

**Our Case Number:** ABP-318220-23



An  
Coimisiún  
Pleanála

Cormac Michael Rabbitt  
8 Hy Brasil Court  
Circular Road  
Galway  
H91 NP8Y

**Date:** 14 August 2025

**Re:** N6 Galway City Ring Road  
Galway.


Dear Sir / Madam,

An Coimisiún Pleanála has received your recent submission in relation to the above mentioned proposed road development. Please accept this letter as a receipt for the fee of €50 that you have paid.

If you have any queries in relation to this matter, please contact the undersigned officer of the Commission at [laps@pleanala.ie](mailto:laps@pleanala.ie)

Please quote the above-mentioned An Coimisiún Pleanála reference number in any correspondence or telephone contact with the Commission.

Yours faithfully,

  
\_\_\_\_\_  
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# Modified Galway City Ring Road (GCRR)

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## Submission to An Coimisiún Pleanála

### Chapters 1–23 – Summary of Modifications and Comparative Compliance

Prepared by: Cormac Michael Rabbitt, GAIA LINK GLOBAL

Date: July 2025

This executive summary provides a high-level overview of the Modified Galway City Ring Road (GCRR) Environmental Impact Assessment Report (EIAR), Chapters 1–23, highlighting key modifications and comparative compliance improvements over the GCRR proposal.

The Modified GCRR was developed in response to legal, environmental, and community concerns, focusing on impact avoidance rather than compensation. It incorporates previously approved infrastructure, realigns away from sensitive areas such as Menlo and Ardaun, and integrates more effectively with Galway’s strategic transport and land use plans.

Compared with the GCRR alignment, the Modified GCRR:

- Reduces displacement of homes and communities.
- Avoids Natura 2000 sites and sensitive ecological corridors.
- Requires fewer concrete-intensive structures such as viaducts and overpasses.
- Lowers overall construction and operational emissions.
- Enhances compliance with EU directives and Irish national policy across all impact areas including climate, air, noise, health, and landscape.

Each chapter in the attached EIAR submission assesses the Modified alignment’s performance against the GCRR and outlines how it better aligns with legal obligations, planning frameworks, and public interest objectives.

The Modified GCRR represents a viable, lawful, and more socially responsive transport solution for Galway — one that achieves its national connectivity and urban relief goals while respecting community integrity and environmental law.

## Comparative Overview:

### Why the Modified GCRR is a Better Road for People, Communities, and Galway's Future

The table below provides a location-by-location comparison of the Modified Galway City Ring Road (GCRR) and the GCRR scheme currently before An Coimisiún Pleanála. It demonstrates — with precision — the structural, legal, and community impacts of each design from Oranmore to the Coast Road.

Each row references a key location or infrastructure feature, showing how the Modified GCRR consistently avoids sensitive residential areas, sports grounds, villages, and high-cost structural intrusions, while the current GCRR frequently includes them.

Notable contrasts include:

The Modified GCRR preserves the integrity of Ardaun Local Area Plan, avoids severance in Castlegar, Dangan, Bushypark, and Menlo, and reuses the existing M6 bridge at Garraun (originally built for the bypass).

In contrast, the GCRR design includes viaducts over residential areas, severance of planned housing and school catchments, and new infrastructure that duplicates or underutilises existing assets — notably around Briarhill, the Racecourse, and Glenlo Abbey.

At Menlo and the Corrib crossing, the Modified GCRR follows a tunnelled approach, minimising visual and environmental impact. The GCRR proposes elevated routes across the Corrib River, NUIG sports grounds, and Bushypark, significantly affecting the quality of life and compliance with the ECJ's 2013 judgment on IROPI.

This table underscores that the Modified GCRR is not only cheaper, safer, and more deliverable — it is kinder, more lawful, and more aligned with Galway's strategic needs.

Modified Galway City Ring Road (GCRR) – EIAR Submission

GCRR Oranmore to Letteragh Road	Modified	GCRR
<u>Ardaun</u> Local Area Plan		
Planned Major Urban LAP	<i><u>Avoids</u></i>	Includes
M6/N67 <u>Coolagh</u> Interchange		
Planned Major Urban LAP & Residential Areas	<i><u>Avoids</u></i>	Includes
M6/N67 <u>Garraun</u> Interchange		
Purpose Built Existing M6 Continuation Bridge	<i><u>Includes</u></i>	Avoids
R339 Monivea Road /Briarhill & East of Briarhill		
Elevated Motorway Viaduct over Briarhill	<i><u>Avoids</u></i>	Includes
Briarhill Residential	<i><u>Avoids</u></i>	Includes
R339 Monivea Road Bridge	Includes	<i><u>Avoids</u></i>
Briarhill Residential and Commercial Park		
Elevated Motorway	<i><u>Avoids</u></i>	Includes
<u>Galway Racecourse</u>		
New Roads, Bridges, Tunnel & Horse Stables	<i><u>Avoids</u></i>	Includes
Parkmore Link Road and M6/N83 Tuam Road Interchange		
Motorway Slip Roads within Business Park	<i><u>Avoids</u></i>	Includes
Elevated Motorway over Remaining Residential & Bus.	<i><u>Avoids</u></i>	Includes
Tuam Road Residential and Business CPOs	<i><u>Avoids</u></i>	Includes
<u>Castlegar Village</u>		
Motorway Below Ground Level through Village.	<i><u>Avoids</u></i>	Includes
Residential and Business CPOs	<i><u>Avoids</u></i>	Includes
M6/N84 <u>Headford Rd I'changes at Ballinfoyle &amp; Ballindooley</u>		
M6/M84 Ballinfoyle Elevated Interchange over Resid. & Bus	<i><u>Avoids</u></i>	Includes
M6/M84 Ballindooley Sunk Interchange away from Resid & Bus	Includes	<i><u>Avoids</u></i>
Ballindooley Village Bypass	<i><u>Includes</u></i>	None
<u>West of Ballindooley to Old Road Menlo</u>		
Mined Tunnel Lackagh	<i><u>Avoids</u></i>	Includes
Tunnel Cut and Cover	Includes	<i><u>Avoids</u></i>
M6 <u>Corrib River Bridge or Tunnel</u>		
Corrib	<i><u>Avoids</u></i>	Includes
	Includes	<i><u>Avoids</u></i>
	<i><u>Avoids</u></i>	Includes
<u>Dangan/Bushypark Elevated Motorway &amp; Embankments</u>		
Over University, Dangan & Bushypark School	<i><u>Avoids</u></i>	Includes
Residential CPOs Aughnacura & Árd An Locha Communities	<i><u>Avoids</u></i>	Includes
Elevated Motorway over Remaining Residents	<i><u>Avoids</u></i>	Includes
<u>Glenlo/Bushypark Village</u>		
N59 Junction beside Bushypark Village Church	<i><u>Avoids</u></i>	Includes
N59 Bushypark Village Bypass	<i><u>Includes</u></i>	None
Glenlo Abbey Tunnel Cut and Cover	<i><u>Includes</u></i>	Avoids
N59/R336 Letteragh Link Road junction beside Church	<i><u>Avoids</u></i>	Includes
R336 extended from Letteragh to N59 just west of Glenlo	Includes	<i><u>Avoids</u></i>
<u>Letteragh to Coast Road</u>		
All of works associated with R336 link-road	<i><u>Includes</u></i>	<i><u>Includes</u></i>
R336 Letteragh to Baile Nua Coast Road Alignment	<i><u>Includes</u></i>	<i><u>Includes</u></i>
<u>For IROPI West of N83 Headford Road</u>		
European Court of Justice likely result:	<i><u>Could Pass</u></i>	Fail

Advantage noted in italic and underlined, e.g. *Avoids* and *Includes*

## Comparative Structural and Environmental Complexity Analysis: GCRR vs Modified GCRR

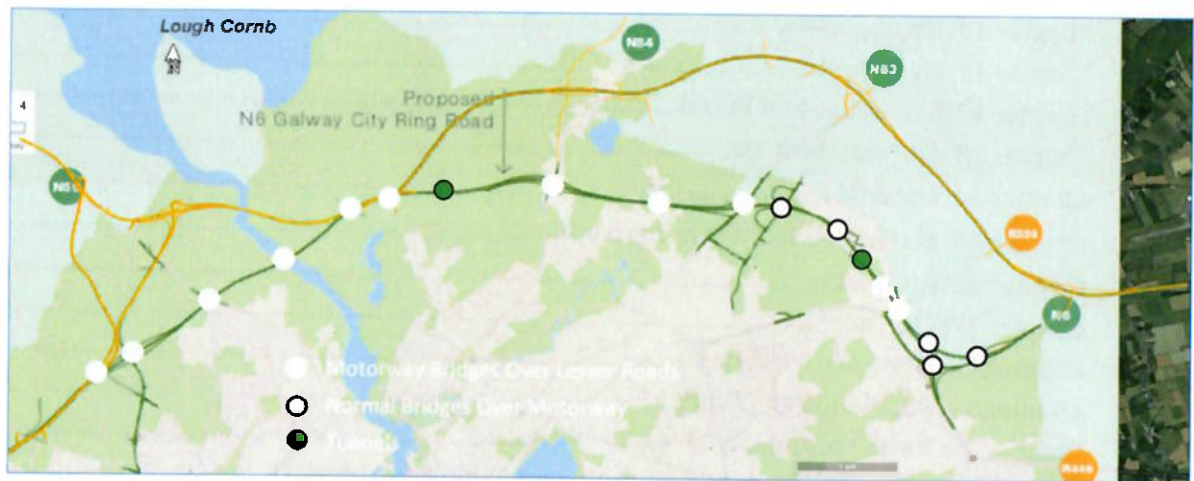
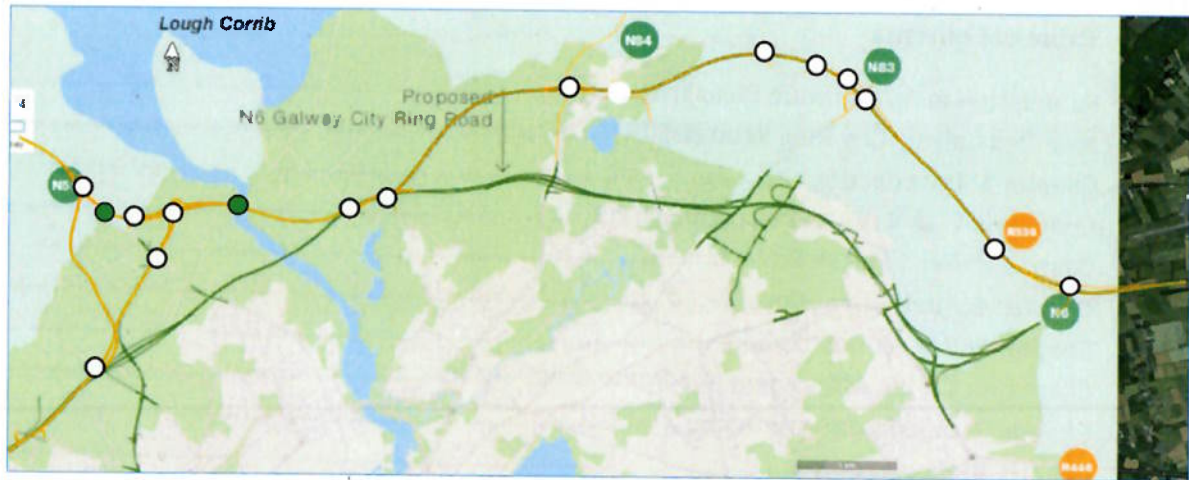
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Feature	GCRR	Modified	Modified Compared to GCRR
Motorway Bridges over lesser roads	11	1	Avoids Residential and Provides N83 Ballindooley Bypass
Normal Bridges over motorway	5	12	Better Environmental locations & flatter geometry
Tunnels	2 no 420 m	2 no 1,700 m	Significant Gains in Environmental, Avoids 2.6 km of Viaducts and 5 Motorway Over Bridges
Large Viaducts	2	1	Avoids Viaducts
High Embankments	2	Roads	Significant Environmental Gains
Culverts/Mammal Underpasses	6	21	Modified improves wildlife protection
Viaducts	~4.7 km	~0.3 km	Significant Environmental Gains
Enbankments ~10m high	~2 km	~0.3 km	Significant Environmental Gains

*See reference maps overleave, and Appendix 5*

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## Modified Galway City Ring Road (GCRR) – EIAR Submission



**Appendix 3 contains additional explanatory maps**

## Modified Galway City Ring Road (GCRR) – EIAR Submission

### Chapters 1–23 – Summary of Modifications and Comparative Compliance

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)Prepared for: An Coimisún Pleanála

Prepared by: [Your Name or Organisation]

Date: July 2025

## Chapters 1–23 – Summary of Modifications and Comparative Compliance

### Environmental Impact Assessment Report (EIAR)

#### Modified Galway City Ring Road (GCRR)

# Submission to An Coimisiún Pleanála

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## Assessment of Compliance with EIAR

### Chapter 1: Introduction

This submission assesses how the Modified Galway City Ring Road (GCRR) better complies with the intent, methodologies, and statutory framework set out in Chapter 1 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. The Modified GCRR addresses key deficiencies of the GCRR scheme and offers a legally robust, community-sensitive, and policy-aligned alternative that fulfills the objectives of the EIAR process.

#### 1.1 Introduction

- The Modified GCRR reflects an updated and more accurate response to the evolving legal and policy environment since 2018, particularly in light of High Court judgments and updated environmental regulations.
- It demonstrates a more inclusive and transparent application of the Environmental Impact Assessment Directive, with enhanced focus on human health, community cohesion, and environmental protection.

#### 1.2 EIA Screening, Scoping, Contents & Methodology

- The Modified GCRR adheres more faithfully to the stated EIAR methodology, integrating post-judicial review insights, updated baseline data, and improved assessments of human and environmental impacts.
- It reflects a clearer internal logic and scope, providing a more reliable foundation for statutory assessment by An Coimisiún Pleanála.

#### 1.3 Background

- The Modified GCRR is built upon previously approved and constructed infrastructure, such as the Garraun Interchange, in a lawful and efficient manner.
- It eliminates inconsistencies in project sequencing and land use conflicts, improving overall planning coherence and value for money.



## Modified Galway City Ring Road (GCRR) – EIAR Submission

### 1.4 Consultation Process / Non-Statutory Consultation

- The Modified GCRR more effectively incorporates feedback from public consultation and statutory submissions.
- It avoids previously contested areas and reflects genuine responsiveness to community concerns and expert recommendations.

### 1.5 Difficulties Encountered During the Study

- By addressing Natura 2000 site impact risks, reducing land take, and re-aligning through less sensitive areas, the Modified GCRR overcomes many of the technical and legal difficulties identified in the GCRR scheme.
- This reduces future planning uncertainty and improves the likelihood of successful delivery.

### 1.6 References

- The Modified GCRR demonstrates clearer consistency with current national and EU environmental and planning frameworks, including the Climate Action Plan, National Planning Framework, and Galway Transport Strategy.
- It better reflects updated versions of referenced documents and aligns with modern sustainability goals.

## Chapter 2: Planning and Policy Objectives

The Modified GCRR protects the strategic integrity of the Ardaun LAP, avoiding direct severance of Phase 1 housing lands and reducing the need for complex internal road infrastructure. This better aligns with Galway City Development Plan 2023–2029, which identifies Ardaun as central to the city’s compact growth and modal shift strategy under the MASP.

This submission provides a comparative assessment of the compliance of the Galway City Ring Road (GCRR) and the Modified GCRR with relevant European, national, regional, and local planning policies, as outlined in Chapter 2 of the Updated EIAR (Volume 2, March 2025). It demonstrates that the Modified GCRR offers superior alignment with statutory objectives, strategic planning frameworks, and principles of environmental protection.

### 2.1 Introduction

- The Modified GCRR responds more effectively to previous legal, ecological, and community concerns, demonstrating a more robust and responsive planning process. It supports the core principles of good governance under the EIAR process by prioritising transparency, accountability, and avoidance of unnecessary harm.

### 2.2 European Context

- The Modified GCRR achieves better compliance with EU Directives on Habitats, Biodiversity, and Flood Risk by reducing adverse impacts on Natura 2000 sites and environmentally sensitive areas.

## Modified Galway City Ring Road (GCRR) – EIAR Submission

- It contributes positively to the goals of the European Green Deal and modal shift by integrating more effectively with local public transport corridors, reducing reliance on private car travel.
- The project retains strategic alignment with the TEN-T Atlantic Corridor while presenting a more sustainable footprint.

