



**transport21**  
progress in motion



Kilkenny County Council  
Comhairle Chontae Chill Chainnigh

## **M9 Kilcullen to Waterford Scheme Phase 2: Waterford to Knocktopher**

**Officially opened on 22 March 2010  
by Mr Noel Dempsey T.D., Minister for Transport in the  
presence of Councillor Michael O'Brien  
Cathaoirleach, Kilkenny County Council**

## **Scéim M9 Cill Chuilinn go Phort Láirge Céim 2: Port Láirge go Cnoc an Tóchair**

**An tUasal Nollaig Ó Díomasaigh, T.D.  
Aire Iompair a d'oscail go hoifigiúil i láthair  
Mícheál Ó Bráin, Cathaoirleach, Comhairle Chontae Chill Chainnigh  
ar an 22 Mí na Márta 2010**



This scheme was funded by the Irish Government under the National Development Plan 2007-2013.  
Planning and design was part financed by the European Union



*“ M9 WATERFORD TO KNOCKTOPHER MOTORWAY  
... WILL ATTRACT INVESTMENT FOR THE ENTIRE  
REGION AS A RESULT OF LINKING DIRECTLY TO THE  
RECENTLY OPENED N25 WATERFORD CITY BY-PASS ”*



# Message from the Minister ...

"The opening of the M9 Waterford to Knocktopher motorway brings us one step closer to completion of the M9 major inter-urban route connecting Dublin and Waterford. It will greatly improve the road safety, as well as enhance the quality of life for residents of Knocktopher, Mullinavat and Ballyhale by eliminating through traffic.

Additionally, it will attract investment for the entire region as a result of linking directly to the recently opened N25 Waterford City By-pass. It will also improve the regional access to Kilkenny via the existing N10. The final section of the M9 inter-urban motorway, Knocktopher to Carlow, is on schedule for opening later this year and as a result will fulfill the goal of regional and national connectivity as outlined under Transport 21."

Minister for Transport  
Noel Dempsey T.D.

Teachtaireacht ón Aire ...

"Céim amháin eile é, cun an nasc tábhachtach idir Baile Átha Cliath agus Phort Láirge a thabhairt i gchríoch, oscailt an M9 ó Phort Láirge go Cnoc an Tóchair. Feabhasóidh sé sábháilteacht bóthair, agus cuirfidh sé go mór le caighdeán bheatha, muintir Cnoc an Tóchair, Muilleán an Bhata agus Baile Héil mar go gcealófar tréthrách"

Leis sin, meallfar infheistíocht isteach sa réigiún go h-iomlán, mar go mbeidh nasc leis an N25 - Seachbhóthair Chathair Phort Láirge. Ina theannta san, feabhasófar rochtain le Chill Chainnigh via an N10. Ta an rannóg deireannach den mótarbhealach idir-chathrach M9, idir Cnoc an Tóchair agus Ceatharlach, ar sceideal chun oscailt níos déanaí sa bhliain seo; agus dá bharr san, tabharfar ceann na sprice atá againn i gcríoch, sé sin, inrochtaineacht réigiúnda agus náisiúnta mar a legadh amach faoi chlár Iompar 21."

Aire Iompair  
Nollaig Ó Díomasaigh, T.D.





Peter Malone, Chairman, National Roads Authority

"The M9 Waterford to Knocktopher scheme is the third major section of the new road to open that will connect Waterford to Dublin via motorway standard. As a result it will improve road safety, shorten journey times and afford both the Waterford and Kilkenny regions opportunities for increased inward investment and assist in attracting foreign investment. Additionally, the improved road network will aid tourists in accessing a full range of offerings from the Irish hospitality industry throughout the South East."



Johannes Hahn, EU Commissioner for Regional Policy

"I welcome the opening of the Waterford to Knocktopher scheme, forming part of the Dublin-Waterford M9 motorway. A vital aspect of this road opening will be the elimination of head on accidents due to the separation of traffic inherent in the design. Additionally, it will assist in the efficient movement of traffic between the Eastern and Southern counties of Ireland. Furthermore it will improve links between Ireland and mainland Europe. The European Commission is pleased to have part-financed the planning and design of this important project through the European Regional Development Fund."



