



An
Bord
Pleanála

Inspector's Report ABP-302885-18 & ABP- 302848-18

Development

N6 Galway City Ring Road Motorway
Scheme 2018 and Protected Road
Scheme 2018 and Compulsory
Purchase Order

Applicant(s)

Galway County Council on behalf of
itself and Galway City Council

Type of Application

Road Scheme

Observer(s)

See Appendix 1, 2 and 3

Date of Site Inspection

7th February, 6th & 7th March, 12th &
13th November 2019, 21st & 22nd
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1.0 Introduction

- 1.1. Galway County Council on behalf of itself and Galway City Council has made an application for the provision of a Protected Road Scheme¹ and a Motorway Scheme between the western side of Bearna Village and a tie-in with the existing N6 at Coolagh, Briarhill, referred to as the proposed N6 Galway City Ring Road and referred to herein as the Proposed Road Development (PRD).
- 1.2. The PRD comprises c.6km of single carriageway from the western side of Bearna village as far as Ballymoneen Road and c.12km of dual carriageway from Ballymoneen Road to the eastern tie in with the existing N6 at Coolagh, Briarhill as well as associated link roads, side roads, junctions and structures. The section of the proposed road development from the tie-in with the R336 Coast Road west of Bearna to the N59 Letteragh junction will be a protected road and the section from this junction to the tie-in with the N6 will be a motorway.
- 1.3. This report considers two concurrent applications: ABP-302885-18 and ABP-302448-18.
- 1.4. ABP-302848-18 - The Council is seeking approval for the Protected Road and the Motorway Scheme Project together with an Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS) in accordance with Section 50 of the Roads Acts 1993 as amended, and Part XAB of the Planning and Development Acts 2000 as amended. This application was submitted to the Board on 23rd October 2018.
- 1.5. ABP-302885-18 – The Council is seeking approval for a Motorway Scheme and a Protected Road Scheme under Section 49 of the Roads Acts, 1993 as amended. The Orders were made pursuant to the powers conferred on the local authority by the Planning and Development Acts 2000 as amended, the Housing Acts 1966 as amended, the Roads Acts 1993 as amended, and the Local Government Acts 1925 as amended. If confirmed, the Orders would authorise the local authority to acquire compulsorily c.280 hectares of lands, which are described in the schedules to the

¹ A Protected Road may provide for the prohibition, closure, stopping up, removal, alteration, diversion or restriction of any specified or all means of direct access to the protected road from specified land or from specified land used for a specified purpose or to such land from the protected road.

proposed schemes. In addition, the proposed schemes entail the extinguishment of a number of public and private rights of way.

- 1.5.1. The full extent of the lands required for the schemes as described, including the public and private rights of way, wayleaves and right of access are shown outlined on the deposited maps, Drawing No's. N6-DM-0001 to N6-DM-0007 (Protected Road Scheme) and Drawing No's. N6-DM-1001 to N6-DM-1014 (Motorway Scheme). The Drawings were received by the Board on 26th October 2018. These schedules were subsequently amended during the Oral Hearing.
- 1.5.2. The PRD is located in parts of the Gaeltacht area.
- 1.5.3. Maps and photos are included in the file pouch.

2.0 Site Description

- 2.1. The city of Galway is located at the point where the River Corrib flows into the sea. This river drains Lough Corrib and there is a relatively small area of land between the southern extremity of Lough Corrib and Galway Bay. While the city centre is located close to the sea outfall of the Corrib at a point where the river is tidal, the city has over the past century expanded to the west and east and also to the north, on either side of the River Corrib.
- 2.2. The immediate surrounds of the River Corrib are generally low lying and the river is relatively narrow downstream of Menlough. To the north of Menlough, however, there are extensive low-lying marshy areas and several channels. The area generally to the west of the River Corrib and the N59 has a base of granite rock and this area is generally quite uneven with a patchwork of small fields, areas with poor drainage and land of variable agricultural quality. There is a high point at Tonabrocky Hill, whose level is given as 111 metres above sea level. There is a dense network of minor roads in this area and extensive ribbon development along these roads.
- 2.3. To the east of the river there are the older villages of Menlough, Coolagh and Ballindooly. There is extensive ribbon development along the roads linking these settlements. There are significant heritage items in the Menlough area including the castle and graveyard.
- 2.4. Closer to the centre there are extensive residential, industrial and commercial land uses. A number of industrial parks characterise the east side of the city as well as the Galway Racecourse at Ballybrit. Galway Mayo Institute of Technology (GMIT) is located to the east of city and the National University of Ireland Galway (NUIG) is located on the west side of the river with extensive sports and playing facilities at Dangan.
- 2.5. The existing N6 is a national primary route which connects the M6 motorway on the eastern side of Galway City to the N59 and the R338 on the western side of Galway City. The N6 also links four national routes around the city, namely the N59, N84, N83 and the N6/M6. It also links a number of regional routes including the R336 which accesses south Connemara.

2.6. There are currently four bridges that cross the River Corrib of which three are in close proximity to the city centre.

3.0 Background

- 3.1. A previous scheme was submitted for approval to An Bord Pleanála on the 1st December 2006, known as the Galway City Outer Bypass (GCOB). The Board granted approval for the eastern part of the scheme on 28th November 2008. The Board was not satisfied that the part of the proposed road development between the N59 Moycullen Road and the R336 Road would not be prejudicial to the preservation of the Tonabrocky bog habitat or that significant adverse effects would not be avoidable or could not be avoided by an alternative route and considered this part of the route to be contrary to sustainable development.
- 3.2. Following a third-party request, the High Court took a judicial review of the Board's decision to approve permission of the eastern section on the basis that the Board erred in its interpretation of Article 6 of the Habitats Directive. The High Court upheld the Board's decision. A third party appealed this decision to the Supreme Court who sought the opinion of the Court of Justice of the European Union (CJEU). The CJEU opinion delivered on the 11th April 2013 established that the loss of a small area of Priority Annex I habitat, for which the Lough Corrib cSAC is selected, would adversely affect the integrity of the cSAC and the provisions of Article 6(4) must apply in granting consent. Following this opinion, the Supreme Court quashed the earlier Board decision to grant approval of the eastern section of the GCOB under Article 6(3) of the Habitats Directive.
- 3.3. Following this decision and the Board's refusal to approve the western end of the project, the applicant decided to reassess the work to ensure all possible alternatives were investigated. The resulting project is the subject of this application for approval now before the Board.

4.0 Proposed Development

4.1. Public Notice Description

4.1.1. The PRD is described as follows in the public notices:

- A dual carriageway, consisting of 2 lanes and a hard shoulder in each direction divided by a segregating barrier;
- A single carriageway, consisting of 1 lane and a hard shoulder in each direction;
- New link roads;
- The realignment / improvement of regional, county and local roads crossed by the proposed road development; and
- Localised works to the existing electricity transmission and distribution networks (specifically comprising of the diversion of the 110kV and 38kV services) together with all ancillary and consequential works associated therewith.

4.2. The Scheme

4.2.1. The PRD contains the following major components:

- 5.6km of a single carriageway from c.2km to the west of Bearna village at An Baile Nua to the east of Ballymoneen Road junction;
- 11.9km of dual carriageway from Ballymoneen Road to the tie-in with the N6 road at Coolagh, Briarhill;
- 4 Major Structures:
 - A viaduct and bridge over the NUIG Sporting Campus and the River Corrib c.620m in length;
 - A viaduct over non-designated priority Annex I habitat at Menlough of c.320m in length;
 - A tunnel of c.270m in length beneath a section of Lough Corrib cSAC exiting in Lackagh Quarry known as the Lackagh Tunnel;

- A tunnel of c.240m in length under the Galway Racecourse at Ballybrit to the north of the racetrack, known as the Galway Racecourse Tunnel;
- Tunnel maintenance buildings adjacent to Lackagh and Galway Racecourse tunnels;
- Four main link roads:
 - N59 Link Road North;
 - N59 Link Road South;
 - Parkmore Link Road;
 - City North Business Park Link.
- 7 standard overbridges, typically 2 or 3 span bridges;
- 10 standard underbridges: at local roads typically a single span portal frame arrangement, at regional roads a clear span;
- 15 retaining structures expected to be of reinforced earth and/or reinforced concrete retaining wall configuration;
- 43 culvert type structures of which 28 are structural to accommodate drainage, watercourses and wildlife;
- 29 Sign Gantries;
- 56 Noise Barriers;
- 28 side roads which require redesign and realignment;
- Full size all-weather GAA pitch and a training pitch at the NUIG Sporting Campus²;
- New stables for the Galway Racecourse;
- Footpaths and cycle lane provision;
- Access roads with private rights of way;
- Lighting, Fencing and Barriers;

² Note this was amended at the Oral Hearing – see below

- Environmental measures including lands north of Menlo Castle to provide an enhancement of the core foraging habitat for the Lesser Horseshoe bat known to roost at Menlo Castle, and all other associated works;
- Material Deposition Areas;
- Temporary site compounds;
- Drainage works;
- Landscaping works; and
- Utilities and services diversion works.

Outline Description

4.2.2. From the R336 Coast Road to Ballymoneen Road the mainline of the PRD is a Type 1 Single Carriageway in accordance with TII Publications, with a minimum width of 18.3m and is designated as a Protected National Road. From Ballymoneen Road to the tie-in with the existing N6 at Coolagh, Briarhill the mainline is a standard Dual Carriageway Urban Motorway (D2UM). The mainline from Ballymoneen Road to the N59 Letteragh Junction will be designated as a Protected National Road and the mainline from the N59 Letteragh Junction to the N6 will be designated as a motorway, however, the cross sections remain the same with a minimum width of 27.6m.

4.2.3. Between the N84 Headford Road junction and the N83 Tuam Road junction the mainline cross section will widen to 34.6m to accommodate a third lane in either direction. The cross sections at the River Corrib bridge and Menlough viaduct consist of the same as described above, with the exception of the hard shoulder width which is reduced to 0.5m and a raised verge of 0.6m. The cross sections of the two tunnels consist of 2 x 3.75m lanes in both directions and a minimum maintained headroom of 5.3m.

Major Components

River Corrib Bridge

4.2.4. The EIAR describes the bridge crossing the River Corrib. It is 650m in length³ and comprises of an eight span bridge carrying the proposed road development over the river adjacent to a retained embankment with five culvert openings on the east approach. There will be no instream piers and the piers to the east within the footprint of the SAC are located in areas of non-Annex I habitat. On the west approach it is a viaduct structure traversing the NUIG Sporting Campus. The bridge is further described as a single concrete box without supports in the river. It is of variable depth between 3 and 7m with the main span being 153m across the river. The superstructure will be supported on reinforced concrete piers.

Menlough Viaduct

4.2.5. A viaduct structure is located outside but adjacent to the Lough Corrib SAC. The total length is dictated by the area of priority Annex I habitat over which it crosses, namely Limestone Pavement and a Turlough. It has a total length of c.320m and the PRD is on embankment on both approaches to it. The viaduct contains eight spans of a similar 40m span length. The minimum distance between the soffit of the superstructure and the ground level is c. 1.5m at one pinch point, at the location of the high point in the rock outcropping on the western side. The bridge deck superstructure will consist of prefabricated pre-cast post-tensioned beams supporting a cast in-situ concrete bridge deck. The substructure will consist of conventional reinforced concrete piers at intermediate supports while the reinforced concrete bankseats at the abutments will be supported on a reinforced earthworks system. No substructure supports are proposed within the extents of the Turlough.

Lackagh Tunnel

4.2.6. The tunnel is described as being c.270m long. The eastern portal of the tunnel is located within the inactive Lackagh Quarry, which is a limestone quarry. The central section of the tunnel will pass under the Lough Corrib SAC. The western portal is proposed to be located in agricultural fields outside of the Lough Corrib SAC. The purpose of this tunnel is to traverse the Lough Corrib SAC without directly impacting on the Limestone pavement and the Calcareous grass within the SAC.

Galway Racecourse Tunnel

³ Depending on chainage – slight changes in length used throughout the EIAR

4.2.7. This tunnel consists of c.240m twin tube reinforced cut and cover tunnel with a central wall. The proposed mainline passes through the north-western corner of the Galway Racecourse property and necessitates a cut and cover tunnel. The purpose of the tunnel is to avoid by design disruption to operations and functioning of the Galway Racecourse.

Underbridges

4.2.8. There are 10 underbridges proposed to carry the PRD over local, regional and national roads. All underbridges are single span and three types are proposed.

- Type 1: Buried reinforced concrete box structure
- Type 2: Bridge deck with reinforced earth wall abutment
- Type 3: Concrete deck with side slopes.

Overbridges

4.2.9. There are 7 overbridges of which 4 are required to carry local roads over the PRD, 1 is required as a mammal crossing and 2 are required at Coolagh Junction to provide free flow access between the R446 and the PRD.

4.2.10. Nature and extent of the land acquisition

4.2.11. Approximately 280 hectares of land is included in the CPO.

4.2.12. It is proposed to demolish 44 residential properties, 2 industrial properties (1 of which comprises four buildings), and 2 commercial properties. An additional 10 residential properties, one commercial property and one landholding that has full residential planning permission, require full acquisition. It is proposed that 17 farm buildings will be acquired to accommodate the proposal. Acquisition is further required of lands at 5 properties where there is full planning permission for residential or commercial development. These acquisitions will result in either the revocation or the need for modification of the planning permission.

4.2.13. Construction phase

4.2.14. A Construction Environmental Management Plan (CEMP) accompanies the application which documents the overall environmental strategy to be adopted during the construction phase.

- 4.2.15. An east to west build sequence is envisaged and construction may be completed in two concurrent phases or a single overall contract:
- Phase 1: N6 Coolagh to N59 Letteragh Junction – 9.9km (including the N59 Link road north and south)
 - Phase 2: N59 Letteragh Junction to R336 Coast Road.
- 4.2.16. It is considered that the PRD is suitable for a Design and Build Scheme or a Public Private Partnership contract (although no decisions have been made on the exact contract).
- 4.2.17. For construction purposes the works have been split into 15 sections. The EIAR lists the works for each section in Chapter 7. Potential Haul Routes and excavation volumes, surpluses and deficits in material requirements have been identified.
- 4.2.18. Thirteen sites have been identified as potential site compounds across the PRD. Site compounds have been identified within the permanent proposed development boundary where possible, with one location identified for temporary acquisition during the construction phase only.

4.3. Need for the Development

- 4.3.1. The need for the PRD is detailed in Chapter 3 of the EIAR. It is stated that the need for the PRD arises directly from the necessity to address the serious transport issues facing Galway City and environs. It is considered that a transport solution has been developed and the PRD forms an essential part of the solution.
- 4.3.2. It is stated that the transport issues facing Galway City and its environs as a result of the inadequacy of the existing road network are wide ranging with associated impacts including congestion throughout the city road network, over capacity of existing junctions, journey time unreliability, journey time variability, peak hour delays, by-passable traffic in conflict with internal traffic, strategic traffic in conflict with local traffic, inadequate transport links to access markets within the city, lack of accessibility to the western region, limited road space for cyclists, and impact of traffic on city's reputation.
- 4.3.3. It is stated that the overall ambition of the PRD is to achieve a number of specific objectives under a number of multi-criteria categories. It is the intention to provide a

project which is attractive to all, delivers the road component of the overall transport solution, provides benefit to the local and the larger regional population and is cognisant of the sensitive environment. Furthermore, the PRD was developed to be part of Ireland's comprehensive network in accordance with the European Union's TEN-T Transport policy.

- 4.3.4. It is concluded that the overriding need for the PRD is underpinned by the fact that a modern economy requires a world-class road transport infrastructure that is sustainable from an economic, social and environmental perspective. The need to deliver the PRD is supported in terms of policy from European to local level. The PRD need is defined in terms of its potential to solve existing transport issues including but not limited to those issues as listed in Section 4.3.2 above.
- 4.3.5. The functionality of the PRD is twofold – it provides for the strategic need of the TEN-T comprehensive road network and connectivity of Galway city and the West Region to the national road network, as well as providing a solution to relieve the city centre roads of unnecessary strategic traffic and providing the necessary road space for other modes of transport namely walking, cycling and public transport.

4.4. The Routing of the Scheme

- 4.4.1. Eleven figures illustrate the route of the road contained within Volume 3A of the EIAR. Each section of road is summarised in the table below, with the relevant EIAR figure identified as well as the chainage.

EIAR Figure	Chainage	Description
5.2.01	Ch.0+000 - Ch.1+350	PRD ties into existing R336 Coast Road in An Baile Nua with an at-grade roundabout. Proceeds north and east. Local connectivity at Na Forai Maola is maintained via an overbridge link.
5.2.02	Ch.0+360 - Ch.2+780	Proceeds north and east. At-grade roundabout at Bearna to Moycullen Road L1321.

EIAR Figure	Chainage	Description
5.2.03	Ch.2+800 – Ch.4+440	Proceed east. Local connectivity maintained at Aille Road with an overbridge. At-grade signalised junction at Cappagh Road.
5.2.04	Ch.4+460 – Ch.5+620	Proceed east. At-grade signalised junction at Ballymoneen Road junction.
5.2.05	Ch.5+660 – Ch.7+300	PRD becomes dual carriageway to the east of Ballymoneen Road. Local connectivity maintained at Ragoon Road via an underbridge and at Letteragh Road via an underbridge.
5.2.06	Ch.7+320 – Ch.8+940	Proceed east to the grade separated N59 junction. Junction connects to the N59 Moycullen road via the proposed N59 Link Road north and to the Ragoon and Letteragh Road via the N59 Link Road south. PRD crosses over the N59 Road at Dangan via an underbridge.
5.2.07	Ch.8+960 – Ch.10+540	PRD travels on a viaduct over the NUIG Sports Campus before crossing over the River Corrib on a bridge structure. Total length of viaduct and bridge is 620m. PRD continues east on an embankment towards the Menlough Viaduct. PRD crosses over Menlo Castle Boithrin and Bothar Nua. The Menlough viaduct is 320m crossing over Seanbothar.
5.2.08	Ch.10+580 – Ch.12+200	Continuing east the PRD enters a section of cut preceding the Lackagh Tunnel which is c.270m in length west of the Lackagh Quarry and exits the tunnel in the quarry. Tunnel maintenance building is located adjacent to the tunnel. PRD continues east with a grade separated junction located at the N84 Headford Road junction at Ballinfoyle.
5.2.09	Ch.12+240 – Ch.13+860	PRD continues east. Local connectivity at Castlegar is maintained via the School Road overbridge. A grade separated junction is proposed at the N83 Tuam Road.

EIAR Figure	Chainage	Description
5.2.10	Ch.13+900 – Ch.15+500	This junction provides access to the proposed Parkmore Link Road between the Ballybrit Business Park and the Parkmore Industrial Estate via the proposed City North Business Park Link road. PRD enters the Galway Racecourse Tunnel which is c.240m in length at Ballybrit to the north of the racetrack. On emerging from the tunnel, the PRD continues south-east.
5.2.11	Ch.15+700 – Ch.17.540	Local connectivity is maintained to Briarhill Business Park via an underbridge. PRD crosses over the Monivea R339 Road and continues south to enter a cutting as it reaches its junction with the existing N6 at Coolagh junction. This junction will be a fully grade separated junction.