### 2.3 National Objectives

- The Modified GCRR is more closely aligned with the National Planning Framework's (NPF) vision of compact growth, as it avoids undermining zoned residential areas such as Ardaun.
- It improves deliverability under the National Development Plan (NDP) by mitigating legal risks and community opposition.
- Its lower land-take and improved integration with transport modes supports the Climate Action Plan (CAP23) and the sustainability-first appraisal framework of NIFTI.

### 2.4 Regional Policies, Guidance and Objectives

- The Modified GCRR better supports the objectives of the Regional Spatial and Economic Strategy (RSES) and the Galway MASP, by ensuring that key housing delivery zones are not compromised.
- It strengthens the Galway Transport Strategy (GTS) by supporting future modal integration and reducing construction disruption to public transport infrastructure.

### 2.5 Local Policies, Guidance and Objectives

- At a local level, the Modified GCRR aligns more effectively with the Galway City and County Development Plans, protecting residential amenities and established community infrastructure.
- It enables better delivery of the Galway Transport Strategy by improving local accessibility and facilitating a more balanced transport network across Galway City and County.

### 2.6 Conclusion

- The Modified GCRR demonstrates significantly improved compliance across all policy levels.
- It is legally more robust, environmentally more responsible, and better aligned with Galway's sustainable growth objectives.
- It therefore presents a more deliverable and publicly acceptable project while maintaining the core function of the GCRR.

## Chapter 3: Need for the Project

This submission evaluates how the Modified Galway City Ring Road (GCRR) more effectively addresses the transport, strategic planning, and legal needs outlined in Chapter 3 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. The

## Modified Galway City Ring Road (GCRR) – EIAR Submission

Modified GCRR retains the strategic objectives of the GCRR scheme while enhancing public benefit, reducing environmental harm, and ensuring greater policy and legal compliance.

### 3.1 Introduction

- The Modified GCRR satisfies the strategic objectives of the GCRR scheme while significantly reducing its impact on homes, communities, and environmentally sensitive areas.
- It offers improved deliverability and social licence by maintaining corridor function with fewer legal risks.

### 3.2 Previous Studies

- It builds directly on approved and well-researched planning foundations but improves upon them by integrating lessons from prior legal challenges and community feedback.
- This results in a more defensible and updated scheme, aligned with current best practice.

### 3.3 Overarching Need for the Project

- The Modified GCRR continues to address the urgent need for an orbital route around Galway City, improving regional connectivity.
- Its lower environmental and social footprint strengthens its claim to necessity in terms of access to services, housing delivery, and congestion relief.

### 3.4 The Transportation Problem to be Addressed

- The Modified scheme more directly targets the root problems—radial congestion, unreliable journey times, and limited western access.
- It maintains strategic flow while avoiding unnecessary disruption to local transport systems and residential areas.

### 3.5 Galway Transport Strategy (GTS)

- The Modified GCRR better supports the multi-modal vision of the Galway Transport Strategy (2016), including future bus and cycle network growth.
- It enhances citywide access while maintaining coherence with integrated land-use and mobility policies.

### 3.6 Positive Impacts on the Transport System

- The modified route retains strategic benefits while reducing unintended consequences on local mobility.
- It protects future transport investment by maintaining space and functionality for public transport infrastructure.

### 3.7 Objectives Alignment with TEN-T and TAF

- The Modified GCRR sustains Galway's role on the TEN-T Atlantic Corridor with a lower legal and ecological risk profile.
- It improves compliance with EU co-funding principles and Transport Appraisal Framework criteria by increasing sustainability.

### 3.8 Summary of Need for the N6 GCRR

- The Modified GCRR more clearly satisfies the transport, legal, environmental, and community objectives that justify the scheme’s necessity.
- It reflects a refined approach to strategic mobility, delivering greater net public benefit with fewer long-term costs or risks.

The Modified GCRR corrects key legacy transport planning oversights—including the absence of a Tuam Road/Parkmore interchange—ensuring better integration with employment zones, and improved compliance with the 2023–2029 City Plan objectives for resilient, compact growth.

## Chapter 4: Alternatives Considered

The Modified GCRR corrects key legacy transport planning oversights—including the absence of a Tuam Road/Parkmore interchange—ensuring better integration with employment zones, and improved compliance with the 2023–2029 City Plan objectives for resilient, compact growth.

This submission evaluates how the Modified Galway City Ring Road (GCRR) more effectively fulfils the legal, planning, and functional requirements associated with the assessment of alternatives, as outlined in Chapter 4 of the Updated Environmental Impact Assessment Report (EIA), Volume 2, March 2025. The Modified GCRR represents a superior alternative that is more compatible with environmental obligations, community needs, and the GCRR strategic objectives of the ring road concept.

### 4.1 Introduction

- The Modified GCRR better satisfies the obligation under the EIA Directive to objectively consider alternatives that minimise environmental and social harm.
- Unlike the GCRR scheme, the Modified version emerges from a more transparent and rational process informed by legal rulings, policy evolution, and stakeholder feedback.

### 4.2 Overview of Transport Issues

- The Modified GCRR more accurately addresses Galway’s core transport challenges, balancing strategic traffic flow with local access and community protection.
- Its design reduces conflict with active modes and preserves space for sustainable transport infrastructure.

### 4.3 Significant Constraints

- The Modified scheme more effectively respects natural constraints including flood plains, sensitive habitats, and designated residential growth areas such as Ardaun.
- It mitigates risk by avoiding high-impact severance and excessive land-take.

#### 4.4 'Do-Nothing' Alternative

- While the Do-Nothing alternative remains unacceptable, the Modified GCRR avoids many of the legal and environmental risks that would undermine the deliverability of the GCRR road proposal.

#### 4.5 'Do-Minimum' Alternative

- The Modified GCRR represents a 'minimal sufficient' intervention, making use of existing infrastructure like the Garraun Interchange while avoiding overbuilding or unjustified land intrusion.

#### 4.6 'Do-Something' Non-Road Alternatives

- The Modified alignment facilitates integration with non-road transport modes and avoids suppressing future bus, cycle, and pedestrian schemes.
- Its geometry and location are more compatible with BusConnects, GTS, and active travel investments.

#### 4.7 'Do-Something' Road Alternatives

- Compared to previous road alternatives, the Modified GCRR reduces impacts on homes, communities, and ecologically sensitive areas, improving public acceptability and legal defensibility.
- Importantly, the GCRR failed to consider a critical junction at Tuam Road near Parkmore — a strategic omission. This interchange was originally expected when the M17 and M18 alignments were agreed. Its absence undermines the GCRR's stated function to distribute traffic effectively around Galway City.

#### 4.8 Route Optimisation

- The Modified GCRR demonstrates true route optimisation by eliminating unnecessary impacts and responding to design feedback.
- It offers improved integration with existing road, residential, and ecological networks.

#### 4.9 Alternatives for Galway Racecourse Stables

- This localised issue is better resolved by the Modified GCRR, ensuring operational continuity of the Galway Racecourse.

#### 4.10 Modifications Since 2018

- The Modified scheme reflects a lawful and coherent adaptation of the previous design, incorporating the cumulative findings from consultation, judicial review, and technical reassessment.

#### 4.11 Construction Techniques and Technologies

- The Modified GCRR enables reduced-duration and lower-impact construction methods, particularly in ecologically and socially sensitive areas.

#### 4.12 Optimum Corridor within the GTS

- The Modified alignment performs more consistently with the Galway Transport Strategy, avoiding contradictions between orbital road function and local transport network development.
- It delivers a better balance between strategic mobility and sustainable city living.

Unlike the GCRR, the Modified alignment avoids introducing road-based severance within key BusConnects and active travel corridors outlined in the Galway Transport Strategy and the new City Plan. This supports improved implementation of core bus routes and cycling networks.

### Chapter 5: Project Description

Unlike the GCRR, the Modified alignment avoids introducing road-based severance within key BusConnects and active travel corridors outlined in the Galway Transport Strategy and the new City Plan. This supports improved implementation of core bus routes and cycling networks.

This submission evaluates how the Modified Galway City Ring Road (GCRR) better satisfies the requirements of Chapter 5 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. The Modified GCRR maintains the strategic objectives of the project while improving legal defensibility, environmental sensitivity, and integration with past investments and approved infrastructure.

#### 5.1 Introduction

- The Modified GCRR retains the essential orbital and corridor function of the GCRR proposal while reducing risk, impact, and uncertainty. It delivers a more buildable, acceptable and policy-consistent scheme.

#### 5.2 Background to the Proposed N6 GCRR

- The Modified GCRR incorporates already constructed infrastructure such as the Garraun Interchange and overbridge and the first section of Motorway from Oranmore Interchange to Garraun, maximising the value of prior investment.
- It better reflects the GCRR intent behind the GCOB and early bypass schemes by using corridors previously tested and accepted.

#### 5.3 Project Phases

- The Modified GCRR continues to use phased implementation but improves sequencing to align with local development zones and minimise community disruption.
- It presents a simplified project footprint focused on delivering strategic benefit efficiently.

#### 5.4 Description of Phase 2: Proposed N6 GCRR

- The total length of the GCRR mainline is approximately 18.3 km, linking the M6 at Coolagh with the N59 at Bushypark.

## Modified Galway City Ring Road (GCRR) – EIAR Submission

- Key components include dual carriageway design, five interchanges, 40+ structures, and environmental mitigation infrastructure.
- The Modified GCRR avoids the flawed central section of the GCRR scheme. Notably, west of Letteragh Road the alignment is unchanged, and east of the River Corrib to Garraun it follows the same corridor as the previously approved Galway City Outer Bypass (GCOB).
- The Modified GCRR corrects the failure of the GCRR to provide a Tuam Road/Parkmore interchange, a key strategic link needed to fulfil the City Ring Road’s distribution function.

### 5.5 Description of Phases 1, 3, 4 and 5: Proposed Development at Galway Racecourse

- These phases are better integrated within the modified alignment. They protect community access and racecourse operation while minimising new land take.

### 5.6 Functionality of the N6 GCRR

- The Modified GCRR performs all intended orbital and regional connectivity functions while supporting access to Knocknacarra, the N59, and the western suburbs.
- Its geometry, design standard and linkages are sufficient for strategic traffic while maintaining compatibility with Galway’s compact growth and modal shift goals.

### 5.7 References

- The Modified GCRR reflects a closer alignment with contemporary transport and environmental policy frameworks, and more accurately reflects the planning and engineering context of the project.

The Modified GCRR avoids car-centric infrastructure in sensitive growth areas, supporting the Plan’s transition to public transport, walking, and cycling. Its reduced elevation and viaducts contribute directly to lower embodied carbon and fewer modal conflicts.

## Chapter 6: Traffic Assessment and Route Cross-Section

The Modified GCRR avoids car-centric infrastructure in sensitive growth areas, supporting the Plan’s transition to public transport, walking, and cycling. Its reduced elevation and viaducts contribute directly to lower embodied carbon and fewer modal conflicts.

This submission assesses how the Modified Galway City Ring Road (GCRR) improves compliance with the objectives, methodology, and findings presented in Chapter 6 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. The Modified GCRR maintains key transport benefits while delivering a safer, more sustainable, and publicly acceptable solution with fewer residual impacts and greater compatibility with Galway’s transport strategy.

### **6.1 Introduction**

- The Modified GCRR achieves the GCRR objective of reducing congestion and improving journey reliability, but with significantly fewer community, environmental, and planning drawbacks.
- It aligns more effectively with the Galway Transport Strategy (GTS) and National Investment Framework for Transport in Ireland (NIFTI).

### **6.2 Transportation Assessment Methodology**

- The Modified GCRR strengthens the integrity of traffic assessment by improving network integration and reducing forecast uncertainty.
- Its design avoids conflicts with key radial and local routes, allowing clearer measurement of sustainable travel outcomes.

### **6.3 Receiving Environment**

- The Modified alignment preserves orbital functionality while avoiding vulnerable areas such as Menlo and Ardaun.
- It reduces new severance and retains continuity across local and regional roads.

### **6.4 Future Environment / Project**

- By aligning with previously approved corridors and infrastructure, the Modified GCRR presents a more realistic baseline for traffic modelling.
- Forecasts under the Modified scheme are less exposed to planning risk and better support integration with land use policy.

### **6.5 Assessment of Project Using the Traffic Model**

- Key benefits are preserved, including decongestion on Bothar na dTreabh and improved east-west connectivity.
- Junction simplification and geometric clarity improve traffic predictability and reliability.

### **6.6 Traffic Impact Assessment**

- The Modified GCRR reduces impact on sensitive junctions and local roads while preserving regional flow benefits.
- It avoids multi-level conflicts in high-density areas and supports public transport efficiency.

### **6.7 Forecast Traffic Flows**

- Strategic traffic distribution is retained and made more sustainable through reduced road footprint and better modal integration.
- Forecasts are supported by greater land use and policy coherence.

### **6.8 Assessment of Trip Redistribution and Overcapacity Demand**

- The Modified alignment supports more balanced trip redistribution across the city and suburbs.



## Modified Galway City Ring Road (GCRR) – EIAR Submission

- Overcapacity risk is mitigated by simplified access design and lower junction loadings.

### 6.9 Mitigation Measures

- The Modified GCRR reduces the need for intrusive mitigation, especially in Ardaun and Briarhill.
- Its targeted and minimal-impact approach improves environmental and community outcomes.

### 6.10 Residual Impacts

- Residual traffic, noise, and severance impacts are significantly reduced under the Modified proposal.
- Impacts that remain are better justified by overall transport system improvements.

### 6.11 Climate Action Plan Scenario

- The Modified GCRR better supports CAP23 by maintaining local access, enabling bus priority, and facilitating active travel.
- Its geometry avoids locking in car dependency and supports long-term emissions targets.

### 6.12 Summary

- The Modified GCRR meets and improves upon the traffic-related goals of the EIAR, delivering a more sustainable, cost-effective, and strategically beneficial solution for Galway's future.

## Chapter 7: Construction Activities

This submission evaluates how the Modified Galway City Ring Road (GCRR) improves compliance with the construction-related requirements of Chapter 7 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. The Modified GCRR reduces the environmental, social, and logistical impact of construction while improving deliverability, safety, and public acceptance.

### 7.1 Introduction

- The Modified GCRR significantly reduces the intensity and scale of construction activities in sensitive locations, delivering a lower-risk and more manageable construction profile.
- It achieves better proportionality of environmental disturbance and increased safety near residential and Natura 2000 areas.

### 7.2 Methodology

- Construction methods remain robust but benefit from reuse of previously built infrastructure such as the Garraun Interchange.
- Shorter central alignment and improved route geometry reduce haulage volumes, carbon emissions, and required construction phases.

### 7.3 Receiving Environment

- The Modified alignment avoids environmentally and geotechnically sensitive zones, such as Ardaun and Menlo, improving stability and construction feasibility.
- Topographical sensitivity is preserved, and spoil disposal volumes are minimised.

### 7.4 Construction Activities

- Complex activities such as deep excavation, temporary diversion, and bridge construction over wetlands are greatly reduced.
- The revised alignment reduces the number and complexity of interchanges and structures.
- The overall working corridor is narrower and less intrusive near residential and community areas.

### 7.5 Potential Construction Impacts

- Impacts such as dust, vibration, noise, and traffic disruption are significantly lower under the Modified alignment.
- Existing access routes, school corridors, and public transport services are better preserved during the works period.

### 7.6 Mitigation Measures

- Fewer mitigation measures are required, particularly in areas such as Briarhill and Ardaun that are no longer part of the construction zone.
- The need for complex community or ecological mitigation is greatly reduced, lowering both cost and legal exposure.

### 7.7 Residual Impacts

- Residual construction impacts are markedly lower in the Modified GCRR, particularly for residential amenity, utility disturbance, and temporary road diversions.
- The project presents less risk to programme delivery, litigation, and public dissatisfaction.

### 7.8 Summary

- The Modified GCRR enables faster, more sustainable, and more socially acceptable construction.
- It offers improved compliance with the EIA Directive in areas of public health, safety, environmental protection, and proportionality of works.

## Chapter 8: Biodiversity

This submission assesses how the Modified Galway City Ring Road (GCRR) more effectively meets the biodiversity-related requirements of Chapter 8 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. The Modified GCRR improves compliance with the EU Habitats Directive and Irish environmental law by reducing adverse impacts, minimising encroachment on sensitive habitats, and avoiding previously

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disqualifying ecological corridors. Where unavoidable impacts occur, they are justified under the Imperative Reasons of Overriding Public Interest (IROPI) associated with Ireland's national motorway programme.