Joe Crockett, County Manager, Kilkenny County Council

"The opening today of the M9 Waterford to Knocktopher motorway scheme and a further section of motorway from Knocktopher to Danesfort junction is of vital significance to the County and City of Kilkenny and to the entire South East region. The new motorway now completed provides another vital link complimenting the Waterford City By Pass and Carlow to Kilcullen motorway which opened late last year.

The development of the M9 motorway will be hugely beneficial to the economy of Kilkenny and of the South East Region. Towns and villages such as Mullinavat, Ballyhale, Knocktopher, Stoneyford and Thomastown will at last experience an enhanced quality of life and a vastly improved urban environment.

It will transform inter-urban travel times and improve accessibility and connectivity within the region and to Dublin. It will also help improve competitiveness in these challenging times.

I commend the efforts of Arup Consulting Engineers, BAM Civil Engineering Contractors and all those who worked on the scheme. I also acknowledge with sincere thanks the patience and co-operation of landowners and communities affected during the course of the construction work".



Councillor Michael O'Brien, Cathaoirleach, Kilkenny County Council

"The largest infrastructural project ever constructed in Kilkenny, the M9 Waterford to Knocktopher Scheme, opens to traffic today. As Cathaoirleach of Kilkenny County Council I am extremely pleased to be present to witness such an historic development and to welcome the concurrent opening to traffic of a further 10 kilometres of motorway between Knocktopher and Danesfort.

The transformation of County Kilkenny's national road network is fast becoming a reality and this year, 2010, will represent significant and welcome progress in the improvement of our road network.

As of today road safety will be greatly improved for those using the new motorway as they can now by-pass many of the villages and poor stretches of road where many collisions have occurred in the past.

I wish to offer my sincere thanks to all who were involved in bringing this project to a successful conclusion and in particular to congratulate the contractor BAM, the scheme designers Arup Consulting Engineers, the National Roads Authority and the Roads Project Office, Kilkenny County Council for their hard work and professionalism over the duration of this project."

Dúirt Peadar Ó Maoleoin, Cathaoirleach an Údaráis um Bóithre Náisiúnta:

“Tá an scéim Bóthair M9, Port Láirge go Cnoc an Tóchair ar an tríú mórstráice a osclaíodh den bhóthar nua a cheanglóidh Port Láirge agus Baile Átha Cliath de bhíthin carrbhealach caighdeánach. De thoradh san, feabhasófar sábháilteacht bóthair, giorrófar amanna taistil, agus cuirfear deiseanna nua ar fáil infheistíocht isteach a mhéadú agus infheistíocht coigrícheach a mhealladh. Ina theannta san, cabhróidh an gréasán bóthair feabhasaithe le turaseóirí chun rochtana ar iomláin tairiscintí tionscail fháilteachais na hÉirinn ar fuaid an Oir-Deiscirt.”



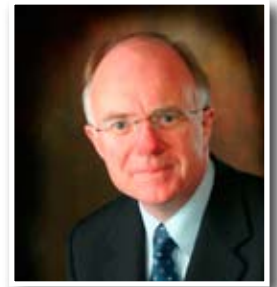
Johannes Hahn, Coimisinéir um Pholasaí Réigiúnach

“Cuirim fáilte roimh oscailt scéim Port Láirge go Cnoc an Tóchair, rannóg de’n mótarbhealach M9, Baile Áta Cliath go Port Láirge. Gné rí-thábhachtach é de’n oscaith seo ná deire a chur le timpistí ceann-ar-cheann tré’n deighilt tráchta ata mar buntréith sa dearadh. Leis sin, cabhróidh se le h-éifeacht gluais na tráchta idir Chontae an Oirthir agus an Deiscirt in Éirinn. Thairis sin, feabhasófar na nascanna idir Éirinn agus móirthír na hEorpa. Cúis sásaimh do Choimisiún na hEorpa páirt-maoiniú pleanáil agus dearadh an tionscnamh tábhachtach seo faoi Chiste Forbartha Réigiúnach na hEorpa.”



Joe Crockett Uas., Bainisteoir an Chontae, Comhairle Chontae Chill Chainnigh

“Tá oscailt oifigiúil an M9, ó Cnoc an Tóchair go Port Láirge, maraon le rannóg mótarbhealaigh ó Chnoc an Tóchair go ghabhal Dhún Feartha, rí-thábhachtach do Chontae agus do Chathair Chill Chainnigh, agus do iomlán an Oir-Dheiscirt chomh maith. Solátharaíonn an mótarbhealach atá anois críochnaithe nasc rí-thábhachtach idir Sheach-bhóthair Chathair Phort Láirge agus an mótar-bhealach ó Cheatharlach go Cill Chuillinn a d’oscail anuraidh.”