4.5. Route Selection

4.5.1. The Route Selection Report details the evolution of the project since the need to address the transportation issues in Galway City and environs was recognised by Galway City and Galway County Council in 1999. The history of the original Galway City Outer Bypass (2006 GCOB) project is detailed in section 3 above, and the subject project for the now named N6 Galway City Ring Road Project began in 2013.

4.5.2. The Route Selection Report identified 6 phases of the project of which the first four are as follows.

- Phase 1: Feasibility Study, Constraints Study, Consideration of all Options;
- Phase 2: Project Appraisal of Feasible Options;
- Phase 3: Selection of Preferred Option, Publish Route Selection Report, Design, EIA & the Statutory Process (CPO);
- Phase 4: Application to An Bord Pleanála, Oral Hearing, Decision.

4.5.3. A constraints study was completed within the scheme study area. Constraints of a physical, procedural, legal and environmental nature were identified. Following on from initial feasibility studies the options considered included:

- Do Nothing
- Do Minimum
- Do something – public transport
- Lough Corrib Route Options
- Coastal Route Options
- Upgrade existing road alternative (on-line)
- Build new road alternative (off-line)

4.5.4. Feasible route options carried forward for further assessment comprised on-line options which included an upgrade of existing infrastructure, partial on-line/off-line options and total new construction off-line. Stage 1 Route Options were presented to the public and following this consultation and further studies, the route options were refined and became Stage 2 Route Options.

4.5.5. A project appraisal of the Stage 2 Route Options was carried out using multiple criteria which included Economy, Safety, Environment, Accessibility and Social Inclusion and Integration. For the Stage 2 assessment the route options were assessed in three sections: Section 1 extends from the R336 to Galway City boundary, Section 2 extends from the city boundary to the existing N6 in the east of the city. An additional break line at the N6 tie-in at Coolagh was incorporated to compare the junction layouts at the N6 tie-in for the Stage 2 assessment which is referred to as Section 3.

4.5.6. A matrix of the project appraisal for each of the three sections was prepared. The options within each section were categorised from preferred to intermediate to least preferred. Upon completion of the project appraisal, the Emerging Preferred Route Corridor was developed as an amalgamation of different route options. This option was put on public display as well as details of the Integrated Transport Management Programme.

4.5.7. The Route Selection Report concluded that the preferred route corridor of the N6 Galway City Transport Project should be adopted because a road component is needed, and the extent of provision of road infrastructure necessary within the

preferred corridor was reviewed, in-conjunction with the wider integrated management transport programme for Galway.

4.6. Documentation Submitted with the application

4.6.1. A substantial amount of documentation was submitted with the application as well as the Compulsory Purchase Order (CPO). The CPO is detailed in Section 7 below.

4.6.2. An Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS) have been submitted as part of the application.

4.6.3. The EIAR comprises the following (in hard copy format):

- Volume 1: Non-Technical Summary
- Volume 2A: EIAR Main Text Part 1 - Chapters 1 – 7
- Volume 2B: EIAR Main Text Part 2 - Chapter 8
- Volume 2C: EIAR Main Text Part 3 – Chapter 9 – 12
- Volume 2D: EIAR Main Text Part 4 – Chapter 13 – 17
- Volume 2E: EIAR Main Text Part 5 – Chapter 18 – 21
- Volume 3A: Figures Part 1 associated with Chapters 1, 5, 7, 8 and 9
- Volume 3B: Figures Part 2 associated with Chapters 10, 11, 12, 13, 14, 15, 16, 17 and 18
- Volume 4A: Appendices Part 1 associated with Chapters 1, 5 and 6
- Volume 4B: Appendices Part 2 associated with Chapters 6 & 7
- Volume 4C: Appendices Part 3 associated with Chapter 7
- Volume 4D: Appendices Part 4 associated with Chapter 7 & 8
- Volume 4E: Appendices Part 5 associated with Chapter 8
- Volume 4F: Appendices Part 6 associated with Chapter 9
- Volume 4G: Appendices Part 7 associated with Chapter 9
- Volume 4H: Appendices Part 8 associated with Chapter 9
- Volume 4I: Appendices Part 9 associated with Chapter 9

- Volume 4J: Appendices Part 10 associated with Chapter 10
- Volume 4K: Appendices Part 11 associated with Chapter 11 & 12
- Volume 4L: Appendices Part 12 associated with Chapter 13, 14, 15, 16, 17 and 18
- A separate Schedule of Environmental Commitments is provided.

4.6.4. The Natura Impact Statement comprises the following:

- Provision of Information for Appropriate Assessment Screening
- Volume 1: Executive Summary
- Volume 2: Main Report
- Volume 3: Figures
- Volume 4A: Appendices Part 1 including Appendix A to E
- Volume 4B: Appendices Part 2 including Appendix F
- Volume 4C: Appendices Part 3 including Appendix G to O

4.7. Further Information Request

4.7.1. Further information was requested from the applicant in a letter dated the 4th April 2019. The information requested was listed under 8 different headings and can be summarised as follows:

- **Drawings:** detailed drawings of the major structures at an appropriate scale, sections and elevations of pinch points of structures with the SAC boundary, examples of underbridges and overbridges, retaining wall details, Lackagh quarry restoration plan, and pedestrian and cycle details.
- **Route Selection Report:** Copy of report requested.
- **Appropriate Assessment:** Additional habitat sampling both within and external to the SAC, detailed mapping where the development boundary overlaps with the SAC, additional detail of outfall into River Corrib, clarification on supporting role of non-Annex I habitat, and clarification of other assessments.

- **Birds:** Night survey queries, RPS report is 13 years old – is it still reliable, assess impact of bridge on wintering birds, and address potential conflict in mitigation measures.
- **Bats:** Clarify if there is a link between the Lesser Horseshoe Bat population at Menlo, Ross House and Ebor Hall, and query the quantity of Core Sustenance Zone (CSZ).
- **Other Ecological Issues:** Demonstrate culverts are effective mitigation for certain species, and address Biodiversity in general.
- **Traffic & Transport:** Justify use of 2012 as base year and clarify how population growth scenarios in TII National Traffic Model compare to the population growth targets set out in NPF.
- **Clarifications:** Drawing queries, access road locations, node numbering and information on watertight seal to be used on the Lackagh Tunnel.

4.8. Applicant's Response

4.8.1. The applicant responded to the Request for Further Information (RFI) on the 30th August 2019 following their request for additional time to respond. The response included four volumes of information which was considered significant and was re-advertised. The information was submitted as follows:

- Volume 1 – Report
- Volume 2 – Appendices
- Volume 3 – Appendix A.2.1 – Route Selection Report
- Volume 4 – Appendix A.10.1 – N6 Galway City Ring Road – Design Report.

4.8.2. In Volume 1 a summary of the information submitted is provided. It is summarised herein under the different headings.

Drawings

4.8.3. As part of the RFI response to this item, a copy of the N6 Galway City Ring Road Design Report was submitted. Appendices to the Design Report include a number of the drawings requested, which are also included in Volume 2 – Appendices of the RFI response for ease of reference.

- 4.8.4. With respect to the River Corrib Bridge a copy of four general arrangement drawings were included as part of Appendix A.1.1 of the RFI response. It is clarified that a 2m high noise barrier will be provided along the full length of the bridge which will be given the appropriate architectural treatment. Two additional figures are provided to include cross-sections of the retaining walls on the eastern approach to the bridge.
- 4.8.5. It is stated that the design for the River Corrib bridge includes the structure over the river and NUIG Sporting Campus and drawings referred to above are applicable to the NUIG structure. Additional figures are included in Appendix A.1.2 of cross-sections of the embankment on the western approach to the bridge over the NUIG campus.
- 4.8.6. Drawings of the Menlough viaduct are included in Appendix A.1.3 and an additional figure presents the areas of Annex I habitat within the Zone of Influence of the Menlough viaduct and the elevation of the viaduct with its height above the Limestone pavement.
- 4.8.7. Copies of the drawings with respect to the Lackagh Tunnel are included in Appendix A.1.4 and additional figures present cross-sections to detail the pinch points with the SAC. Copies of the drawings of the Galway Racecourse tunnel are included in Appendix A.1.5.
- 4.8.8. The different types of underbridges and overbridges are detailed in drawings in Appendix A.1.6 and A.1.7. Mammal underpasses and wildlife overpass are detailed in drawings in Appendix A.1.7 and A.1.8.
- 4.8.9. Drawings of proposed boundary treatment, and where the different boundary treatment types are proposed, are included in Appendix A.1.9. It is noted that the purpose of the boundary treatment is to secure the extents of the road development as well as preventing errant persons or wildlife accessing the network and posing a risk to road users. The type of boundary treatment varies depending on different circumstances governed by listed criteria.
- 4.8.10. It is stated that a combination of retaining structure and reinforced soil embankment is proposed between Ch.9+850 to Ch.10+050 to ensure that the road does not encroach on Annex I habitat. A selection of the type of retaining system is governed by the ground conditions at a particular location. The rock head level changes significantly requiring retaining system solutions for shallow and deep rock ground

conditions which can be constructed outside the SAC Annex I habitat. Additional figures include cross-sections of the retaining structure in Appendix A.1.10.

- 4.8.11. With respect to the final plan layout of Lackagh Quarry post construction, additional figures are provided in Appendix A.1.11. Mitigation measures are proposed including provision of artificial bat roosts and stabilisation of the existing blast damaged rock face to prevent encroachment on the SAC and Annex I habitat.
- 4.8.12. It is noted that Material Deposition Areas (MDAs) have been designed to provide the required stability to the existing blast damaged rock face and to facilitate the creation of compensatory ecological habitat. The creation of MDAs to the north of the road within the quarry is limited to the north-western area as the north-eastern area is used to mitigate potential impacts on Peregrine Falcon. Four MDA areas within the quarry were originally presented in the EIAR.
- 4.8.13. A modified layout is now proposed. The modifications were assessed by the environmental specialists and it was considered that there are no additional amendments to the EIAR following the assessment. It is considered that the proposed modifications do not compromise the mitigation measures included in the EIAR as the same plan area of compensatory ecological habitat can be created and the exposed rock face can be stabilised with the modified layout.
- 4.8.14. It summarises that c.366,000m³ of material will be generated for placement in MDAs and can be split into c.76,000m³ of peat and 290,000m³ of U1 Non-hazardous material. Bulking will occur in the order of 30% leading to material for deposition in the order of c.475,800m³. With originally excess allowable material deposition capacity there was scope to refine the MDA locations, footprints and volumes. These details are included in Appendix A.1.11.
- 4.8.15. The construction works at the quarry face comprise the MDA placement and the slope stability measures and both facilitate the development of new petrifying springs. It is stated that, if the Board require, new spring features can be created by installing drill holes from the quarry face into the rock mass.
- 4.8.16. An overlaid map of the original 2006 Galway City Outer Bypass and the proposed road is provided in Appendix A.1.12. Additional figures detailing pedestrian and cyclist crossing facilities are provided in Appendix A.1.13.

Route Selection Report

4.8.17. A copy of the Route Selection Report is provided which sets out the consideration of alternatives and the process followed in identifying the proposed road.

Appropriate Assessment

4.8.18. A number of items were requested under this heading including additional relevé data.

4.8.19. It is stated that as Annex I habitat areas were key biodiversity constraints in the context of informing the route selection process, they were avoided where possible by the various route options. As a result, the majority of the relevés recorded at that time lie outside of the proposed development boundary. As requested, additional relevés (116 no.) were taken between June and August 2019 in each location where the proposed development boundary overlaps with the Lough Corrib SAC. The full relevé dataset is provided as part of the RFI response. The habitat mapping carried out in 2019 generally reflects and confirms the habitat mapping already submitted in the EIAR and NIS in the area of overlap between the boundary and Lough Corrib SAC with a few exceptions. An additional area of Limestone pavement (205m²) was identified in Menlough and was classified as *8240 habitat. The design of proposed access road AR10/01 has been amended to avoid direct and indirect impacts on this area. As a result, this change in habitat classification does not affect the assessment or conclusions presented in the NIS. Other amendments were of a minor nature and the conclusion of the NIS still stands.

4.8.20. In excess of 700 relevés were recorded between June and August 2019 within the proposed boundary but outside of the cSAC boundary as per RFI item 3b. The quantity of relevés taken for each habitat type varied depending on factors including the ecological value of the habitat type. In addition to providing the relevé and survey results, a review of the EIAR assessment was also undertaken in light of changes. The changes to Fossit habitat classification are mainly attributed to changes in grassland types and to scrub encroachment. The changes are due to a number of factors including the passage of time since previous surveys, increase of encroachment of scrub, changes in land-use management and the significant increase in relevé intensity which resulted in finer scale mapping. The 2019 results confirm that the impacts of the development in terms of habitat loss or degradation remain the same as presented in the EIAR with the exception of one small area of a

new Annex I habitat type and changes in the areas and precise locations of Annex I habitat to be lost. The areas of residual habitat losses differ in some cases and are presented as part of the RFI response. It remains the case that some of the Annex I habitat types that are being lost outside of the European sites cannot be directly compensated and there will be a residual effect at the international geographic scale for the permanent loss of c.1.18Ha of Limestone Pavement and c.0.01Ha of Blanket Bog, loss of c.2.49Ha of Wet Heath and the loss of a Petrifying Spring feature at Lackagh Quarry at county scale⁴. There are also a number of habitat types of a local biodiversity importance that will be permanently lost as a result of the road.

- 4.8.21. It is concluded that the findings of the 2019 surveys have no implications for any European sites as presented in the NIS. The only change to the significant residual effects already documented in the EIAR are the addition of an adverse significant residual effect at the international geographic scale for the permanent loss of 93m² of Blanket Bog and changes in the areas and precise locations of Annex I habitats to be lost.
- 4.8.22. Clarification of area 1.f. as referred to in the NIS is provided. Detailed maps showing all areas of Limestone pavement within SAC and the development boundary are provided.
- 4.8.23. The definition of 50% exposed Limestone pavement is explained. Two contexts are provided. It is noted that in the second context there are no guidelines or definitions (50% surface bedrock to differentiate between *8240 wooded limestone pavement habitat type and non-Annex I woodland habitat type with some limestone boulders or rocks in it). It is stated that best expert judgement was used, and a very conservative approach was taken.
- 4.8.24. The drainage outfall from the N59 Link Road North will discharge into an existing ditch which will ultimately outfall into the SAC and SPA. It is summarised that the habitats along the drainage ditch include a diverse range of habitat types including Annex I habitats.
- 4.8.25. With respect to the River Corrib classification, it is stated that little is known about the distribution of Annex I *Ranunculus fluitans* and *Callitriche-Batrachion* in this SAC and no location maps are available. There is no direct reference to any specific part

⁴ Note these areas were amended at the oral hearing

of the River Corrib in the conservation objectives. The EU habitats and interpretation manual gives only a very brief description and it can be interpreted very broadly to include any river vegetation with floating components. It is clarified that in the EIAR and NIS it is stated that within the area covered by the aquatic surveys, it does not correspond with the Annex I habitat of Watercourses type of plain to montane levels with *Ranunculus fluitans* and *Callitriche-Batrachion* vegetation, and does not state that the entire river does not feature this habitat type.

- 4.8.26. An explanation of how the Irish Semi-Natural Grassland Survey 2007 – 2012 has been applied is provided. Responses to the requests relating to the supporting roles of habitats inside and outside the SAC are provided. It is concluded that habitats both within and outside the SAC do provide a supporting role to habitats within the SAC. However, this role will not be affected by the proposed development due to its design and mitigation measures.
- 4.8.27. With respect to the extent of vegetation clearance required within the development boundary, it is confirmed that no areas of qualifying interest Annex I habitat will be removed from within the SAC during site clearance or to facilitate construction. All other areas of vegetation aside from those highlighted will be removed to facilitate the construction and operation of the road. Their loss will not affect the conservation objective attributes and targets supporting the conservation condition of any of the QI habitats or species of the SAC.
- 4.8.28. Timelines are provided to establish compensatory measures⁵ which range from 10 to 50 years.
- 4.8.29. In terms of clarifying groundwater impacts, specifically groundwater lowering, only one European site, Lough Corrib SAC, is within the hydrogeological zone of influence of the road. The hydrogeological study identified the groundwater bodies that contribute to GWDTE being Ross Lake GWB, Lough Corrib Fen 1 (Menlough) GWB, Lough Corrib Fen 2 GWB and the Clare-Galway GWB. The design ensures that groundwater levels are not lowered in contributing groundwater bodies.
- 4.8.30. How GWDTE in the SAC are working hydrogeologically and if flow paths may change post construction are described. It is clarified that groundwater flow paths will remain the same as they currently are following construction of the proposed road

⁵ "compensatory habitat" areas are not compensatory measures in the context of Article 6(4)

and will not change as a result of any permanent groundwater lowering. The road will not pose any temporary or permanent barrier to the movement of groundwater in these groundwater bodies.

- 4.8.31. An 'in-combination' assessment of all the plans and projects together is provided.
- 4.8.32. With respect to the comments by the Department of Culture, Heritage and the Gaeltacht relating to the Designated Sites conservation objectives, it is stated that all the Qualifying Interests (QIs) of all European sites within the potential zone of influence have been considered in detail within the NIS. It is stated that certain QIs are not present within the zone of influence and, therefore, the conservation objectives of those QIs cannot be undermined in any way and it is therefore not necessary to consider these QIs in any more detail.

Birds

- 4.8.33. A copy of the RPS Bird Survey of 2006 was included in the response. It is stated that the fact that the 2006 survey was at a different location is not of great importance given the relatively short length of the river corridor between Lough Corrib and Galway City and the surveys were only c.600m from the proposed bridge. Birds present would be expected to commute and/or forage along the entire river. The 2006 survey data was used as available background information supported and confirmed by the results of the 2014, 2015 and 2016 wintering and breeding bird surveys.
- 4.8.34. Based on existing published scientific literature bridges, regardless of their design, do not pose a collision risk that would have any long-term effect on the Special Conservation Interest (SCI) bird populations of any SPA site.
- 4.8.35. It is stated that there are three distinct habitat complexes of relevance to wintering birds which lie within 300m of the proposed bridge: the playing fields at NUIG, the River Corrib, and the agricultural fields and woodland on the east bank of the River Corrib. The lands on the east bank of the River Corrib were not included in a dedicated survey as the surrounding landscape is not suitable for birds listed as SCI of the SPA. The wintering birds recorded during 2014/2015 using the River Corrib and NUIG Playing fields were consistent with the findings of the 2006 surveys. It is considered that during operation, while there is likely to be some level of displacement of wintering birds using the NUIG playing fields in the immediate

vicinity of the supporting piers, the structure of the bridge is extremely unlikely to displace wintering birds from using the river or the adjacent playing fields.

4.8.36. It is stated that in June 2019 an adjustment was made to the bird species listed as SCI of Inner Galway Bay SPA. The Black-throated diver was included as an SCI and the Shoveler was removed. Therefore, the Black-throated diver was not assessed in the NIS published in October 2018. It is noted that at the nearest point the proposed road is more than 1km from the Inner Galway Bay SPA boundary and, therefore, there is no risk of direct impact. The Black-throated diver was not recorded at any of the winter bird survey sites. The only potential impact pathway is for construction works to affect water quality in receiving watercourses. As stated in the NIS, mitigation measures will be implemented which will ensure hydrological impacts do not occur. Therefore, habitat degradation will not occur or affect the conservation objectives supporting the conservation condition of the Black-throated diver population. Therefore, the conclusion of the NIS assessment of Inner Galway Bay SPA still applies.

