

Gary Cotter & Associates Ltd.
Rockmills
23 Derryknockane Close
Ballycummin
Raheen
Limerick

Limerick Southside Regeneration Area – M7 Junction
Alternative Junction Design-Concept Proposal Feasibility Stage

Issue 1
11-May-12

Contents

1.0 Introduction

2.0 Development in and adjacent to Limerick Southside Regeneration Area

3.0 Proposal for Alternative Junction Design

4.0 Comments on the MWRDO Report output for consideration

5.0 Alternative Option 2A

6.0 Conclusions

Appendix A – Drawings by Kilgallen and Partners

1.0 Introduction

Limerick Regeneration Agencies, Limerick City Council and Limerick County Council recently commissioned a report to examine the possibility of providing improved connectivity to Limerick City and the Limerick Southside Regeneration Area from the M20 Cork/Tralee direction.

The report, carried out by the Mid West National Road Design Office(MWNRDO), examined 14 no. options, noted the advantages and disadvantages of each and made a conclusion in relation to the feasibility of each. In relation to Option 2, a possible reconfiguration of the Rosbrien Interchange to provide the improved connectivity, the report noted that this option was the subject of a separate study and therefore a decision on 'feasible/not feasible' was not made.

This is the separate report on the potential reconfiguration of the Rosbrien Interchange as referred to in the MWNRDO report. The option considered in this report is an alternative junction layout to Option 2 and is referred to as Option 2A, access in to the Roxboro area of the City and the Southside Regeneration Area is considered and a decision on 'feasible/not feasible' is made.

At present, the configuration of the Rosbrien Interchange provides northbound traffic on the M20 with only two options. One is to turn east on to the M7 towards Limerick City East and Dublin or two, turn west on to the N18 towards Limerick City West and Galway (via the tunnel).

This report can be read in conjunction with the MWNRDO report.

2.0 Development in and adjacent to Limerick Southside Regeneration Area.

Since the completion of the final design and construction of the Rosbrien Interchange, steady and significant development has taken place in the Roxboro Road, Childers Road and general Southside area of Limerick City.

Southill and Ballinacurra Weston are two of the designated Regeneration areas that have had significant resources and specialist interventions introduced in the past four years. The area has undergone major investment in the Social, Business and Physical infrastructures in that time with more planned under the ongoing Regeneration Project.

In the past ten years the area has grown as a destination and it could gain further benefit with improved connectivity from the M20 and this could potentially open up new business opportunities within the Limerick Southside Regeneration Area.

Limerick Enterprise Development Partnership has since 1999 generated almost 1000 jobs on its 16 acre site at Roxboro. Its weekly footfall is over 15,000 people with practically all of the State training organisations located on site.

3.0 Proposal for Alternative Junction Design

The Limerick Regeneration Agency regards the provision of improved connectivity from the M20 to the Roxboro/Limerick Southside Regeneration area to be crucial to the regeneration of these areas. Access for traffic travelling from the Dublin direction on the M7 to the area is well catered for at other junctions and is not regarded as being essential at the Rosbrien Interchange.

4.0 Observations made on the 14 options considered in the MWNRDO Report.

1. 6 no. of the 14 no. options were deemed feasible and the report recommended that these options be brought forward for more detailed consideration.
2. All 6 options deemed feasible require new intersection reconfigurations providing connectivity off the M7 to the east, either at the Bawnmore or Kilmallock Roads, providing either interior access at Bawnmore or peripheral access at Kilmallock, to the Southside Regeneration Area. The new intersection reconfigurations are of varying complexity both geometrically and in potential land acquisition. Traffic weaving considerations between existing and reconfigured intersections also arise.
3. 3 no. of the options offer access to traffic from both the Dublin and Cork directions with the remaining 3 no. options catering for traffic from the Cork direction only, ie, providing direct access from Dublin direction does not affect feasibility in principle.
4. Option 2 examined reconfiguration of the existing junction, providing periphery access to the Southside Regeneration Area. A number of disadvantages were recorded, including ;
 - Doesn't cater for M7 traffic (not critical, see no.3 above)
 - Impact on lands made available to Limerick Tunnel Concessionaire
 - Significant construction cost – estimated at €5m
 - Conflicts with services (gas, watermain and sewer)
 - 2 major bridges required
 - Double diverge and merge on ramps
 - John Carew Park Link road roundabout may need to increase in size with potential impact on adjacent residential housing
 - May require additional lands
 - Very difficult geometrically
 - Significant traffic disruption and safety concerns
 - Signage difficulties