Cuirfudh forbairt an M9 go mór le geilleagar Chill Chainnigh agus le Réigiún an Oir-Dheiscirt. Tiocfaidh feabhas an-mhór ar chaighdeán beatha agus chomhshaol do mhuintir bailte agus sráid-bailte a bheidh seachadtha, ar nós Muilleán an Bhata, Baile Héil, Cnoc an Tóchair, Áth Stúin agus Baile Mhic Andáin.

Trasfhoirmeoidh sé amanna taistil idir-chatchrach, agus feabhsóidh sé inrochtaineacht agus ceangailteacht sa Réigiún agus go cathair Bhaile Áta Cliath, leis. In éineacht leis sin, cuirfidh sé feabhas ar iomaíochas costas na tíre sa ré dúshlánach atá ann anois.

Molaim go mór an sár-iarracht atá curtha isteach ag Muintir Arup Consulting Engineers, agus ag BAM, na Conraitheoirí Innealtóireachta, maraon leo uile a bhí gafa leis an Scéim seo. Ina theannta san, tugaim aitheantas do fhoighne agus do chomh-oibriú úinéirí talún agus pobail áitiúla ar ghoill obair an tógála orthu ar shlí ar bith.”

Comhairleoir Mícheál Ó Bráin, Cathoirléach, Comhairle Chontae Chill Chainnigh

“Tá an tionscnamh fo-struchtúrtha is mó le tógáil ariamh i gCill Chainnigh, an M9 ó Cnoc an Tóchair go Chathair Phort Láirge, ar oscailt i gcóir tráchta inniu. Mar Chathoirléach ar Chomhairle Chontae Chill Chainnigh, tá áthas mór orm bheith i láthair i’m fhinné ar an fhorbairt stairiúil seo, agus leis, chun fáilte a chur roimh an oscailt chomhcéimneach ar deich ciloméadair mótarbhealaí idir Cnoc an Tóchair agus Dún Feartha.

Tá ath-fhoirmiú ghréasáin bóthair náisiúnta Chontae Chill Chainnigh ag teacht go mear chun réaltacht; agus dearbhaíonn feachtais na bliana so, 2010, feabhsú atá suntasach - agus go bhfuil mór-fháilte roimhe - sa ghréasán bóthair seo againne.

Ón lá seo amach, beidh feabhas mór maidir le sábháilteacht bóthair ann dóibh siúd a n-úsáidfidh an mótarbhealach nua, mar beidh sráid-bailte agus droch-stráiceanna bóthair, ar a mbíodh an-chuid tubaistí ag tárlú, á fhágaint ar leath-taoibh acu.

Gabhaim mo mhíle bhuíochas dóibh siúd uile a raibh baint acu leis an tionscnamh seo a thabhairt i gcrích ar son a gcuid dian-oibre agus gairmiúlacht i gcaitheamh na hoibre; go háirithe don chonraitheoir, BAM; do na dearthóirí, Muintir Arup; don Údarás um Bóithre Náisiúnta; agus d’Oifig Thionscadail Bhóithre Chomhairle Chontae Chill Chainnigh.”



# Introduction | Réamhrá

The National Development Plan 2000 to 2006 outlined the need for a high quality dual carriageway to be constructed between Kilcullen and Waterford. The M9 Kilcullen to Waterford Scheme Phase 2: Waterford to Knocktopher Road Improvement forms a significant part of this major inter-urban route. The scheme passes through County Kilkenny and its opening provides a continuous section of motorway some 24 km long between the N25 link road near Grannagh in County Waterford and a grade separated junction to the west of Knocktopher, County Kilkenny.

The scheme consists of a dual 2-lane motorway with two grade separated junctions linking it to the national and regional road network via the towns of Knocktopher and Mullinavat, County Kilkenny. The existing N9 in the vicinity of the scheme, reclassified as a regional road, provides a parallel all-purpose route.

