulfil a hierarchy of major economic, planning and transport policy objectives included in European Union, National, Regional and Local policy documentation (Refer to Chapter 2 Policy Context and Need for the Proposed Road Development). These objectives support the sustainable economic development of Ireland, the Mid-West Region and Limerick City and County as shown in Plates 1.3 and 1.4.

[2] Following the merger of the National Road Authority (NRA) into Transport Infrastructure Ireland in 2015, all guideline documents which were formerly published by the NRA previous to this date are referred to as TII documents throughout this EIAR for consistency.

Plate 1.3 Ireland Mid-West Region

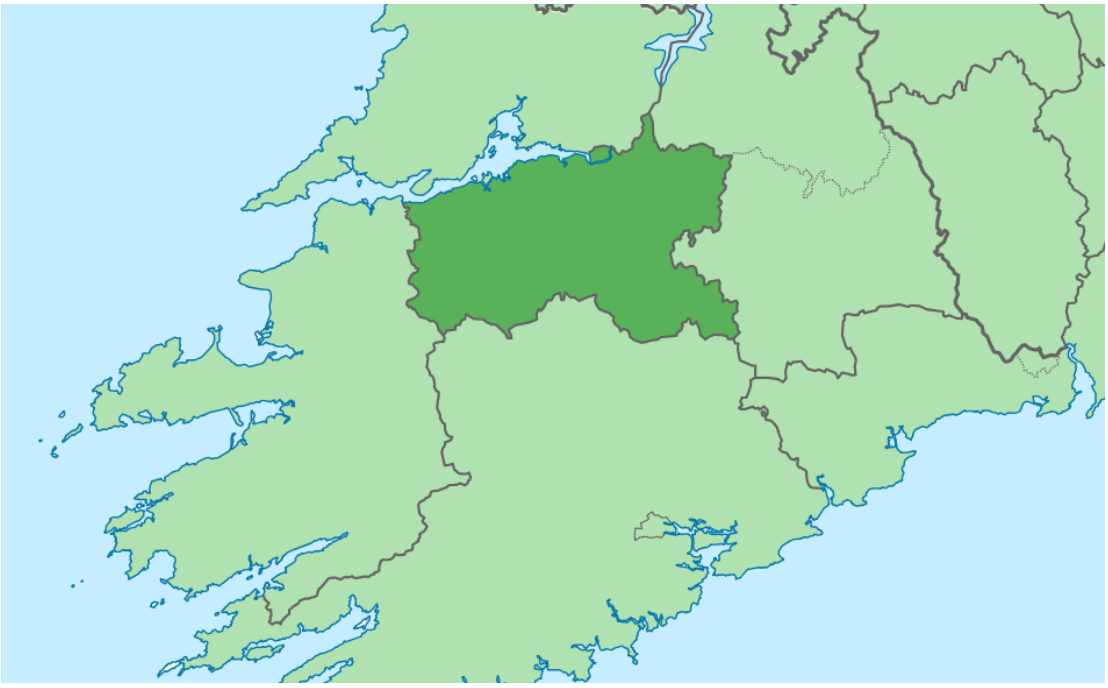

Plate 1.4 Limerick City & County Council Administrative Area

EU Regulation No 1315/2013 of 11th December 2013 (the TEN-T Regulation), defines and provides guidance for the provision of the Trans European Transport Network (TEN-T). TEN-T consists of two network layers for Road Transport:

- Core Network; and
- Comprehensive Network.

These EU TEN-T Road Networks are shown in Plate 1.5 as a schematic map for Western Europe, and in Plate 1.6 in the Limerick Region of Ireland. In County Limerick, the Core Network Route comprises a link from Shannon-Foynes Port to Limerick City. The Comprehensive Network Route extends from Limerick to Cork and Kerry along the M20 Motorway and the N20 and N21 single carriageway roads.