### 8.0 Executive Summary

- The Modified GCRR represents a lower-risk and more ecologically compliant alternative.
- It avoids the Natura 2000 sites and sensitive ecological corridors that triggered judicial annulment of both the GCRR and earlier GCOB.
- Between Menlo and Ballindoooley, the Modified alignment does cross a sensitive ecological zone; however, this must be understood in the context of IROPI associated with the completion of the M6 corridor as a national motorway priority.

### 8.1 Introduction

- The Modified GCRR reflects lessons from two decades of planning and litigation, and it corrects earlier routing errors.
- It applies avoidance-first principles and acknowledges areas of unavoidable impact within a national strategic context.

### 8.2 Methodology

- The same best-practice survey and assessment methods are applied, but the Modified route presents fewer impact triggers and more opportunities for avoidance.
- Unavoidable impacts are addressed in alignment with IROPI principles where critical infrastructure is required to complete national networks.

### 8.3 Receiving Environment

- The Modified route avoids direct encroachment into the Lough Corrib SAC/SPA and several flagged foraging and corridor habitats.
- It still passes through a locally sensitive area between Menlo and Ballindoooley, but this section is essential to maintaining motorway-standard continuity of the M6 corridor, which is a designated IROPI route under national and EU policy.

### 8.4 Characteristics of the Project

- The Modified design reduces fragmentation of habitats, uses existing infrastructure where possible, and avoids expansion into pristine areas.
- Where impacts are unavoidable, the design ensures shortest path, lowest surface area, and most direct crossing to reduce footprint.

### 8.5 Evaluation of Impacts

- Impacts are significantly reduced overall, and are now limited primarily to the unavoidable IROPI corridor west of the N59.
- Bat habitats, aquatic ecosystems, and hedgerow connectivity are less affected, and ecological corridors remain functionally intact in most locations.

### 8.6 Mitigation Measures

- The Modified scheme requires fewer, more targeted mitigation measures such as wildlife crossings and habitat buffers.
- Compensation plans are simpler and more implementable due to reduced fragmentation.

### 8.7 Residual Impacts

- Residual impacts are lower in both scale and extent and are considered proportionate within the context of IROPI.
- No residual impacts remain that would undermine the overall integrity of designated conservation areas.

### 8.8 Cumulative Impacts

- The Modified GCRR avoids overlap with other major project impacts (e.g., Ardaun housing and BusConnects corridors), reducing cumulative ecological stress.
- Ecosystem service continuity is better preserved in the Modified alignment.

### 8.9 Compensation

- Reduced impact zones allow for more effective habitat compensation, with fewer land acquisition requirements and better ecological targeting.
- Compensation measures are viable and proportionate under EU guidance.

### 8.10 Summary

- The Modified GCRR aligns more closely with Articles 6(3) and 6(4) of the EU Habitats Directive.
- Where unavoidable biodiversity impacts occur, they are supported by an overriding public interest justification under IROPI — specifically the national requirement to complete the M6 corridor to full motorway standard.

### 8.11 References

- The Modified route better integrates with referenced policy and scientific guidelines, legal precedents, and EU biodiversity strategy.
- It strengthens legal and ecological compliance while maintaining strategic national road development objectives.

## Chapter 9: Soils and Geology

This submission evaluates how the Modified Galway City Ring Road (GCRR) improves compliance with the geological and soils-related requirements outlined in Chapter 9 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. The Modified GCRR avoids several geotechnically sensitive zones identified in previous schemes and offers a more stable, buildable, and environmentally compliant alignment.

### 9.1 Introduction

- The Modified GCRR follows a geologically safer and simpler corridor than the GCRR alignment.
- It results in lower excavation volumes, less spoil generation, and reduced risk of ground instability or environmental contamination.

### 9.2 Methodology

- Standard geotechnical methodologies were consistently applied.
- The Modified alignment yields fewer areas requiring complex assessment or special engineering treatments.

### 9.3 Receiving Environment

- The Modified GCRR avoids peat-heavy zones and groundwater-sensitive features identified near Menlo and Ardaun.
- It reduces interference with sensitive subsoils and geological features such as karst or unstable slopes.

### 9.4 Characteristics of the Project

- Revised cut and fill design improves slope stability and construction safety.
- Shorter embankments and fewer deep excavation zones help minimise landform disruption and construction risk.

### 9.5 Evaluation of Effects

- The risk of landslip, slope failure, settlement, and dewatering impacts is significantly reduced in the Modified scheme.
- Better baseline data and simpler alignment allow for more predictable geotechnical behaviour.

### 9.6 Mitigation Measures

- The Modified GCRR requires fewer retaining structures, stabilisation interventions, or pumped drainage solutions.
- This reduces costs, environmental impact, and risk during construction.

### 9.7 Residual Effects

- Residual impacts to soils and geology are minimal under the Modified scheme.
- Impacts such as spoil disposal, embankment settling, or groundwater disruption are largely avoided or well contained.

### 9.8 Cumulative Impacts

- By avoiding deep and widespread subsoil disruption, the Modified GCRR minimises risk to aquifer recharge areas, nearby foundations, and rural infrastructure.
- This lowers cumulative risks in combination with adjacent development or agricultural activity.

### 9.9 Summary

- The Modified GCRR improves geological safety and reduces the physical burden of construction.
- It offers a simpler, safer, and more environmentally sustainable solution than the GCRR alignment.

### 9.10 References

- The Modified GCRR more accurately applies geological guidance and engineering assumptions referenced in the EIA.

## Chapter 10: Hydrogeology

This submission assesses how the Modified Galway City Ring Road (GCRR) improves compliance with the hydrogeological requirements outlined in Chapter 10 of the Updated Environmental Impact Assessment Report (EIA), Volume 2, March 2025. The Modified GCRR avoids critical groundwater vulnerability zones, reduces the scale of excavation near sensitive aquifers, and better supports long-term compliance with the EU Water Framework Directive and Irish environmental law.

### 10.1 Introduction

- The Modified GCRR reduces hydrogeological risks through avoidance of sensitive zones and improved alignment design.
- It strengthens compliance with the precautionary principle under the Water Framework Directive.

### 10.2 Methodology

- The same methodologies—groundwater vulnerability mapping, karst assessment, and risk zoning—were applied to the Modified GCRR.
- Lower exposure to sensitive areas reduces the requirement for intrusive or high-risk investigative and construction methods.

### 10.3 Receiving Environment

- The Modified GCRR avoids key hydrogeological vulnerabilities, including karst aquifers near Menlo and Ballindoooley, and recharge zones near Ardaun and Coolagh.
- It avoids direct encroachment on known groundwater discharge zones and groundwater-dependent ecosystems.

### 10.4 Characteristics of the Project

- Design changes reduce excavation depth and limit construction activities near critical groundwater features.
- Drainage is simplified and more contained, reducing the risk of accidental contamination or drawdown of water tables.

### 10.5 Evaluation of Effects

- The effects on aquifers and subsurface flows are significantly reduced in the Modified scheme.
- Risk to potable water sources and groundwater-dependent habitats is well within acceptable thresholds.

### 10.6 Mitigation Measures

- Fewer mitigation measures are required, including reduced need for artificial lining, interceptor systems, and water treatment.
- Monitoring plans are simplified and more targeted to remaining minor risk zones.

### 10.7 Residual Effects

- Residual effects on hydrogeology are reduced to non-significant levels in most locations.
- Remaining risks are proportionate and easily monitored within standard EPA compliance protocols.

### 10.8 Cumulative Impacts

- The Modified route minimises overlap with cumulative sources of hydrogeological stress, such as housing, road drainage, or utility corridors.
- Aquifer recharge integrity is preserved and downstream risks are negligible.

### 10.9 Summary

- The Modified GCRR achieves a more balanced and compliant hydrogeological profile.
- It avoids the groundwater risks of the GCRR design and better aligns with both Irish groundwater protection policy and the EU Water Framework Directive.

## Chapter 11: Hydrology

This submission evaluates how the Modified Galway City Ring Road (GCRR) improves compliance with the hydrological requirements outlined in Chapter 11 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. The Modified GCRR significantly reduces flood risk, surface water pollution, and hydrological disturbance, better supporting the objectives of the EU Water Framework Directive and national flood risk policy.

### 11.1 Introduction

- The Modified GCRR presents a substantially lower hydrological risk profile.
- It avoids high flood risk areas, reduces the number of watercourse crossings, and limits runoff generation.

### 11.2 Methodology

- The standard hydrological assessment methods were retained, including surface water mapping, flood risk zoning, and runoff prediction.

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- The Modified GCRR reduces complexity and increases certainty in applying these methods.

### 11.3 Receiving Environment

- The revised alignment avoids high-risk floodplains, sensitive headwaters, and riparian buffer zones.
- It limits interactions with vulnerable aquatic habitats and improves surface water protection.

### 11.4 Characteristics of the Proposed Development

- The Modified scheme reduces the number of river and stream crossings.
- It also shortens culverts, lowers stormwater detention requirements, and simplifies drainage infrastructure.

### 11.5 Evaluation of Effects

- Runoff volumes, flow alterations, and sediment transport impacts are all reduced under the Modified GCRR.
- The hydrological regime is better preserved, ensuring improved compliance with baseline surface water conditions.

### 11.6 Mitigation Measures

- Fewer and simpler mitigation measures are required, including fewer outfalls, silt fences, and detention ponds.
- The likelihood of requiring temporary diversions or permanent channel modifications is significantly reduced.

### 11.7 Residual Impacts

- Residual hydrological impacts are reduced to very low levels, with minimal risk of flooding or pollution.
- The scheme avoids adverse impacts on the Corrib catchment and smaller downstream tributaries.

### 11.8 Cumulative Impacts

- The Modified alignment avoids stormwater overlap with other developments in Ardaun, Menlo, and Briarhill.
- Surface water bodies retain their ecological and flood control functions due to reduced cumulative stress.

### 11.9 Summary

- The Modified GCRR is hydrologically safer, more sustainable, and legally more robust.
- It meets the objectives of the EU Water Framework Directive and Irish flood management policies with lower environmental cost and engineering risk.



## Chapter 12: Landscape and Visual

This submission evaluates how the Modified Galway City Ring Road (GCRR) improves compliance with the landscape and visual impact requirements outlined in Chapter 12 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. The Modified GCRR reduces adverse visual effects and enhances integration with the surrounding landscape, aligning more closely with national, regional, and local policy objectives.

### 12.1 Introduction

- The Modified GCRR reduces the scale and extent of visual intrusion, particularly in sensitive residential and scenic areas.
- It delivers a more visually compatible route, preserving key view corridors and natural skylines.

### 12.2 Methodology

- The same visual impact assessment methodology (ZTV mapping and receptor classification) was applied.
- Due to reduced project massing, the Modified GCRR produces fewer visibility conflicts and lower landscape character disruption.

### 12.3 Receiving Environment

- The revised route avoids elevated or exposed terrain near Menlo and Ardaun and maintains distance from designated scenic views.
- It preserves continuity between the River Corrib, surrounding hills, and natural heritage landscapes.

### 12.4 Characteristics of the Project

- The Modified design limits road surface exposure and reduces embankment size and height.
- Lighting and signage infrastructure are minimised or repositioned to reduce skyline interruption.

### 12.5 Evaluation of Effects

- Visual effects on local residents, recreational users, and commuters are significantly reduced.
- Protected views from Ballindooley, Dangan, and Menlo are no longer affected by large-scale infrastructure interventions.

### 12.6 Mitigation Measures

- Reduced visibility of the Modified route lowers the need for intensive landscaping or artificial screening.
- Landscape mitigation is more targeted, with native planting and contour blending in key receptor areas.

### **12.7 Residual Impacts**

- Residual impacts are low in both magnitude and extent and are consistent with acceptable planning thresholds.
- Visual amenity is retained for homes, walking routes, and scenic roads in proximity to the corridor.

### **12.8 Cumulative Impacts**

- Cumulative visual fragmentation is avoided due to better coordination with surrounding development and planned infrastructure.
- The route complements existing urban form without creating long-term landscape division.

### **12.9 Summary**

- The Modified GCRR supports strong compliance with national and local visual protection objectives.
- It protects Galway's urban-rural edge character while allowing for strategic mobility improvements with minimal scenic disruption.

## **Chapter 13: Cultural Heritage**

This submission evaluates how the Modified Galway City Ring Road (GCRR) improves compliance with the cultural heritage requirements outlined in Chapter 13 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. The Modified GCRR avoids significant heritage constraints, reduces the risk of adverse effects on recorded monuments and historic landscapes, and better supports legal and policy obligations related to Ireland's cultural legacy.

### **13.1 Introduction**

- The Modified GCRR avoids known cultural heritage conflicts, including recorded monuments and protected structures.
- It aligns more closely with the National Monuments Acts, Galway County Development Plan, and relevant EU heritage guidance.

### **13.2 Methodology**

- The same heritage impact methodology was applied, including desktop review, field inspection, and predictive modelling.
- The Modified route allows this methodology to be applied more effectively due to reduced proximity to sensitive sites.

### **13.3 Receiving Environment**

- The Modified GCRR avoids direct impact on Menlo Castle and its historic setting, Ballindooley ringforts, and other monuments.
- It protects historic viewsheds and townland integrity in the Dangan-Menlo corridor.

### 13.4 Characteristics of the Project

- The route requires less land take near heritage features and avoids significant architectural or archaeological zones.
- It removes direct conflict with archaeologically rich soils found in the previous central alignment.

### 13.5 Evaluation of Effects

- The Modified GCRR reduces the number and intensity of impacts on protected structures and cultural landscapes.
- It improves the potential to preserve sites in situ and reduces need for protective works.

### 13.6 Mitigation Measures

- Reduced scope of impact enables a smaller and more focused set of archaeological mitigation measures.
- There is less need for buffer zones, excavation campaigns, or cultural landscape restoration.

### 13.7 Residual Effects

- Residual effects are limited and localised, with no significant loss of heritage value to designated or undesignated assets.
- The Modified route avoids indirect impacts such as visual encroachment or setting degradation.

### 13.8 Cumulative Impacts

- The scheme avoids cumulative degradation of culturally significant zones already subject to development pressure.
- It preserves the landscape character and continuity of Galway's historic rural-urban fringe.

### 13.9 Summary

- The Modified GCRR is a more culturally sensitive and legally defensible alternative.
- It provides strong alignment with the cultural protection objectives of national legislation and planning policy.

### 13.10 References

- The Modified route enables clearer compliance with guidance from the National Monuments Service, the Department of Housing, Local Government and Heritage, and local authority conservation policy.

## Chapter 14: Material Assets – Agriculture

This submission evaluates how the Modified Galway City Ring Road (GCRR) aligns with the agricultural land use and material asset protection objectives outlined in Chapter 14 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. While

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the Modified GCRR passes through a greater extent of agricultural land than the GCRR scheme, its route avoids higher-density residential and commercial zones and supports a more deliverable, legally compliant solution with reduced overall disruption to households, schools, and community infrastructure.

### 14.1 Introduction

- The Modified GCRR crosses more agricultural land than the GCRR scheme, but does so to avoid more significant residential and community impacts.
- It maintains farmland connectivity and reduces fragmentation of densely developed areas.

### 14.2 Methodology

- Standard EIAR methodologies were used, including landowner consultation and site assessment.
- The Modified alignment presents broader agricultural interaction but simpler site mitigation.

### 14.3 Receiving Environment

- The route traverses active pasture, tillage, and mixed-use farmland.
- It avoids more complex urban-farm interface areas near Ardaun, Menlo, and suburban Galway.

### 14.4 Characteristics of the Proposed Development

- While more agricultural parcels are affected, the Modified scheme results in fewer landowner-to-landowner interfaces and reduced urban edge conflict.
- It provides more predictable access and boundary conditions for agricultural users.

### 14.5 Evaluation of Effects

- Agricultural severance is more frequent but generally affects larger, less constrained holdings.
- Management disruption is lower where farms are not located near schools, estates, or narrow urban roads.

### 14.6 Mitigation Measures

- Mitigation includes standardised underpasses, fencing, and provision of safe access for machinery and livestock.
- Drainage systems and field connectivity are preserved through planned layout and adjusted fencing lines.

### 14.7 Residual Impacts

- Residual impacts are higher in terms of total land area affected but lower in terms of socio-economic and legal complexity.
- Landowners retain viable holdings in most cases, and no total loss of agricultural function is predicted.