I bPlean Forbartha Náisiúnta 2000 go 2006 léirítear a riachtanaí is atá sé carrbhealach dúbailte ar ardchaighdeán a thógáil idir Cill Chuillinn agus Port Láirgels cuid thábhachtach Scéim Feabhsúchán Bóthair M9, Cill Chuillinn go Port Láirge, Céim 2: Port Láirge go Cnoc an Tóchair den mhórbhealach idiruirbeach seo. Gabhann an scéim trí chontae Chill Chainnigh agus cuireann oscailt na scéime stráice leanúnach carrbhealaigh 24 km ar fhad ar fáil idir an nascbhóthar N25 in aice an Ghreanach i gContae Phort Láirge agus acomhal grádscairtha siar ó Chnoc an Tóchair i gContae Chill Chainnigh.

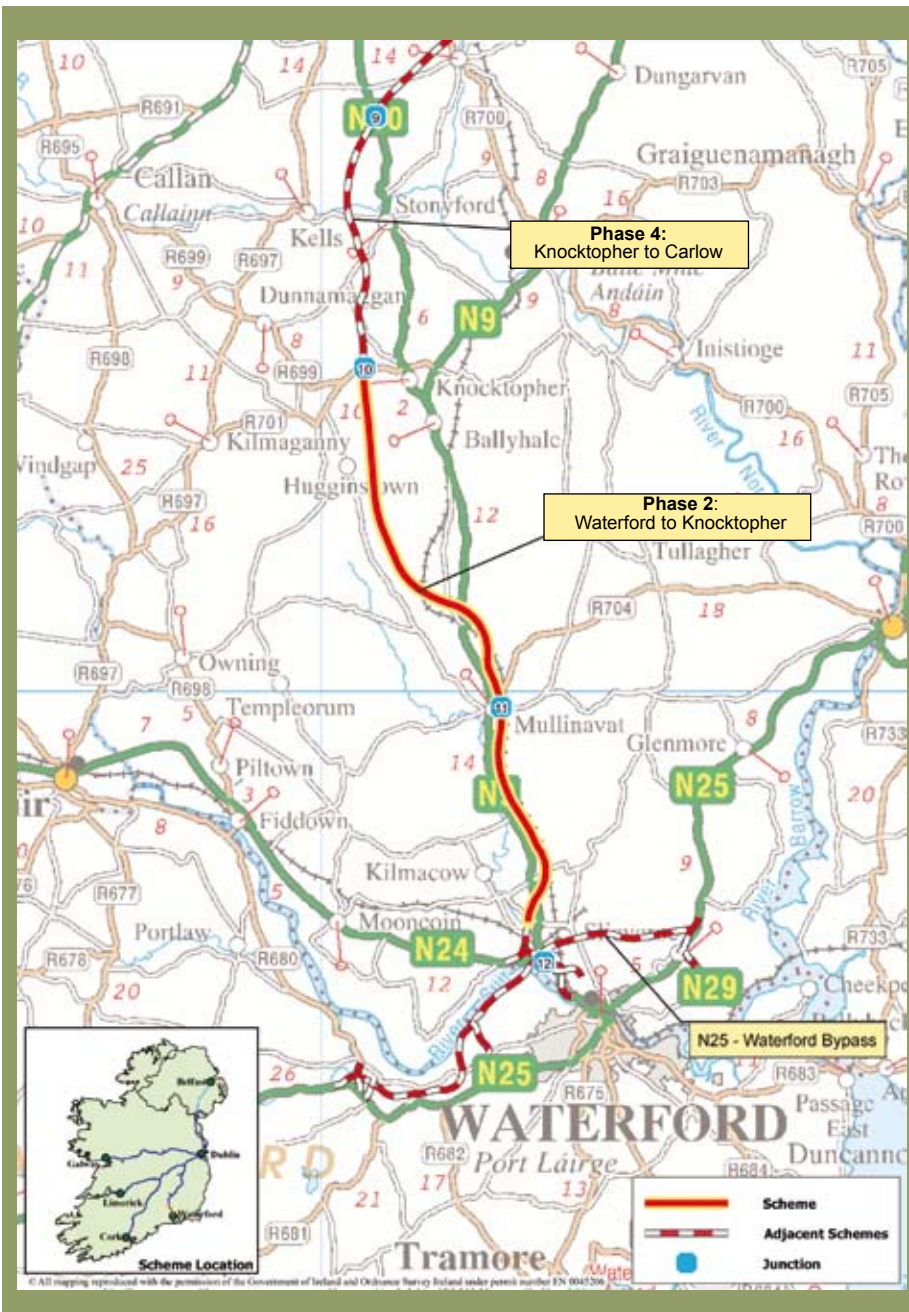
Carrbhealach dúbailte 2-lána atá i gceist leis an scéim lena n-áirítear dhá acomhal ghrádscairtha a dhéanann nasc idir í agus an líonra bóthair réigiúnach agus náisiúnta tríd an dá bhaile, Cnoc an Tóchair agus Muileann an Bhata i gContae Chill Chainnigh. Cuireann an N9 atá athaicmithe mar bhóthar réigiúnach agus a ritheann in aice na scéime faoi láthair bealach ilchuspóireach comhthreomhar ar fáil."