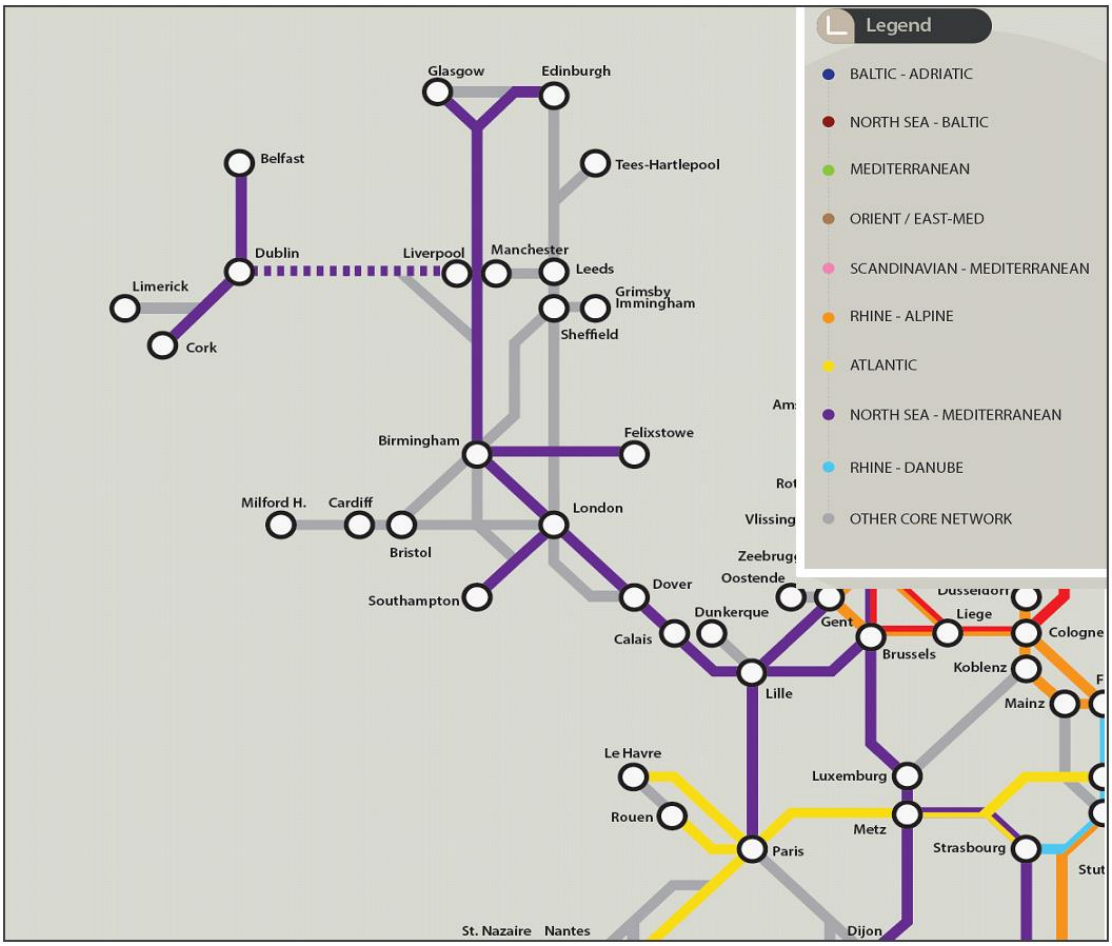

Plate 1.5 Ireland and the EU TEN-T Core Road Network

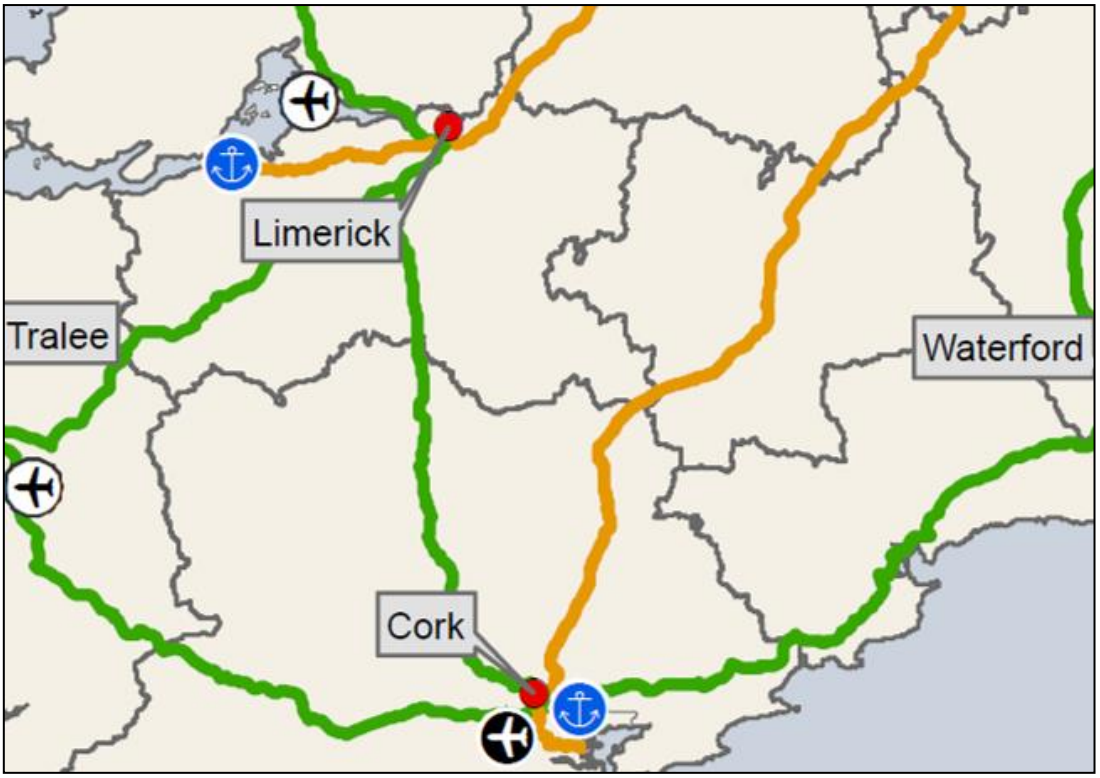

Plate 1.6 EU Ten-T Core and Comprehensive Network in Limerick Region (Core Routes in Orange / Comprehensive Routes in Green)

The existing road network in Limerick is shown in Plate 1.7 and includes the following national routes:

- M20 Motorway for 9.5km from Rossbrien Junction on the M7/N18 Limerick Southern Ring Road, extending westward to Attyflin Junction southwest of Patrickswell;
- N20 single carriageway road towards Cork extending southward from Attyflin Junction;
- N21 single carriageway road towards Tralee in County Kerry from Attyflin Junction, passing through Adare and continuing westward bypassing Rathkeale;
- N69 single carriageway road from the Dock Road Junction on the N18 Limerick Southern Ring Road, extending westward to Foynes and onward to Tralee in County Kerry;
- M7 / N18 Limerick Southern Ring Road; and
- N24 Tipperary Road.