4.8.37. It is considered that there is no time restriction on blasting in Lackagh Quarry to avoid disturbance to nesting Peregrine Falcons. It is clarified that construction works between the proposed Lackagh Tunnel and the N84 road junction commence prior to mid-February to ensure that disturbance influences the nest site selection as opposed to displacing an incubating female from the nest. The timing of blasting associated with the construction of the eastern approach to Lackagh Quarry is included only in relation to wintering birds at Ballindooley Lough and will be carried out between April and September to minimise disturbance. Blasting in relation to the Lackagh Tunnel is outside the zone of influence of Ballindooley Lough.

Bats

4.8.38. In terms of the presence of a link or not between the various populations of Lesser Horseshoe bats at Menlo, Ross House and Ebor Hall, it is clarified that the Menlo Castle population is not linked to the QI of Ross Lake and Woods cSAC or Lough Corrib cSAC (Ebor Hall). The road poses no risk of affecting the conservation objectives supporting the QI Lesser Horseshoe population of any European sites.

4.8.39. With respect to Core Sustenance Zones (CSZ) it is considered that high-suitability bat habitat within each CSZ results in only minor increases in the percentage of

habitat loss affecting each of the CSZ and does not affect the conclusions of the impact assessment of habitat loss on these roost sites as presented in the EIAR.

Other Ecological Issues

- 4.8.40. Information is provided on the effectiveness of culverts and it is considered that the proposed mitigation measures to reduce or prevent isolation of populations of red squirrel, pine marten and common lizard are effective.
- 4.8.41. An assessment of the likely impacts on biodiversity in general in accordance with the 2014 EIA Directive is provided.

Traffic and Transport

- 4.8.42. The RFI is broken down into three areas with respect to justification of the use of 2012 data: Justification of the use of 2012 as the base year for traffic assessment; population and economic changes in the intervening years; and recent traffic survey data.
- 4.8.43. A summary of the response for each point is provided followed by detailed information. The summary can be outlined as follows:

- **2012 Base year:** Traffic modelling began in 2013. At that time the Western Regional Model (WRM) was under development with a base year of 2012. The WRM is the most appropriate model for the appraisal of the road. The fact that 2012 is the base year is irrelevant to the forecast traffic flows as the forecast flows are determined based on land use, population forecasts and economic assumptions, as opposed to applying a growth factor to the base year flows as previously done.
- **Population and Economic Changes:** All population and economic changes which have occurred between 2012 and May 2019 have been accounted for in the forecasting undertaken.
- **Recent Traffic Survey Data:** Recent (2018) traffic survey data has been collated for Galway City, however, its incorporation into the WRM would not alter the future year demand forecasts which are determined using planning data/land use assumptions combined with the various calibrated travel behaviour parameters.

- 4.8.44. In light of the publication of the NPF, population and employment growth forecasts have been developed for the area aligned with the NPF forecasts for the city and region. The NPF scenario was prepared with inputs from the NTA and Galway City and County Council Planners and has been derived using a 'bottoms up' approach based on an understanding of existing planning applications in the city and county, land use zoning and plot ratios as well as local, regional and national policy.
- 4.8.45. A modelling exercise was undertaken using the PRD for the NPF Growth Forecast and comparing it to the 2039 TII Central Case Do-Something Scenario as presented in the EIAR. Comparison tables were produced comparing the NPF forecasts and the forecasts in the EIAR in terms of population and employment. It is clear that the total growth assumed for Galway City and County is higher in the NPF Scenario, and city population forecasts are significantly higher in the NPF scenario (55% NPF vs. 14% TII Central Growth). Similarly, the total jobs growth for the city and county in the NPF forecasts is 51%, which is more than double the TII Central Forecast of 24%.
- 4.8.46. In line with policy, the NTA/GCC NPF forecasts assume that the majority of future population and employment growth in the region will occur within Galway City and its Environs. These forecasts have been input into the National Demand Forecasting Model and the WRM to determine the resultant traffic flows in the Design Year of 2039 with the PRD in place (the 2039 Do-Something NPF scenario) against the TII Central Case presented in the EIAR. Both scenarios have the same infrastructure assumed (PRD only) but differ in their planning and land use assumption.
- 4.8.47. The results show some increases in delay and congestion as a result of the differing demographic assumptions, but these increases are considered to be relatively minor in the context of the increases in population and employment assumed to take place under the NPF assumptions.
- 4.8.48. A sensitivity test comparing the NPF with the PRD and the Galway Transport Strategy (GTS) with the TII Central case with the PRD and the GTS was carried out, i.e. the NPF + GTS vs. TII + GTS. The results indicate that the GTS measures have a greater impact when combined with the NPF growth assumptions. Both vehicle distance and total network travel time show a reduction and average speed improves as a result of the GTS measures in the NPF scenario. Comparison of journey times indicates that the introduction of the GTS measures has a minimal impact on journey

times under the NPF scenario whereas they result in further delays using the TII Central case.

- 4.8.49. The ratio of flow to capacity at key junctions has been analysed including the GTS measures. In the EIAR scenario there are minor benefits along key junctions but an increase in links experiencing an RFC >90% on a network wide basis. Under NPF assumptions, network performance improves at both key junctions and on a network wide basis because of the introduction of the GTS measures.
- 4.8.50. It is noted that the above analysis utilises the forecasts developed by the NTA and Galway City and County Council Planners to assign population and employment as set out in the NPF. In May 2019 TII also undertook a similar exercise and released updated travel demand projections for the country aligned with the national forecasts contained in the NPF. It is stated that while both forecasts are aligned to the NPF, given the urban setting of the PRD and the granular level of detail within the NTA NPF scenario, it is considered that the NTA NPF scenario represents the most appropriate forecasts for re-appraising the scheme.
- 4.8.51. The consequent implications of NPF traffic forecasts on environmental receptors were assessed. Noise, Air Quality, Water Quality and Human Health are detailed. The reassessment shows no adverse impacts on these pathways which could affect human health.

Clarifications

- 4.8.52. Clarification of drawing numbers, tables, node numbers and figures are provided.

4.9. Oral Hearing Documentation

- 4.9.1. The applicant, prescribed bodies and third parties introduced a substantial number of documents at the oral hearing which will be considered as part of the assessment. These documents were numbered and are referred to throughout the assessment and are listed in Appendix 7.

4.10. Changes to Road Design introduced at the Oral Hearing

- 4.10.1. The applicant introduced amendments to the design at the Oral Hearing including the omission of works on the NUIG pitches and revisions to the Parkmore Link Road adjacent to Boston Scientific Campus and the Galway Racecourse.
- 4.10.2. With respect to the works to the NUIG pitches the applicant stated that NUIG do not want the mitigation measures originally proposed in the EIAR. They are pursuing their own plans to mitigate the impacts of the proposed road development, and have recently received planning permission for those works from An Bord Pleanála (ref ABP-308412-20).
- 4.10.3. With respect to the Parkmore Link Road, it is stated that changes to the Boston Scientific Campus have occurred since the publication of the EIAR. To address those changes and to provide mitigation, the proposed routing of the Parkmore Link Road has been amended to a route to the east of their site. It was stated at the Oral Hearing that each specialist assessed the changes proposed and concluded that there were no changes to the conclusions of the EIAR or the NIS. The assessment sections of this report include an assessment of the changes proposed.

5.0 Policy Context

5.1. The Paris Agreement

- 5.1.1. The Paris Agreement entered into force on 4 November 2016. To date, 189 of the 197 Parties to the Convention have ratified the agreement including Ireland. The Paris Agreement builds upon the Convention and for the first time brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so. As such, it charts a new course in the global climate effort.
- 5.1.2. The Paris Agreement central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change.

European Policy

5.2. European Union – TEN-T Core and Comprehensive Network

- 5.2.1. The European Union adopted a transport infrastructure policy in December 2013 – “Infrastructure TEN-T – Connecting Europe”. The main legislative basis for this policy is the EU Regulation No. 1315/2013 (enacted in January 2014). The TEN-T network is a Trans-European Network that connects the continent between east and west, north and south. The policy is to “close the gaps” between member states’ transport networks by removing bottlenecks and building missing links etc. It seeks to upgrade infrastructure and streamline cross-border transport operations for passengers and business throughout the EU. It is also an objective to improve connections between different modes of transport and to contribute to the EU’s climate change objectives.
- 5.2.2. The TEN-T network includes the core transport routes in all EU member states for all transport modes and consists of two planning layers, namely the core transport network and the comprehensive transport network. The core network represents the major transport corridors connecting Europe and is supported by the comprehensive

network. The proposed road development is stated as being part of the TEN-T comprehensive road network.

National Policy

5.3. Project Ireland 2040 - National Planning Framework

5.3.1. The National Planning Framework (NPF) was published jointly with the National Development Plan 2018-2027 Infrastructure Investment Programme under the umbrella of Project Ireland 2040. The NPF states that Galway has been Ireland's most rapidly developing urban area for half a century and is a key driver for the west of Ireland. Delivery of the Galway City Ring Road is acknowledged as a key future growth enabler for the city. National Strategic Outcome 2 includes advancing orbital traffic management solutions and specifically refers to the Galway City Ring Road. In addition, the NPF provides information on the expected growth of Galway City and environs of 120,000 persons by 2040.

5.3.2. The National Development Plan 2018 – 2027 seeks the delivery of major national infrastructure projects in the interest of regional connectivity. The N6 Galway City Ring Road is one such project included in the National Development Plan for appraisal and delivery.

5.4. Spatial Planning and National Roads: Guidelines for Planning Authorities, DoECLG 2012.

5.4.1. These guidelines set out planning policy considerations relating to development affecting national primary and secondary roads, including motorways and associated junctions. It is stated that

“National roads play a key role within Ireland's overall transport system and in the country's economic, social and physical development. The primary purpose of the national road network is to provide strategic transport links between the main centres of population and employment, including key international gateways such as the main ports and airports, and to provide access between all regions. A modern economy requires a world-class road transport network that is sustainable from an economic, social and environmental perspective. Better national roads improve access to the

regions, enhancing their attractiveness for inward investment and new employment opportunities and contribute to enhanced competitiveness by reducing transport costs”.

5.5. Smarter Travel a Sustainable Transport future, a New Transport Policy for Ireland 2009-2020

5.5.1. The document states that the Government reaffirms its vision for sustainability in transport and sets out five key goals: (i) to reduce overall travel demand, (ii) to maximise the efficiency of the transport network, (iii) to reduce reliance on fossil fuels, (iv) to reduce transport emissions, and (v) to improve accessibility to transport.

5.5.2. There is a broad range of 49 actions designed to achieve more sustainable transport by 2020. Chapter 4 details the actions to encourage Smarter Travel. Chapter 5 details Actions to Deliver Alternative Ways of Travelling. Chapter 6 details Actions to Improve the Efficiency of Motorised Transport. There are many Actions which relate to improving the effectiveness of public transport and seeking to encourage modal shift to more sustainable forms of transport than motorised vehicles.

5.6. Climate Action Plan 2019

5.6.1. The Climate Action Plan 2019 has been published and was unanimously endorsed by the Dáil. The Action Plan contains a substantial number of actions under a broad range of headings including the Built Environment and Transport. It is stated that agriculture makes up for c.32% of emissions compared to just 11% in Europe. However, in all other sectors Ireland also has a higher carbon footprint.

5.6.2. In terms of transport, the actions relate to the acceleration of the take up of EV cars and vans so that we reach 100% of all new cars and vans being EVs by 2030. In addition, it is intended to make growth less transport intensive through better planning, remote and home-working and modal shift to public transport.

5.6.3. It is stated that the Government will adopt a strong suite of policies to influence the transport intensity of growth and the carbon intensity of travel. Furthermore, to make growth less transport intensive some key policies include successful execution of the NPF designed to promote compact, connected and sustainable living, expansion of walking, cycling and public transport to promote modal shift, and better use of market

mechanisms to support modal shift. In addition, it is stated that important influences will be enhancing priority for public transport, enhancing EV charging network and giving Local Authorities more discretion in designating low emission zones.

- 5.6.4. Measures to deliver targets are detailed including encouraging modal shift. Commitments have been made to an additional 500,000 public transport and active travel journeys daily by 2035. It is acknowledged that policies need to be better aligned to achieve more ambitious targets for modal shift involving building supporting infrastructure such as sustainable mobility projects etc.

5.7. **National Biodiversity Action Plan 2017 – 2021**

- 5.7.1. The National Biodiversity Action Plan 2017 – 2021 was published by the Department of Culture, Heritage and the Gaeltacht. This plan is the third such plan for Ireland, and captures the objectives, targets and actions for biodiversity that will be undertaken by a wide range of government, civil society and private sectors to achieve Ireland's Vision for Biodiversity. This plan provides a framework to track and assess progress towards Ireland's Vision for Biodiversity over a five-year timeframe from 2017 to 2021. Seven objectives are identified underpinned by targets.
- 5.7.2. The Department of Culture, Heritage and the Gaeltacht is the official body responsible for oversight of the implementation of this Plan and for coordinating the other Public Authorities, NGOs and private sector organisations involved in the process.

Regional Policy

5.8. **Regional Spatial and Economic Strategy (RSES) for the Northern and Western Region**

- 5.8.1. The Northern and Western Regional Assembly adopted the first Regional Spatial and Economic Strategy for the Northern and Western Region at its January Meeting held on 24th January 2020.
- 5.8.2. Chapter 3 of the RSES considers People and Places. It is noted that the Galway Transport Strategy has already been prepared and it will now be implemented as an objective of the Galway Metropolitan Area Strategic Plan (MASP). Galway city and

suburbs are identified for 50% of new housing and for a population of up to 120,000. A key ambition of the RSES is to deliver compact growth.

- 5.8.3. Under the heading of 'Connected City' in Section 3.6.4, it is an objective to improve the road network around the city and in particular to support the delivery of the GTS including the N6 GCRR. The road is identified as a main transportation component of the MASP. The road is further identified in policy Regional Policy Objective 6.6 which lists projects to be delivered in the short term and before 2027.

5.9. **Regional Planning Guidelines for the West Region 2010 - 2022**

- 5.9.1. While these Guidelines have been superseded by the RSES they were in force at the time of lodgement and preparation of the project. The Galway City Outer Bypass is listed as a future investment priority. Section 3.5.2 identifies actions to achieve regional competitiveness. For the retention of existing jobs reduced transport costs by improving the road networks particularly the M6 and Galway Outer Bypass are specifically identified.

Local Policy

5.10. **Galway City Development Plan 2017 – 2023**

- 5.10.1. Chapter 1 outlines the introduction and the core strategy, chapter 3 refers to Transportation, chapter 4 to Natural Heritage, Recreation and Amenities, chapter 5 to Economic Activity, chapter 8 to Built Heritage and Urban Design and chapter 9 to Environment and Infrastructure. It is further noted that it is intended to prepare Local Area Plans for Ardaun, Murrough and Headford Road area and Area Plans for Castlegar and Menlough.
- 5.10.2. Seven strategic goals are listed in chapter 1 which includes the encouragement of sustainable modes of transport and the integration of transportation with land use. It is also stated that the Core Strategy is supported and informed by the Galway Transport Strategy (GTS). The GTS consolidates the recommendations from transportation studies and strategies carried out by the Galway Transportation Unit (GTU) since 2008, with national transport policy direction and transport guidance from the NTA. It is also informed by the ongoing N6 Galway City Ring Road (N6 GCRR) project. Of relevance to the subject project it is stated "*.....it also affirms the*

need for a strategic ring road incorporating a new river crossing. Public transport measures alone have been deemed incapable of delivering a solution to the specific, significant problems associated with transport in the city, which will be further exacerbated by additional future demand unless addressed now". It is further stated "Cumulatively the components of the GTS, which includes the N6 GCRR, will address the congestion on the major routes through the city".

- 5.10.3. Chapter 3 refers to Transportation and it is stated that the aim is "To integrate sustainable land use and transportation, facilitating access and choice to a range of transport modes, accessible to all sections of the community that ensures safety and ease of movement to and within the City and onward connectivity to the wider area of County Galway and the West Region". **Policy 3.4 Traffic Network** includes:

Enhance the delivery of an overall integrated transport solution for the city and environs by supporting the reservation of a corridor route to accommodate an orbital route as provided for in the N6 GCRR project.

Policy 3.7 Road and Street Network and Accessibility includes:

Support the N6 Galway City Ring Road project in conjunction with Galway County Council and Transport Infrastructure Ireland (TII) in order to develop a transportation solution to address the existing congestion on the national and regional road network.

- 5.10.4. Chapter 4 addresses Natural Heritage, Recreation and Amenity as well as identifying the European and National Designated sites (see Section 5.15 below for further details). It states that the aim is to:

To provide for a green network in the city that allows for the sustainable use, management and protection of natural heritage, recreation amenity areas, parks and open spaces in an integrated manner. The green network will ensure the protection of nature and provide for the enhancement and expansion of passive and active recreational opportunities. It will be accessible to all and by sustainable modes of transport, where feasible. Ensure better integration of environmental and natural resource considerations in the Development Plan through the SEA process and provide the highest level of protection for European Sites, taking account of Article 6 of the Habitats Directive.

- 5.10.5. The strategy includes the promotion of a green network for the city and supports accessibility to the city's green network for the wider community and by sustainable modes of transport. In addition to promoting Galway as a 'Healthy City' it seeks to conserve, protect and enhance the designated and non-designated sites and natural habitats. Figure 4.1 illustrates the Green Network which clearly indicates the green areas along either side of the River Corrib. **Policy 4.1 Green Network** lists 19 areas to be supported.
- 5.10.6. Section 4.2 lists the Protected Spaces at European, National and Local levels. Table 4.3 identifies the Network of Local Biodiversity Areas including areas that the road will directly traverse or be proximate to including the River Corrib, Menlough to Coolagh Hill, Ballindooley to Castlegar and Ballybrit Racecourse. **Policy 4.2 Protected Spaces: Sites of European, National and Local Ecological Importance** seeks to protect sites that form part of the Natura 2000 network.
- 5.10.7. Section 4.4 addresses Green Spaces. Figure 4.4 identifies the Hierarchy of Parks in the city and includes lands zoned for Recreational and Amenity including lands alongside the River Corrib.
- 5.10.8. Section 4.5.1 refers to Greenways and Public Rights of Way (RoW). It states that the Galway Transport Strategy (GTS) identifies green corridors which will offer safe and direct routes for both pedestrians and cyclists to work/school and or for leisure. Section 4.5.3 refers to views of Special Amenity Value and Interest. The following panoramic protected views are of relevance: V.1 panoramic views of the city and the River Corrib from Circular Road; V.2 views from Dyke Road and Coolagh Road encompassing the River Corrib and Coolagh fen; and V.7 views encompassing Lough Corrib from parts of the Quarry Road and Monument Road. Linear protected views include: V.10 Views from Galway-Moycullen Road (N59) of the River Corrib; V.11 views from the waterside of the River Corrib; and V.14 Views northwards encompassing the River Corrib and adjoining lands from Quincentenary Bridge.
- 5.10.9. Section 4.7 refers to Specific Objectives. It is stated that the Council has a number of objectives that have been informed by various studies and plans, primarily the Recreation and Amenity Needs Study, the Galway City Heritage Plan 2016-2021, the Galway City Biodiversity Plan 2014-2024, the Galway City SFRA and the Galway Transport Strategy.

