1 Introduction

1.1 Introduction

This Environmental Impact Statement (EIS) examines the potential impacts which may result from the development of a proposed M7 Osberstown Interchange and R407 Sallins Bypass Scheme, Co Kildare. A location plan for the proposed scheme is presented in **Figure 1.1. Volume (V) 3**.

This interchange and bypass will provide necessary enhanced connectivity between the National Motorway Road Network (M7) and the towns of Naas and Sallins. The interchange will connect to the proposed R407 Sallins Bypass to the north and the existing local and regional road network to the south. The proposed interchange and bypass, i.e. the proposed scheme, is shown in **Figure 1.2. V3**.

Kildare County council (KCC) in conjunction with Kildare National Roads Office and Roughan O'Donovan are currently progressing the M7 Naas to Newbridge By-pass Upgrade Scheme in parallel. As the M7 Osberstown Interchange is located along this widening scheme, there is an immediate interface between the two schemes which has been fully considered in terms of scheme design and environmental assessment.

1.2 Purpose of this Report

This EIS has been prepared as part of the statutory development consent procedure for the proposed plan to develop a grade separated interchange and bypass in accordance with the Roads Act 1993 (Section 50) and its subsequent amendments (including the EC Environmental Impact Assessment (Amendment) Regulations 1999).

1.3 Planning Procedure for the Proposed Development

Section 50 of the Roads Act, 1993 as amended by Section 9 (1) (d) (i) of the Roads Act 2007 states:

"A road authority or the Authority shall prepare a statement of the likely effects on the environment ("environmental impact statement") of any proposed road development consisting of:

(i.) *the construction of a motorway,*

(ii.) the construction of a bus way,

(iii.) the construction of a service area, or

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

The prescribed type of proposed road development, as defined by paragraph 8 of the Roads Regulations (S.I. No.119 of 1994), for the purpose of Section 50 of the Act is as follows:

- (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.*
- *The construction of a new bridge or tunnel which would be 100 metres or more in length.*

On the basis that the northern River Liffey crossing is greater than 100 m in length and that the interchange is located on a motorway, an EIS for this proposed scheme is required.

Section 6(c) of the Planning and Development (Strategic Infrastructure) Act, 2006 defines strategic infrastructure development to include all national road development proposals for which an EIS is required. All such strategic infrastructure development is to be dealt with by the Strategic Infrastructure Division of An Bord Pleanála.

1.4 EIS Methodology

1.4.1 Introduction

The Environmental Protection Agency (EPA) provides two advisory documents in relation to the preparation and content of an EIS including:

- Guidelines on the Information to be contained in an EIS (EPA, 2002), which provides guidance on the issues to be addressed in the EIS.
- Advice Notes on Current Practice in the preparation of an EIS (EPA, 2003).

Due cognisance was also paid to the Design Manual for Roads and Bridges (NRA, 2013) and the Environmental Impact Assessment of National Road Schemes – A Practical Guide (NRA, 2008).

1.4.2 General EIS Methodology

The EIS methodology is a systematic analysis of the proposed road development in relation to the existing environment. The overall methodology for preparation of the EIS is discussed under the following headings:

- Basis for Assessment.
- Impact Assessment and Mitigation.
- Significance of Environmental Issues.

1.4.2.1 Basis for Assessment

The impact assessment examines the existing conditions of the proposed development area for each element of assessment and then determines the potential impacts associated with the construction and operational phases.

The impact assessment compared a range of scenarios, as follows:

- The Do-Minimum (DM) Scenario assumes that the proposed scheme is not constructed, with forecast traffic scenarios prepared for 2015and 2030. The DM scenario assumes that the M7 Naas to Newbridge By-Pass Upgrade Scheme is operational.
- The 'Do-Something Scenario assumes that both the M7 Osberstown Interchange and R407 Sallins Bypass and the M7 Naas to Newbridge By-Pass Upgrade Scheme are operational. The assessment utilises resulting forecast traffic predictions for 2015and 2030.

The area of investigation for this EIS incorporates the extent of the likely construction impacts and operational impacts. The area of direct construction impact has been taken to be all land within the CPO line. The overall study area for each environmental aspect is discussed in the relevant corresponding EIS chapter.