# History of the Scheme



In October 2000, Kilkenny County Council, the lead local authority, appointed consultants Arup Consulting Engineers and Roughan O'Donovan-FaberMaunsell Alliance to undertake the design of the N9/ N10 Powerstown to Waterford Scheme and its promotion through the statutory process. The M9 Waterford to Knocktopher section was one element of this overall scheme. A Constraints Study and Route Selection Study led to the identification in October 2001 of a preferred route, which was presented to the public.

## M9 Kilcullen to Waterford Scheme Phase 2 Waterford to Knocktopher Scheme Plan



Following further development of the preferred route, an Environmental Impact Statement and Compulsory Purchase Order for the scheme were submitted to An Bord Pleanála in February 2005.

An Oral Hearing was held in June 2005 and An Bord Pleanála approved the scheme, subject to certain modifications and undertakings, in November 2005.

As part of the N9/N10 Kilkenny Consult Joint Venture, Arup Consulting Engineers and Roughan O'Donovan-FaberMaunsell were appointed to undertake the preparation of tender documents, procurement of a Contractor and to provide supervision of construction as the Engineer under the Contract for Kilkenny County Council. The scheme was to be procured as a design and build contract, using the modified FIDIC Form of Contract.

In November 2006, BAM Construction (previously Ascon) was awarded the Contract for the design and construction of the scheme. Their Design Consultant was Jacobs Engineering.

Construction started at the end of January 2007. As a result of some difficult challenges on the project, the completion date of 22 March 2010 is outside of the two year programme envisaged at the outset of the Contract.



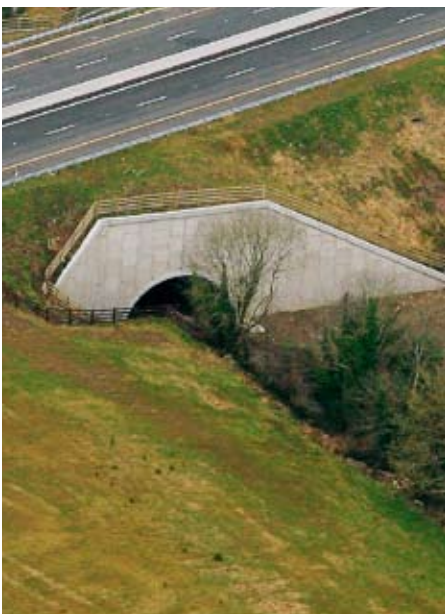
# Protection of the Local Environment

Protecting the environment and providing mitigation to minimise the effects of the motorway on the surrounding countryside were important considerations in the development of the scheme. Extensive landscaping has been carried out to screen properties from the route and to help blend the scheme into the surrounding landscape. To minimise the impact of road traffic noise, noise bunds and barriers have been erected at certain locations along the route. All the road drainage is attenuated to green-field run off levels and the design incorporates measures to protect watercourses and aquifers from pollution.

To protect wildlife, badger and otter passes were constructed under the motorway and substantial lengths of badger and otter proof fencing were erected to guide the animals to the underpasses and prevent them getting onto the motorway. The design and construction of the scheme considered the particular sensitivity of the candidate Special Area of Conservation (cSAC) at Hugginstown Fen.