5.10.10. Chapter 5 refers to Economic Activity. **Policy 5.1 Enterprise** includes:

“Support the implementation of the phased plan of transportation measures as proposed for in the Galway Transport Strategy (GTS) including for public transport, walking and cycling, and a strategic new road, the N6 GCRR”

5.10.11. Section 8.8 of chapter 8 lists specific objectives including an objective to facilitate the restoration of Menlough Castle.

5.10.12. Chapter 9 refers to Environment and Infrastructure. This chapter includes a range of policies with respect to noise, light, climate change resilience and air. **Policy 9.10 Air Quality and Noise** includes

“Ensure the design of development incorporates measures to minimise noise levels in their design and reduce the emission and intrusion of any noise or vibration which might adversely impact on residential amenities, where appropriate.

Consider the Galway City Council Noise Action Plan 2013-2018 in the assessment of relevant development applications, where appropriate”.

Policy 9.11 Light Pollution:

“Ensure the design of external lighting minimises the incidence of light pollution, glare and spillage into the surrounding environment and has due regard to the visual and residential amenities of surrounding areas”.

5.11. Galway County Development Plan 2015 – 2021

5.11.1. Chapter 1 provides the Introduction. Chapter 2 includes the Spatial and Core Strategy and includes the variation to include the GTS. Chapter 5 refers to Roads and Transportation and includes the same variation. Chapter 9 refers to Heritage, Landscape & Environmental Management, and chapter 10 to Cultural, Social & Community Development.

5.11.2. Chapter 1 outlines the strategic aims. Strategic aim no.7 refers to **Sustainable Transportation** and seeks to *Minimise travel demand and promote the increase of sustainable mobility throughout the County*. Chapter 2 notes that Local Area Plans provide for zoning provisions and include reference to Bearna, Headford and Ardaun as well as Gaeltacht areas.

5.11.3. Chapter 5 did not originally refer to the N6 Galway City Ring Road. It was stated that the city and county were examining the transportation issues. A variation to the Plan was adopted on 24th April 2017 to include it.

5.11.4. The variation to the Plan includes:

Objective DS 2 – Galway Transportation and Planning Study Area

(GTPS) a) Continue to recognise the defined Galway Transport and Planning Study Area, the commuter zone of Galway City, which requires careful management of growth and strong policies to shape and influence this growth in a sustainable manner. b) Support a review of the Galway Transportation and Planning Study during the lifetime of the Plan, in co-operation with Galway City Council. Consideration of the inclusion of a Strategic Transport Assessment shall form part of this review.

5.11.5. The N6 Galway City Ring Road was added to Table 5.1 of the Plan which listed Priority Transportation Infrastructure Objectives. The Plan notes the following: ‘Galway County Council together with Galway City Council, the National Transport Authority (NTA) and Transport Infrastructure Ireland (TII) are committed to delivering a sustainable transport vision for Galway where all elements of transport are working together to achieve an integrated transport solution. This will be progressed in the city and environs area by the delivery of the GTS, which includes measures such as public transport, bus networks; rail, park and ride, cycle networks and the provision of the N6 GCRR as set out in Table 5.1 Priority Transport Infrastructure Objectives 2015-2021’.

Policy TI 2 – Development of an Integrated and Sustainable Transport System:

It is the policy of the Council to promote the development of an integrated and sustainable high quality transport system for the county, which includes the specific areas identified in the Galway Transport Strategy(GTS), which shall:

a) Promote closer co-ordination between land use and sustainable transportation; b) Continue the provision of a range of transport options within Galway and in collaboration with Galway City Council, the National Transport Authority(NTA), Transport Infrastructure Ireland(TII), other statutory agencies and transport providers, including safe road network, a range of bus and rail

services, adequate facilities for walking and cycling and opportunities of air and water-based travel.

- 5.11.6. Variation No.2(B) includes the Gaeltacht Plan. The Gaeltacht Plan states with respect to transport:

As this plan will form part of the Galway County Development Plan objectives relating to the provision of transport network infrastructure and community facilities which are already included in the County Development Plan are not considered necessary to repeat

- 5.11.7. Chapter 9 refers to Heritage, Landscape & Environmental Management and notes the designated sites as well as the Architectural Conservation Area of Bearna. In section 9.2 it states:

The Galway County Biodiversity Plan provides a framework for the conservation of natural heritage and biodiversity at the County level; • To promote appropriate enhancement of the built and natural environment as an integral part of any development; • To promote a reasonable balance between conservation measures and development needs in the interests of promoting orderly and sustainable development; • To protect the landscape categories within the County and avoid negative impacts upon the natural environment; • To promote appropriate enhancement of the natural environment as an integral part of any development.

- 5.11.8. General Heritage Policies include:

Policy GH 1 – *Conserve, protect and enhance the special character of the County as defined by its natural heritage and biodiversity, its built environment, landscape and cultural, social and sporting heritage.*

Policy GH 2 – *Ensure that heritage protection is an integral part of coherent policies on economic and social development and of urban and rural planning.*

Policy GH 3 – *Implement the legislative provisions of the Planning and Development Act, 2000 (as amended), which offers protection to the architectural, archaeological and natural heritage.*

Policy GH 4 – *Engage with all relevant stakeholders (and in particular local communities) in matters relating to the protection of natural, built and cultural heritage.*

5.11.9. Section 9.9 refers to Natural Heritage and Biodiversity Policies and Objectives and include the following objective which is of particular relevance:

Objective NHB 11 – *Trees, Parkland/Woodland, Stonewalls and Hedgerows*

a) Protect important trees, tree clusters and hedgerows within the County and ensure that development proposals take cognisance of significant trees/tree stands. Ensure that all planting schemes use suitable native variety of trees of Irish provenance;

b) Seek to retain natural boundaries, including stonewalls, hedgerows and tree boundaries, wherever possible and replace with a boundary type similar to the existing boundary where removal is unavoidable. Discourage the felling of mature trees to facilitate development and encourage tree surgery rather than felling where possible. All works to be carried out in accordance with the provisions of the Forestry Act, 1946.

5.11.10. Section 10.4 refers to An Ghaeltacht. Policies and Objectives include the following:

Policy G 1 – *Preserving and Promoting An Ghaeltacht in the Planning Process The Council through the Gaeltacht Local Area Plan 2008-2018 has outlined policies and objectives to protect and encourage the social, cultural and linguistic heritage of the Gaeltacht, whilst seeking to realise the economic and development potential of the Gaeltacht in a balanced and sustainable manner over the lifetime of the plan.*

Policy G 2 – *Economic Development in An Ghaeltacht Galway County Council, through its Economic Development role, is committed to working closely with all the statutory development agencies, especially Údarás na Gaeltachta, to achieve sustainable development in the Galway Gaeltacht while protecting and promoting the Irish language as the first community language of the area.*

5.11.11. Section 10.13 refers to Public Rights of Way policy and objectives. The policies include preservation of public rights of way.

- 5.11.12. Chapter 12 addresses Implementation & Monitoring. Table 12.1 sets out Performance Indicators and includes 11 Strategic Aims.
- 5.11.13. Chapter 13 addresses Development Management Standards. Section 13.9 provides Guidelines for Infrastructure and Services.
- 5.11.14. A Draft of the new County Development Plan 2022 – 2028 has been published and is currently out for public consultation until 30th July 2021. The Draft Plan continues to support the Galway Transportation Strategy including the subject PRD.

5.12. Galway Transportation Strategy (GTS)

- 5.12.1. The introduction to the GTS states that the transport problems currently experienced across the city are having a significant effect on the quality of life of residents and are now impacting on the economic capability of the city. To address these issues Galway City and Galway County Council in partnership with the National Transport Authority have developed the GTS.
- 5.12.2. The GTS details the current issues facing residents, businesses, tourists and commuters to Galway. With respect to the road network, it is noted that traffic wishing to cross the river are drawn in close proximity to the city centre. Quincentenary Bridge is the sole option for traffic wishing to avoid the centre and as a result there is heavy congestion and delay often leading to traffic re-routing towards Salmon Weir Bridge, Wolfe Tone Bridge and O'Brien's Bridge. It is stated that the M/N6 is a highly important national road and is identified as part of the Ten-T Comprehensive network. It is also identified as a Strategic Radial Corridor in the National Spatial Strategy (NSS) and is an important inter-urban transport corridor linking the Galway Gateway with the Greater Dublin Area and gives access to regional and international markets.
- 5.12.3. It is noted that 60% of all trips in the city are by car. Figure 2.3 illustrates the highest trip volume destination and origins. The GTS highlights the key challenges to be addressed by the transport networks. A strategy for all modes of transport and users is detailed. Of relevance is the fact that it is noted that *'unless additional capacity is provided for traffic, the overall objectives for the Transport Strategy will not be met'*. It is further stated that *'A new road link to the north of the city is therefore proposed as part of this Transport Strategy'*.

- 5.12.4. Section 4 of the GTS sets out the strategy for the Traffic Network including the city centre access, road and street network, HGV management and parking. Public transport is addressed in section 5. Cycling, walking and public realm are addressed in section 7. Section 9 details Implementation and Outcome. The N6 Galway City Ring Road is considered to be in the medium to long term phase.
- 5.12.5. The GTS was subject to a Strategic Environmental Assessment which is included in Appendix I of the documentation.

5.13. Ardaun Local Area Plan 2018 – 2024

- 5.13.1. Ardaun is an area of c.164Ha located on the east side of Galway, 5km from the city centre. Ardaun is identified as a key growth area in the Galway City Development Plan and is capable of delivering up to 4,640 homes and accommodating a population of up to 12,621.
- 5.13.2. The LAP includes an Urban Design Framework, a Land Use Strategy, a Development Phasing Approach. The main development challenges are listed including the north/south physical division caused by the existing N6/M6, and the fact that the PRD route corridor reservation traverses the north-western section.

5.14. Bearna Local Area Plan

- 5.14.1. The Bearna LAP was adopted as a variation No. 2(a) to the County Development Plan on the 23rd July 2018.

5.15. Natural Heritage Designations

Site Code	Site Name & designation	Brief Description & Qualifying Features	Distance to PRD (closest point)
Natura 2000			
000297	Lough Corrib cSAC pNHA including	Comprises Lough Corrib, River Corrib, twelve or more other rivers and the land surrounding the Lough,	0 km (i.e. overlapping boundaries),

Site Code	Site Name & designation	Brief Description & Qualifying Features	Distance to PRD (closest point)
000228	Ballycurke Lough pNHA and River Corrib and adjoining wetlands LBA	encompassing bog, heath, woodland, grassland and limestone pavement. Supporting important populations of stoneworts in the southern basin of Lough Corrib and a population of lesser horseshoe bats at Ebor Hall, plus Ballycurke Lough pNHA	to north and south
000268	Galway Bay Complex cSAC pNHA, including Rusheen Bay – Barna Woods – Illaunafamona LBA and Mutton Island and nearby shoreline LBA and overlapping with Lough Atalia and Renmore Lagoon LBA	Inner part of Galway Bay including shallow, inter-tidal inlets and bays, small islands, coastal cliffs, lagoons and surrounding terrestrial habitats.	0.16km, south
004042	Lough Corrib SPA	Lough Corrib.	0.2km
004031	Inner Galway Bay SPA	Inner Galway Bay, see description for Galway Bay Complex cSAC.	1.1km

Site Code	Site Name & designation	Brief Description & Qualifying Features	Distance to PRD (closest point)
004142 000253 NHA	Cregganna Marsh SPA NHA	Primarily lowland wet grassland with other habitats including limestone pavement.	4km, south-east
002034	Connemara Bog Complex cSAC pNHA	A very large site encompassing the majority of the south Connemara lowlands, underlain with granite and supporting areas of deep peat, with the main habitat being Atlantic blanket bog. The blanket bog is interspersed with a variety of base-poor terrestrial habitats and lakes, supporting a number of rare plant species.	6km west
004181	Connemara Bog Complex SPA	South Connemara lowlands, see description for Connemara Bog Complex cSAC.	9km west
000606	Lough Fingall Complex cSAC pNHA	Within an area of flat, low-lying limestone and supporting a complex of calcareous habitats including limestone pavements, calcareous grassland and a series of turloughs. The grassland supports a variety of orchids and an additional feature of the site is an internationally important population of lesser horseshoe bats.	9.5km south east
001312	Ross Lake and Woods cSAC pNHA	Ross lake is a medium size lake on limestone supporting a variety of stoneworts adjoined by a conifer plantation and some broadleaved	10km north-west

Site Code	Site Name & designation	Brief Description & Qualifying Features	Distance to PRD (closest point)
		woodland. Supports otter and a breeding population of common gull.	
000020	Black Head-Poulsallagh cSAC pNHA	Part of the Burren, including the shoreline, sand dunes at Fanore, limestone pavement and the Caher River.	11km south
000322	Rahasane Turlough cSAC pNHA	One of only two large turloughs in the country which still functions naturally, supporting two rare plant species including Fen Violet (<i>Viola persicifolia</i>), and is also the most important turlough in Ireland for its birdlife.	11.5km south east
004089	Rahasane Turlough SPA	Large turlough, see description for cSAC.	12km south-east
001285	Kiltiernan Turlough cSAC pNHA	A relatively dry turlough which is notable for the presence of two rare plant species; alder buckthorn (<i>Frangula alnus</i>) and fen violet (<i>Viola persicifolia</i>)	12km south east
000242	Castletaylor Complex cSAC pNHA	Complex of habitats on limestone including Caranavoodaun turlough, limestone pavement, calcareous grassland, heath and woodland.	12km south east
001271	Gortnandarragh Limestone	Limestone pavement located on the south side of Lough Corrib, interspersed with heath, grassland and	12.5km north-west

Site Code	Site Name & designation	Brief Description & Qualifying Features	Distance to PRD (closest point)
	Pavement cSAC pNHA	scrub, plus an area of bog, which is the only known locality for the endemic fungus <i>Entoloma jenny</i>	
002244	Ardrahan Grassland cSAC	Large flat limestone area with a mosaic of calcareous habitats plus Brackloon Lough, a small marl lake, with adjoining wetlands and two small turloughs.	13km south east
000054	Moneen Mountain cSAC pNHA	Part of the Burren, open limestone pavement, associated grassland and heaths, plus scrub and woodland.	13km south
001926	East Burren Complex cSAC pNHA	All of the high ground in the eastern Burren area, comprising limestone pavement and associated calcareous grasslands and heath, scrub and woodland together with a network of calcareous lakes and turlough.	13km south
002008	Maumturk Mountains cSAC	A series of peaks over 600m above sea level and surrounding areas, with wet heath, dry heath and blanket bog.	34km, northwest
002031	The Twelve Bens/Garraun Complex cSAC	A series of peaks over 500m above sea level and surrounding areas with heath and blanket bog, part of the Connemara National Park.	47km, northwest
Natural Heritage Areas and proposed Natural Heritage Areas			

Site Code	Site Name & designation	Brief Description & Qualifying Features	Distance to PRD (closest point)
002364	Moycullen Bogs NHA and part of Ballagh – Barnacranny Hill LBA	Connemara peatland, including blanket bog, fen, wet grassland, heathland and scrub, located east of Tonabrocky.	0m, immediately adjacent
002431	Oughterard District Bog NHA	Large area of lowland and upland blanket bog, interspersed with other peatland habitats.	15km
001267	Furbogh Wood pNHA	Oak woodland bordering the Furbogh River, and one of the few Atlantic woodlands which occurs directly at the coast, and on a mineral soil.	2.3km
000287	Kiltullagh Turlough pNHA	Turlough, unusual in supporting a dry grassland type.	2.2km
002083	Killarainy Lodge, Moycullen	Natterer's bat nursery roost	7.2km
001260	Drimcong Wood pNHA	Mixed broadleaved and coniferous woodland	8.2km
001788	Turloughcor pNHA	Wetland Supporting wintering bird populations	15km

6.0 Observations

6.1. Introduction

6.1.1. There were many submissions and objections during the course of the project, at application stage, further information stage and at the oral hearing. All of the submissions and objections have been read and are summarised within this report and addressed throughout the Assessment sections. For ease of reading the key points are summarised in this section of the Report and more detail including how each submission has been addressed is provided in Appendices 1, 2 and 3.

6.2. Prescribed Bodies

6.2.1. An Taisce

- Reference to EIAR; transport generating projects must assess project against Smarter Travel policy, traffic generation, congestion, air pollution, GHG, cumulative impact. If adverse impacts cannot be mitigated, consent cannot be allowed.
- Refer to national policy and consider that recent planning decisions have failed to comply and are in breach of Smarter Travel objectives.
- Significant lessons to be learned from the M50 and Limerick City bypass.
- Applicants justification for proposal is flawed.
- Individually and cumulatively planning decisions have failed to mitigate continuing climate emissions, air pollution and congestion.
- If consent is given there is no legal obligation on behalf of the developer to ensure efficient public transport is developed in tandem.

6.2.2. Department of Communications, Climate Action & Environment

- Submission from Geological Survey of Ireland – refer to information provided on the geology of Ireland.
- Note three County Geological Sites (CGS) within 2km of proposal; Roadstone Quarry on the Tuam Road, Mushroom Rock in Menlough and Knocknagrena.

Consider there is no envisaged impact on the integrity of the CGS by the proposal.

- Groundwater vulnerability is deemed extreme.
- Seek a copy of site investigation and any other reports should development go ahead.

6.2.3. Department of Culture, Heritage and the Gaeltacht (NPWS)

- Note series of pre-application meetings and consultations and that draft NIS and draft Biodiversity chapter of the EIAR were reviewed as an exceptional measure.
- Acknowledge the extent and detail of the surveys carried out and the extent to which the ecological and other data have informed and modified aspects of the design to minimise adverse effects on biodiversity.
- Consider the extent and nature of habitat impacts and/or changes in the SAC are difficult to ascertain. Clearer drawings would assist. Relationship of the road to nearby qualifying interest Annex I habitats within the SAC is difficult to ascertain.
- Hydrology – application would benefit from clarity in changes to the hydrogeological regime in Lackagh Tunnel on the groundwater catchment area. It is unclear what the hydrological connectivity between the groundwater dependent terrestrial ecosystems (GWDTEs) of the SAC are. Further elucidation could be beneficial.
- Risk of bird collision with the bridge is given no further consideration beyond identifying potential impacts. Refer to effects of habitat loss and fragmentation on wintering birds and considers that further information is required.
- Reference is made to the additional matters to be taken into account and addressed with respect to the EIA: Moycullen Bogs NHA and bog eco-hydrology; linear habitat resource which will be lost needs clarification; impact of habitat on Marsh Fritillary.

- Note losses of Annex I habitat outside of SAC are to be compensated by translocating habitat from one location to another - query long-term management.
- Notes that the EIAR documents one of the most detailed and comprehensive surveys for bats ever undertaken in Ireland.
- Considers there could be potential tensions between mitigation measures set out in the NIS and EIAR.
- Notes that mitigation measures and commitments must apply to all parts of the development including the enabling works.