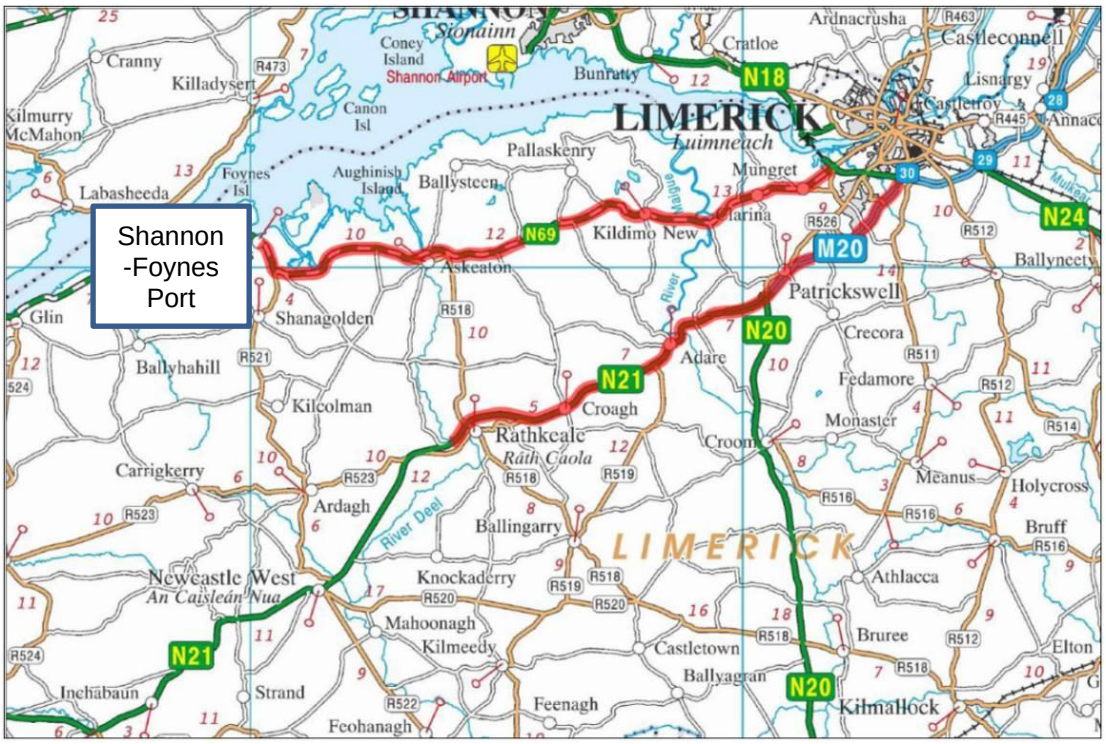

Plate 1.7 **Existing Road Network in Limerick Region (N21 and N69 routes highlighted in red)**

In accordance with the suite of relevant economic and transport development policies as outlined in Chapter 2, the proposed road development is needed for two primary purposes:

(i) To provide high-quality access to Shannon-Foynes Port, and

(ii) To relieve major traffic congestion on the N21 at Adare.

Improved access to the Shannon-Foynes Port will support the economic development of the southwest region of Ireland and enable potential major industrial and employment development.

Relief of the current major traffic congestion at Adare on the N21 route will also greatly benefit the population and communities of Counties Limerick and Kerry and will reduce journey times and improve reliability of transport connectivity to the rest of the country.

Further details on the need for the proposed road development are provided in Chapter 2 of this document.

Access to Shannon-Foynes Port

Shannon-Foynes Port is currently accessed by the existing N69 National Secondary Route which is a single carriageway road that extends from Limerick City through to Listowel and Tralee. Apart from a few short sections where the road has been improved, the existing N69 between Foynes and Limerick is a road of low quality that poorly serves its purpose to provide access to the Shannon-Foynes Port for Heavy Goods Vehicles (HGVs).

The National Ports Policy (2013) categorised Shannon-Foynes Port as a Tier 1 Port of National Significance, alongside the Ports of Dublin and Cork and this is reflected by the European Union with the routes to the port designated as part of the European TEN-T road and rail transportation networks. European Regulations require that these

TEN-T roads are built as high-quality roads, which requires a Motorway or Express Road in this case. As defined in the Regulation (EU) No 1315/2013:

> *"An express road is a road designed for motor traffic, which is accessible primarily from interchanges or controlled junctions and which:*
>
> *(i) prohibits stopping and parking on the running carriageway; and*
>
> *(ii) does not cross at grade with any railway or tramway track."*

The existing N69 fails to meet these standards and is therefore unsuitable for inclusion as the TEN-T Core Network link to Shannon-Foynes Port. The possibility of improving the existing road was examined in the Route Selection Report which assessed this "Do Minimum scenario" to see if it could satisfy the requirements of TEN-T infrastructure and to also accommodate the anticipated future growth in traffic over the next 30 years. The Report assessed the 'Do-Minimum' scenario investigating the potential to replace or upgrade the existing infrastructure to meet TEN-T requirements and the predicted demands for the next 30 years. However, it determined that the existing N69 route would not be feasible to support a road which meets TEN-T standards due to the high level of frontage development along the route.