#### 14.8 Cumulative Impacts

- The Modified route avoids cumulative strain in peri-urban areas and shifts pressure into areas where existing land use remains predominantly agricultural.
- This supports clearer planning policy consistency and rural land continuity.

#### 14.9 Summary

- While the Modified GCRR increases the proportion of land affected that is zoned agricultural, it achieves lower human and community impact.
- It supports deliverability while maintaining agricultural land function, with appropriate mitigation for severance and access.

#### 14.10 References

- The Modified GCRR is consistent with rural policy guidance where infrastructure serves national need but avoids excessive disruption to established community areas.

### Chapter 15: Material Assets – Non-Agriculture

This submission evaluates how the Modified Galway City Ring Road (GCRR) improves compliance with the protection of non-agricultural material assets as outlined in Chapter 15 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. The Modified GCRR significantly reduces negative impacts on residential properties, community facilities, and essential services while improving alignment with local planning and social sustainability objectives.

#### 15.1 Introduction

- The Modified GCRR reduces impacts on residential, recreational, educational, and utility infrastructure assets.
- It provides a more community-sensitive route that avoids widespread displacement and service disruption.

#### 15.2 Methodology

- The same mapping and stakeholder engagement methods were used for assessment.
- The Modified route required fewer protective measures for buildings and non-agricultural services.

#### 15.3 Receiving Environment

- The Modified GCRR avoids densely built-up areas including Menlo, Ardaun, and Castlelawn.
- It also bypasses local schools, sports grounds, and high-voltage and water supply infrastructure.

#### 15.4 Characteristics of the Project

- Fewer residential dwellings are acquired or brought into proximity risk.
- Schools and recreational facilities are protected from direct construction impact.

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- The number and complexity of utility diversions are significantly reduced.

### 15.5 Evaluation of Effects

- Impacts on residential and service infrastructure are substantially less severe than under the GCRR alignment.
- Community assets are left intact and fully functional, with minimal adjustment required.

### 15.6 Mitigation Measures

- Simpler and more targeted mitigation measures are required, including boundary fencing and noise barriers.
- Fewer service diversions reduce the need for trenching and temporary outages.

### 15.7 Residual Impacts

- Residual impacts are generally localised and minor.
- There is no community-scale disruption or dislocation of services or amenities.

### 15.8 Cumulative Impacts

- The Modified GCRR reduces cumulative development pressure on suburban Galway infrastructure.
- It maintains the resilience of housing areas, education networks, and utility corridors.

### 15.9 Summary

- The Modified GCRR achieves a socially and environmentally preferable balance, protecting housing and essential services.
- It enables project delivery with significantly reduced public resistance and legal exposure.

### 15.10 References

- The Modified scheme aligns more closely with social infrastructure policy, zoning protections, and sustainable land-use guidance.

## Chapter 16: Air Quality

This submission evaluates how the Modified Galway City Ring Road (GCRR) improves compliance with air quality protection objectives outlined in Chapter 16 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. The Modified GCRR demonstrates stronger alignment with national and EU air quality standards by reducing exposure near sensitive receptors, minimising pollutant generation in residential zones, and enhancing conditions for sustainable transport.

### 16.1 Introduction

- The Modified GCRR provides improved air quality outcomes through reduced proximity to high-sensitivity receptors and better design integration with sustainable travel policy.

## 16.2 Methodology

- The same air dispersion and pollutant modelling methodology was applied as in the GCRR scheme.
- The Modified alignment allows more precise modelling of risk by reducing conflict with residential and educational receptors.

## 16.3 Receiving Environment

- The route avoids high-density residential clusters and vulnerable groups (e.g. schools, playgrounds) near Menlo, Ardaun, and Castlelawn.
- This results in a reduced air quality risk profile.

## 16.4 Characteristics of the Project

- The Modified alignment results in fewer locations falling within the 100–200m air quality impact zone.
- It also reduces congestion-related emissions at strategic pinch points and supports public transport efficiency.

## 16.5 Assessment of Potential Effects

- Modelled emissions of NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are lower along the Modified route.
- The scheme reduces exposure duration and cumulative dose for adjacent receptors.

## 16.6 Mitigation Measures and Monitoring

- Fewer mitigation interventions are required due to improved base-case outcomes.
- Monitoring can be implemented more effectively in setback zones and quieter residential perimeters.

## 16.7 Residual Effects

- Residual pollutant concentrations are significantly reduced, with all values projected to remain below statutory thresholds.
- Human health and ecological receptors are adequately protected.

## 16.8 Cumulative Impacts

- The Modified route helps mitigate cumulative air quality pressures from traffic, development, and household emissions.
- It enhances conditions for sustainable transport, reinforcing policy-based emissions reductions.

## 16.9 Summary

- The Modified GCRR enables stronger compliance with Clean Air for Europe Directive objectives and the National Air Pollution Control Programme.
- It achieves reduced air quality impacts while maintaining project functionality and community safety.

### 16.10 References

- The Modified scheme supports and reflects EPA air quality strategy, WHO public health standards, and CAP23 emissions targets.

This design strategy supports the Galway City Development Plan 2023–2029 by directly reducing embodied carbon, avoiding motorway-grade bridges in noise-sensitive areas, and contributing to national CAP23 targets on transport emissions.

## Chapter 17: Climate

This design strategy supports the Galway City Development Plan 2023–2029 by directly reducing embodied carbon, avoiding motorway-grade bridges in noise-sensitive areas, and contributing to national CAP23 targets on transport emissions.

This submission evaluates how the Modified Galway City Ring Road (GCRR) improves compliance with Ireland’s climate action objectives as outlined in Chapter 17 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. The Modified GCRR reduces construction-related emissions, supports modal shift, and avoids land use patterns associated with high carbon intensity. It aligns more closely with CAP23, the Climate Action and Low Carbon Development Act 2015 (as amended), and Ireland’s national and sectoral carbon budgets.

### 17.1 Introduction

- The Modified GCRR reduces lifecycle emissions and integrates better with Galway’s transport and spatial planning policies.
- It offers a lower-carbon alignment with fewer negative consequences for future emissions trajectories.

### 17.2 Methodology

- Life-cycle carbon modelling and risk assessments were applied using standard EPA and EU methodologies.
- The Modified route allows clearer modelling due to reduced construction complexity and more compact geometry.

### 17.3 Receiving Environment

- The route avoids climate-sensitive areas including low-lying floodplains and zones of energy-intensive urban expansion.
- This supports climate resilience and compact growth policy under the National Planning Framework.

### 17.4 Characteristics of the Project

- The Modified scheme reuses existing infrastructure and avoids construction-intensive junction designs.



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- Motorway bridges are minimised. Where necessary, the Modified alignment prioritises the road passing under local roads—an approach that significantly reduces concrete volumes compared to elevated motorway-over-road bridges.

### 17.5 Assessment of Potential Effects

- Construction emissions are lower due to reduced excavation, fewer high-span structures, and shorter construction duration.
- Operational emissions are reduced through improved traffic flow and reduced congestion.

### 17.6 Mitigation Measures and Monitoring

- Mitigation includes targeted tree planting, low-carbon construction materials, and route-based carbon accounting.
- Reduced construction footprint makes monitoring easier and more effective.

### 17.7 Residual Effects

- Residual climate impacts are proportionately lower, with significant gains in carbon efficiency per kilometre.
- Less embodied carbon in structures due to reduced need for concrete-intensive motorway bridges.

### 17.8 Cumulative Effects

- The Modified GCRR complements other low-carbon strategies by avoiding car-centric land use and supporting public transport corridors.
- It aligns with urban decarbonisation strategies in Galway City and County.

### 17.9 EU Technical Guidance Assessment

- The Modified scheme better meets EU taxonomy and sustainability criteria, particularly around climate mitigation, proportionality, and no significant harm.

### 17.10 Climate Action Plan Assessment

- It supports CAP23 emissions ceilings by reducing vehicle-kilometres travelled in urban cores and enhancing network efficiency.
- The route avoids locking in car dependency at the expense of public and active travel.

### 17.11 Compliance with Climate Act 2015 (as amended)

- The Modified GCRR improves compliance with Section 15 of the Act by achieving net emissions reduction, spatial integration, and risk avoidance.
- Its delivery supports sectoral targets without undermining future legal obligations.

### 17.12 Summary

- The Modified GCRR delivers a climate-resilient and emissions-reduced solution to Galway's orbital transport needs.
- It improves carbon efficiency, reduces risk of legal challenge, and reflects best available sustainability practice in motorway delivery.

### 17.13 References

- This submission aligns with guidance from the EPA, CAP23, the Climate Act, and the EU Climate Adaptation and Sustainable Finance Taxonomy frameworks.

## Chapter 18: Noise and Vibration

This submission evaluates how the Modified Galway City Ring Road (GCRR) improves compliance with the noise and vibration management objectives outlined in Chapter 18 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. The Modified GCRR significantly reduces exposure of sensitive receptors to road noise, avoids construction of large viaducts near urban areas, and simplifies mitigation through greater use of natural screening and route geometry.

### 18.1 Introduction

- The Modified GCRR reduces predicted noise and vibration levels through strategic realignment and topographical screening.
- It avoids extensive use of elevated viaducts in noise-sensitive areas, which are known to propagate road noise over long distances.

### 18.2 Methodology

- The same CNOSSOS-EU and CRTN-based noise and vibration modelling was used for both alignments.
- The Modified GCRR supports more predictable and lower-impact modelling outputs due to reduced elevation and improved buffering.

### 18.3 Receiving Environment

- The Modified alignment avoids dense residential zones such as Menlo, Ardaun, and Castlilawn.
- It also maintains greater distance from schools, care facilities, and recreational areas.

### 18.4 Characteristics of the Project

- The GCRR includes major viaduct structures at Briarhill (over the N84 and N83) and a continuous elevated section of approximately 2 km from Seán Bothar (Menlo) to Letteragh. These structures contribute significantly to ambient noise levels due to elevated road surface exposure and lack of containment.
- The Modified GCRR avoids these viaducts, reducing noise propagation and structure-borne vibration risks.

### 18.5 Evaluation of Effects

- Predicted LAeq and Lnight values are significantly lower for the Modified GCRR at key receptor locations.
- Reduced use of viaducts and hard-surfaced elevated sections translates into lower sustained exposure and more effective passive mitigation.

### 18.6 Mitigation Measures

- The Modified scheme requires fewer noise barriers and building envelope upgrades.
- Topography, set-back, and alignment design provide natural mitigation with longer lifespan and lower cost.

### 18.7 Residual Impacts

- Residual noise and vibration impacts are moderate to low across most zones.
- The avoidance of viaducts in residential areas eliminates the dominant airborne noise source associated with the GCRR.

### 18.8 Cumulative Impacts

- The Modified GCRR avoids cumulative noise burdens near urban cores, where development and traffic levels are already high.
- It preserves Galway's acoustic landscape character in suburban and peri-urban transition zones.

### 18.9 Summary

- The Modified GCRR delivers a quieter, less intrusive alignment, reducing both acute and chronic noise exposure.
- It better reflects WHO, EPA, and planning authority guidance on noise and community wellbeing.

### 18.10 References

- The Modified route supports compliance with the Environmental Noise Regulations (2006), WHO Guidelines, EPA NG4, and TII environmental standards.

The Modified GCRR supports the Galway City Development Plan's aim of delivering a 15-minute city by protecting permeability, local access, and internal community connectivity—especially in Ardaun, Menlo, and Castlelawn.

## Chapter 19: Population and Human Health

The Modified GCRR supports the Galway City Development Plan's aim of delivering a 15-minute city by protecting permeability, local access, and internal community connectivity—especially in Ardaun, Menlo, and Castlelawn.

This submission evaluates how the Modified Galway City Ring Road (GCRR) improves compliance with the population and human health objectives outlined in Chapter 19 of the Updated Environmental Impact Assessment Report (EIA), Volume 2, March 2025. The Modified GCRR reduces displacement, avoids severance of key communities, protects school zones, and aligns more effectively with the Ardaun Local Area Plan (LAP) and broader public health strategies.

### 19.1 Introduction

- The Modified GCRR reduces overall human health impacts and avoids direct intrusion into sensitive residential and community areas.
- It avoids fragmentation of Menlo and Ardaun, preserving community cohesion and limiting risk to vulnerable populations.

### 19.2 Methodology

- Standard WHO and EPA-aligned health risk assessment methodologies were used.
- The Modified scheme improves health outcomes by avoiding high-exposure zones and preserving green and active transport corridors.

### 19.3 Receiving Environment

- The GCRR passed through the centre of Ardaun, severing planned residential and educational zones.
- This would have required extensive local road construction and resulted in disconnected communities.
- The Modified alignment avoids this, preserving the integrity of the Ardaun LAP.

### 19.4 Characteristics of the Project

- The Modified route avoids sensitive areas near Menlo and Ballinfoile and no longer requires residential demolition in Ardaun.
- It better supports compact, connected development and avoids the creation of isolated pockets of housing and services.

### 19.5 Evaluation of Effect of the Project

- The Modified GCRR minimises stress, noise exposure, traffic disruption, and displacement risks for residents.
- It protects school routes, green corridors, and community spaces from being bisected or disrupted.

### 19.6 Mitigation Measures

- Fewer mitigation measures are required compared to the GCRR scheme, including relocation supports, community buffers, or underpass realignments.
- Health risks are naturally reduced through more appropriate spatial alignment.

### 19.7 Residual Effects

- Residual impacts such as chronic noise, psychological stress, and visual intrusion are significantly reduced in scale and intensity.
- The Modified GCRR does not compromise access to services or local mobility options.

### 19.8 Cumulative Impacts

- The Modified GCRR avoids the cumulative public health and social fragmentation risks introduced by the GCRR alignment through Ardaun.

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- It reduces future dependency on new internal distributor roads that would have increased air, noise, and social fragmentation.

### 19.9 Summary

- The Modified GCRR better supports population health, social inclusion, and the legal right to health-protective planning.
- It enables implementation of the Ardaun LAP and Galway Transport Strategy without undermining community connectivity or well-being.

### 19.10 References

- The Modified alignment supports WHO Environmental Noise Guidelines, EPA NG4, and public health planning policy objectives under Ireland's National Planning Framework and local development plans.

The Modified GCRR protects the strategic integrity of the Ardaun LAP, avoiding direct severance of Phase 1 housing lands and reducing the need for complex internal road infrastructure. This better aligns with Galway City Development Plan 2023–2029, which identifies Ardaun as central to the city's compact growth and modal shift strategy under the MASP.

## Chapter 20: Resource and Waste Management

The Modified GCRR protects the strategic integrity of the Ardaun LAP, avoiding direct severance of Phase 1 housing lands and reducing the need for complex internal road infrastructure. This better aligns with Galway City Development Plan 2023–2029, which identifies Ardaun as central to the city's compact growth and modal shift strategy under the MASP.

This submission evaluates how the Modified Galway City Ring Road (GCRR) improves compliance with the resource and waste management objectives outlined in Chapter 20 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. The Modified GCRR reduces the demand for raw materials, minimises spoil generation, and supports circular economy principles through simplified construction techniques and infrastructure reuse.

### 20.1 Introduction

- The Modified GCRR reduces construction waste and material consumption by reusing existing infrastructure, avoiding concrete-intensive viaducts, and reducing spoil excavation.

### 20.2 Legislation, Policy and Guidance

- The Modified alignment aligns more effectively with the Waste Management Act 1996 (as amended), Ireland's Circular Economy Strategy, and the EU Waste Framework Directive (2008/98/EC).

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- It also follows EPA and TII best practices for sustainable construction and demolition waste management.

### 20.3 Methodology

- The same modelling was used to estimate material balances and waste outputs.
- The Modified route required less modelling of long-haul transport or off-site landfill due to lower waste volumes.

### 20.4 Receiving Environment

- The Modified alignment avoids waste-sensitive zones such as aquifers and landfill buffer areas.
- It reduces potential topsoil and subsoil disturbance in ecologically sensitive or agriculturally valuable areas.

### 20.5 Characteristics of the Project

- Material volumes are reduced due to simpler underpass structures and reduced bridge spans.
- Cut-and-fill operations are more balanced, with shorter haul distances and lower external material import needs.

### 20.6 Description of Potential Impacts

- Construction phase impacts are significantly reduced for both virgin material use and disposal demands.
- Less concrete and aggregate are required, lowering embodied carbon and environmental footprint.

### 20.7 Mitigation Measures

- The Modified route simplifies mitigation through smaller material yards, fewer spoil stockpiles, and reduced site waste handling complexity.
- On-site reuse of clean material becomes more feasible.