6.2.4. Irish Water

- Support development as part of the Galway Transport Strategy.
- Irish Water about to submit a planning application to relocate the Terryland Water Treatment Plant intake in the main River Corrib channel and significant projects are underway to service the planned development at Ardaun.
- Require a number of items to be agreed prior to construction.

6.2.5. National Transport Authority (NTA)

- NTA worked with both Councils to produce the Galway Transport Strategy (GTS). The GTS was written into the Development Plans to give proposals a statutory basis.
- The ring road was identified as an integral part of the GTS and accordingly the NTA supports the proposed road scheme as an important element of the GTS.

6.2.6. Transport Infrastructure Ireland (TII)

- Fully support the proposal and confirm the scheme is included in TII's current capital programme.

6.2.7. Udaras na Gaeltachta

- Support the proposal as it is critical that the N6 is built to provide access to the Gaeltacht areas and the rest of the county.

- Speedy access is crucial for many industries such as the fish/shellfish industry.
- With the closure of Galway Airport in 2011 it is now more important than ever that the ring road is built.

6.3. Observers

6.3.1. Submissions were received from 79 observers (listed in Appendix 1 of this report) in response to the application for the proposed motorway scheme and the protected road scheme. These comprise submissions from individuals and families, interest groups and umbrella groups as well as submissions from public representatives. The issues raised by observers are summarised in Appendix 1 both by name of observer and thematically. They generally fall under the following headings: -

- Support for the proposed development
- The need for, and purpose of, the development
- Policies and Objectives of statutory documents
- Legal and procedural matters
- Public consultation
- Alternatives considered
- Impact on amenities of the area particularly the Sports Campus of NUIG, Dangan and the River Corrib
- Loss of dwellings
- Severance of communities
- Impact on local road network
- Impact on pedestrians, cyclists and school children
- Traffic modelling
- Junction strategy and design of road
- Impacts on health and quality of life and general amenity
- Noise and vibration impacts

- Air and climate change impacts
- Landscape and visual impacts
- Impacts on flora and fauna
- Water Quality impacts
- Material assets including socio-economic impacts and future development plans for lands
- Ecology prioritised over all other matters
- Cultural heritage impacts
- EIAR deficient.

6.4. Further Submissions following re-advertisement of Further Information Response

6.4.1. The Further Information response was deemed significant and was re-advertised. In total 17 valid submissions were received (a number of parties submitted more than one observation). Six were from prescribed bodies: Development Applications Unit (NPWS), Irish Water, An Taisce, HSE, Udaras na Gaeltacht and Geological Survey Ireland. The remainder were from observers who had previously made submissions and two new observers. The list of the observers and submissions made is in Appendix 3 to this report. In summary issues raised include:

- Support for the development
- Likely effects on European Sites
- Likely effects on the Environment
- Assessment of later consents and public consultation
- Pest control
- Impact of Parkmore Link Road
- Noise and landscaping at Ard na Gaoithe
- Ecology was prioritised over all other matters
- FI response contains nothing to address concerns

- EIAR is flawed
- Irish Water requirements
- Concerns with impact on Gort na Bro estate
- Individual concerns on houses in the Dangan area
- Concerns with new drawings and stone walls, boundary treatment, route selection etc.
- Request adequate access to zoned site on the Tuam Road.
- No assessment of impact on wells being permanently disabled for bottled water plant and loss of this natural resource.
- Adequate and meaningful consultation.

7.0 Compulsory Purchase Order

7.1. Documentation Submitted

7.1.1. The CPOs submitted to the Board on the 26th October 2018 for both the Protected Road Scheme and the Motorway Scheme are accompanied by:

- Chief Executive's Order no. 2426 signed 17th October 2018 for the Motorway Scheme.
 - The Chief Executive's Order details the documentation in connection with the making of the CPO, the certificates from the Engineer and Planners and notes that an EIAR and NIS are to be prepared and directs an application be made to the Board for approval of the proposed development.
- 14 no. officially sealed deposit maps (Drawing Nos. N6-DM-1001 to N6-DM-1014) for the Motorway Scheme.
- Schedule for the Motorway Scheme which is split into two volumes. The schedule is split into 7 parts, however, schedules 2, 5, 6, and 7 are not applicable in this instance. Schedule 1 details the lands to be compulsorily acquired, schedule 2 details the rights proposed to be acquired in relation to land for the purposes of the proposed motorway, schedule 3 is a description of the public and private rights of way to be extinguished, and schedule 4 details the lands in respect to which it is proposed to restrict access.
 - Land proposed to be acquired forming part of the motorway is shown bordered in red and coloured blue and described in Schedule 1 Part 1.
 - Land proposed to be acquired not forming part of the motorway is shown bordered in red and coloured grey and described in Schedule 1 Part 2.
 - Rights of way to be extinguished are shown between tags coloured green and described in Schedule 3.

- Land in which it is proposed to prohibit, close, stop up, remove, alter, divert or restrict a means of direct access to or from the motorway are described in Schedule 4.
- 7 no. officially sealed deposit maps (Drawing Nos. N6-DM-0001 to N6-DM-0007) for the Protected Road Scheme.
- Schedule for the Protected Road Scheme. The schedule is split into 7 parts, however, schedules 5 and 6 are not applicable in this instance. Schedule 1 details the lands to be compulsorily acquired, schedule 2 details the rights proposed to be acquired in relation to land for the purposes of the proposed protected road, schedule 3 is a description of the public and private rights of way to be extinguished, schedule 4 details the lands in respect to which it is proposed to restrict access and schedule 7 details the particulars of planning permissions proposed to be revoked and the planning permissions proposed to be modified and the extent of such modifications.
 - Land proposed to be acquired forming part of the protected road is shown bordered in red and coloured yellow and described in Schedule 1 Part 1.
 - Land proposed to be acquired not forming part of the protected road is shown bordered in red and coloured grey and described in Schedule 1 Part 2.
 - Rights in relation to land to be acquired are shown between tags and coloured purple and described in Schedule 2.
 - Rights of way to be extinguished are shown between tags coloured green and described in Schedule 3, parts 1 and 2.
 - Land in which it is proposed to prohibit, close, stop up, remove, alter, divert or restrict a means of direct access to or from the protected road are described in Schedule 4.
 - Particulars of planning permission to be revoked or modified are described in Schedule 7, parts 1 and 2.
- A certified and signed copy of the Engineer's report dated 16th October 2018.

- The report certifies that the lands set out in the Deposit Maps and described in the schedules are a true and accurate description of the lands which will be affected by the scheme and which are required for the provision of the road.
- The report recommends that the Motorway Scheme and the Protected Road Scheme be made and that the statutory notices be published and served.
- Recommends that the Motorway Scheme and the Protected Road Scheme and the EIAR and the NIS be submitted to An Bord Pleanála for approval.
- Certificate dated 3rd October 2018 and signed by the Assistant Director of Services of the Planning Department of Galway City Council.
 - Report certifies that the road is in accordance with the policies and objectives of the Development Plans and is in accordance with the proper planning and sustainable development of the area.
 - Certifies that the lands indicated on the deposit maps are necessary and required for the proposed road.
- Certificate dated 2nd October 2018 and signed by the Director of Services of the Planning, Environment and Emergency Services Department of Galway County Council.
 - Report certifies that the road is in accordance with the policies and objectives of the Development Plan and is in accordance with the proper planning and sustainable development of the area.
 - Certifies that the lands indicated on the deposit maps are necessary and required for the proposed road.
 - Certifies that the road is in accordance with the objectives of the Galway Transport Strategy (GTS) 2017 and the National Planning Framework.
- Copies of newspaper notices dated 25th and 26th October 2018.

7.2. Oral Hearing

- 7.2.1. Revised versions of the CPO Schedules and deposit maps were submitted at the oral hearing to correct various errors and to address changes in legal interest, matters arising from the hearing (including the proposed Parkmore Link Road modification) and as parties withdrew their objections. I refer the Board to the versions submitted prior to the close of the oral hearing on 4th November 2020, identified as 'Issue 3'. The applicant also submitted versions with 'tracked changes' to assist the Board in identifying the alterations.

8.0 Oral Hearing

8.1. Overview

- 8.1.1. Following the applicant's response to the Further Information request and the advertising of same, the date was set for the holding of the Oral Hearing. The hearing was arranged to commence in the G Hotel on the Dublin Road, in Galway on 18th February 2020. Mid-way through the hearing, the Covid 19 Pandemic occurred and in line with Government Guidance the hearing was adjourned. As it became clear that it was not going to be possible to complete the hearing in a normal format for the foreseeable future, a decision was made to recommence the hearing using a virtual meeting format. The hearing recommenced on 12th October 2020 online using Microsoft Teams. The remainder of the hearing was held online, and the hearing concluded on 4th November 2020.
- 8.1.2. The hearing was recorded by the Board's appointed Consultant, Artane Studios. There is a full recording of the hearing attached to this file. In addition, services were provided to allow anyone who wished to make their presentation in Irish to do so.
- 8.1.3. Prior to the hearing commencing, all parties were asked if they wished to participate in the hearing and if so, how much time they would like. A very detailed agenda was drafted, and it was decided to split the hearing into three modules. Everyone who sought to engage in the hearing was accommodated as much as reasonably possible, having regard to the legislation requiring the Inspector to hold the hearing in as expeditious a manner as possible.
- 8.1.4. The modules were as follows:
- Introduction
 - Module 1: Issues relating to Ecology and Hydrogeology
 - Module 2: All other Planning matters
 - Module 3: CPO
- 8.1.5. As the hearing progressed, due to parties not appearing, or parties withdrawing their objection to the proposal, the agenda had to be amended. The agenda was updated and accessible on the Board's website.

8.1.6. The hearing opened on 18th February 2020. The applicant took the first three days of the hearing to introduce the project very briefly, having been advised that all the documentation was to be taken as read. The applicant introduced their consultants and each consultant summarised the key points about their respective topic and responded to the submissions made by the various objectors/observers. In addition, the changes to the project were introduced including the changes to the Parkmore Link Road and works to the NUIG Sports campus. Each consultant confirmed that they had assessed the changes and that there was no change to the conclusion of their relevant sections of the EIAR and NIS. The applicant was represented by:

- Mr Jarlath Fitzsimons and Mr Declan McGrath (both Senior Counsel)
- Mr Mike Evans – Arup
- Ms Eileen McCarthy – Arup - Project Lead
- John O'Malley – Kiaran O'Malley & Co. - Planning Lead
- Andrew Archer & David Conlon – Systra – Traffic
- Aebhin Cawley & Andrew Speer – Scott Cawley – Ecology
- Con Curtin – Curtin Agricultural Consultants – Agriculture
- Michael Sadlier – EVC (Veterinary Surgeon) – Equine
- Dr Leslie Brown – Arup – Hydrogeology
- Tony Cawley – Hydro Ltd. – Hydrology
- Juli Crowley & Marie Fleming – Arup – Soils/Geology
- Gareth Maguire – Independent Consultant – NUIG Sports Campus
- Dr Craig Bullock – Optimize – Population and Human Beings/Socio Economic
- John Cronin – John Cronin & Associates – Human Beings – Irish Language
- Faith Bailey – IAC Archaeology – Archaeology
- Jennifer Harmon – AWN Consulting Ltd. – Noise & Vibration
- Sinead Whyte – Arup – Air Quality & Climate
- Dr Martin Hogan – EHA – Human Health

- Thomas Burns – Brady Shipman Martin – Landscape & Visual

8.1.7. On Day 4, the 21st February 2020, the Prescribed Bodies were provided opportunities to make submissions and ask questions. The NPWS made a submission. Mr Arnold on behalf of the Board asked the NPWS a number of questions to assist with his assessment for the Board. Following this Mr Peter Butler on behalf of An Taisce made a submission. These submissions are referred to throughout this report as part of my assessment.

8.1.8. Module 1 Ecology and Hydrogeology began on Day 5. The agenda clearly indicated in advance that only these two topics would be discussed during this module.

8.1.9. The following parties made a submission/asked questions.

Day 5 Monday 24th February 2020

- Deirdre Goggin
- Peadar O'Maoilain on behalf of Kevin Kelly and Shane Kelly
- Kevin Gill
- Peter Connolly
- Brendan Mulligan
- Patrick McDonagh
- Michael O'Connor representing businesses and residents in Salthill
- Tom Corr on behalf of Dermot & Sarah Harley
- Stephen Dowds on behalf of the N6 Action Group
- Dermot Flanagan on behalf of McHugh Property Group

Day 6 Tuesday 25th February 2020

- Vincent Carragher
- Dermot Flanagan on behalf of McHugh Property Group
- Galway Athletics Board – Brian Bruton (secretary) and Ruth Molloy
- Mr Arnold and Mr Dodds asked questions on behalf of the Board.

8.1.10. Due to availability issues of the Board's external consultants, Module 1 was paused as planned. As per the agenda, Module 2 'All other Planning Matters' started on Tuesday 3rd March 2020. The following parties made a submission/asked questions.

Day 7 Tuesday 3rd March 2020

- Sean O'Neachtain (note submission in Irish)
- Deirdre Goggin
- Damien Kelly
- Maura O'Connell and Audrey Dineen
- Kevin Gill
- Peadar O'Maolain on behalf of Shane Kelly and Kevin Kelly
- Gerard O'Donnell representing Padraig and Imelda Burke
- John Hughes
- Pamela Harty of MKO on behalf of GVA the Statutory Receivers Plot 229
- Linda Rabbitt
- Hands Across the Corrib

Day 8 Wednesday 4th March 2020

- Dermot Flanagan on behalf of the Connolly Motor Group
- Marie O'hEocha
- Thomas Kilgariff
- Stephen Meagher and James McCloon on behalf of Aughnacurra Residents Association
- Derrick Hambleton
- Ciaran Ferrie
- Brendan Mulligan
- Michael Murphy
- M&M Qualtech

- John O'Carroll

Day 9 Thursday 5th March 2020

- Lorretta Needham and Tom Rea
- Neasa Bheilbigh on behalf of Galway Cycle Bus Network
- Joseph Kelly on behalf of Atlantic Greenway Project
- Finbarr McCarthy
- Tony Newry and Deirdre O'Connor on behalf of Parkmore Traffic Action Group
- Brian Bruton, Brian McNicholl, Niall Murphy, Michelle Van Kamp, on behalf of Galway City Harriers

Day 10 Friday 6th March 2020

- Peter Connolly
- Patrick McDonagh
- Dermot Flanagan on behalf of McHugh Property Group
- Neil O'Leary, Shane Foran, Kevin Jennings on behalf of Galway Cycling Campaign
- Frank McDonald on behalf of An Taisce

8.1.11. Module 2 was paused after Day 10 and Module 1 resumed on Day 11. The following parties made a submission/asked questions.

Day 11 Tuesday 10th March 2020

- Questioning between Mr Arnold, Mr Dodd and the applicant
- Stephen Dowds on behalf of N6 Action Group

Day 12 Wednesday 11th March 2020

- Applicant responds to Mr Arnold and Mr Dodd's questions
- NPWS responds to Mr Arnold's questions

8.1.12. Module 1 closed on 11th March 2020. As noted above the Covid 19 Pandemic resulted in the adjournment of the hearing. As it became clear that the Covid-19

pandemic was ongoing for much longer than anyone anticipated, it was decided to restart the hearing in a 'virtual' manner using Microsoft Teams. Module 2 restarted on 12th October 2020. The following parties made a submission/asked questions.

Day 13 Monday 12th October 2020

- Senator Sean Kyne
- Catherine Connolly TD
- Senator Pauline O'Reilly
- Cllr. Noel Larkin
- Neil Walker and Helen Leahy on behalf of IBEC
- Terrance McDonagh on behalf of Galway City Community Network
- John C. O'Carroll
- Kenny Deary and J.P. Gilmartin on behalf of Galway Chamber of Commerce
- John J. Martin

Day 14 Tuesday 13th October 2020

- Kevin Miller on behalf of Gaynor Miller clients including Mr Tom Burke and James & Tracy Gavin
- Rooney Property Consultants on behalf of clients Mr John Glynn, Michael & Geraldine Flaherty and Kevin McDonagh & Ursula McDonagh

Day 15 Wednesday 14th October 2020

- Senator Ollie Crowe
- Eamonn O'Cuiv TD
- Vincent Costello on behalf of clients Denis & Margaret O'Neill and Jarlath & Mary Kemple
- Damien Kelly
- Dermot Flanagan, Peter Kingston, Pamela Harty, Senan Clandillon on behalf of Galway Race Committee

Day 16 Monday 19th October 2020

- Michael O'Donnell, Julian Keenan, Imelda Shanahan on behalf of Caiseal Geal Teoranta (Castlegar Nursing Home)
- Dermot Flanagan and Senan Clandillon on behalf of McHugh Property Group
- Peter Butler on behalf of An Taisce
- Kevin Jennings and Shane Foran on behalf of Galway Cycling Campaign
- Brendan Mulligan
- Dermot Flanagan on behalf of Connolly Motor Group

Day 17 Tuesday 20th October 2020

- Gerard Lawless
- Richard Burke
- Eamon Galligan on behalf of Brooks Timber and Building Supplies Ltd (Brooks)
- Dermot Flanagan on behalf of Connolly Motor Group
- Stephen Dowds and Cormac Rabbitte on behalf of N6 Action Group

Day 18 Wednesday 21st October 2020

- Michael O'Donnell, Imelda Shanahan on behalf of Caiseal Gael Teoranta
- Peter Butler on behalf of An Taisce
- Vincent Carragher
- Kevin Jennings on behalf of Galway Cycling Campaign
- Damien Kelly
- Stephen Dowds on behalf of N6 Action Group
- Brendan Mulligan
- Neasa Bheilbhig on behalf of Galway Cycle Bus
- Dermot Flanagan on behalf of Galway Race Committee, McHugh Property Group & Connolly Motor Group
- Ciaran Ferrie

8.1.13. Module 3 dealing with the CPO began on the 27th October 2020, albeit there was substantial overlap between Module 2 and 3. The following parties made a submission/asked questions.

Day 19 Tuesday 27th October 2020

- Deirdre Goggin & Michael Kenny
- Se Greenan
- Peter Connolly
- Ross Tobin
- Michael Flattery on behalf of Mary Flattery
- Colm Ryan and Pamela Harty of MKO on behalf of Strategic Land Investments
- John Corridon on behalf of Vantage Towers Ltd.