## Cosaint an Chomhshaoil Logánta



Rinneadh machnamh le linn obair forbartha na scéime ar a thábhachtaí is a bheadh sé an comhshaoil a chosaint agus drochiarmhairtí an charrbhealaigh don dúiche máguaird a mhaolú agus a íoslaghdú. Rinneadh tírdhreachú forleathan d'fhonn sciath a chur idir maoinne sealbhais agus an bealach agus d'fhonn aon aonad leanúnach amháin a dhéanamh den scéim agus den tírdhreach ina mórthimpeall. D'fhonn éifeacht thorann na tráchta bóithre a íoslaghdú tógadh ballaí cré agus baicinní ag ionaid áirithe ar feadh an bhealaigh.

Déanfar an uisce a shileann ón mbóthair a thabhairt chun tanaíochta le go rithfidh sé isteach sna garraí glasa taobh leis agus tá bearta cosanta sruthchúrsaí agus uiscíoch ar thruaillíú ina ndlúthchuid den dearadh.

D'fhonn fiadhúlra a chosaint gearradh pasáistí amach faoi bhun an charrbhealaigh le haghaidh broc agus dobharchúnna agus tógadh ballaí sách fada a bhí cóirithe ina n-aghaidh d'fhonn na hainmhithe a threorú chuig na híosbhealaí agus d'fhonn cosc a chur orthu teacht ar an gcarbhealach. Rinneadh machnamh le linn obair dheartha na scéime ar a íogaire a bhí an limistéar ag Eanách Bhaile Hugúin a bhfuiltear ag iarraidh an stádas Ceantar Caomhantais Speisialta (cSAC) a bhaint amach dó.



## Benefits of the M9 Scheme

When the whole of the major interurban route between Dublin and Waterford is completed in 2010, it will:

- Reduce travelling time between the two cities by 45 minutes
- Provide a safer road and reduce the number of accidents
- Improve the quality of life for towns and villages along the route
- Allow for the proper development and expansion of the towns and villages bypassed by the Scheme

Phase 2 Waterford to Knocktopher will make an important contribution to all these improvements. The valued co-operation of the property and land owners whose lands were acquired for the construction of Phase 2 Waterford to Knocktopher is hereby acknowledged.

## Archaeology Summary

An intensive pre-construction investigation strategy, including desk-based archaeological assessment, a full walkover study, geophysical and underwater surveys, was implemented to assess the impact of the proposed scheme on the archaeological heritage. The road was successfully designed to avoid all known archaeological monuments identified in its proximity.

In early 2006, Margaret Gowen & Co. Ltd undertook a programme of test excavations to identify all potential archaeological sites within the lands acquired for construction of the new road and so minimise the risk of costly delays to the construction works. Fifty-four previously undocumented sites were identified as a result of this work.

Valerie J. Keeley Ltd carried out archaeological excavations at these sites in 2006 and 2007 in advance of road construction to ensure their preservation by record. Post-excavation analysis is now complete and final excavation reports are in preparation.

While County Kilkenny is justifiably well known for its Medieval heritage; the archaeological investigations along the route of the N9/N10 Phase 2 has led to the discovery of some much earlier sites and uncovered evidence for some of Kilkenny's earliest prehistoric communities. These discoveries are enabling archaeologists and historians to add to the story of our ancestors' settlement of this rich land.



## Sochair na Scéime M9

Nuair a bheidh iomlán an mhórbhealaigh idiruibigh idir Baile Átha Cliath agus Port Láirge tugtha chun críche i 2010:

- Beidh laghdú de 45 nóiméad ar an am taistil idir an dá chathair
- Beidh bóthar níos sábháilte ann agus beidh laghdú ar líon na dtimpistí
- Beidh feabhas ar mhianach saoil sna bailte agus sna sráidbhailte ar feadh an bhealaigh
- Déanfar soláthar d'fhorbairt agus do leathnú na mbailte agus na sráidbhailte a ngabhann an Scéim tharstu.