### 20.8 Residual Effects

- Residual waste and material handling risks are minor and more easily managed within EPA and TII guidance thresholds.

### 20.9 Cumulative Effects

- The Modified GCRR reduces regional strain on waste infrastructure and aggregate demand, especially when considered with parallel development projects.
- It supports Galway's material footprint reduction and long-term sustainability goals.

### 20.10 References

- This alignment reflects guidance from the National Waste Policy 2020–2025, TII Guidelines on Construction and Demolition Waste, and EU Circular Economy Action Plan.

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The Modified GCRR protects the strategic integrity of the Ardaun LAP, avoiding direct severance of Phase 1 housing lands and reducing the need for complex internal road infrastructure. This better aligns with Galway City Development Plan 2023–2029, which identifies Ardaun as central to the city’s compact growth and modal shift strategy under the MASP.

### **Chapter 21: Major Accidents, Interactions, and Cumulative Impacts**

The Modified GCRR protects the strategic integrity of the Ardaun LAP, avoiding direct severance of Phase 1 housing lands and reducing the need for complex internal road infrastructure. This better aligns with Galway City Development Plan 2023–2029, which identifies Ardaun as central to the city’s compact growth and modal shift strategy under the MASP.

This submission evaluates how the Modified Galway City Ring Road (GCRR) improves compliance with the requirements for risk mitigation, interaction effects, and cumulative environmental impact outlined in Chapter 21 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. The Modified GCRR reduces complexity, avoids high-risk locations, and strengthens system resilience against accident, infrastructure, and environmental scenarios.

#### **21.1 Introduction**

- The Modified GCRR reduces project-scale and system-wide risk by shortening the alignment, limiting exposure to sensitive receptors, and simplifying engineering requirements.

#### **21.2 Major Accidents and Disasters**

- The Modified route avoids viaducts over urban centres and vulnerable community infrastructure.
- It reduces potential impacts from accidents involving flooding, structural failure, or hazardous material spills.

#### **21.3 Methodology Used to Assess Interactions and Cumulative Effects**

- A matrix-based interaction analysis was applied per standard EIAR procedure.
- The Modified alignment lowers the number of overlapping environmental zones, reducing cumulative impact and uncertainty.

#### **21.4 Interaction of Effects**

- The Modified GCRR reduces instances where noise, air pollution, and visual intrusion coincide in high-density zones.
- Fewer complex junctions and bridges lower both operational and construction-phase exposure to risk.

### **21.5 Cumulative Effects Assessment**

- The Modified GCRR avoids the Ardaun LAP, thus preventing new local road demand and development-driven pressure.
- It integrates better with Galway's Transport Strategy while minimising new environmental burdens.

### **21.6 Summary of Conclusions of the Cumulative Impacts Assessments**

- The Modified GCRR presents fewer cumulative risks and more stable environmental conditions over the project lifecycle.
- The simplification of alignment and infrastructure directly supports compliance with risk mitigation objectives.

### **21.7 Transboundary Impacts**

- No transboundary impacts are identified.
- The environmental, social, and infrastructure effects of the Modified GCRR are fully contained within the State boundary and governed by Irish regulation.

### **21.8 References**

- The Modified alignment supports compliance with the Seveso III Directive, Planning and Development Regulations, and referenced chapters on human health, biodiversity, hydrogeology, noise, and climate risk.

The Modified GCRR protects the strategic integrity of the Ardaun LAP, avoiding direct severance of Phase 1 housing lands and reducing the need for complex internal road infrastructure. This better aligns with Galway City Development Plan 2023–2029, which identifies Ardaun as central to the city's compact growth and modal shift strategy under the MASP.

## **Chapter 22: Summary of Mitigation Measures and Residual Effects**

The Modified GCRR protects the strategic integrity of the Ardaun LAP, avoiding direct severance of Phase 1 housing lands and reducing the need for complex internal road infrastructure. This better aligns with Galway City Development Plan 2023–2029, which identifies Ardaun as central to the city's compact growth and modal shift strategy under the MASP.

This submission evaluates how the Modified Galway City Ring Road (GCRR) improves the clarity, effectiveness, and efficiency of mitigation measures and reduces residual environmental effects, as outlined in Chapter 22 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. The Modified GCRR provides stronger alignment with the principles of the EIA Directive by emphasising impact avoidance and reducing reliance on artificial mitigation and compensation.



### 22.1 Introduction

- The Modified GCRR results in fewer significant environmental effects and simpler mitigation across all phases.
- It reflects improved design, reduced construction intensity, and avoidance of ecologically or socially sensitive areas.

### 22.2 Construction Phase

- Shorter construction zones and use of existing infrastructure reduce the scale of temporary impacts.
- Dust, noise, vibration, and hydrological impacts are significantly reduced, lowering the need for intensive mitigation.
- Standard measures for sediment control, haul route management, and site containment remain appropriate and effective.

### 22.3 Operational Phase

- Fewer sensitive receptors near the route reduce the need for high-spec mitigation (e.g., noise barriers, façade insulation).
- Lower operational noise and air pollution levels reduce long-term health and amenity effects.
- Landscape integration is easier due to more compact geometry and fewer elevated structures.

### 22.4 Compensatory Measures

- Biodiversity compensation needs are reduced due to avoidance of high-value habitats.
- Fewer residential and agricultural land acquisitions result in less compensation and less social disruption.
- No artificial landscape replication is required in the Modified alignment.

### 22.5 Overview

- The Modified GCRR delivers more sustainable, cost-effective, and deliverable mitigation.
- Residual effects are fewer, lower in magnitude, and easier to monitor under standard EPA and TII guidelines.
- The scheme supports long-term environmental stability without reliance on complex or speculative interventions.

The Modified GCRR protects the strategic integrity of the Ardaun LAP, avoiding direct severance of Phase 1 housing lands and reducing the need for complex internal road infrastructure. This better aligns with Galway City Development Plan 2023–2029, which identifies Ardaun as central to the city’s compact growth and modal shift strategy under the MASP.

## **Chapter 23: Schedule of Environmental Commitments**

The Modified GCRR protects the strategic integrity of the Ardaun LAP, avoiding direct severance of Phase 1 housing lands and reducing the need for complex internal road infrastructure. This better aligns with Galway City Development Plan 2023–2029, which identifies Ardaun as central to the city’s compact growth and modal shift strategy under the MASP.

This submission evaluates how the Modified Galway City Ring Road (GCRR) improves the practicality, efficiency, and proportionality of environmental commitments as outlined in Chapter 23 of the Updated Environmental Impact Assessment Report (EIAR), Volume 2, March 2025. The Modified alignment results in fewer and simpler commitments across all environmental domains, reflecting its more compact design, reduced footprint, and emphasis on avoidance rather than compensation.

### **23.1 General**

- The Modified GCRR requires fewer environmental commitments due to reduced construction complexity and improved route selection.
- Previously constructed infrastructure is reused where possible, lowering additional impact and cost.

### **23.2 Waste**

- Reduced excavation and shorter haul distances lower spoil and C&D waste volumes.
- More opportunities exist for on-site reuse of materials and simplified waste logistics.

### **23.3 Population and Health**

- Fewer people are displaced and less noise and air pollution is imposed on homes and schools.
- Public health-related commitments such as noise screening and access continuity are easier to implement.

### **23.4 Material Assets – Non-Agriculture**

- Fewer commitments are required for residential and institutional asset protection.
- Service continuity and access measures are straightforward, with minimal disruption expected.

### **23.5 Material Assets – Agriculture**

- While more farmland is crossed, the alignment allows better severance design, reduced infrastructure conflict, and simpler farm access solutions.
- Drainage and fencing commitments are reduced in complexity.

### **23.6 Air Quality**

- Improved traffic flow and reduced congestion lessen emissions, reducing mitigation needs.
- Monitoring and dust control commitments are localised and less intensive.

### **23.7 Climate**

- Reduced structural intensity (e.g. avoidance of viaducts) supports lower embodied carbon.
- Climate resilience measures are simpler, more scalable, and easier to deliver.

### **23.8 Noise and Vibration**

- Natural topographical screening and greater separation from homes reduce reliance on engineered barriers.
- Fewer properties require treatment or long-term noise mitigation.

### **23.9 Landscape and Visual**

- Fewer elevated structures reduce visual impact and associated planting and screening commitments.
- The route blends better with terrain, enabling more naturalistic landscape measures.

### **23.10 Cultural Heritage**

- Avoidance of Menlo Castle and archaeological zones limits excavation and cultural heritage disturbance.
- Fewer surveys and monitoring actions are required.

### **23.11 Soils and Geology**

- Reduced cut and fill and avoidance of geotechnical risks lessen soil handling, stabilisation, and disposal commitments.

### **23.12 Hydrogeology**

- Fewer interactions with aquifers reduce the requirement for groundwater protection and monitoring.

### **23.13 Hydrology**

- Simplified drainage layout, reduced stream crossings, and floodplain avoidance decrease hydrological disturbance.
- Commitments around erosion control and attenuation are less demanding.

### **23.14 Biodiversity**

- Impact avoidance leads to reduced requirement for habitat compensation or species relocation.
- Targeted connectivity measures (e.g. underpasses, fencing) are minimal and site-specific.

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**Appendix 1 – Traffic Movement, Junction Connectivity, and Safety**

## Appendix 2 – IROPI, ECJ, and Critical National Infrastructure

### Appendix G – Traffic Movement, Junction Connectivity, and Safety

Differentiating National, Internal, and Strategic Cross-City Flows for the GCRR and Modified GCRR

#### 1. Introduction

The Galway City Ring Road (GCRR) and the Modified GCRR seek to serve three overarching policy objectives:

- Extend the national motorway network
- Distribute Galway City traffic efficiently
- Protect residential communities and the environment

The following analysis compares both schemes using these objectives as a benchmark, while breaking down:

- National traffic (external)
- Internal orbital traffic (within the GCRR zone)
- Strategic city connections, especially from Knocknacarra, Oranmore, and the R446 to Parkmore

Tables and illustrations provide clarity on route lengths, junction functionality, and conflict points, supported by official documentation and national policy alignment.

#### 2. National Traffic (Bypass Flows)

National through traffic seeks to bypass Galway entirely, particularly traffic between the M6 and western national routes (e.g. N59 Clifden and N84 Headford).

Entry-Exit Point	Modified GCRR	GCRR	Difference	Notes
M6 Oranmore → N59 Bushypark	11.0 km	13.0 km	-15%	Modified uses existing M6 Garraun Bridge
N59 → M6 Oranmore	11.0 km	13.0 km	-15%	Elevated structures avoided in Modified
M6 → N84 Headford	9.5 km	12.0 km	-20%	Direct route via Ballindooley
N67 Coolagh → N59	13.2 km	15.0 km	-12%	Modified avoids Ardaun and Briarhill LAP

Conclusion: The Modified GCRR provides shorter, faster bypass options, using fewer overbridges and existing infrastructure, reducing environmental and cost impacts.

### 3. Internal Orbital Traffic (Within City Ring)

This refers to traffic between Galway suburbs such as Knocknacarra, Ballinboyle, Parkmore, Tuam Road, and the N59 corridor.

Route	Modified GCRR	GCRR	Δ km	Observations
Knocknacarra → Parkmore	~10.3 km	~13.4 km	-3.1 km	GCRR's tortuous junctions increase distance
Newcastle → Tuam Road	~7.9 km	~10.2 km	-2.3 km	Modified enables smoother orbital routing
Letteragh → Coolagh	9.8 km	11.4 km	-1.6 km	Fewer residential crossings in Modified
Ballindooley → Parkmore	4.6 km	6.0 km	-1.4 km	Compact junction in Modified GCRR reduces path

Conclusion: Modified GCRR prioritises city-wide access, vital for public transport planning, deliveries, school trips, and local mobility—a critical flaw in the current GCRR.

### 4. Strategic Cross-City Traffic (Parkmore ↔ Knocknacarra, Oranmore, R446)

Parkmore is Galway's most important business quarter. Traffic to/from Knocknacarra and the east (Oranmore/R446) is essential.

Origin	Destination	Modified GCRR	GCRR
Knocknacarra	Parkmore	10.3 km	13.4 km
Oranmore	Parkmore	4.6 km	7.0 km
R446	Parkmore	7.3 km	10.1 km

▲ Critically, the GCRR omits direct Tuam Rd/Parkmore access, undermining both planning logic and the project's stated function. The Modified GCRR restores this access — crucial for:

- City traffic distribution (per 2000 policy),
- Sustainable commuting,
- Public transport interconnectivity.

### 5. Junction Functionality & Safety

Conflict points—locations where vehicle paths intersect—are key safety indicators. The GCRR's elevated, closely spaced junctions introduce a higher number of such conflict points, reducing operational efficiency and increasing risk. In contrast, the Modified GCRR minimises these conflicts through simpler geometry and fewer multi-level connections.

Junction Type	Conflict Points	GCRR Uses	Modified Uses
T-Junction	20-30	✓	✓
Cross Roads	56-84	✓ (Briarhill, Tuam)	✗
Compressed Diamond	56-84	✓ (N83, Parkmore)	✗

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**Roundabout (4-arm)**                      8-12                      X                      ✓ (limited)

● The GCRR introduces operational bottlenecks — notably at:

- The Parkmore split-grade junction,
- Tuam Road junctions,
- Briarhill viaduct — all with high-conflict turning paths.

✓ The Modified GCRR uses flatter, cleaner junctions with better visibility, reduced turning complexity, and proven compatibility with the existing M6 and regional road network.

### 6. Policy Alignment & Project Objectives

This section compares how the GCRR and the Modified GCRR align with stated transport, environmental, and planning policies, including:

- The Galway Transport Strategy (GTS)
- The National Planning Framework (NPF)
- NIFTI and CAP23
- 2000 Government motorway decision and MASP 2023–2029

These policies all stress the importance of internal city connectivity, modal shift, environmental sensitivity, and efficient use of existing infrastructure.

Objective	GCRR	Modified GCRR
<b>Extend national motorway</b>	✓	✓ (uses built Garraun bridge)
<b>Distribute city traffic</b>	⚠ Fails at Tuam Rd & Parkmore	✓ Compact city-ring, best access
<b>Protect people and environment</b>	✗ Cuts Ardaun, Castlegar, Bushypark, etc	✓ Avoids LAPs, tunnels key zones
<b>Serve Parkmore Business Hub</b>	✗ Omitted junction	✓ Fully integrated

The Modified GCRR demonstrates superior compliance with transport and planning objectives by:

- Delivering strategic access to Galway’s key employment hubs
- Avoiding environmental and residential disruption
- Maximising the value of existing infrastructure and investments
- Supporting sustainable transport and future modal shifts

### 7. Conclusion

The Modified GCRR delivers a demonstrably better outcome for Galway’s people, economy, and environment. It:

### Modified Galway City Ring Road (GCRR) – EIAR Submission

- Provides more efficient and shorter routes for both national and internal traffic
- Enables compact, functional cross-city journeys between key residential and employment centres
- Significantly reduces safety hazards through better junction design and conflict minimisation
- Fully aligns with national, regional, and city-level planning and transport strategies

In contrast, the current GCRR fails to meet fundamental project objectives. It does not function as a bypass in the practical sense, nor does it support Galway's urban framework, trip containment goals, or modal shift targets.

The Modified GCRR is the only proposal that satisfies the road's GCRR purpose, environmental duties, and the real needs of Galway's residents and businesses.



## Appendix 3 — IROPI, ECJ, and Critical National Infrastructure

### 1. Introduction: Legal Context and IROPI Framework

Under Article 6(4) of the EU Habitats Directive (92/43/EEC), projects that negatively impact Natura 2000 sites can still proceed if there are Imperative Reasons of Overriding Public Interest (IROPI), no feasible alternatives exist, and compensatory measures are taken.

The Modified GCRR, although significantly improved, may still affect priority habitats. This appendix sets out the case that such impacts, if confirmed, should be addressed under IROPI, supported by legal precedent and government policy.

### 2. IROPI in EU Law and the ECJ Sweetman Ruling (C-258/11)

In the ECJ Sweetman ruling, the Court annulled permission for the Galway City Outer Bypass (GCOB) due to the loss of priority limestone pavement. However, it reaffirmed that a project may proceed if:

- It is necessary for public safety, health, or a major socio-economic reason,
- No alternatives exist, and
- Compensatory measures preserve ecological coherence.

The ECJ explicitly upheld Ireland's right to apply IROPI for major infrastructure if all Article 6(3) tests fail but 6(4) conditions are met.