Day 20 Wednesday 28th October 2020

- Stephen Meagher on behalf of Aughnacurra Residents Association
- Michael Murphy
- Loretta Needham and Tom Rea
- Gerald Lawless
- Sharon Morris and Edward O'Reilly
- Mike Lydon on behalf of James Fahy
- John M. Gallagher representing Peter Broughan, Thomas McGrath, Peter O'Halloran, Nora Codyre and Pat Codyre
- Owen Kennedy on behalf of Joyce Mackie & Loughheed clients

Day 21 Thursday 29th October 2020

- Dermot Flanagan and Senan Clandillon on behalf of McHugh Property Group
- Robert McLoughlin of Avison Young on behalf of Tesco Ireland
- Peadair O'Maolainn on behalf of Shane Kelly

Day 22 Friday 30th October 2020

- Eamon Galligan on behalf of Brooks Timber and Building Supplies Ltd (Brooks)
- Kevin Gill
- Michael O'Donnell and consultants on behalf of Annette & Michael Kerin and Castlegar Nursing Home
- Dr Annette Kerin
- Professor Michael Kerin

Day 23 Wednesday 4th November 2020

- Eamon Galligan, Callum Bain and Michael Conmy on behalf of Brooks
- Tom Corr on behalf of Dermot & Sarah Harney
- Marie O'Donovan
- Dermot Harney
- Kevin Miller on behalf of James Maloney
- Paul Gaynor on behalf of Mathew & Eileen Burke
- Stephen Dowds on behalf of the N6 Action Group
- Rory Mulcahy on behalf of the Clada Group
- John Gallagher on behalf of Tom McGrath
- Dermot Flanagan on behalf of Connolly Group and Galway Race Committee
- Vincent Costello on behalf of Patrick Griffin
- Tom Corr
- Marie O'Donovan
- Michael O'Donnell
- Dr Annette Kerin
- Professor Michael Kerin

- 8.1.14. As with the submission by/on behalf of the Prescribed Bodies, all issues raised by observers through Modules 1, 2 and 3, as well as responses provided by the applicant are addressed throughout the assessment section of this report.
- 8.2. The hearing closed on Wednesday 4th November 2020. Numerous changes were made to the CPO Schedules as well as the Schedule of Environmental Commitments in the EIAR. These are addressed throughout the assessment of the project.
- 8.3. A list of all documents received at the oral hearing is included in Appendix 7. Each document is assigned a reference number and they are referenced as appropriate throughout the report.

9.0 Assessment

- 9.1. Under the proposed scheme, consent is being sought for the motorway development, the protected road and for the compulsory purchase of the lands required for the construction of each of these elements of the proposed development. I have examined the file and the planning history, considered European, national and local policies and guidance and inspected the site.
- 9.2. Having regard to the requirements of the Planning and Development Act, 2000 as amended, this assessment is divided into three main parts, planning assessment, environmental impact assessment and appropriate assessment. In each assessment, where necessary, I refer to the issues raised by all parties, made either to the Board in response to the application, submissions received following advertisement of further information, or at the oral hearing.
- 9.3. There is an inevitable overlap between the assessments, for example, with matters raised falling within both the planning assessment and the environmental impact assessment. In the interest of brevity, matters are generally not repeated but rather cross-referencing is applied.
- 9.4. A second Inspector, Mr Niall Haverty (Senior Planning Inspector) was appointed by the Board to assist with the assessment of the application.
- 9.5. The Board engaged specialists in the areas of Ecology and Hydrogeology. The three specialist reports are included as Appendices 4, 5 and 6. These reports have informed the Environmental Impact Assessment and the Appropriate Assessment carried out.

10.0 Planning Assessment

10.1. Introduction

- 10.1.1. A substantial amount of information has been submitted to the Board over the course of this application. The Planning Assessment below has had regard to all the information provided, including the original application documentation, the response to the request for Further Information, submissions and observations by third parties, as well as information presented at the oral hearing by both the applicant and the observers and objectors.
- 10.1.2. I draw the Board's attention to the fact that the applicant introduced changes to the design of the road at the oral hearing. These will be considered herein, including changes to the design of the Parkmore Link Road and omission of works to the pitches at NUIG. Changes introduced and agreed between landowners and the applicant as part of the CPO process will be addressed in Section 13 below.
- 10.1.3. Having regard to all of the information received, I consider that the key issues for consideration by the Board in this case are as follows:
- Legal and Procedural Issues
 - Policy Considerations
 - Need, Justification and Purpose of the Proposed Road Development
 - Design of the Road
 - Evaluation of Alternatives
 - Socio-Economic Impacts
 - Residential and Community Amenities
 - Services and Utilities
 - Construction Activities
 - Material Deposition Areas
 - Consultations
 - Implications of Covid-19 Pandemic for proposed development

- 10.1.4. As there is a degree of overlap between the topics covered in this section and the EIA of the project, I recommend that it should be read in conjunction with section 11. Unavoidably there is an element of repetition within each assessment given the extensive nature of the project and the given the need to ensure that a robust assessment has been carried out. For example, the impacts on the Galway Racecourse, Lackagh Quarry and loss of dwellings are assessed under different headings throughout this report.
- 10.1.5. The original 2006 Galway City Outer Bypass project as referred to in Section 3 above has been raised many times by observers. Throughout the below assessments it will be referred to as the 2006 GCOB.

10.2. Legal and Procedural Issues

- 10.2.1. A number of observers and objectors raised issues in relation to legislation and procedural issues which are addressed herein.

Obligation to carry out an EIA of the entirety of the Galway Transport Strategy (GTS)

- 10.2.2. Many submissions referred to the fact that the EIAR submitted only considered the road whereas it should have examined and assessed the entirety of the GTS, on the basis that the road is a project that is identified as part of the GTS. The GTS is referred to in the policy section above (section 5.12). The history of the GTS is described within the applicant's documentation. The GTS was prepared to develop an overall transportation strategy for Galway and was subject to a Strategic Environmental Assessment (SEA) which is included in Appendix I of that documentation. In addition, the GTS was adopted as part of both the City and County Development Plans, which in themselves have been subject to SEA.
- 10.2.3. The GTS is a plan/strategy. The requirement for SEA derives from the SEA Directive (2001/42/EC) which came into force in 2001. The Directive is entitled '*The Assessment of the effects of certain plans and programmes on the environment*' and it relates to plans and programmes, not to individual projects, such as that proposed. A project is required to be subject to an environmental impact assessment under the various EIA Directives including the amending Directive 2014/52/EU. Case Law has clearly distinguished between a plan and a stand-alone project. A plan or programme

sets the framework for future development consent. I am satisfied that the subject road is a project and is distinct from the other projects identified in the GTS. I am satisfied there is no legal basis for subjecting the GTS to EIA.

Article 6(4) of the Habitats Directive and the 2006 GCOB

- 10.2.4. Many objectors queried why the applicant did not seek approval of the original 2006 GCOB project under Article 6(4) of the Habitats Directive for 'Imperative Reasons of Overriding Public interest' IROPI. I have addressed this in detail under the heading of Alternatives below in section 10.6. The Competent Authority must determine whether there are imperative reasons. One of the first steps to consider with respect to Article 6(4) is if alternative solutions exist and, as proven by the subject proposal, they do. I am satisfied that it is highly unlikely that the original 2006 GCOB could have progressed under Article 6(4) on this basis.

Modifications to the project

- 10.2.5. On the first day of the oral hearing, the applicant proposed changes in relation to the Parkmore Link Road and the works to be undertaken on the NUIG Sports campus. These have been detailed in section 4.10 above. Works at NUIG have been omitted from the project and the Parkmore Link Road has been modified. I am satisfied that the scope of the proposed changes are relatively minor having regard to the scale of the overall project.
- 10.2.6. With respect to procedures, the applicant's legal team stated that the Board has the jurisdiction to consider modifications to the proposed road development under section 51(6) of the Roads Act 1993, as amended. Section 51(6) states:

An Bord Pleanála, having reached a reasoned conclusion under subsection (5)(c) and being satisfied that the reasoned conclusion remains up-to-date, may, by order, approve a proposed road development, with or without modifications and subject to whatever environmental conditions (including conditions regarding monitoring measures, parameters to be monitored and the duration of monitoring) it considers appropriate, or may refuse to approve such development. (my emphasis)

I draw the Board's attention to the fact that the Parkmore Link Road modification involved changes to the redline boundary as indicated on the drawing number *Proposed Road Development Plan City East Junction Sheet 14 of 15, Drawing No.*

5.1.14 Issue 12 dated 17th February 2020. The applicant's legal team advised that all relevant experts conducted an assessment of this change and no changes to the conclusions of their EIAR or NIS were required.

10.2.7. At the hearing there was a discussion about the change of boundary at this stage of proceedings. The applicant's legal team restated section 51(6) of the Roads Act which permits the Board to approve a proposed development with modifications. The applicant's legal team confirmed at the hearing that Galway County Council had entered into a binding contract for the purchase of the third-party lands required for the proposed modification and submitted an extract of the contract at the hearing. No objections were forthcoming at the hearing to the proposed modification.

10.2.8. The Board can approve the proposal with or without the proposed modification. I am of the opinion that the proposed modification is a refined and improved mitigation measure to address the severance issues raised by the objector, Boston Scientific. As can be seen throughout this report, I am satisfied that there will be no change to the identified impacts as a result of the modification. I consider that the oral hearing is part of the EIA process and, therefore, enhanced mitigation measures can be introduced at this stage. Should the Board concur with my recommendation to approve the road with the enhanced mitigation to the Parkmore Link Road, I recommend that a condition to this effect should be appended to that decision.

10.2.9. With respect to NUIG, the schedules have been amended to omit the works and I note that the University has sought and received planning permission for their own works on the campus.

Inadequacies of the EIAR, Non Compliance of the EIAR with EU Directive

10.2.10. Many objectors considered that the EIAR was inadequate including Mr Michael O'Donnell on behalf of his clients, Caiseal Gael Teoranta (Castlegar Nursing Home). Mr O'Donnell was of the opinion that the EIAR had failed to carry out any analysis of the impact of the PRD on his client's facility. It was his contention that the nursing home would not be able to continue to function during construction and would be seriously impacted during the operational phase. Mr O'Donnell was of the opinion that the impact was not described anywhere in the EIAR or assessed, and no engagement had taken place with his client and the EIAR is, therefore, not in accordance with the EU Directive. Mr Fitzsimons for the applicant responded stating

exactly where the analysis and assessment had been carried out and in what sections of the EIAR this information could be found. I have reviewed the EIAR and I am satisfied that the EIAR does examine and assess the various works on School Road and the Castlegar area to enable the Board to carry out an EIA.

10.2.11. Other objectors were likewise of the opinion that the EIAR was inadequate particularly in relation to the impact on Human Beings. Many objectors considered that Ecology/Biodiversity has taken precedence over Human Beings. I am satisfied that the EIAR has been prepared in accordance with the EIA Directive which clearly indicates that Population and Human Health as well as Biodiversity are to be addressed within the EIAR. At the oral hearing the Project Lead, Ms McCarthy addressed this issue many times and explained the process of route selection whereby the topics of Human Beings and Ecology were considered to be priority constraints throughout the process.

10.2.12. Friends of the Irish Environment were of the opinion that the EIAR was not in compliance with the EIA Directive. They consider that the analysis of greenhouse gas emissions within the EIAR is cursory and that basic details have been omitted. I do not agree and refer the Board to section 11.11 of this report whereby an assessment of air emissions and climate is addressed.

10.2.13. I am satisfied that the EIAR and accompanying documentation is adequate to permit the Board to carry out an EIA and the EIAR has had full regard to the EIA Directive. Section 11 of this Report carries out an EIA of the development based on the EIAR, the Further Information submitted by the applicant, submissions from observers and objectors, as well as up to date information provided throughout the course of the oral hearing.

Conclusion of significant negative impact in EIA

10.2.14. In An Taisce's first written submission, under section 2 'The EIA Directive' it is stated that *'if adverse impacts cannot be mitigated then consent therefore cannot be allowed'*. This is not the case. Despite a reasoned conclusion determining that there will be negative impacts as a result of this project, the Board is not precluded from granting permission. It is the case in relation to *Appropriate Assessment* that the Board is precluded from approving the project if there is an adverse effect on the integrity of designated sites having regard to their conservation objectives.

Reference to EU cases

10.2.15. Mr Peter Sweetman amongst others made a submission wherein he stated that it is not possible to grant permission because this development would not comply with CJEU judgements: C-258/11, C-164/17 and C-462/17. No other information is provided to clarify how Mr Sweetman considers the development will not comply. Mr Sweetman did not turn up at the oral hearing to address his submission.

10.2.16. The above cases refer to compliance with the Habitats Directive. As can be seen in Section 12 of this Report, in accordance with Article 6(3) of the Habitats Directive a Stage 1 Screening and a Stage 2 Appropriate Assessment have been carried out. I am satisfied that based on the conclusion of the AA process the Board can determine that the proposed road will not adversely affect the integrity of any European site having regard to the conservation objectives and can proceed to make a decision to approve or refuse the proposed road development.

Format of the Oral Hearing

10.2.17. The observer 'Hands Across the Corrib' raised an issue with the format of the oral hearing with respect to the modules approach. They stated that it was different to how the 2006 GCOB hearing was held. I am satisfied that the hearing was run in a manner as required by the Planning and Development Act 2000, as amended. Section 135 of the P&D Act states:

The person conducting an oral hearing of an appeal, referral or application shall have discretion as to the conduct of the hearing and shall conduct the hearing expeditiously and without undue formality (but subject to any direction given by the Board under subsection (2A) or (2AB)).

10.2.18. Upon the resumption of the hearing in October 2020 following the adjournment due to Covid-19 restrictions, a number of parties objected to the hearing being held in an online virtual format. As noted above, section 135 of the P&D Act as amended, provides that the Inspector has discretion as to the manner in which the hearing will be held and the section further states that the hearing shall be held expeditiously. Given the extreme circumstances brought about by the pandemic it was decided that it was reasonable to complete the hearing in an online virtual format with the use of

MS Teams. No evidence was presented that any party was unable to participate in the hearing.

CPO Powers

- 10.2.19. At the hearing an issue was raised in respect of the CPO of lands occupied by Brooks Timber and Building Supplies Ltd (Brooks). Brooks are the tenant of the lands and I note that the landowner withdrew the objection to the CPO. It was stated that the tenant has 7 years left to run on the lease. However, Mr Eamon Galligan (SC) on behalf of Brooks raised concerns regarding the powers of the applicant to CPO the lands. The lands appeared to Mr Galligan to be subject to CPO for the purposes of providing new stables for Galway Racecourse and not for the purposes of constructing a road. Mr Galligan raised concerns with the right of the applicant to acquire lands for the benefit of another landowner/a third party. Mr Galligan suggested that the Board should seek clarity from the High Court because the Board has the power to refer questions of law to the High Court or at the very least take legal advice.
- 10.2.20. The applicant's legal team stated that the suggestion that the acquisition of the lands for the purpose of constructing stables was entirely incorrect. It was clarified that the construction of the Galway Racecourse tunnel necessitated the demolition of buildings. It was further stated that once it became clear that the buildings had to be demolished for the purposes of the road construction, the land was considered as a possible mitigation for the replacement of stables, following completion of the tunnel works. It was noted that this approach had been adopted for other lands, such as lands in Lackagh quarry being used for material deposition areas.
- 10.2.21. This was the subject of much discussion during the hearing and is discussed further in Section 13 below. However, I am satisfied that the initial reason for acquiring the lands is for the purposes of constructing the tunnel which is part of the overall road development for which CPO powers for the applicant are not in question. Following this activity, the applicant has taken the opportunity to provide mitigation for the racecourse. Financial compensation for Brooks and the landowner is not a matter for the Board.

ARUP Involvement

10.2.22. Some objectors questioned ARUP involvement in the project and at what point they came on board. The Project Lead addressed this in response to Mr Michael Murphy's question on Day 8 of the hearing (amongst others). Ms McCarthy clearly explained the role of ARUP at different phases of the project and the different tender and procurement processes. Ms McCarthy explained how works were stopped by Bec (Environmental Consultants) and shared with all other consultants at Phase 1 and then further along Ms McCarthy explained about Phase 2 and the equivalent assessment of all alternatives.

10.2.23. I am of the view that the Board has no role in the appointment of consultants and that is a matter for the applicant. The question was put in the discussion on alternatives and public consultation (addressed below), however I am satisfied that the applicant has fully complied with their requirements on public consultation as will be addressed further below at both statutory and non-statutory stages. Alternatives are also addressed below.

Other Consents

10.2.24. A number of observers and objectors queried other consents required. I am satisfied that, where necessary, the applicant has set out what other consents are required and whether they have been obtained as part of the process so far or will be applied for at a future date. I am satisfied that there are no outstanding consents that in any way interfere with or present as an obstacle to the Board's adjudication on the application.

10.3. Policy Considerations

10.3.1. There is a suite of documents to which reference has been made by the applicant in setting the policy context support for the proposed road. These are identified in Chapter 2 of the EIAR. I note that the Climate Action Plan 2019 was not published at the time of the submission of the application, however, I consider it herein and it was addressed at the oral hearing. In addition, the decision on the third runway at Heathrow Airport with reference to the Paris Agreement was made during the course of the project and was referred to by both applicant and observers and is also considered herein and within the EIA section of this report.

10.3.2. Many objectors submitted that the PRD was not in accordance with national, regional and local sustainable development objectives. I have addressed this under the various headings below. In the first instance, however, sustainable development is a cornerstone of the Planning and Development Act 2000, as amended. It is also a fundamental principle of EU environmental law and has informed my assessment of the PRD. In addition, many objectors submitted that transport policies were prioritised over other policies and there was inherent conflict. This is addressed herein and in the relevant sections of this report.

10.3.3. Moreover, a number of objectors stated that the development of a road was *contrary* to policies at all levels. While this is further addressed below in this section and under Evaluation of Alternatives, of note and importance is that a ring road has been determined to be part of the solution to the traffic problems in Galway. This is strengthened by a ring road's clear inclusion in policy documents from National to Regional to Local. A route corridor for a ring road is identified in maps, strategic objectives, and local objectives in the hierarchy of statutory plans at varying degrees of detail as appropriate to the policy level document. All the statutory documents referenced are subject to SEA and it is clear that the development of a ring road is part of those policy documents which have been adopted by elected representatives. This proposed road development is of course subject to further EIA and AA assessment as considered herein.

Paris Agreement

3.4. As addressed in section 11.11 below (EIA - air and climate), a number of objectors submitted that the proposed development was contrary to Ireland's obligation under the Paris Agreement. In support of this a number of parties made reference to the judgement of the UK Court of Appeal which related to the proposed third runway at Heathrow Airport. As will be described in more detail below, the judgement related to a failure to take the Paris Agreement into account and not to the acceptability or otherwise of a new runway.

10.3.5. The Paris Agreement seeks to limit global warming but does not seek to prevent development. Ireland has adopted climate action legislation and policies which aim to fulfil our obligations under the Paris Agreement, in particular the achievement of climate neutrality or net zero emissions by 2050. While it is accepted that the road

will result in additional carbon emissions during construction and operation, I do not consider this to be contrary to our Paris Agreement obligations as such obligations are set out at a national level. These will require broader sectoral adaptation and the implementation of carbon budgets as envisioned in the Climate Action and Low Carbon Development (Amendment) Bill 2021.

European Policy

- 10.3.6. In a European context the *TEN-T policy* which pertains to transport, sets out the framework for policy development in transport with the aim being to “close the gaps” between Member States’ transport networks. The PRD is stated as forming part of the TEN-T Comprehensive road network which feeds into the Core network at regional and national level.
- 10.3.7. EU Regulation No. 1315/2013 (enacted in January 2014) sets out the requirements for high quality roads that shall form part of the TEN-T road network, both Core and Comprehensive. As per Article 17(3) high quality roads shall be specially designed and built for motor traffic and shall be motorways, express roads or conventional strategic roads.
- 10.3.8. I am satisfied that the proposed road forms part of the TEN-T comprehensive network and has been designed accordingly. This is further detailed below in section 10.5.