5.0 Alternative Option 2A

The Limerick Regeneration Agency requested the assistance of Gary Cotter and Associates Ltd (GCA) to prepare this report. GCA sought the assistance of Kilgallen and Partners to determine if the requirement could be achieved in compliance with the Geometric Standards of the NRA required for such an Interchange.

Drawing No.'s 12002-PR101 and 102 attached to this report provide details of a proposed reconfiguration of the Interchange, now referred to as Option 2A.

As per the other 14 options, the advantages and disadvantages are listed:

Advantages

- Direct link for M20 northbound traffic to City via Roxboro area.
- Access to periphery of Southside Regeneration Area.
- Unlikely to require additional lands.
- Cost – preliminary opinion would be it is likely that the capital cost will be less than the capital cost of Option 2. With regard to the other feasible options it may be comparable in some cases.

Disadvantages

- Doesn't cater for M7 traffic (not critical, see no.3)
- Impacts on lands made available to Limerick Tunnel Concessionaire.
- John Carew Park link road roundabout may need to be increased in size with potential impact for adjacent residential housing.
- Traffic disruption due to on line works
- Conflicts with services
- Signage difficulties

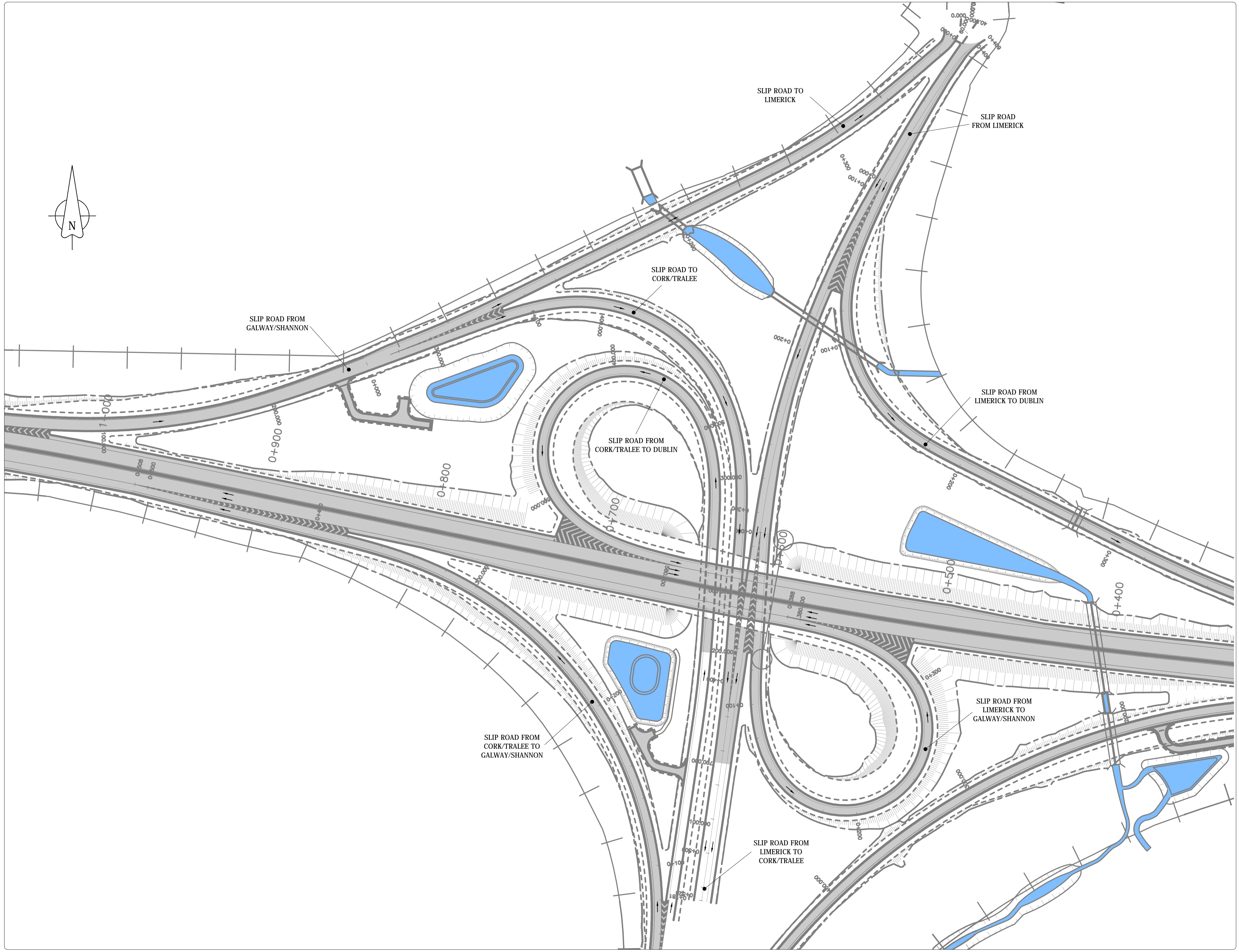
6.0 Conclusions

This report presents proposals for an alternative layout at Rosbrien Interchange (Option 2A) to provide improved connectivity to Limerick City for northbound traffic on the M20.

This proposal is deemed feasible when assessed using the same criteria as was applied to the considerations identified in the MWNRDO report and should be brought forward for more detailed consideration in conjunction with the other 6 feasible options.