### 3. Public Interest Grounds for the Modified GCRR

Even assuming that the Modified GCRR may affect critical habitats, it qualifies for IROPI status based on:

- National Transport Policy and completion of the M6 corridor
- Essential citywide traffic distribution and emergency access
- Support for Galway's economic and employment base (notably Parkmore)
- Removal of substandard and unsafe junction layouts from the GCRR
- Improved integration with public transport and BusConnects

No other feasible alignment meets these combined objectives without greater environmental or community cost.

### 4. Comparison with GCRR under IROPI Standards

The GCRR affects a greater number of homes, amenities, and designated lands, while failing to deliver city traffic connectivity. If both routes were to be assessed under Article 6(4), only the Modified GCRR meets the balance required:

- It avoids Bushypark, Ardaun, and Castlegar core areas
- It uses existing infrastructure such as the M6 Garraun bridge
- It reduces land take and avoids viaducts over residential zones

## **5. Compensatory Measures and Precedent**

If impacts to Natura 2000 sites are confirmed, compensatory measures may include:

- Habitat restoration and enlargement off-site
- Funding of ecological corridors and protection plans
- Monitoring and mitigation strategies tied to construction phasing

These steps are consistent with prior Irish projects approved under IROPI, including:

- M3 Motorway (Tara/Skryne Valley)
- Corrib Gas Pipeline (SAC impacts in Co. Mayo)

## **6. Conclusion**

While the Modified GCRR is designed to minimise environmental impact, if adverse effects on protected habitats are confirmed, the project still qualifies under IROPI due to:

- Overriding national and regional interest
- Absence of reasonable alternatives
- Provision for compensatory ecological measures

In line with ECJ guidance and Irish precedent, the Modified GCRR remains the legally and functionally superior option.

## Appendix 4: — Comparative Structural and Environmental Complexity Analysis: GCRR vs Modified GCRR

Feature	GCRR	Modified	Modified Compared to GCRR
Motorway Bridges over lessor roads	11	1	Avoids Residential and Provides N83 Ballindooley Bypass
Normal Bridges over motorway	5	12	Better Environmental locations & flatter geometry
Tunnels	2 no 420 m	2 no 1,700 m	Significant Gains in Environmental, Avoids 2.6 km of Viaducts and 5 Motorway Over Bridges
Large Viaducts	2	1	Avoids Viaducts
High Embankments	2	Roads	Significant Environmental Gains
Culverts/Mammal Underpasses	6	21	Modified improves wildlife protection
Viaducts	~4.7 km	~0.3 km	Significant Environmental Gains
Embankments ~10m high	~2 km	~0.3 km	Significant Environmental Gains

*See reference maps overleave*

### M6/Motorway Integration

Integration Element	Original GCRR	Modified GCRR	Outcome
Start of M6 Standard Road	Letteragh Interchange	Glenlo/Bushypark (N59/M6)	Modified continues M6 seamlessly
Corrib Bridge	New, high-visual viaduct	GCOB bridge (partially built)	Environmental/legal continuity
Garraun Bridge	Avoided	✓ Fully used	Major existing asset optimised

### Policy and Environmental Alignment

Issue	GCRR	Modified GCRR	Comment
<b>Environmental Impact</b>	High due to elevation, viaducts	Lower due to reuse of consented works	Better NIS/Natura 2000 profile
<b>Land-Take in Sensitive Zones</b>	Menlo, Ardaun, Bushypark	Avoided via tunnelling + integration	Reduced community severance
<b>Consistency with GCOB Permission</b>	Divergent	✓ Aligned with 2013 ECJ-approved GCOB	Enables continuity in planning

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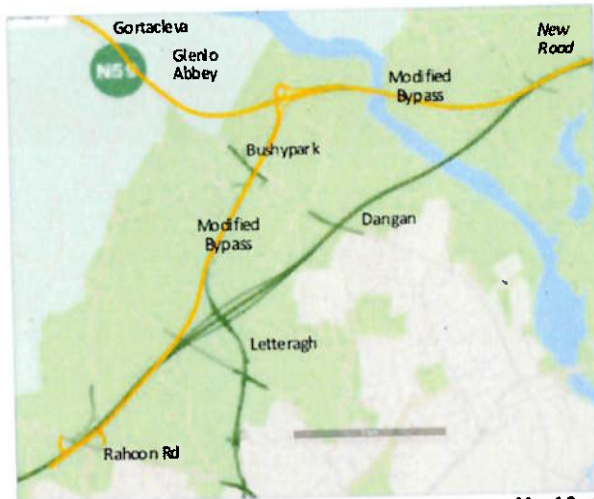
**Appendix 5: — Illustrative Maps**

See attached File Illustrative Maps.Pdf

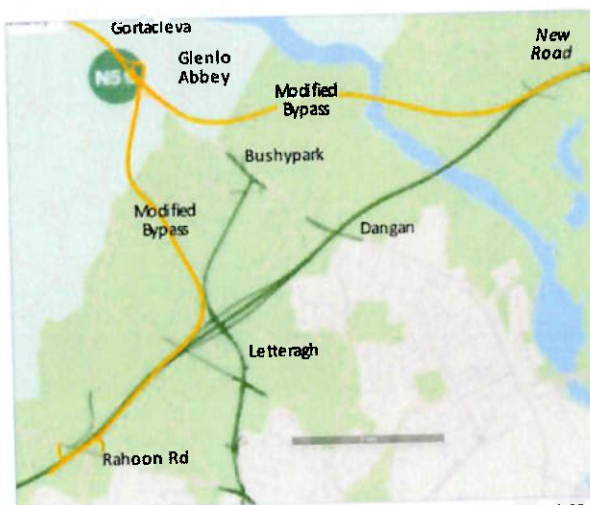
To connect the R336 Western Approach Link Road to the M6 Oranmore to Bushypark part of the Galway City Bypass three options are shown below. A fourth way is also possible to run the R336 from Rahoon to the M6/N59 at Gortacleva (not shown below).



Map 4.8.: GCR R336 Western Approach Link

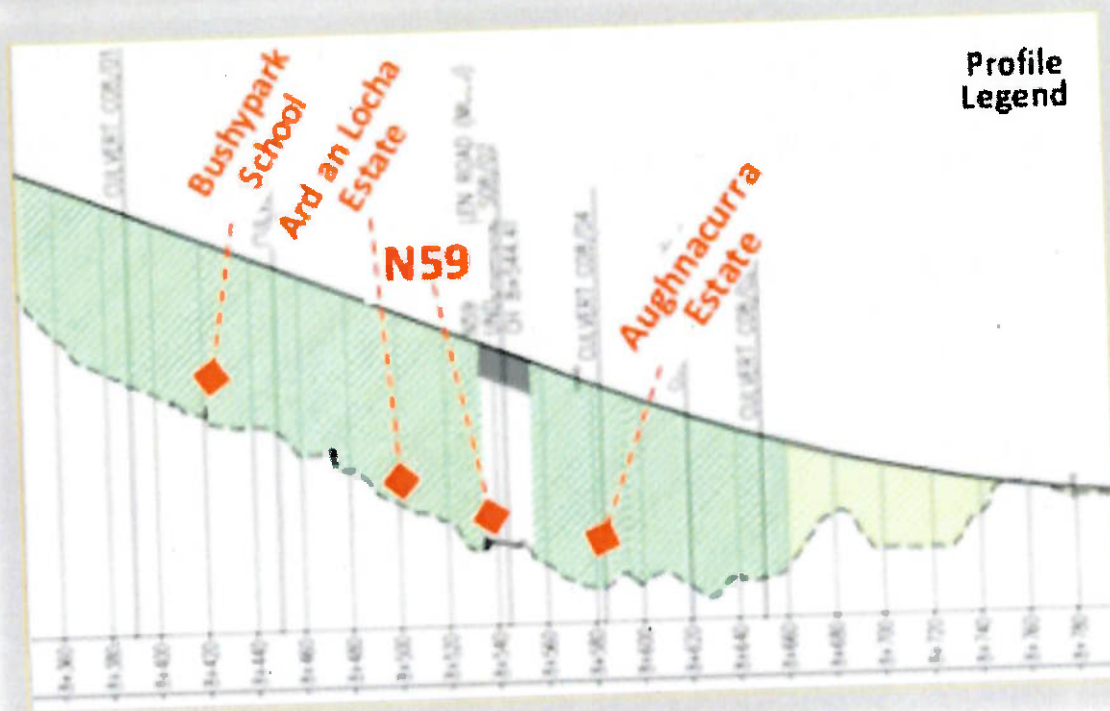
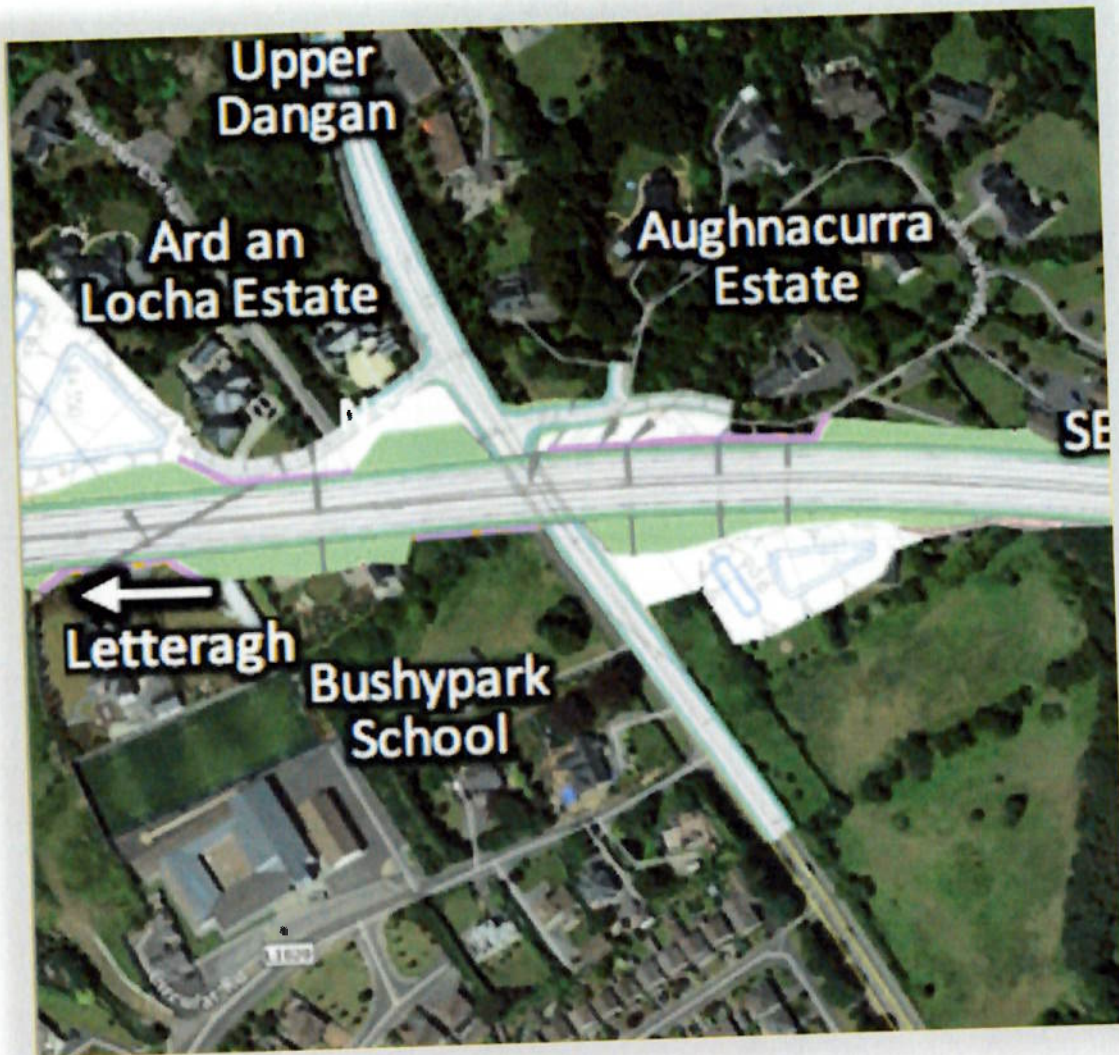


Map 4.9.: Amendment 4a

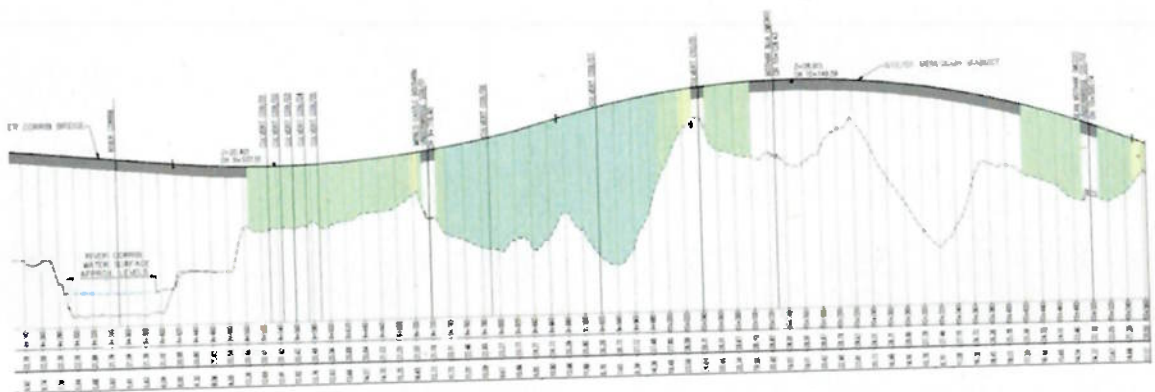


Map 4.10.: Amendment 4b

## M6 Free Flow Options to Link With R336

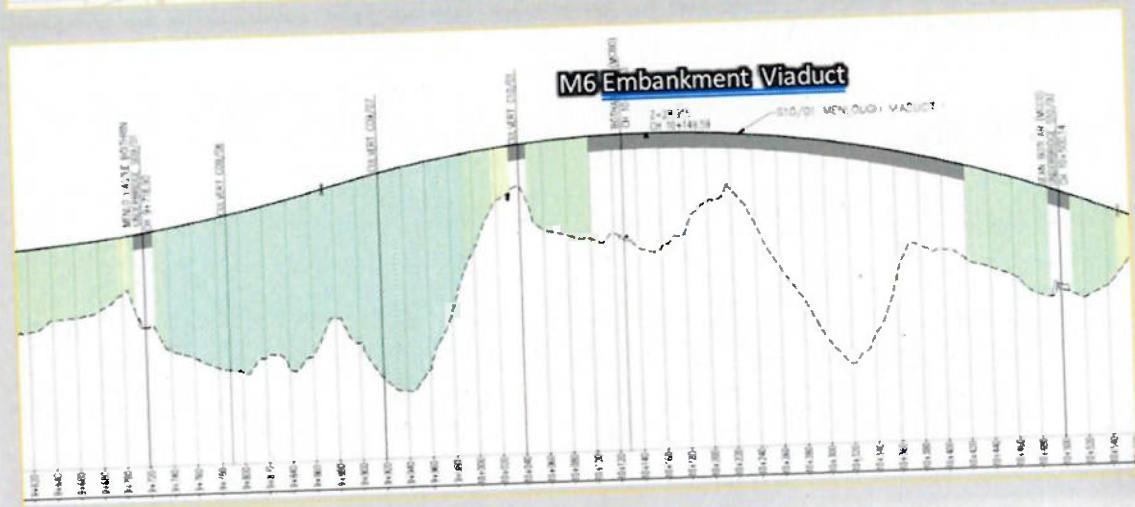
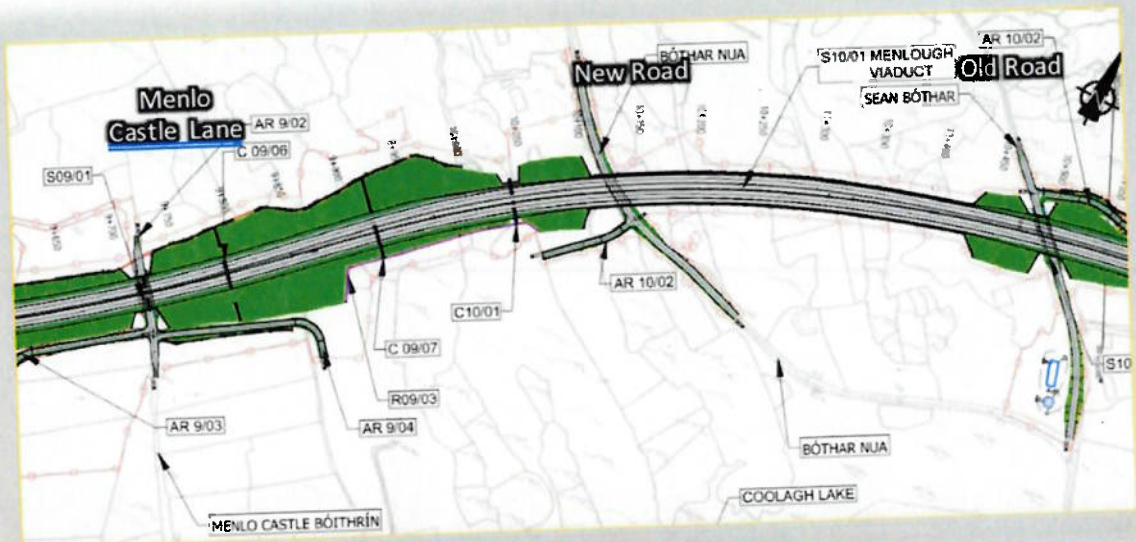