National Policy

- 10.3.9. The *National Planning Framework (NPF)* states that Galway has been Ireland’s most rapidly developing urban area for half a century and is a key driver for the west of Ireland and balanced regional development. Delivery of the PRD is acknowledged as a key future growth enabler for the city. National Strategic Outcome 2 includes advancing orbital traffic management solutions and specifically refers to the Galway City Ring Road. It is identified as a project which will enhance connectivity to and within the region.
- 10.3.10. Furthermore, the population projections for Galway included in the NPF informed the revisions to the transport assessment and are detailed throughout this report. There was a substantial increase in projected population growth, and this was reflected in the applicant’s revised assessment at Further Information stage. Many objectors raised concerns about the road leading to further sprawl as it would be seen as an

enabler to increasing commuter patterns and private vehicle use. However, I am satisfied that the City, County and Local Area Development Plans must be consistent with the NPF. The NPF promotes sustainable development founded upon a compact city model with increased residential density accompanied by enhanced public transportation and proper provision for cycling and walking. The road will enable capacity for trips to be made without the need to go into the centre of the city meaning less congestion in the city centre. This will enable road space to be re-allocated to more sustainable modes of transport as set out in the GTS. Compact growth and enhanced regional accessibility are two of the ten Strategic Outcomes in the NPF.

10.3.11. I am satisfied that the PRD is identified as a “key future growth enabler set out for Galway”, thereby confirming that the PRD is consistent with and supported by the NPF.

10.3.12. The *National Development Plan 2018 – 2027* seeks the delivery of major national infrastructure projects in the interest of regional connectivity. The PRD is one such project.

10.3.13. The *Climate Action Plan 2019* refers to the NPF which anticipates the growth for Galway and the rest of the country. As noted above this will be grounded in compact, connected and sustainable development. Some objectors submitted that the road would be contrary to the Climate Action Plan. The Plan recognises the challenge for the transport sector associated with population and jobs growth.

10.3.14. The actions detailed in the Plan relate to the acceleration of the take up of Electric Vehicles (EV) cars and vans, so that we reach 100% of all new cars and vans being EVs by 2030. In addition, it is intended to make growth less transport intensive through better planning (compact growth as detailed in the NPF), remote and home-working and modal shift to public transport.

10.3.15. Actions no's. 85 to 100 are designed to encourage modal shift away from private vehicles. Many objectors contended that the PRD was in direct contravention of the Climate Action Plan particularly in relation to modal shift. However, the GTS states that one of the key requirements for its success is the PRD. This is needed to free up the city roads to improve public transport reliability and journey times, reduce

congestion in the city and the emissions associated with that congestion, which will support the objectives of the Climate Action Plan.

10.3.16. It is clear that road infrastructure will still be required and there is no prohibition on additional road infrastructure in the Climate Action Plan. This is further addressed in section 11.11 below where climate is assessed in detail and the most recent legislative changes are discussed.

10.3.17. Ms Catherine Connolly TD raised the issue about the Supreme Court quashing of the Climate Mitigation Plan in July 2020. She stated that we are now 'in a vacuum'. Ms Connolly TD also referred to the new Climate Bill 2020. I do not agree that we are in a vacuum in terms of *policy* such that the Board would not be in a position to assess the project. I am of the opinion that there are sufficient policies at all levels to enable the Board to assess the project. As stated above, this is dealt with in particular detail in Section 11.11 below.

10.3.18. In terms of *Smarter Travel – A Sustainable Transport Future* it is stated that the proposal would be consistent with one of the key goals which seek to improve economic competitiveness through maximising the efficiency of the transport system and alleviating congestion and infrastructural bottlenecks. The road network is also an important element in providing for improved public transport such as the services provided by the CIE Group and private operators. Moreover, it is considered to be an essential component of the GTS and necessary to relieve congestion in the city centre, thereby enabling the other components of the GTS to be implemented. It is stated by the applicant that the principles of Smarter Travel underpin the GTS.

10.3.19. A number of submissions both in written format and made at the oral hearing considered that the proposal is contrary to the aims of Smarter Travel. In particular An Taisce stated that the Board must assess the direct and indirect impacts of the proposal on Smarter Travel policy. They consider that the application has failed to assess the long-term traffic generation associated with the proposal. I do not agree that this is the case - the data provided in the transport assessment clearly assesses the situation in the long-term. An Taisce detail recent decisions they consider are in breach of Smarter Travel including car parking facilities which they are of the view are contributing to Ireland's car dependency.

10.3.20. Mr Brendan Mulligan made similar points at the oral hearing in relation to Smarter Travel. He questioned the predicted reduction in private car mode share against Smarter Travel target of 45%. In addition, he queried the expected mode share for cycling and the number of car parking spaces recently granted by the Council as part of such developments as Bonham Quay. The assessment and mode share are addressed in section 11.13 below.

10.3.21. I would agree that there is always the possibility that providing a new road will result in an increase in the number of cars attracted onto the road network. It is, therefore, necessary to understand the role of the road within the bigger picture of the GTS. As stated by the applicant at the hearing, at the outset it became very clear that a road on its own would not solve the problems of traffic in Galway City. The GTS provides the balance and opportunity to facilitate and encourage the use of other modes of transport such as public transport, cycling and walking. The road will divert considerable traffic volumes away from the city, thereby reducing congestion and making the city a more attractive and safer place to walk or cycle. I am of the opinion, on balance, that the PRD would support the removal of through traffic from the town, reduce journey times for public transport and enable a reduction in congestion which are all key aims of Smarter Travel. In coming to this conclusion, I have also had regard to the applicant's Table 2.1 in chapter 2 of the EIAR which provides an assessment of the Smarter Travel policies.

10.3.22. An Taisce made reference to the Department of the Environment, Community and Local Government document '*Spatial Development and National Roads, Guidelines for Planning Authorities*'. They consider that there are significant lessons to be learned from the development of the M50 and Limerick City Bypass. I once again refer the Board to the role of the PRD within the GTS.

10.3.23. The subject PRD is a project that is identified within the GTS amongst other projects and has, therefore, been considered as part of a suite of measures to address the transport issues in Galway. I draw the Board's attention to the fact that other projects identified in the GTS have already been brought forward for approval which will support the overall strategy of the GTS including the Salmon Weir pedestrian and cycle bridge which is currently under assessment by the Board (Ref. ABP-308783). Furthermore, the project has been identified in policy documents at all levels and of importance, within the NPF framework, which promotes compact growth unlike the

older roads referred to by An Taisce which predate such co-ordinated policy documents.

10.3.24. I note that the *National Biodiversity Action Plan* is addressed in the EclA and AA section of this report.

Regional Policy

10.3.25. Under the heading of 'Connected City' in the *Regional Spatial and Economic Strategy*, it is an objective to improve the road network around the city and in particular to support the delivery of the GTS including the PRD. The road is identified as a main transportation component of the Metropolitan Area Strategic Plan (MASP). The road is further identified in policy objective 6.6 which lists projects to be delivered in the short term and before 2027.

10.3.26. A number of observers were of the opinion that the road is contrary to policies with respect to the emission of greenhouse gases, as well as commitments to climate change made in regional and national policy. The point was also made that the road is based on outdated and flawed logic and is in conflict with the NPF which is committed to sustainable development. I have addressed the NPF above and will address emissions in the EIA section below.

10.3.27. I am satisfied that there is policy support for a ring road around Galway at a European and national, as well as at regional level. The road is considered to be necessary to enable the success of the GTS and that without the road, the aims and objectives of the GTS will not be achievable. A new ring road is identified as an infrastructural project to be carried out in the short to medium term. In conclusion, it is stated as being a requisite for the implementation of the full suite of projects identified as part of the GTS at a county and city level, addressed further below.

Local Policy Context

10.3.28. The actual and detailed location of the road is not identified in policy documents referred to above (as is appropriate). Thus, while support for a road is clear, there is no specific location identified in those documents. However, in both the City and County Development Plans, as well as the Ardaun Local Area Plan, the route corridor is referred to in written statements and identified on maps. A variation to the County Development Plan was adopted on 24th April 2017 to include reference to the GTS which incorporates the PRD.

10.3.29. It was argued in written submissions and at the oral hearing that the road would open up other areas for development in the future and would encourage urban sprawl. However, the NPF states that the expected growth of Galway city and environs to 2040 is to a population of 120,000 persons. I note that in response to the RFI, a 'bottoms up' approach to how this growth would be managed has been developed by a combination of the NTA and Galway City and County Councils. Having regard to this level of detail and the policies and objectives of the regional and city and county plans, it is clear that such sprawl, should it occur, would be contrary to those plans.

10.3.30. Many objectors considered that the PRD breached plans at all levels particularly in relation to sustainable development which underpins all plans. This is addressed above.

10.3.31. Some objectors made the point that the applicant had only focussed on transport policies of the various Development Plans to the detriment of other policies and objectives. I propose to address the PRD's compliance with other development plan policies and objectives under the relevant sections throughout this report. However, for the avoidance of doubt, the presumed and planned for existence of this road has been included in relevant Development Plans. The Plans have been prepared or varied and subject to the necessary environmental assessments with this road included.

10.3.32. Some objectors were of the opinion that the road was completely contrary to the land use zoning objectives of various locations such as Aughnacurra, The Heath, NUIG sports campus, Lackagh Quarry and employment locations. This was further articulated during the oral hearing and subject of much discussion. In the first instance I would draw the Board's attention to my earlier comment about how the PRD has been identified in the Development Plans. In addition, and of utmost importance with respect to the objectors' comments, there is an over-arching comment in the City Development Plan, in section 11.2 that states:

Priority will be given to the reservation of the N6 GCRR Preferred Route Corridor and the associated land requirements over other land use zonings and specific objectives.

I am satisfied, having regard to this clear statement in the Development Plan, that the land required for the PRD takes precedence over other land use zonings and specific objectives in the City Development Plan.

10.3.33. Thus, while there may be perceived conflicts between the land requirements for a road and lands zoned 'CF – Institutional and Community' or 'R - residential development', it is clear that the development of the road takes precedence. I have addressed potential impact on amenities further in section 10.8 below. With respect to the CF zoning of NUIG Sports Campus I note that the zoning objective states:

CF - To provide for and facilitate the sustainable development of community, cultural and institutional uses and development of infrastructure for the benefit of the citizens of the city

10.3.34. Some objectors noted the zoning of the lands at The Heath and considered its proposed use for agricultural purposes was contrary to the zoning. This is dealt with in detail in section 13 of this report. However, I would note that the acquisition of the estate road is in accordance with the provisions of the Roads Act.

10.3.35. A number of objectors referred to the zoning of Lackagh Quarry (including Patrick McDonagh, Linda Rabbitte). The quarry is currently zoned 'Agriculture' in the City Development plan. Section 4.6.2 of the Plan with respect to agriculture states the following:

Agricultural lands serve a number of purposes; they provide for agricultural uses, have an important recreation, amenity and biodiversity value and can also facilitate strategic projects, such as roads.

As can be seen such zoned lands can facilitate roads. Hence as well as having regard to the over-arching comment in the City Development Plan, in section 11.2, I am satisfied that the zoning of the quarry or any other lands zoned for agriculture does not preclude the development of the road.

10.3.36. A substantial number of objectors referred to the GTS and it generated much discussion at the hearing over many days. As noted elsewhere the GTS has been adopted into the Development Plans and, therefore, has been put on a statutory footing. The history and background to the GTS is addressed in section 5.12 above. The applicant addressed comments made about the timing of the finalisation of the GTS being subsequent to the selection of the Emerging Preferred Route Corridor of

the PRD. A solution to Galway's traffic problems has been the subject of many studies and strategies. The GTS builds on previous transport studies including the Galway Transportation and Planning Study 2002 which included the development of the 2006 GCOB. The applicant has provided a clear history to the development of the road as part of the Alternatives chapter of the EIAR and within many submissions presented at the hearing by the applicant's consultants in particular, including, the brief presented by the Project Lead, Ms Eileen McCarthy. Based on the information provided in the EIAR as well as statements given at the hearing, I am satisfied that the timing of the GTS and the preferred emerging route are not in conflict with each other. As was explained during the hearing, as work on the GTS proceeded, the PRD team focussed on possible options for a new crossing of the river – in this way the two studies informed each other.

10.3.37. In response to the many questions put forward by the objectors about the GTS, on Day 16 of the hearing the applicant's consultants again provided an overview of the GTS, the reason for not proceeding with a light rail or GLUAS for Galway and information was provided about the situation in the absence of the GTS. I draw the Board's attention to submission 65 presented by the applicant dated 16th October 2020 which provides a comprehensive response to many issues raised in Module 2 of the hearing.

10.3.38. The applicant informed the hearing that many other projects identified in the GTS are progressing such as the Salmon Weir Pedestrian Bridge (currently with the Board Ref. ABP. 308783) as well as improvements to cycling infrastructure. In response to car parking queries raised in relation to new car parking being constructed in the city (e.g. Bonham Quay), it was stated that the implementation of demand management in tandem with the full GTS and the NPF will result in a step change in sustainable travel.

10.3.39. As will be addressed throughout this report, I am satisfied that the PRD does not prohibit future public transport – it is not a case of either/or, rather a combination of both components. I note the applicant refers to cities such as Copenhagen and Seville, which were raised at the hearing, have a high level of walking, cycling and public transport use and have invested in all types of infrastructure including ring roads around the city.

10.3.40. Some objectors considered that the transport strategy should be subsumed within a comprehensive long-term 20 years vision for sustainable development of the region (including Professor Gerald L Lyons). I am satisfied that the GTS is a comprehensive review of the transport problems facing Galway and an overarching strategy to address those problems.

10.3.41. Concerns were raised about the 'severance' impact of the road on the Ardaun corridor including by Tesco and Brendan Mulligan. The *Ardaun LAP* covers an area of c.164Ha located on the east side of Galway, 5km from the city centre. Ardaun is identified as a key growth area in the Galway City Development Plan and is capable of delivering up to 4,640 homes and accommodating a population of up to 12,621. The PRD is clearly identified in the Ardaun LAP within the Plan. I would also further note that severance already exists due to the N6/M6.

10.3.42. With respect to policy and objectives, I am satisfied that the proposed road is a key component of the GTS which, as noted above, is adopted as part of the Development Plans for the city and county.

Conclusion

10.3.43. In conclusion, therefore, I submit that the project has support at European, national, regional and local policy levels with the proposal being fully in accordance with those plans and would advance specific objectives as set out in the National Planning Framework, the National Development Plan, the Regional Spatial and Economic Strategy and the current County and City Development Plans.

10.4. Need, justification and purpose of the road

Need and Justification

10.4.1. I draw the Board's attention to section 11.13 of this report which provides in depth detail of the need for the road and the following should be read in-conjunction with that section.

10.4.2. The need for the PRD is dealt with in Chapter 3 of the EIAR and was set out in a number of submissions made by the applicant at the oral hearing particularly the submission made by the Project Lead Ms Eileen McCarthy. In addition, a number of written and oral submissions by observers supporting the proposal emphasised the

need for the road for the economic and social well-being of the residents of the city (including IBEC, Parkmore Action Group, Galway Chamber of Commerce and Mr Sean O’Neachtain). Similarly, many observers questioned the need for the road including Professor Terrence McDonough, N6 Action Group, Mr Kevin Gill, Professor Kerin and others.

- 10.4.3. The EIAR states that the need for the road arises directly from the necessity to address the very serious transport issues facing Galway City and its environs, and that this road forms an essential part of the transport solution. It is submitted that the existing transport network breaks down on a frequent basis as there is no resilience in the network, e.g. wet afternoon, vehicle collision, etc. The associated consequential impacts are stated including congestion, overcapacity of existing junctions, journey time unreliability, by-passable traffic in conflict with internal traffic, lack of accessibility to the western region, etc.
- 10.4.4. An overview of the existing road network has been analysed to establish the underlying issues. It is explained that the N6 terminates at the R338, at the at-grade Browne roundabout junction with the N59. The R338 continues in a westerly direction to the Coast Road, the R336. While the N6 bypasses the city centre a large portion of traffic is not fully bypassing the city environs, rather it is using the N6 and the R338 to move in an east/west direction across the city. It is considered that the existing road network is at capacity and is insufficient to cater for the current travel demand in the city, its environs and the western region.
- 4.5. Traffic analysis was carried out using the detailed multi-modal traffic model, i.e. the Western Regional Traffic Model (WRM) which was developed by the NTA. It is stated that this model provides a very clear picture of travel patterns that informed the understanding of travel demand in the city and environs, which has guided the selection of a transport solution.
- 10.4.6. In response to the traffic queries in the RFI, the revised information contained in the NPF with respect to projected growth in Galway up to 2040 was analysed to compare it with the data used originally in the EIAR (TII Central Case)⁶. The projected growth provided for in the NPF was analysed in detail by the NTA and

⁶ The TII Central Case is used in the EIAR and uses assumptions from the TII National Model Medium Growth Scenario

Galway City and County Council together (NTA/GCC NPF)⁷. A number of scenarios were compared including TII Central Case vs. NTA/GCC NPF, TII Central Case + GTS vs. NTA/GCC NPF + GTS and a Do-Minimum scenario. A significant amount of data and tables comparing journey times, ratio of flow to capacity and network statistics have been provided. For the convenience of the Board, I have reproduced some of the data that is presented in Section 8 of the Response to the RFI as well as the further changes that were introduced at the oral hearing. I draw the Board's attention to the fact that this information is examined and assessed in detail in section 11.13 below.

10.4.7. In the first instance it is appropriate to review the population differences between both scenarios as detailed in Table 8.4 of the RFI.

Scenario	2016 Census	TII Central Case Forecast (2039)		NTA/GCC NPF Forecast (2039)	
		Total	% Increase from 2016	Total	% Increase from 2016
2039 Galway City Population	78,668	90,000	14%	121,741	55%
2039 Galway County Population	179,390	205,362	14%	218,459	22%
Galway Total	258,058	295,362	14%	340,200	32%

Table 10.4.1 Population Growth Comparison

Source: Table 8.4 of the RFI

Table 8.10 of the RFI provides information with respect to the Ratio of Flow to Capacity AM peak on the Network in 2039 and was amended at the hearing:

⁷ The NTA/GCC NPF scenario is based on population and employment growth aligned to NPF growth forecasts and distributed within the city and county based on existing planning applications, existing land use zoning & plot ratios and existing & emerging policy, a "bottoms up" approach

RFC >90%	TII Central Case (EIAR)	TII Central Case + GTS (EIAR)	NTA/GCC NPF 'Do Minimum' (RFI)	NTA/GCC NPF 'Do Something' N6 GCRR (RFI)	NTA/GCC NPF 'Do Something' N6 GCRR + GTS ⁸ (RFI)	NTA/GCC NPF 'Do Something' N6 GCRR + GTS + Parking Management (Oral Hearing)
Key Junctions (N6/R338)	12	8	22	14	8	5
Entire Network	115	131	281	185	129	Not Stated

Table 10.4.2: Number of Junctions at or over capacity in the AM Peak

Source: EIAR, NPF Traffic Sensitivity Test, 'Response to Issues Raised in Module 2' document.

In addition, Table 8.11 considers the City Centre Mode Share Percentage in 2039.