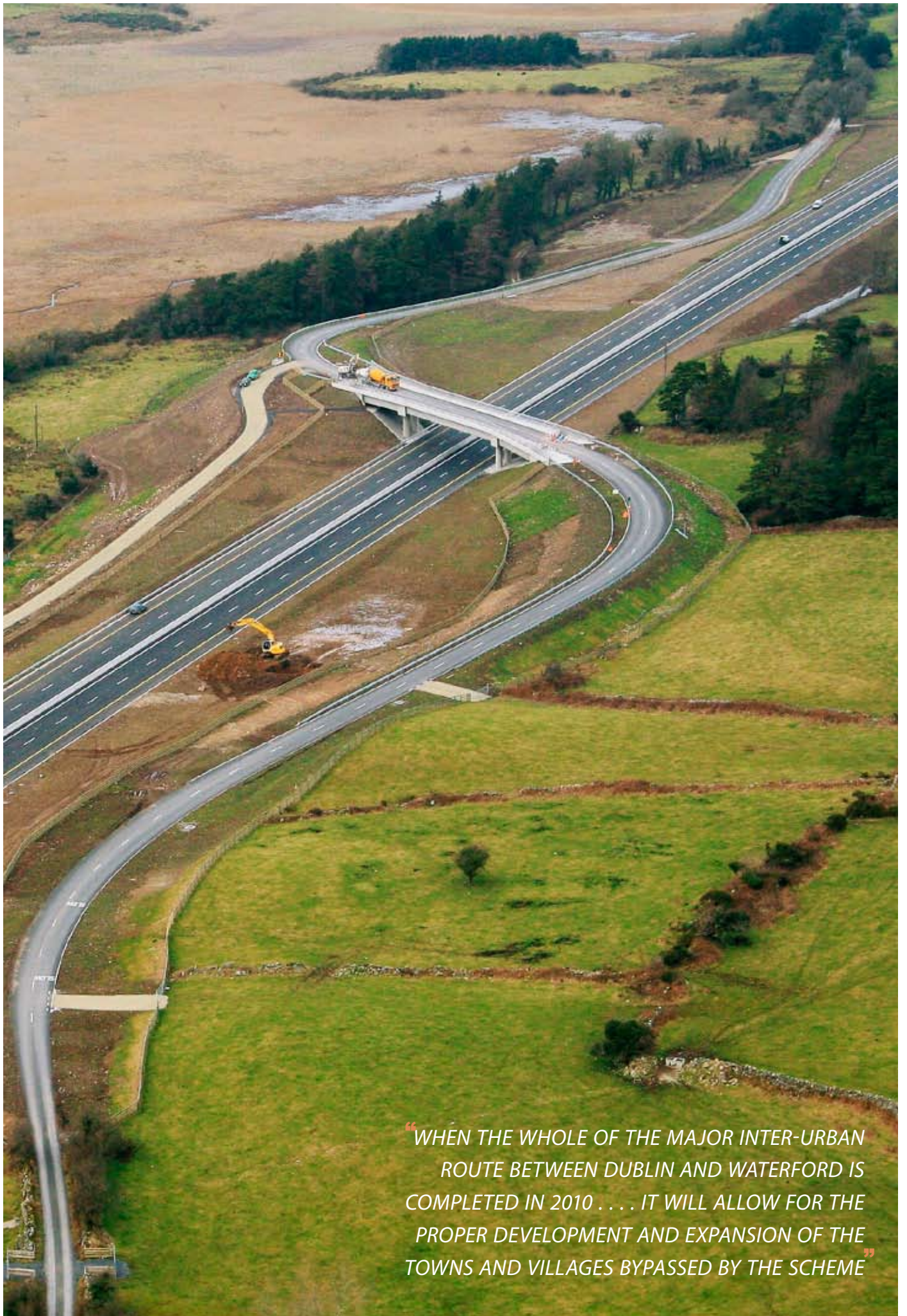
Cuideoidh Céim 2, Port Láirge go Cnoc an Tóchair go mór leis na feabhsaithe sin. Admhaítear leis seo gur mór atáthar faoi chomaoin chomhoibriú na n-úinéirí talún agus maoin sealbhais ar glacadh seilbh ar a gcuid tailte le haghaidh na hoibre tógála ar Chéim 2, Port Láirge go Cnoc an Tóchair.

## Achoimre Sheandálaíochta

Cuireadh dianstraitéis iniúchta réamhthógála i bhfeidhm ar a n-áirítear measúnú deascbhunbaithe, suirbhéanna geoifisiceach agus faoi uisce d'fhonn tionchar na scéime a bhí molta ar an oidhreacht sheandálaíochta a mheasúnú. Dearadh an bóthair sa chaoi is go seachnófaí gach séadchomhartha seandálaíochta aitheanta ina chónagar agus seachnaíodh. Go luath i 2006 thug Margaret Gowen & Co. Ltd faoi chlár tochairle tástála d'fhonn gach suíomh seandálaíochta ionchasach ar na tailte a bhí faighte le haghaidh obair thógála an bhóthair nua a liostáil agus d'fhonn an baol go gcuirfí moill chostasach ar na hoibriúcháin tógála a íoslághdú ar an dóigh sin. De thoradh na hoibre sin ainmníodh 54 shuíomh nach raibh doiciméadaithe riamh roimhe.