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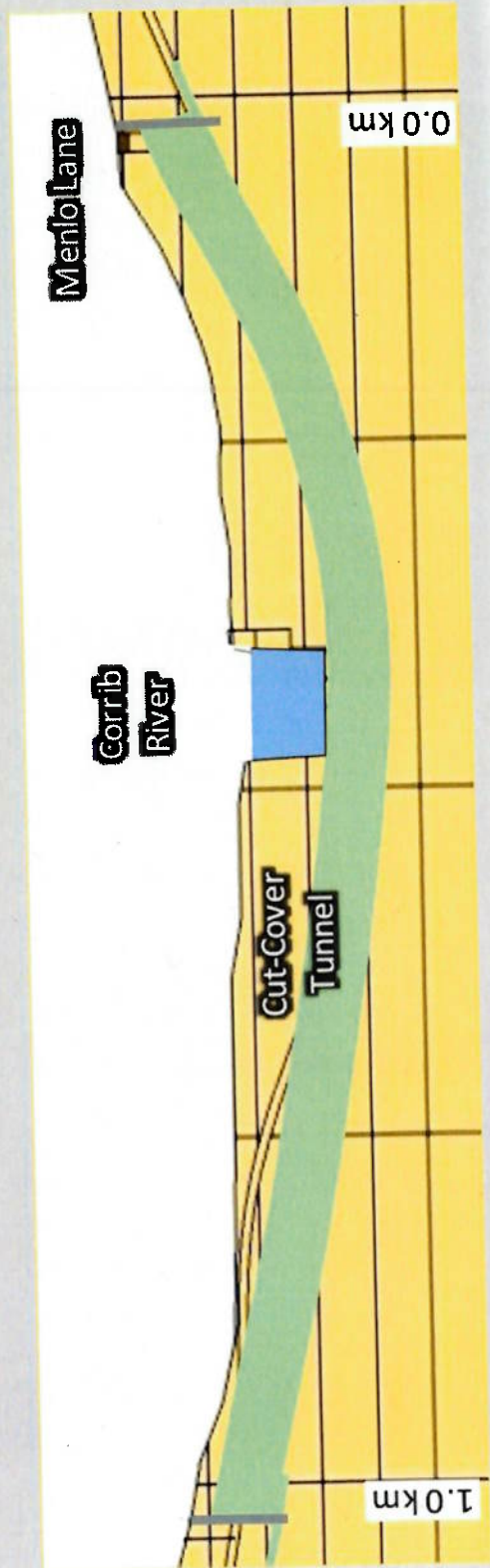


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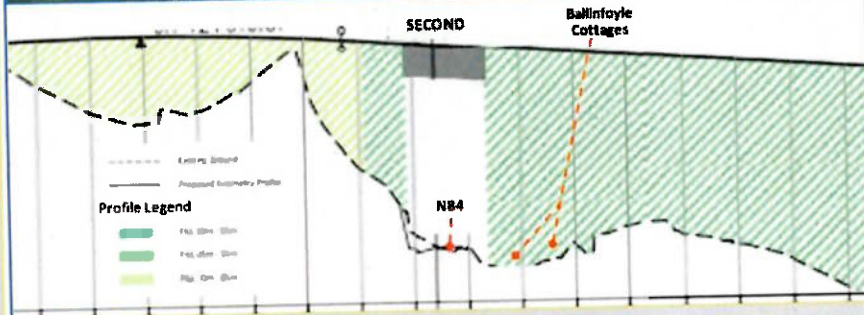




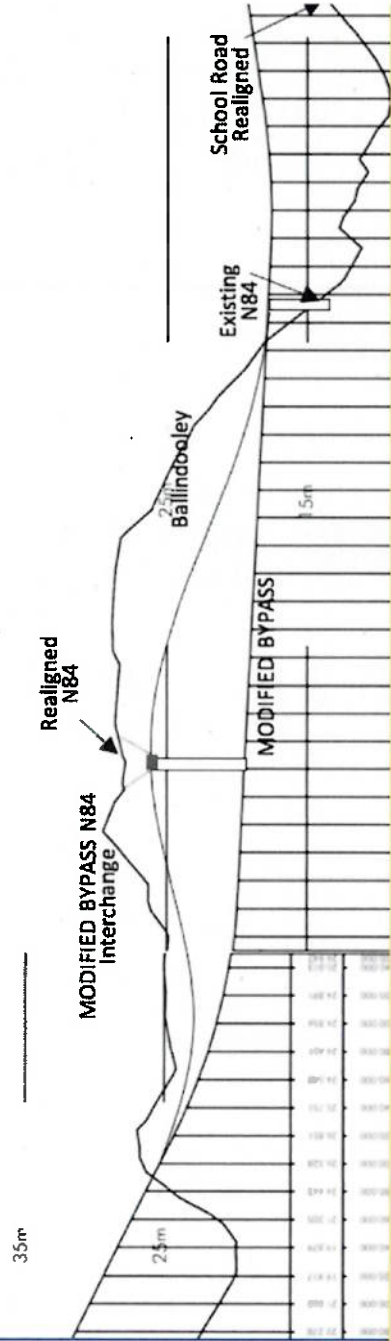
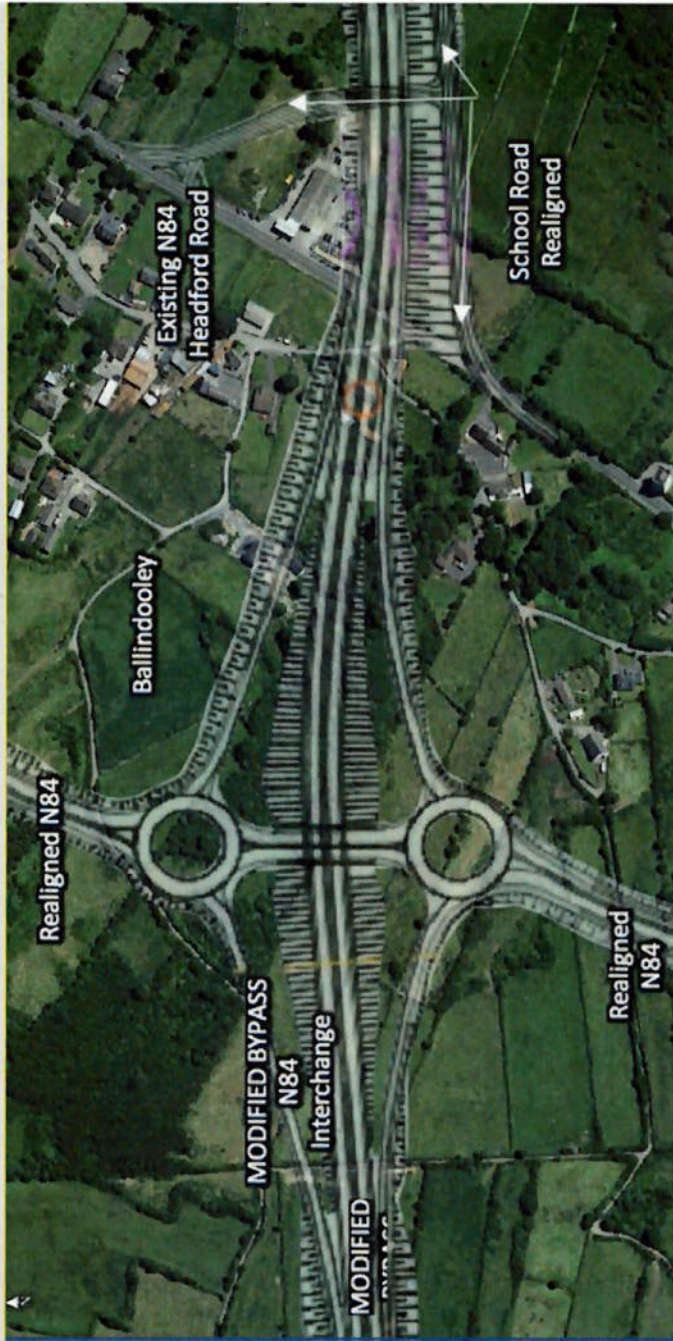
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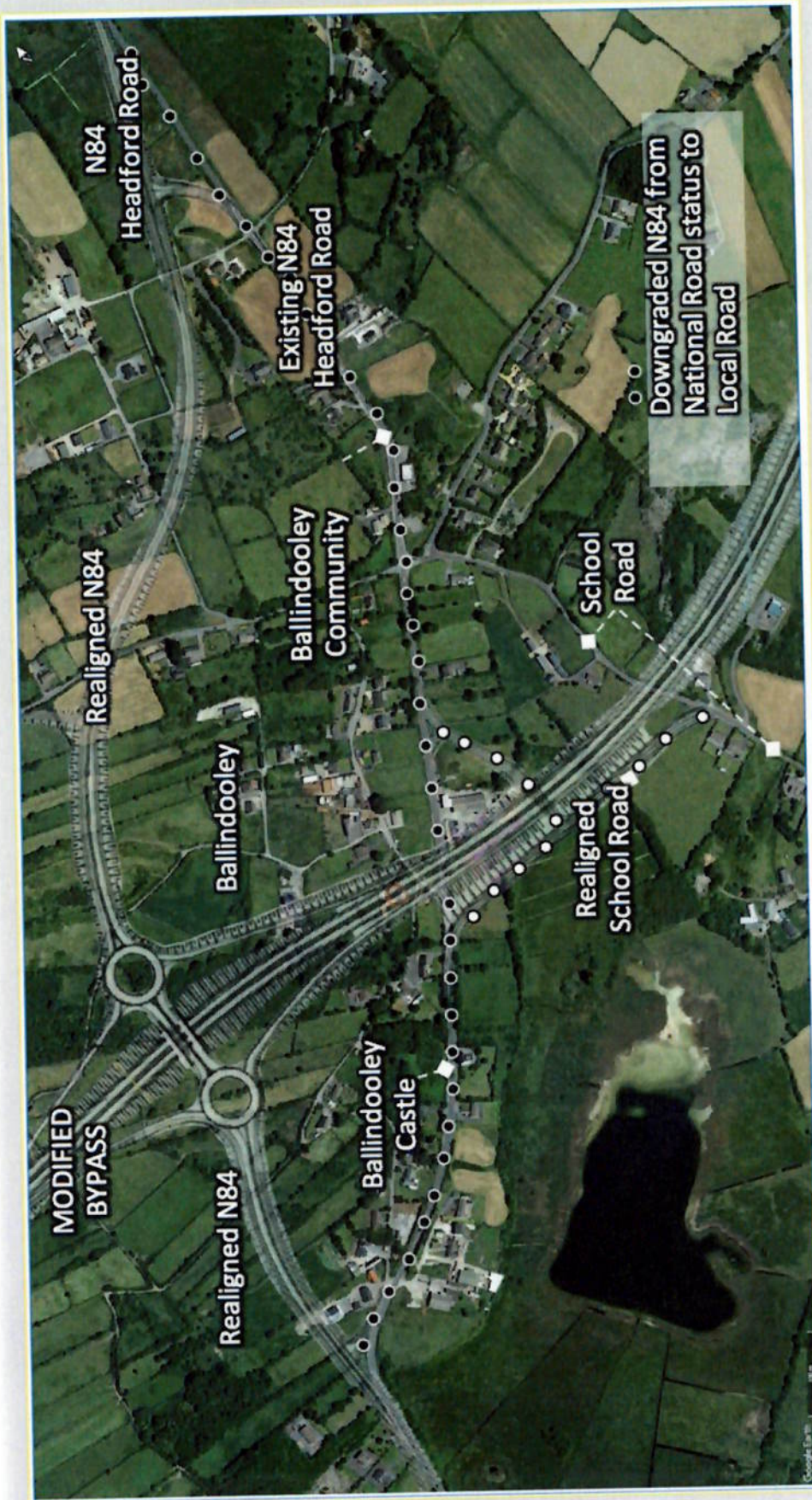
**Preserves Landscape**



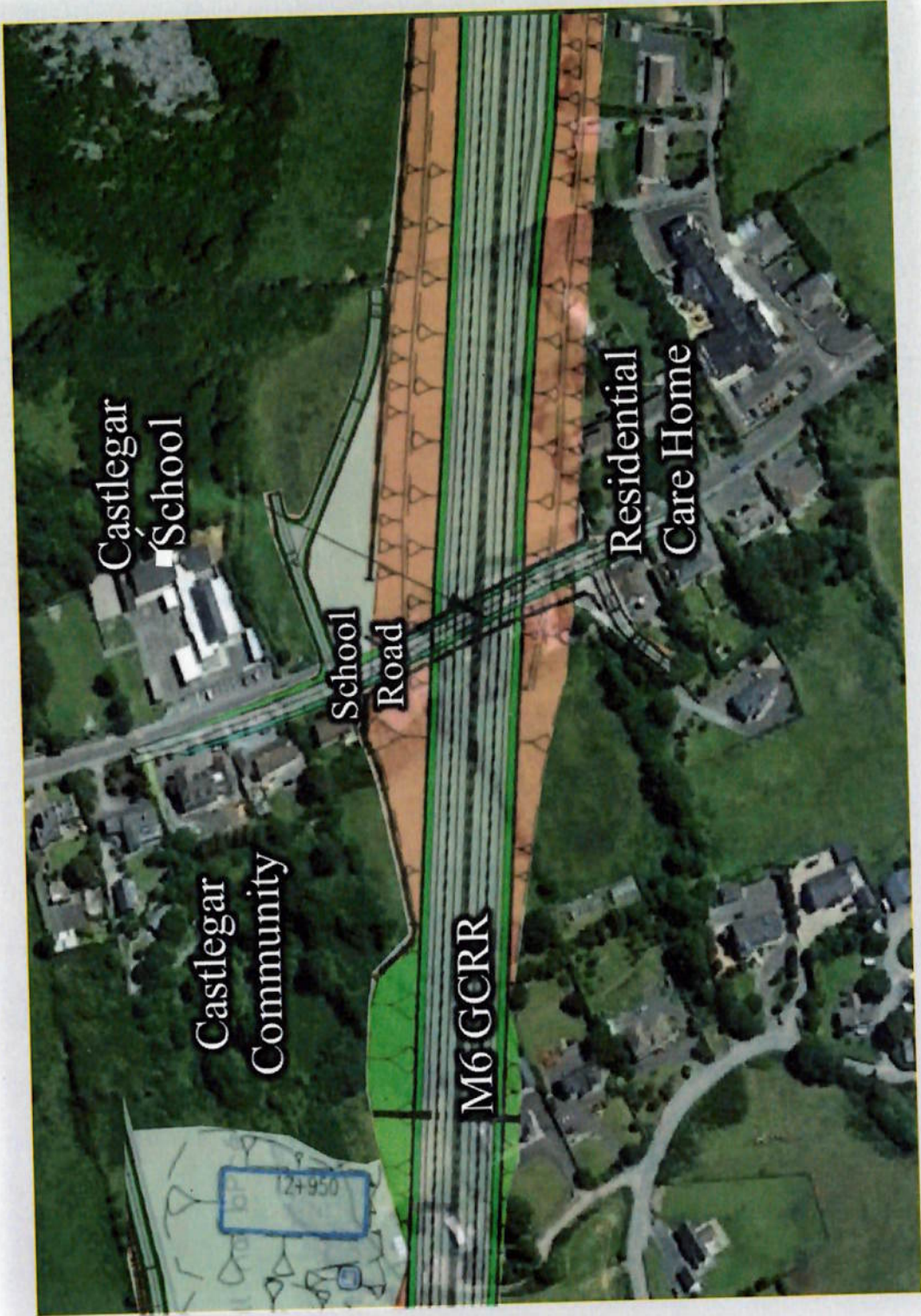
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**All of Intersection Below Ground**