Appendix A

Drawings by Kilgallen and Partners overleaf



REV	DATE	BY	DETAILS

STATUS
PRELIMINARY

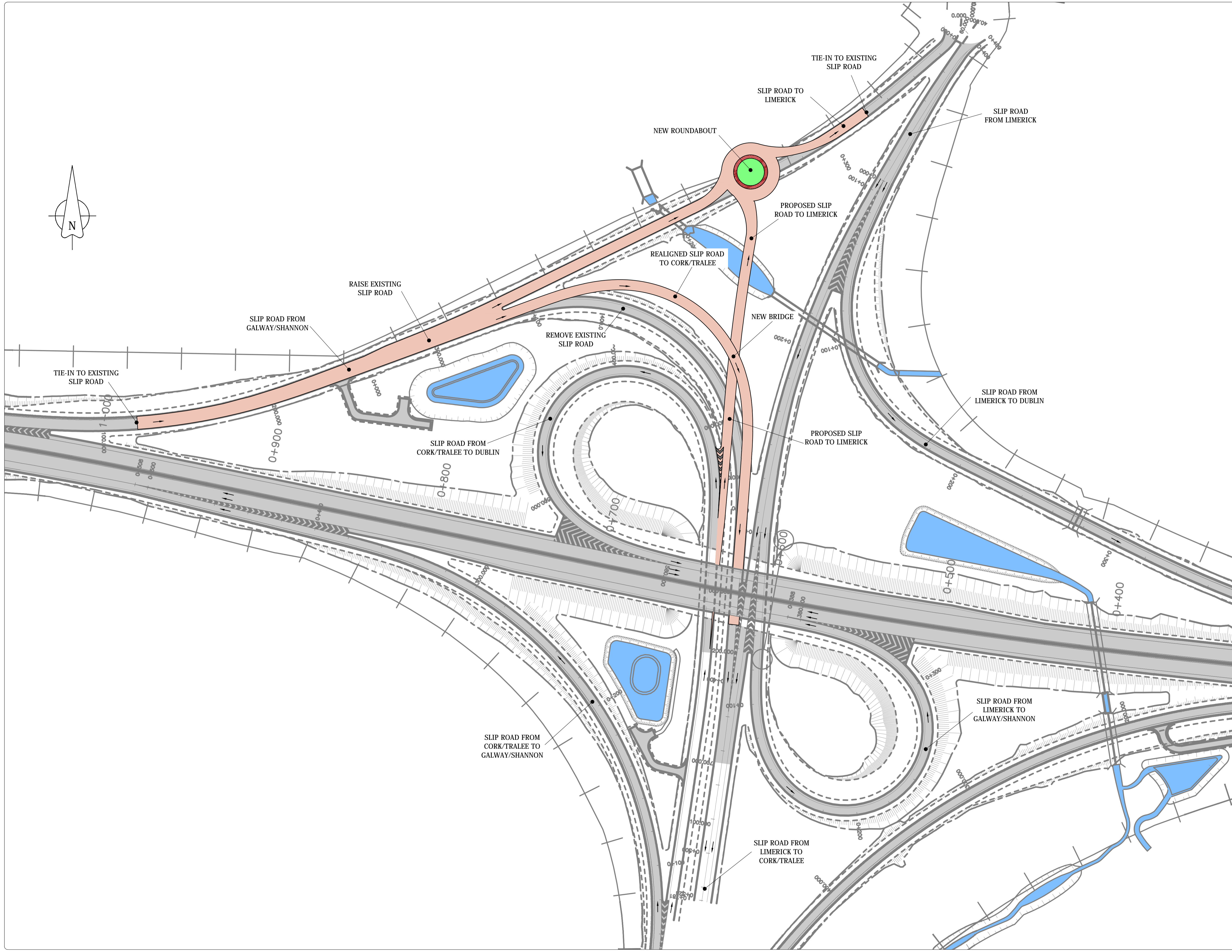
CLIENT
LIMERICK REGENERATION

PROJECT
ROSBRIEN INTERCHANGE, LIMERICK
N20 CORK/TRALEE TO LIMERICK SLIP ROAD

TITLE
EXISTING INTERCHANGE LAYOUT


KILGALLEN & PARTNERS
 CONSULTING ENGINEERS
 KYLEKIPROE, WELL ROAD, PORTLAOISE, CO. LAOIS
 Tel: +353 57 86 62860, Fax: +353 57 86 62861
 E-mail: Info@kilgallen.ie, Web: www.kilgallen.ie

DRN:	MOC	SCALE:	1:1,000 @ A1	DRAWING NO.:	212-002-100	REV.:	P1
CHKD:	PB	DATE:	17.01.2012				



REV	DATE	BY	DETAILS

STATUS
PRELIMINARY

CLIENT
LIMERICK REGENERATION

PROJECT
ROSBRIEN INTERCHANGE, LIMERICK
N20 CORK/TRALEE TO LIMERICK SLIP ROAD

TITLE
SCHEMATIC LAYOUT OF PROPOSED N20
CORK/TRALEE TO LIMERICK CITY SLIP ROAD
AND ASSOCIATED WORKS


KILGALLEN & PARTNERS
 CONSULTING ENGINEERS
 KYLEKIPROE, WELL ROAD, PORTLAOISE, CO. LAOIS
 Tel: +353 57 86 62860, Fax: +353 57 86 62861
 E-mail: Info@kilgallen.ie, Web: www.kilgallen.ie

DRN:	MOC	SCALE:	1:1,000 @ A1	DRAWING NO.:	212-002-101	REV.:	P1
CHKD:	PB	DATE:	17.01.2012				