Rinne Valerie J. Keeley Ltd tochairle seandálaíochta ag na suíomh sin i 2006 agus 2007 chun tosaigh ar obair thógáil an bhóthair lena gcaomhnú ar taifead a chinntiú. Tá an anailís iarthochailte tugtha chun críche anois agus tá tuarascálacha tochairle deiridh á n-ullmhú.

Cé go bhfuil aitheantas maith ar Chill Chainnigh mar gheall ar a hoidhreacht Mheánaoiseach agus údar leis sin, thángthas ar shuíomh ó aois i bhfad níos luaithe agus nochtadh fianaise ar roinnt de na pobail réamhstairiúla ba luaithe i gCill Chainnigh le linn na dtochailte ar feadh bhealach Chéim 2 den N9/N10. Tá na fionnachtana sin ag cur ar chumas seandálaithe agus staraithe cur le stair lonnaíocht ár sinsear sa dúiche shaibhir seo."



*“WHEN THE WHOLE OF THE MAJOR INTER-URBAN  
ROUTE BETWEEN DUBLIN AND WATERFORD IS  
COMPLETED IN 2010 . . . IT WILL ALLOW FOR THE  
PROPER DEVELOPMENT AND EXPANSION OF THE  
TOWNS AND VILLAGES BYPASSED BY THE SCHEME”*

# Construction Contract - Key Information

## Construction Facts

Length of main carriageway:	23.5km
Length of ancillary side roads:	9.5km
Interchanges:	2 No. Knocktopher Mullinavat
Structures:	32 number including 2 rail bridges 4 river bridges
Earthworks:	
Cut Volume:	3,000,000 m <sup>3</sup>
Fill Volume:	2,200,000 m <sup>3</sup>

## Conradh Togála Eochareolas

Fad an Phríomhcharrbhealaigh:	23.5km
Fad Bóithre Coimhdeacha Taoibh:	9.5km
Crosbhealaigh:	méid 2 Cnoc an Tóchair Muilleán an Bhata
Struchtúir:	méid 32 ag cuimsiú 2 trasrian iarnróid agus 4 trasrian abhann Créfort:
Toit ghearrtha:	3,000,000 m <sup>3</sup>
Toirt lín:	2,200,000 m <sup>3</sup>

## Funding

This brochure was funded by the Irish Government under the National Development Plan (NDP) 2007 - 2013 and part-financed by the European Union.

## Maoiniú

Fuair an bróisiúr seo maoiniú ó Rialtas na hÉireann faoin bPlean Forbartha Náisiúnta (NDP) 2007 - 2013 agus páirtmhaoiniú ó Ionstram an Aontais Eorpaigh.



## Management of the Scheme

The project was co-ordinated through monthly steering group committee meetings and technical committee meetings, which involved the following people:

Mr John Mulholland:	Director of Services, Kilkenny County Council
Mr Joe Gannon:	Project Co - ordinator, Kilkenny County Council
Mr Con Daly:	Senior Executive Engineer, Tramore House Regional Design Office
Mr John Fitzsimons:	Senior Project Manager, National Roads Authority
Mr Winston Douglas:	Senior Project Manager, National Roads Authority
Mr Troy Burton:	Project Director, Arup Consulting Engineers
Mr Denis Crowley:	Project Director, Arup Consulting Engineers
Mr Kevin Colquhoun:	Project Engineer's Representative, Arup Consulting Engineers
Client's Design Consultants:	Arup Consulting Engineers
Contractor:	BAM Contractors
Mr Tadhg Lucey:	Project Manager, BAM Contractors
Mr Declan Roche:	Contracts Manager, BAM Contractors
Contractor's Design Consultants:	Jacobs Consultancy
Archaeology:	Valerie J Keeley Ltd, Margaret Gowen & Co. Ltd.
Mr James Eogan:	NRA Senior Archaeologist