



## INTRODUCTION

The Dundalk Western Bypass PPP Scheme comprises the construction of the Dundalk Western Bypass, the operation of tolling on the M1 adjacent to the Boyne Bridge and the operation and maintenance of the M1 from north of Dundalk, County Louth, to Gormanston, County Meath. Please refer to the map on page 4 for a key to the elements of the scheme.

## DUNDALK WESTERN BYPASS

The Dundalk Western Bypass scheme forms part of the strategic north-south road corridor Euroroute E01. Euroroute E01 is part of the Trans-European Road Network proposed by the European Union. It forms part of the link (along with E30) of the three largest centres of population on the island (Dublin, Belfast, Cork) and provides access to the main commercial seaports and international airports.

The Dundalk Western Bypass extends from the northern end of the Dunleer-Dundalk Motorway and terminates at the N1 north of Dundalk in the vicinity of the existing Ballymascanlan Roundabout and is approximately 12 kilometres in length.

Within County Louth the Euroroute E01 has been divided into the following separate Projects: -

- Northern Motorway Phases II and III
- Dunleer Bypass
- Dunleer-Dundalk Motorway
- Dundalk Western Bypass
- Cross Border Link

## SCHEME OBJECTIVES

The general objectives of the Dundalk Western Bypass are: -

- to provide traffic relief in the centre of Dundalk and reduce journey times;
- to remove through traffic from the local road network therefore reducing congestion and improving environmental standards and safety in areas of high population;
- to reduce transport costs and offset the negative effects of European Union peripherality by improving access to ports and airports;
- to provide for the efficient movement of traffic between the Dunleer-Dundalk Motorway and the N1 north of Dundalk;
- to provide an effective bypass of Dundalk;
- to link Dundalk, its hinterland and the N52 Inner Relief Road to the motorway.

## PROGRAMME

There are three sets of statutory procedures required for the Dundalk Western Bypass PPP Scheme. The Public Inquiry in relation to the Dundalk Western

Bypass Motorway Scheme and Environmental Impact Statement has been completed. The decision of the Minister for the Environment and Local Government is awaited.

The Toll Scheme, Environmental Impact Statement & Motorway Scheme relating to tolling in the vicinity of the Boyne Bridge were published in July 2001 and a decision is awaited.

Tender documentation was issued in early 2002 with the aim of achieving financial close in the final quarter of 2002. Road opening is envisaged in 2004.

## NEW BUILD ELEMENT

### General

The Dunleer-Dundalk Motorway completed statutory procedures in 1994. This scheme included: -

- the Dunleer-Dundalk Motorway Scheme, a motorway extending from the Dunleer Bypass to the Northern Link Interchange on the Armagh Road;
- the Northern Link Road, a two lane single carriageway road from the Northern Link Interchange to the Newry Road (N1) at the Ballymascanlan Roundabout.

Construction of the Dunleer-Dundalk Motorway to the Southern Link Interchange was completed in 2001. The remainder of the approved Dunleer-Dundalk Motorway that has not yet been constructed is referred to (in part) as the Dundalk Western Bypass. The remainder of the scheme now referred to as the Dundalk Western Bypass consists of the extension of the approved motorway scheme to the N1 near Thistle Cross.

## DESCRIPTION

### Route

The Dundalk Western Bypass extends from the northern end of the constructed Dunleer-Dundalk Motorway. North of the N52 the Motorway crosses the Knockbridge Road east of an ESB substation. From there the Motorway crosses the Carrickmacross Road and further north the Grey Acre and Castleblaney Roads.

The Motorway crosses the Bellewsbridge Road at a location immediately to the east of Tateetra House and continues north to cross the Castletown/Kilcurry rivers. Progressing northwards, the alignment crosses the Scotch Green Farm Road and a curve brings the route around the western edge of Fort Hill to the Armagh Road.



The route now progresses in a more easterly direction crossing the Armagh Road, County Roads CR103 and CR102. Continuing eastwards the significant constraint of the Dublin-Belfast Railway is crossed at Ballynahattin. At the confluence of the N1 and the N52, with other local roads at Ballymascanlan, an interchange is provided for.

The motorway continues north-eastwards to its termination at a proposed at-grade roundabout on the existing N1.

### Topography

The most striking form on the landscape is that of the Dublin-Belfast railway embankment which is over 15m in height. The Topography of the land over the length of the scheme is varied, with several significant peaks and troughs.