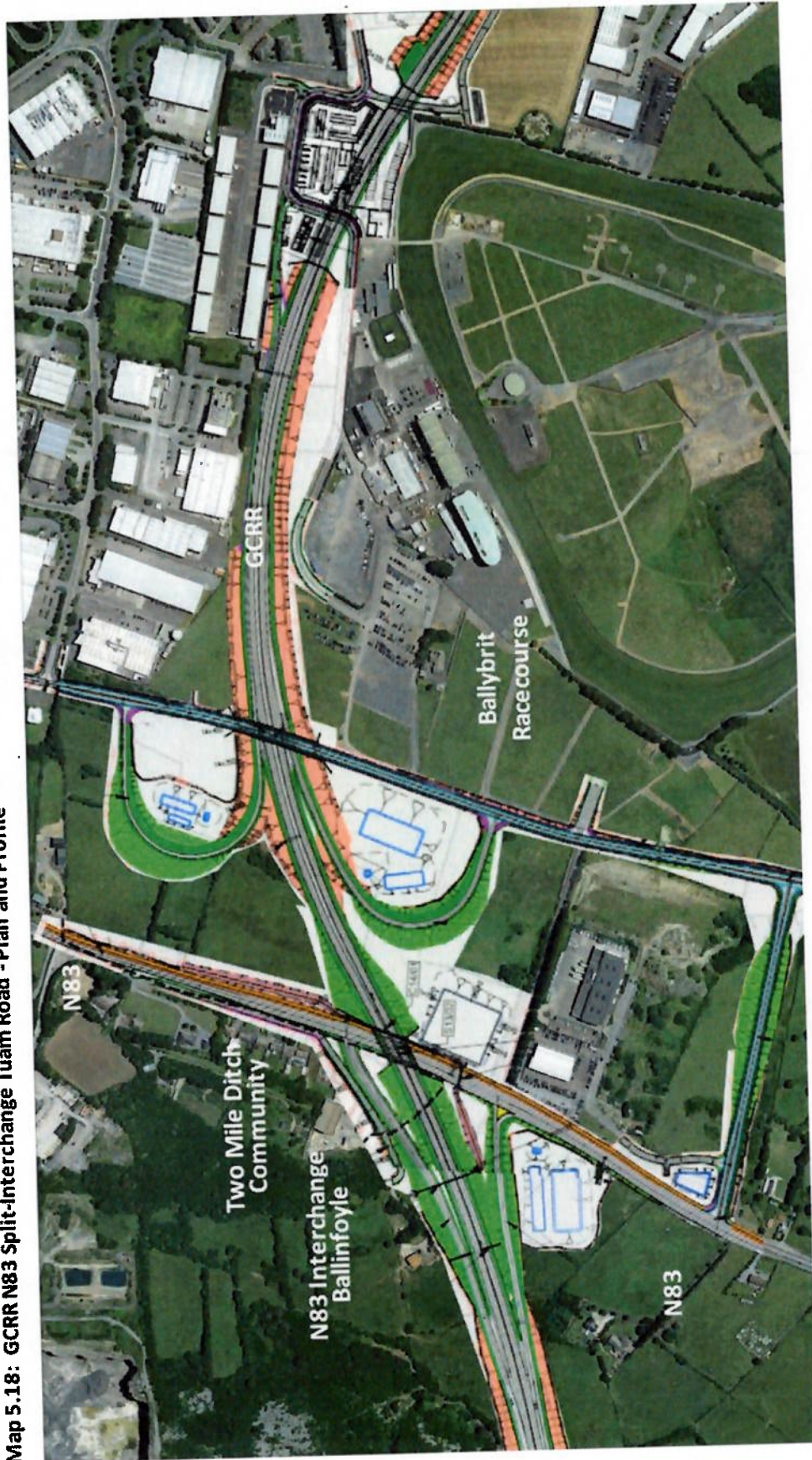


**N84 Bypass to Ballindoooley Provided**

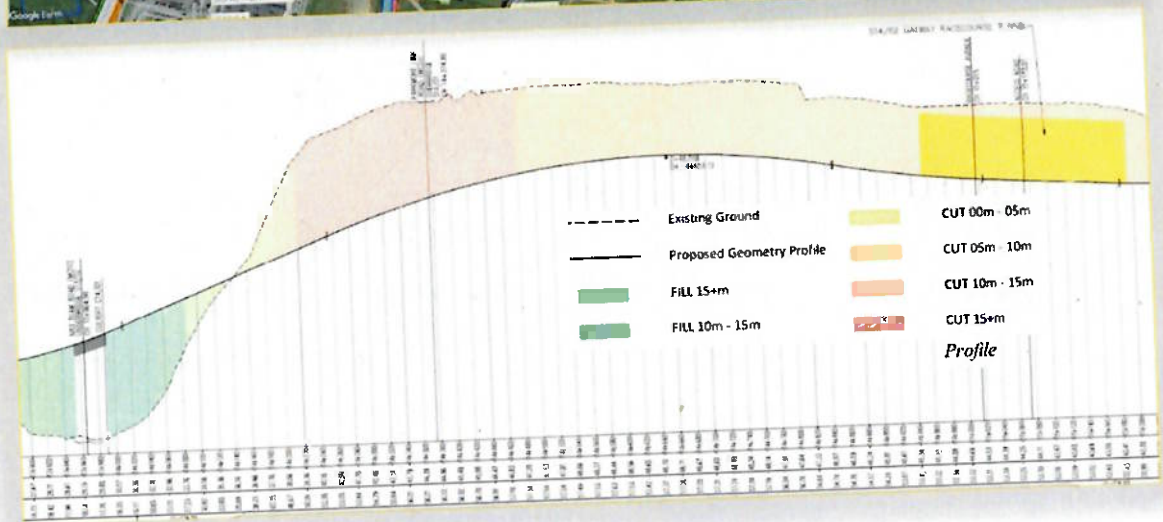
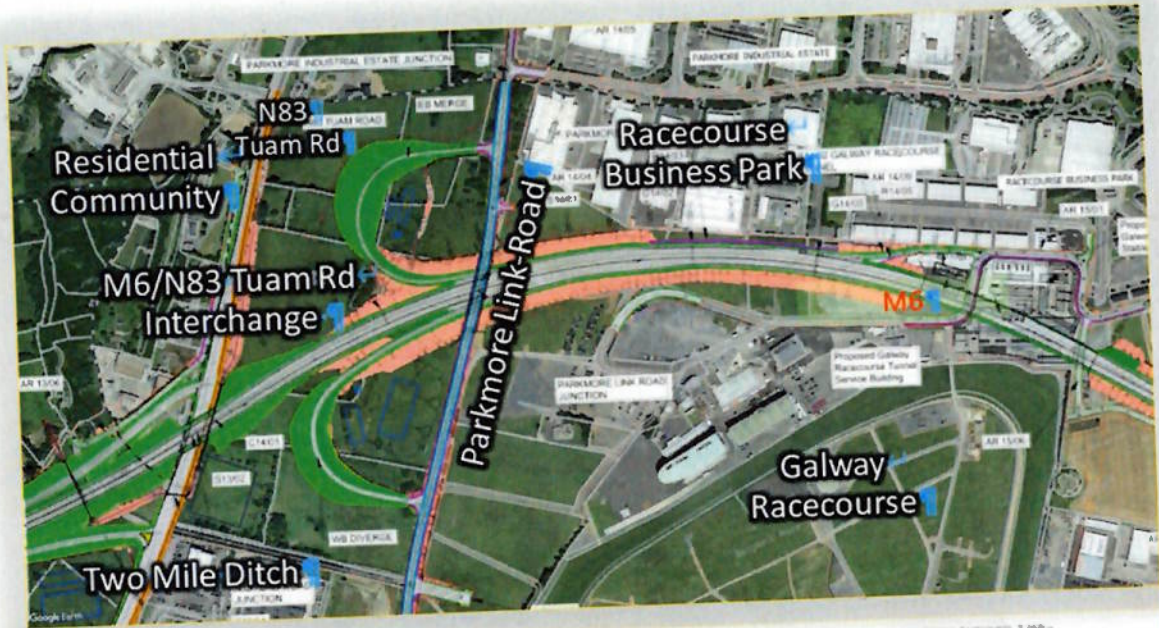


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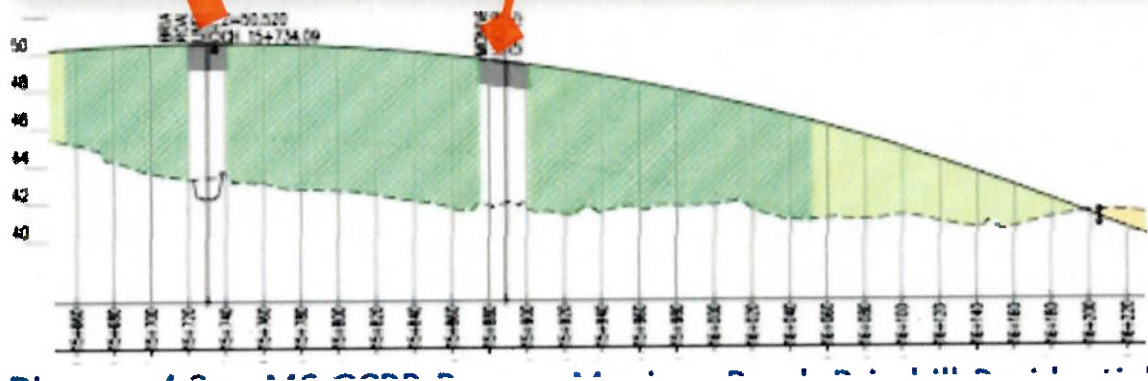
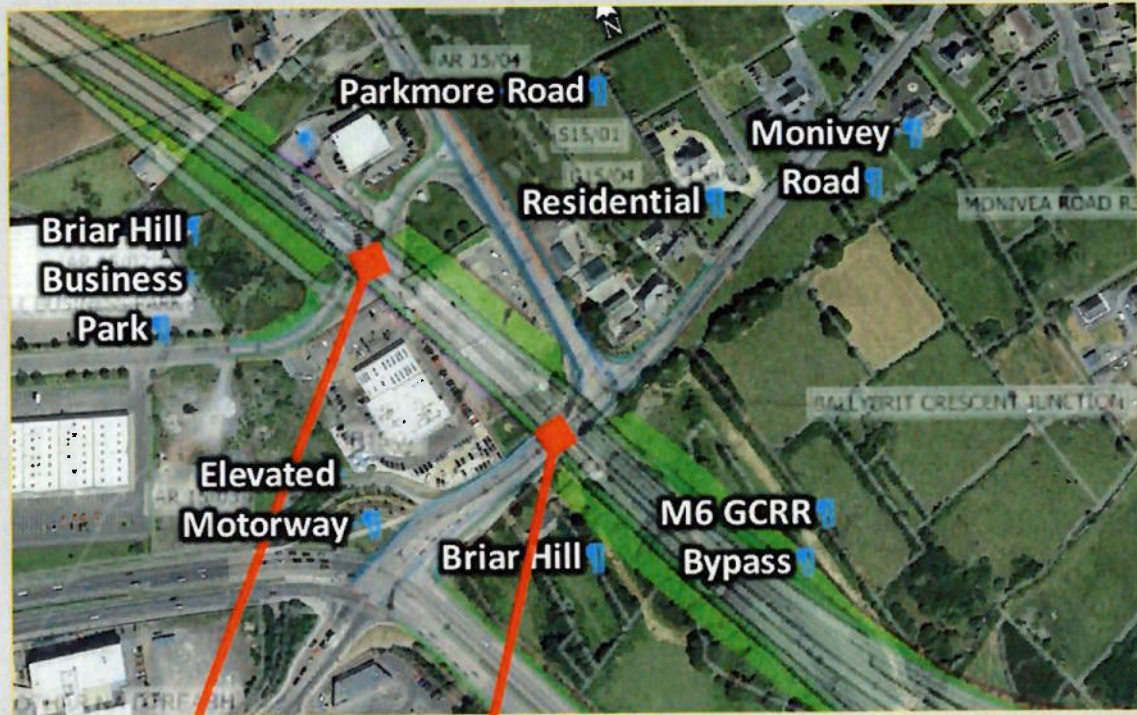
Map 5.18: GCRR N83 Split-Interchange Tuam Road - Plan and Profile



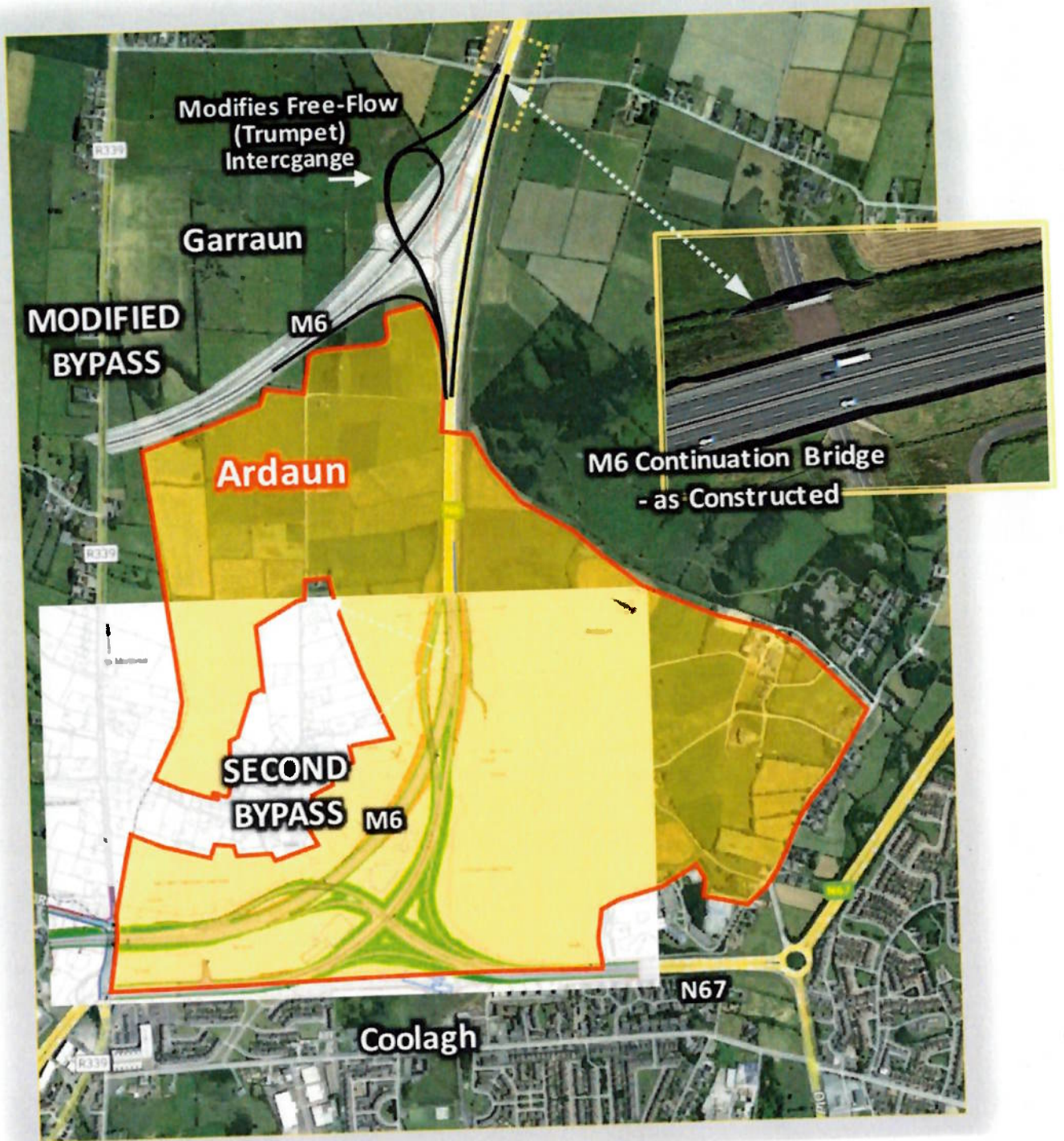
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