Existing Traffic Congestion on the N21 at Adare

In addition to the existing N69 access to Shannon-Foynes Port, the road network in this region also includes the N21 National Primary Route which connects Limerick to Tralee via Adare. This road runs generally parallel to the N69 route through County Limerick as far as Rathkeale and both are within 10km of one another in the vicinity of Askeaton and Rathkeale. The N21 in this area is a single carriageway road passing through Adare village where the high volume of traffic causes significant congestion and extensive delays daily, especially westbound at evening peak time with longer delays on weekends and particularly during the summer tourist season. Traffic congestion can extend eastward from Adare for over 5km to Attyflin Junction at Patrickswell and beyond. Typical peak period traffic congestion is shown in Plates 1.8 to 1.10.

Plate 1.8 Traffic Congestion on the N21 Dual Carriageway at Attyflin

Plate 1.9 Traffic congestion entering Adare from the East at Adare Manor Golf Club

Plate 1.10 Heavy Traffic on the N21 in Adare

A bypass of Adare was previously proposed south of the village connecting to the planned M20 Cork to Limerick Motorway, but it was refused approval by An Bord Pleanála in October 2012, on the basis that it constituted isolated development, citing the withdrawal of the M20 Cork to Limerick scheme as the primary reason for refusal at that time.

The Route Selection Study for the proposed Foynes to Limerick Road (including Adare Bypass) considered the overall requirements for improvements for access to Shannon-Foynes Port, and for the N21 corridor, in accordance with the requirements for the European TEN-T Core (to be upgraded by 2030) and TEN-T Comprehensive (to be upgraded by 2050) Road Networks in the Limerick Region. This study concluded that the existing environmental and developmental constraints provided very few options to weave a direct route from Limerick to Foynes, and the proposal to combine the routes emerged as the best solution. The development of the TEN-T Core Route in the Foynes to Limerick region, will therefore be combined with the upgrade of the TEN-T Comprehensive N21 route through the provision of a new motorway east of Rathkeale including a bypass of Adare to the north of the village.

A single combined road development will serve both key objectives for a suitable high-quality access to Shannon-Foynes Port and to remove traffic congestion at Adare and

improve the N21 route to motorway standard from the Attyflin junction as far as Rathkeale. The combined route will involve 31.5km of new road construction compared to 49km for two separate new roads (16km on the N21 and 33km on the N69), which is 36% shorter and, therefore, far more efficient in terms of public investment, as well as reducing the overall scale of impact on the environment.

Road Safety

Several sections of both the Foynes road (N69) and the Adare road (N21) have more than twice the national average collision rate for a rural single carriageway road and have safety ratings of 1 and 2 stars respectively, out of a possible 5 stars. These sections of road have the lowest and an unacceptable level of road safety for road users including vulnerable road users such as cyclists and pedestrians. Significant improvements are, therefore, required to bring these roads up to an acceptable road safety standard for the volume of traffic they carry now. This requirement is particularly acute having regard to the forecast growth in Shannon-Foynes Port traffic which will further adversely affect road safety along the N69 route and the residential amenity for the local population.

Environmental Mitigation by Avoidance

There are a large number of major sensitive environmental sites located between Foynes and Limerick City and the area also contains numerous heritage and archaeological features. The proposed route has avoided most of these environmental constraints by continuing south-eastwards from Foynes until it joins the N21 at Rathkeale. Further detail on the Route Selection Stage is available in Chapter 3 Alternatives Considered.

"Mitigation by avoidance" is regarded as the best practice when seeking to mitigate environmental impacts. The proposed route will not only achieve environmental mitigation by the avoidance of these constraints, it will result in significant resource utilisation efficiencies and capital savings by providing a single combined road development comprising 31.5km of new road to accommodate separate sections of two national routes the N69 and the N21 rather than approximately 49km of new road which would have been required if separate routes were developed to replace the N69 between Foynes and Limerick and to replace the N21 between Rathkeale and Attyflin.

1.4. Environmental Impact Assessment Guidelines

The preparation of the EIAR has been informed by relevant national EIA guidelines prepared by the EPA, the DHPLG and TII including:

- Guidelines on the Information to be contained in Environmental Impact Statements, (EPA, 2002);
- Advice notes on Current Practice (in the preparation of Environmental Impact Statements), (EPA, 2003);
- Draft Guidelines on the Information to be contained in Environmental Impact Assessment Reports, (EPA, 2017);
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, (DHPLG, August, 2018);
- Draft Advice Notes for Preparing Environmental Impact Statements, (EPA 2015);
- Environmental Impact Assessment of National Road Schemes - A Practical Guide, Revision 1 (TII, 20 November 2008).