### Structures

#### General

Grade separated interchanges are provided for at the N53 (Castleblayney Road) and at the N1/N52 (Ballymascanlan Interchange). The scheme includes the following 13 structures: -

Structure	Location
Overbridges	<ul style="list-style-type: none"> <li><input type="checkbox"/> N52</li> <li><input type="checkbox"/> N53 Interchange</li> <li><input type="checkbox"/> Railway</li> <li><input type="checkbox"/> Ballymascanlan Interchange</li> </ul>
Underbridges	<ul style="list-style-type: none"> <li><input type="checkbox"/> Littlemills Road</li> <li><input type="checkbox"/> Carrickmacross Road</li> <li><input type="checkbox"/> Grey Acre Road</li> <li><input type="checkbox"/> Tateetra</li> <li><input type="checkbox"/> Castletown River</li> <li><input type="checkbox"/> Kilcurry River</li> <li><input type="checkbox"/> Scotch River</li> <li><input type="checkbox"/> Armagh Road</li> <li><input type="checkbox"/> County Road CR102</li> </ul>

### Dublin - Belfast Railway Crossing

The Dundalk Western Bypass crosses the Dublin-Belfast Railway in the townland of Ballynahattin. At this location, the railway alignment is on an embankment of over 15 metres in height and has side slopes that are heavily vegetated.

It is proposed that the motorway will pass underneath the railway. A detailed examination of the interface was carried out by Iarnród Éireann and they have specified a preferred vertical clearance of 10 metres

between track level and motorway road level.

The motorway approach embankment is up to 5 metres in height. The railway bridge has an overall deck length of approximately 84m.

The track levels and the approach railway embankment shall remain unaltered by the proposed bridge, with the bridge located within the height and width of the existing railway embankment.

A slide-in bridge solution during a short duration railway possession is required in order to satisfy the requirements of Iarnród Éireann.

### Ground Conditions

Ground conditions along the scheme comprise typically 3m to 5m of Glacial Till over Bedrock. The bedrock consists of Silurian siltstones, mudstones and sandstones, and locally, according to published Geological Mapping, Dinantian Limestone. There are local areas of more recent deposits, typically comprising peat, soft clay and silt.

The glacial tills are described as firm becoming stiff with depth, slightly sandy, gravelly, low plasticity silt with occasional cobbles. In places medium dense to dense, well-graded silty sandy gravel occurs.

Published geological mapping also indicates the presence of basalt dykes in the region.

Groundwater conditions are likely to be complex and variable. The underlying rock is relatively impermeable. Artesian/sub-artesian water pressures may develop which may result in weakening/softening of overlying fine soils. Such areas may be identified on the ground by their distinctive vegetation and (non-) land use.

### Utilities

The proposed scheme will intersect with many service providers. Diversions will be required for the following: -

- Electricity (ESB)
- Water and Sewerage (Louth County Council & Dundalk Urban District Council)
- Telecommunications (Eircom, Esat & Ocean)

New services are proposed by some service providers and liaison will be required for gas (An Bord Gáis).

### Key Interfaces

Liaison with Dúchas will be necessary during the project to ensure that requirements in relation to archaeology are met. Liaison with Iarnród Éireann will be necessary in relation to the proposed crossing of the Dublin-Belfast railway at Ballynahattin. Liaison with the Office of Public Works and the Eastern Regional Fisheries Board will be required along with necessary approvals in respect of all watercourse crossings, in particular the crossing of the Castletown and Kilcurry Rivers.

## OPERATION & MAINTENANCE ELEMENTS

### *Dunleer Dundalk Motorway*

#### Route

The Dunleer Dundalk Motorway is located to the west of the old National Primary Route N1 between the townlands of Haynestown and Mooremount. The Dunleer-Dundalk Motorway is located entirely within County Louth and comprises a dual two-lane motorway, with hard shoulders, of approximate length of fifteen kilometres.

#### Structures

Grade separated interchanges are provided at Regional Road R170 (Mooremount Interchange), Ardee Link Road (Charleville Interchange), Regional Road R166 (Drumleck Interchange) and at the Southern Link Road (Southern Link Interchange). The scheme includes the following 19 structures: -

### *Dunleer Bypass Motorway*

Structure	Location
Overbridges	<input type="checkbox"/> Dromin Overbridge (CR237) <input type="checkbox"/> Charleville Interchange No.1 <input type="checkbox"/> Charleville Interchange No.2 <input type="checkbox"/> Braganstown Overbridge (CR215) <input type="checkbox"/> Drumleck Interchange (R166) <input type="checkbox"/> Whiterath Overbridge (CR182) <input type="checkbox"/> Farm Accommodation Overbridge <input type="checkbox"/> Southern Link Interchange No.1 <input type="checkbox"/> Southern Link Interchange No.2
Underbridges	<input type="checkbox"/> Mooremount Interchange (R170) <input type="checkbox"/> Blackbog Underbridge (CR216) <input type="checkbox"/> Newrath Underbridge (CR190) <input type="checkbox"/> Clermont Underbridge (CR167)
Riverbridges	<input type="checkbox"/> River Dee Motorway Bridge <input type="checkbox"/> River Dee Ramp Bridge No.1 <input type="checkbox"/> River Dee Ramp Bridge No.2 <input type="checkbox"/> River Glyde Bridge <input type="checkbox"/> River fane Bridge <input type="checkbox"/> Old Fane Culvert