1.4.2.2 Impact Assessment and Mitigation

The preparation of the EIS was an iterative process, which by its very nature was inherently linked with the design development process. The approach adopted in the assessment and preparation of the EIS document was generally based on that recommended in the EPA 'Guidelines on the Information to be contained in an Environmental Impact Statements 2002'.

A design was developed and the potential impacts of the proposal on the receiving environment were identified along with mitigation measures, as required.

1.4.2.3 Significance of Environmental Issues

An initial description of the proposed scheme was prepared and a baseline survey of the existing environment undertaken. Next the likely impacts of the scheme on the receiving environment were considered.

In assessing the significance of impacts, the probability, duration, magnitude and intensity of the impacts were considered together with the condition and the significance of the existing environment. Detailed methodologies utilised for the assessment of each environmental aspect are included in the relevant EIS chapter.

Where no impact or a positive impact was predicted to occur, the design of the scheme remained unchanged. In the case where significant adverse impacts were predicted, mitigation measures were proposed to avoid or minimise impacts. Where feasible these measures were then incorporated into the final design of the proposed scheme.

1.4.3 EIS Format

The format used in this EIS document seeks to enable the reader to access the issues of interest as easily as possible. Therefore, the EIS document has been divided accordingly as follows:

- Volume 1 (**V1**) - Non-Technical Summary.

- Volume 2 (**V2**) - Main Text.
- Volume 3 (**V3**) – Figures.
- Volume 4 (**V4**) – Appendices - Book 1 (Chapters 1-4)
- Volume 4 (**V4**) – Appendices - Book 2 (Chapters 5-21)

The main text of the EIS has been further divided into the following chapters:

- Chapter 1 – *Introduction*.
- Chapter 2 – *Planning and Policy*.
- Chapter 3 – *Need for the Scheme and Alternatives*.
- Chapter 4 – *Description of the Proposed Scheme.*
- Chapter 5 –*Transportation.*
- Chapter 6 – *Agronomy*.
- Chapter 7 – *Human Beings*.
- Chapter 8 – *Archaeology and Cultural Heritage*.
- Chapter 9 – *Architecture*.
- Chapter 10 – *Landscape and Visual*.
- Chapter 11 – *Noise and Vibration*.
- Chapter 12 – *Air Quality*.
- Chapter 13 – *Climate*.
- Chapter 14 – *Ecology*.
- Chapter 15 – *Soils and Geology*.
- Chapter 16 - *Hydrogeology*.
- Chapter 17 – *Hydrology*.
- Chapter 18 – *Resource and Waste Management.*
- Chapter 19 – *Non-agricultural Material Assets.*
- Chapter 20 –*Interrelationships, Interactions and Cumulative Impacts.*
- Chapter 21 – *Summary of Mitigation Measures and Residual Impacts*.

In general, each element of the environment is generally described under the following headings in each individual chapter:

- Introduction.
- Methodology.
- Existing Environment.
- Predicted Impacts.
- Mitigation Measures.

- Residual Impacts.

1.5 Consultation Process

Public consultation for the proposed interchange is undertaken in two phases:

- Informal Consultation – took place during the preparation of the EIS.
- Formal Consultation – a statutory requirement to be undertaken following the submission of the proposed scheme to An Bord Pleanála.

In addition, during the scoping phase of the project, a scoping document was issued to all relevant statutory and non-statutory consultees. A list of these consultees is provided in Appendix A1. Comments received during this consultation phase were reviewed and considered in the preparation of this document.

1.5.1 Informal Consultation

Consultations with the community were undertaken during the Design development and the EIS preparation phase of the proposed scheme.

This consultation consisted of an open information session with display boards on Wednesday 29 May 2013 at Kildare County Council Office, Áras Chill Dara, Naas, Co Kildare. The display boards were transferred to a public area within the Kildare County Council offices following completion of the public consultation. This unattended display was available for viewing by the public for a further two weeks until 14 June, 2013.

The information session provided an opportunity for the general public to review and comment on the proposed scheme. Approximately 100 people attended.