Other guidelines from TII and other bodies have been taken into account in the relevant technical assessment chapters of this EIAR and are referenced in those chapters.

The following guidelines by the European Commission have also been consulted in the preparation of this EIAR:

- Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report (European Commission, 2017).

1.5. Non-Statutory EIA Scoping

A Non-Statutory EIA Scoping Report was issued to a list of forty-five statutory consultees in June 2018. The purpose of the informal scoping was to describe the proposed road development, provide an outline of likely significant aspects of the development and of sensitivities identified in the receiving environment that would help the consultees to provide useful feedback at the scoping stage. Consultees were invited to respond within a four-week period, identifying any concerns or issues they might have in respect of the proposed road development.

A total of 6 responses were received in response to the EIA Scoping Report. The majority of the responses were in support of the proposed development and noted the benefits which would arise to the Shannon Region and to County Kerry as a result of the development. The submissions were taken on board throughout the EIAR and were responded to where appropriate.

1.6. Pre-Application Consultations with An Bord Pleanála

Under Section 51A of the Roads Act 1993, Limerick City and County Council (LCCC) requested a pre-application consultation with An Bord Pleanála (hereafter 'the Board'), regarding the proposed road development. Subsequently, three pre-application consultations took place on the 24th of October 2017, 23rd of April 2018 and the 11th of July 2018. During these consultations, LCCC detailed the nature and extent of the proposed road development, discussed the route selection process, and outlined the key environmental constraints.

LCCC was advised to consult with the NPWS, IFI, OPW and GSI in relation to relevant potential environmental impacts which has since been undertaken. The Board provided LCCC with a list of Prescribed Bodies who should be forwarded copies of the planning application documents.

1.7. EIA Contributors

The EIA Directive requires the developer to ensure that the EIAR is prepared by competent experts. A table is included at Appendix 1.1 (see Volume 4 of this EIAR) which summarises the qualifications and expertise of the principal members of the project team who were involved in the preparation of this EIAR. Limerick City and County Council has evaluated the technical competence of each of the consultants and specialists through the tendering process and during the project and is satisfied that they each are sufficiently qualified, experienced, expert and competent in their fields.

1.8. EIAR Structure

The EIAR is presented in five volumes: the standalone Non-Technical Summary is Volume 1; Volume 2 (this volume) contains the Main Text; Volume 3 contains the associated Figures; Volume 4 contains the associated Appendices; and Volume 5 contains the Photomontages. The Volume structure and Chapter layout of this EIAR is as follows:

Volume 1: Non-Technical Summary

Volume 2: Main Text

Chapter 1: Introduction
Chapter 2: Policy Context and Need for the Proposed Road Development
Chapter 3: Alternatives Considered
Chapter 4: Description of the Proposed Road Development
Chapter 5: Traffic Analysis
Chapter 6: Population and Human Health
Chapter 7: Biodiversity
Chapter 8: Soils and Geology
Chapter 9: Hydrogeology
Chapter 10: Hydrology
Chapter 11: The Landscape
Chapter 12: Noise and Vibration
Chapter 13: Air Quality and Climate
Chapter 14: Archaeology, Architecture & Cultural Heritage
Chapter 15: Material Assets and Land - Agriculture
Chapter 16: Material Assets and Land – Non-Agriculture
Chapter 17: Interactions and Cumulative Effects
Chapter 18: Major Accidents and Natural Disasters
Chapter 19: Mitigation and Monitoring Measures

Volume 3 Figures

Volume 4 Appendices

Volume 5 Photomontages

1.9. Natura Impact Statement

An NIS, which contains an examination of the implications of the proposed road development, on its own or in combination with other plans or projects, for Natura 2000 sites, has also been prepared in accordance with the provisions of Part XAB of the Planning and Development Act 2000 to facilitate the carrying out of an Appropriate Assessment by An Bord Pleanála. This is a separate document to the EIAR.