#### Route

The Dunleer Bypass Motorway is located to the west of the old National Primary Route N1 between the townlands of Monasterboice and Mooremount. The Dunleer Bypass Motorway is located entirely within County Louth and comprises a dual two-lane motorway, with hard shoulders, of approximate length of six kilometres.

#### Structures

A grade-separated interchange is located at the Woodlands Interchange and at the old Regional Route R132 (Monasterboice Interchange). The scheme includes the following 8 structures: -

Structure	Location
Overbridges	<input type="checkbox"/> Prieststown Overbridge <input type="checkbox"/> Shamrock Hill Overbridge
Underbridges	<input type="checkbox"/> Cappoge Underbridge <input type="checkbox"/> Woodlands Interchange <input type="checkbox"/> Rathgory Underbridge <input type="checkbox"/> Paddock Underbridge <input type="checkbox"/> Rathgory Culvert
Underbridges	<input type="checkbox"/> White River Bridge

### *Northern Motorway (Monasterboice to Boyne River)*

#### Route

This section of the M1 is located between the townlands of Tullyallen and Monasterboice and passes to the west of Drogheda. It ties in with the Dunleer Bypass Motorway at Monasterboice and with the Boyne River Crossing at the southern end. It is entirely located within County Louth and comprises a dual two-lane motorway, with hard shoulders, of approximate length of seven kilometres.



### Structures

Grade separated interchanges are provided at the N51 National Secondary Route (Mell Interchange) and at the Regional Route R132 (Monasterboice Interchange). The scheme includes the following 8 structures: -

Structure	Location
Overbridges	<input type="checkbox"/> Mell Interchange Southern
	<input type="checkbox"/> Mell Interchange Northern
	<input type="checkbox"/> Mell Overbridge (CR322)
	<input type="checkbox"/> Barnattin Overbridge (CR311)
	<input type="checkbox"/> Balgathern Accommodation Overbridge
Underbridges	<input type="checkbox"/> Monasterboice Interchange
	<input type="checkbox"/> Newtown Monasterboice Underbridge (CR299)
	<input type="checkbox"/> Slane Road Underpass

### Northern Motorway (Boyne River Crossing)

#### Route

This section of the M1 is approximately 4 kilometres long and is located between the townlands of Rathmullan and Tullyallen and crosses the Boyne River to the west of Drogheda. It extends from the Gormanston section of the Northern Motorway and ties in with the Monasterboice section of the Northern Motorway. It is located in the Counties of Meath and Louth and is dual two-lane with hard shoulders.

A major bridge structure carries the motorway over the River Boyne valley and has an overall length of approximately 400 metres. The Drogheda South grade separated Interchange is incorporated into this element of the scheme on the south-western side of Drogheda.

### Structures

Structure	Location
Underbridges	<input type="checkbox"/> Boyne River Cable Stayed Bridge

### Northern Motorway (Boyne River to Gormanston)

#### Route

This section of the Northern Motorway is approximately 10.5 kilometres long and is located between the townlands of Gormanston and Rathmullan.

The motorway extends from the Balbriggan Bypass at its southern end and terminates south of the River Boyne where it ties in with the Boyne River Crossing. It is entirely in County Meath and comprises dual two-lane motorway with hard shoulders.

### Structures

Structure	Location	
Overbridges	<input type="checkbox"/> Gormanston Overbridge	
	<input type="checkbox"/> Farm Accommodation Overbridge	
	<input type="checkbox"/> Lisdornan Overbridge	
	<input type="checkbox"/> Dardistown Road Overbridge	
	<input type="checkbox"/> Dardistown land Overbridge	
	<input type="checkbox"/> Kilsharvan Road Overbridge	
	<input type="checkbox"/> Beymore Road Overbridge	
	<input type="checkbox"/> Donore Road Overbridge	
	<input type="checkbox"/> Sheephouse Road Overbridge	
	Underbridges	<input type="checkbox"/> Balloy Underbridge
		<input type="checkbox"/> Duleek Road Underbridge
	River Bridges	<input type="checkbox"/> River Nanny Bridge
Rail Bridges	<input type="checkbox"/> Lagavooren Railway Bridge	