There were 17 submissions received following the public consultation. From these, and from the general views from the public at the information session, the following principal concerns were identified as particularly important and are specifically addressed in the EIS:

- Existing high noise levels in the vicinity of the M7 Motorway – refer to Chapter 11 - *Noise and Vibration.*
- Spoil views around the Grand Canal – Refer to Chapter 10 - *Landscape and Visual.*
- Light pollution – refer to Chapter 10 - *Landscape and Visual.*
- Security and safety of children in the green area of Castlesize Estate adjacent to the Sallins Link Road – refer to Chapter 7 - *Human Beings.*
- The impact of the Sallins Link Road on the Linear Park proposed in the Sallins LAP – refer to Chapter 7 - *Human Beings.*
- Provision of a cycle path into Naas from Sallins either via the bypass or otherwise – refer to Chapter 3 - *Need for the Scheme/Alternatives.*

- Requirement for a connection for cyclists/pedestrians from the bypass to the tow path on the north side of the canal – refer to Chapter 3 - *Need for the Scheme /Alternatives.*
- Road drainage flooding the surrounding area – refer to Chapter 17- *Hydrology.*
- Traffic volumes in Sallins during the construction and operational phases– refer to Chapter 5 - *Transportation*.
- Disruption to farming enterprises – refer to Chapter 6 - *Agronomy*.

These issues and concerns were incorporated into the design of the scheme where possible and addressed within relevant chapters of the EIS (as above).

1.5.2 Formal Statutory Consultation

Statutory consultation is required to be undertaken after the EIS has been submitted to An Bord Pleanála and details of this statutory consultation will be advertised in accordance with the provisions of the Roads Act 1993 (as amended).

The EIS will be available for inspection on the Kildare County Council website (http://www.kildare.ie/ and at the following locations:

Kildare County Council	Naas Town Council	Kildare County Council
Aras Chill Dara	Aras Chill Dara	National Roads Design Office
Devoy Park	Devoy Park	Maudlins
Naas	Naas	Naas
Co. Kildare	Co. Kildare	Co. Kildare

Written submissions in relation to the likely effects on the environment of the proposed scheme may be made to An Bord Pleanála, 64 Marlborough Street, Dublin 1 prior to the date specified in the newspaper notices to be published.

1.6 Study and Design Team

The design and EIS have been prepared by Arup.

The EIS team drew primarily on in-house resources in traffic and highway engineering, construction activities, environmental and planning management. Specialist technical contribution was provided as follows:

- Noise and vibration assessment by AWN Consulting Limited.
- Ecology assessment by EirEco Environmental Consultants.
- Landscape and visual assessment by Brady Shipman Martin.
- Human beings assessment by Optimize Consultant.
- Archaeological and cultural heritage assessment by Irish Archaeological Consultants.

- Architectural assessment by Paul Arnold Architects.

The assistance of all organisations and individuals consulted during the preparation of the EIS and the assistance of local residents over the course of the investigations is gratefully acknowledged.

1.7 Difficulties Encountered During the Study

No particular difficulties were encountered in the preparation of the EIS. Any technical limitations associated with assessment of an environmental aspect are detailed in the relevant EIS chapter.

1.8 References

Roads Act 1993 (No. 14 of 1993) Government Publications, Dublin, Ireland.

Roads (Amendment) Act 1998 (No. 23 of 1998) Government Publications, Dublin, Ireland.

Roads Act 2007 (No. 34 of 2007) Government Publications, Dublin, Ireland.

EC (Environmental Impact Assessment) (Amendment) Regulations 1999 (SI No. 93 of 1999) Government Publications, Dublin, Ireland.

Environmental Protection Agency. 2003. Advice Notes on Current Practice in the preparation of an EIS.

Environmental Protection Agency. 2002. Guidelines on the Information to be contained in an EIS.

European Communities (Environmental Impact Assessment) (Amendment) Regulations, 1998 (S.I. No. 351 of 1998) Government Publications, Dublin, Ireland.

European Commission (EC) Environmental Assessment Directive 85/337/EC as amended by Environmental Assessment Directive 97/11/EC.

National Roads Authority. Design Manual for Roads and Bridges. 2013.

National Roads Authority. 2008. Environmental Impact Assessment of National Road Schemes – A Practical Guide.

Planning & Development Act 2000 (No. 30 of 2000). Government Publications, Dublin, Ireland.