10.4.8. As can be seen from the tables reproduced above, there is a very significant projected increase in population growth between both scenarios compared to 2016, 55% for the NPF vs. 14% for the EIAR. Hence why the data was reviewed again to understand the implications for such significant growth on the proposed road design at the RFI stage. The applicant considers that although the growth is substantial, due to the introduction of the GTS measures under NPF assumptions, the network performance results in some improvements over and above those of the EIAR (TII) assumptions. It is stated that there are considerable benefits to be gained from good integration of land use and transport, and that the GTS measures will have a much greater impact in terms of encouraging sustainable travel when implemented alongside a complementary land use policy.

10.4.9. I draw the Board's attention to the fact that the NPF 'Do Something + GTS' scenario does indeed improve the situation across several criteria, in particular, the reduction in the number of junctions that are operating above their 90% capacity across the network with the road in place. However, what needs to be highlighted is that even

⁸ There is a discrepancy between Table 4-7 and Table 7-5 in the NPF Traffic Sensitivity Test in respect of the number of junctions at capacity under the DS N6 GCRR + GTS scenario. Table 7-5 appears to have erroneously copied the figures from the PM peak table, so I have used the Table 4-7 figures. This would also be consistent with Table 9 of the 'Response to queries raised in Module 2' document.

with the road in place plus implementation of the GTS measures, there will still be junctions operating above 90% capacity.

10.4.10. This issue was addressed further at the oral hearing and is addressed in detail in section 11.13 below.

10.4.11. Prior to the hearing being adjourned as a result of the Covid-19 pandemic, a number of observers (e.g. Mr Damien Kelly) suggested that the need for the road was questionable on the basis that more and more people would work from home. The pandemic has proven this to be the case. However, I draw the Board's attention to section 10.12 below.

Purpose

10.4.12. The purpose of the road was queried in many submissions and many times at the oral hearing. Various parties submitted that the purpose of the road was unclear and, therefore, its need had not been proven. Many observers commented on the fact that the numbers seeking to bypass the city are very low and considered that the problem is axial and not radial.

10.4.13. The original 2006 GCOB was clearly designed to be a bypass in the traditional sense of the word. However, it was stated many times by the applicant during the hearing, this PRD is not designed simply as a bypass, but effectively as a link road. It was emphasised by the applicant at the hearing that a key conclusion of the initial assessment of the transport problem was that through traffic or by-passable traffic is not the major component of the problem, and that any improvement needed to be developed within the context of an overall strategy that comprehensively considered all modes. It was stated that a team was commissioned to develop such a strategy for Galway which culminated in the Galway Transport Strategy (GTS). It was stated that the GTS seeks to deliver an integrated network of 'links' and 'nodes' along which people can travel and change corridors and modes as necessary to make their journey.

10.4.14. It is considered that the network is undeveloped along its northern half which results in Galway lacking the connected road network which would facilitate more direct travel. I draw the Board's attention to Figures 2, 3 and 4 of the 'Brief Summary of Proposed Development' Submission no.2 presented by Mr Mike Evans and Ms Eileen McCarthy at the hearing. I am of the opinion that these figures provide a good

overview of the current situation and illustrate what could be argued to be the missing link or undeveloped northern half of the network. As a result of this missing link all traffic has to come into the city to access the spine road before it then moves around the city or bypasses the city. I am satisfied that the PRD provides the required outer edge route developing the road network of the northern half of the city which will facilitate more direct journeys and divert through traffic away from the central spine.

10.4.15. As noted by some observers, a bypass is normally required to allow traffic to proceed to a further destination around a town or city. This point was made on numerous occasions at the hearing including by An Taisce representative Peter Butler, who cited the Athlone bypass as an example. Other observers stated that the road was a 'road to nowhere'. In the subject case, there is no further city destination for the traffic – the majority of traffic is simply attempting to move from one side of the city (east side or west side) or to cross between east and west of the river. Only a small fraction of traffic is seeking to get further west.

10.4.16. While the alternatives for the PRD are discussed further below, I am satisfied that the purpose of the road is not just as a bypass and it could not be justified based on the small percentage of vehicles seeking to bypass the city to get to the west (3% as per Plate 6.3 in Chapter 6 of the EIAR). Its purpose is broader than the original 2006 GCOB. This was reiterated many times at the hearing by the applicant under the headings Economy, Safety, Environment, Accessibility & Social Inclusion and Integration.

Conclusion

10.4.17. I am of the view that it has been demonstrated that there is a clear and pressing need for the PRD as a result of the issues faced by Galway City which suffers from undue traffic congestion, delays and poor journey characteristics. Furthermore, the congestion and delay are forecast to continue and to worsen without any major intervention. It has also been clearly demonstrated that the proposed development would facilitate the freeing up of the city and village centres thereby enabling the other projects identified to succeed in the goals of modal change.

10.4.18. I am satisfied that the need, justification and purpose of the road has been adequately demonstrated by the applicant. It is clear that it is not simply a bypass

road as per the original 2006 GCOB. I also accept the applicant's contention that 20 years has passed since the original road was mooted and a lot has changed in terms of policy at national, regional and local levels which results in changes to the purpose of the road. It is considered, therefore, that the need and justification for the proposed development has been adequately established.

10.5. Design of Road

Road Type and Cross-Section

- 10.5.1. A number of parties (e.g. Tom Kilgarriff and Gabor Molinar, Galway N6 Action Group), queried the design of the PRD, contending that a 'full' Motorway designation was not required and that the PRD is over-engineered, particularly noting that it connects a National Road (N6) to a Regional Road (R336) and that unlike other Motorway bypasses, such as at Athlone, Galway is a destination or end-point as demonstrated by the 3% figure for traffic seeking to bypass the City.
- 10.5.2. I consider that this issue warrants consideration as, while dual carriageways and Motorways can have the same cross-section, the Motorway designation has implications for junction typology and the higher design speed drives the geometric design, militating against more compact alignments and junctions. Having regard to the nature of the receiving environment and the extent of land acquisition required, I consider it appropriate to address whether the design of the PRD is appropriately balanced between providing sufficient capacity and minimising its physical footprint and associated impacts on the environment.
- 10.5.3. As noted in Section 10.3 above, the PRD forms part of the 'comprehensive network' identified in the Trans-European Transport Network (TEN-T) policy. TEN-T requires that all roads that form part of the network, as a minimum, be a 'high quality road'. This is defined under Article 17(3) of Regulation (EU) No. 1315/2013 as either a 'motorway', 'express road' or 'conventional strategic road'. A 'motorway' is defined in the Regulation as a road "*specially designed and built for motor traffic, which does not serve properties bordering on it and which is provided, except at special points or temporarily, with separate carriageways for the two directions of traffic, separated from each other by a dividing strip not intended for traffic or, exceptionally, by other means; does not cross at grade with any road, railway or tramway track, bicycle path*

or footpath; and is specially sign-posted as a motorway". An 'express road' is defined as a road designed for motor traffic, which is accessible primarily from interchanges or controlled junctions and which; prohibits stopping and parking on the running carriageway; and does not cross at grade with any railway or tramway track. A 'conventional strategic road' is defined as a road which is not a motorway or express road but which is still a high-quality road.

- 10.5.4. It can be seen from these definitions that the TEN-T Policy is not overly prescriptive regarding the type of road and cross-section that is required. I also note that, unlike the term 'motorway', the terms 'express road' and 'conventional strategic road' are not clearly defined as any particular cross-section type in Irish Standards. The required road type and cross-section is, therefore, primarily a function of capacity and forecast traffic rather than policy.
- 10.5.5. The proposed mainline of the PRD from the R336 Coast Road to Ballymoneen Road is a 'Type 1 Single Carriageway' with a design speed of 85 km/hr, designated as a Protected National Road. From Ballymoneen Road to the eastern tie-in with the existing N6 at Coolagh, the proposed mainline is a 'Standard Dual Carriageway Urban Motorway' (D2UM). The portion of the mainline between Ballymoneen Road and the N59 Letteragh Junction will be designated as part of the Protected National Road, while the portion from the N59 Letteragh Junction to the N6 Coolagh Junction will be designated as a Motorway, notwithstanding that both portions have the same cross-section. The design speed in this area will be 100km/hr. A third lane in each direction is also proposed between the N84 Headford Road and the N83 Tuam Road junctions, to cater for forecast traffic.
- 10.5.6. A typical cross-section of the Type 1 Single Carriageway is shown in Plate 5.1 of the EIAR and it has a total width of 18.3m, including 2 x 3.65m lanes, 2.5m hard shoulders and min. 3m verges. A typical cross-section of the D2UM is shown in Plate 5.2 of the EIAR and it has a total width of 27.6m, including 2 x 3.5m lanes in each direction, a 2.6m central reserve, 2.5m hard shoulders and min. 3m verges. The cross-sections in the two tunnels differ slightly.
- 10.5.7. Details of the incremental cross-section assessment undertaken by the applicant are summarised in Section 6.4.3 of the EIAR, with more detail in Section 7.5 of Appendix

A.6.1 (Phase 3 Traffic Modelling Report) and in Section 3.2 of the Design Report, a copy of which was submitted with the response to the RFI.

- 10.5.8. Due to the PRD traversing both rural and suburban/urban areas, the applicant's cross-section analysis had regard to both TII publication DN-GEO-03031⁹ 'Rural Road Link Design' and the UK DMRB TA 79/99 'Traffic Capacity of Urban Roads'. The UK guidance has no effect in Ireland, however, I consider it to be a useful good practice guide to capacity in urban areas. The analysis utilised predicted traffic volumes for the 2039 Design Year and hourly flows for the AM peak. The Phase 3 Traffic Modelling Report notes that traffic flows are a starting point only, and that capacity depends on other factors also. In particular, given the number of junctions proposed within the PRD, and the distances between them, I consider that junction capacity may have the potential to act as the limiting factor on overall capacity, rather than road link capacity. If traffic cannot clear the junctions efficiently, there is the potential for backing-up to occur onto the mainline, reducing capacity.
- 10.5.9. Table 3.2 of the Design Report summarises the cross-section assessment and it is clear that a Type 1 single carriageway between the R336 and Ballymoneen Road is more than adequate to cater for the forecast AADT in the Design Year with a sufficient factor of safety. It would appear that – based solely on AADT – the only portion of the PRD that would warrant a full Motorway is the portion between the N83 and N84, with traffic volumes dropping off significantly in either direction beyond this link. It appears that the remainder of this portion of the PRD could in theory operate adequately as a Type 1 Dual Carriageway, however, such a road would have the same cross-section and similar landtake requirement, albeit that more compact junctions may be achievable. The designation of such a short portion of Motorway would not be feasible, in my opinion, and I note that the AADT figures for the PRD set out in Tables 5-1 and 5-2 of the NPF Traffic Sensitivity Test submitted in response to the FI request (i.e. incorporating the higher NPF population and economic growth) are generally higher than those utilised in the cross-section analysis, and that a number of sections are on the cusp between Dual Carriageway and Motorway capacity. The AADT between the N83 and N84 in the NPF is sufficient

⁹ The Phase 3 Traffic Modelling Report refers to the earlier NRA TD 9/12 document, which has been replaced by TII Publication DN-GEO-03031.

to justify a third lane on this portion and I note that the additional lane does not continue beyond this required section, which is appropriate in my opinion.

10.5.10. Having regard to TII and UK DMRB guidance, and noting that such guidance is effectively a blunt tool, with consideration of broader economic, environmental and policy matters required, such as the strategic function of the PRD as part of the TEN-T Network, I do not consider that the cross-section of the PRD mainline is over-engineered or over-specified, noting that it drops to a single carriageway from Ballymoneen Road to the R336 Coast Road, as the traffic volumes drop. I conclude that the road types and cross-sections chosen are proportionate and responsive to the forecast traffic volumes and do not include excessive 'headroom' or excess capacity beyond that which is appropriate to reasonably future-proof the PRD.

Junction Strategy

10.5.11. Having concluded that the PRD road type and cross-section is appropriate to cater for the forecast traffic, without being significantly over-designed, I turn now to the proposed junction strategy, the objectives for which are set out in Section 6.4.3.1 of the EIAR and with a more detailed report contained in Appendix G of Appendix A.6.1 of the EIAR, which includes details of the iterative design process undertaken. The issue is also addressed in Section 4 of the Design Report.

10.5.12. At the outset, I note that, while TEN-T requires that all roads forming part of the network be a 'high quality road', it does not dictate the required junction type. Notwithstanding this, and having regard to the definition of a 'high quality road' set out in Article 17(3) of Regulation (EI) No. 1315/2013, the choice of a 'motorway' or an 'express road' would restrict access to junctions only, while certain junction types are only compatible with certain cross-sections, as per TII Standards. Having regard to the strategic nature of the road, both in terms of distributing traffic and its TEN-T function, I consider it appropriate that all access to the mainline be limited to junctions only. As noted above, I consider that the applicant has justified the need for a portion of the PRD to comprise a Motorway, one of the consequences of which is that TII Standards require junctions on Motorways to be fully grade-separated.

10.5.13. Given that the PRD also seeks to move car trips from existing City Centre roads to the PRD, adequate connectivity to the radial routes that converge on the City is also an important element of the junction strategy.

10.5.14. I note that the Junction Strategy included in the EIAR utilises TII publication DN-GEO-03043 'Geometric Design of Major/Minor Priority Junctions and Vehicular Access to National Roads'. This publication was in fact withdrawn in 2017 and replaced with DN-GEO-03060. This replacement TII publication does not include the graph that is replicated in Figure 2 of the applicant's Junction Strategy, but does contain guidance on suitable junction types for various AADT levels.

10.5.15. Travelling from west to east, the junctions on the PRD mainline are as follows:

- **Bearna West Roundabout (Ch. 0):** Proposed roundabout at the junction of the R336 Coast Road and the start of the single carriageway portion of the N6 GCRR. Footpaths are proposed on each arm of the junction to facilitate pedestrian crossings away from the flaring of the approaches.

Traffic flows on the R336 in the 2039 Design Year are c. 13,000, with c. 11,000 diverting onto the PRD, and the remainder continuing into Bearna village. I consider that the provision of a roundabout is an appropriate solution for this junction, having regard to the AADT level, and consider that a roundabout will be effective in minimising delays due to the high percentage of traffic turning left onto the PRD and that it will also slow traffic continuing straight in to the 50km/hr zone leading into Bearna Village. I also consider the pedestrian arrangements to be acceptable, noting the rural location and low level of pedestrian activity in the area.

- **Bearna East Roundabout (Ch. 2+800):** Proposed roundabout at the junction of the single carriageway portion of the N6 GCRR and the Bearna to Moycullen Road (L1321). Footpaths are proposed on each arm of the junction to facilitate pedestrian crossing away from the flaring of the approaches.

Traffic flows on the PRD in the 2039 Design Year are c. 11,000 on the western approach and 18,000 on the eastern approach. This junction will form an important node on the PRD providing linkages to Bearna Village and Moycullen. I consider that the provision of a roundabout is an appropriate solution for this junction, having regard to the AADT level, the relatively balanced flows and likely low level of pedestrian and cycle traffic in this rural area. I consider that a roundabout, rather than a signalised junction, will be

effective in minimising delays on the mainline and that it will operate comfortably within capacity due to the AADTs in this area. I also consider the pedestrian arrangements to be acceptable, noting the rural location and low level of pedestrian activity in the area.

- **Cappagh Road Junction (Ch. 4+450):** Proposed at-grade signalised junction of the N6 GCRR and Cappagh Road. Footpaths are proposed on each arm of the junction, connecting into the existing networks in the area. An existing roundabout junction of Cappagh Road and the Western Distributor Road is located c. 370m south of this junction.

Cappagh Road is currently a relatively little-used local road. There will be a significant increase in traffic movements on the portion of Cappagh Road to the south of the PRD due to traffic from the Knocknacarra area accessing the PRD. The PRD would have a traffic flow of c. 18,000 in this area, with c. 6,500 on Cappagh Road to the south and c. 300 to the north. The applicant considered several options at this location, including an underbridge (i.e. no direct access to the PRD) and a roundabout, but has proposed a signalised junction due to the ratio of flow to capacity being close to capacity. LINSIG analysis found that a signalised junction would operate at an acceptable level with residual capacity for the future. I consider this signalised junction proposal to be acceptable, noting the capacity issue and functionality issues associated with the roundabout option and the fact that the junction is approaching more built-up areas, and as such an urban street junction in accordance with DMURS is a preferable solution in my view. The underbridge option considered at an earlier stage would also have detrimental impacts on residential amenity due to the embankments required and would lead to an excessive volume of traffic accessing the PRD at the Ballymoneen Road Junction.

- **Ballymoneen Road Junction (Ch. 5+650):** Proposed at-grade signalised junction of the N6 GCRR and Ballymoneen Road. This is the location at which the road cross-section changes from single carriageway to dual carriageway. Footpaths are proposed on each arm of the junction connecting into the existing networks in the area.

Ballymoneen Road is a part rural road and part urban street connecting Ragoon Road to the Western Distributor Road and onwards to the R336. There is also a secondary school located on this road, close to the junction with the Western Distributor Road. This junction will be used by traffic from Knocknacarra and Ballyburke to access the PRD mainline with a predicted traffic flow of c. 18,000 on the mainline, 6,000 on Ballymoneen Road to the south of the PRD and 4,000 on Ballymoneen Road to the north of the PRD. Improvements to the Ballymoneen Road are also proposed in the vicinity of the junction to address its substandard geometry. Having regard to the forecast AADTs, the applicant considered both a roundabout and a signalised junction at this location but has proposed a signalised junction due to the ratio of flow to capacity for the roundabout being close to capacity and issues with regard to unbalanced flows on the major/minor arms. LINSIG analysis found that a signalised junction would operate at an acceptable level with residual capacity for the future. Mean maximum queues predicted in the AM peak are c. 14.5 pcu on the eastbound approach, which I note would not impact on any of the upstream or downstream junctions. I consider this signalised junction proposal to be acceptable, noting the issues associated with the roundabout option, and consider that an urban street junction in accordance with DMURS is a preferable solution in this developing suburban area.

- **N59 Letteragh Junction (Ch. 7+600):** Proposed standard grade-separated junction, which is offset from the N59, with a proposed Link Road to the north connecting to the N59 at a signalised junction and a proposed Link Road to the south connecting to Letteragh Road and on to the Ragoon Road. This is the location at which the designation of the PRD changes from a Protected Road to a Motorway, although there is no change in cross-section at this location.

The Motorway designation of the PRD at this location dictates a grade-separated junction, and the design is a relatively standard diamond arrangement, with the exception that it is offset from the N59. While offsetting of the junction, rather than providing a direct on-line junction, is unusual, I consider that it is justified by the level of impact on residential property which would arise from an on-line junction due to the developed nature of the N59 in

this area. It also allows for the provision of additional road links to distribute traffic and improve connectivity/permeability in the Knocknacarra, Letteragh and Rahoon areas.

As a result of junction analysis the standard 'dumbbell' arrangement with roundabouts positioned at the termini of the slip lanes has been replaced with signalised junctions. This signalised approach prevents the dominant traffic movements totally controlling the junctions during peak hours and allows for dedicated crossing points for pedestrians and cyclists on each arm of the junction and footpaths and cycleways through the overall Letteragh Junction. Noting that the N59 Link Roads North and South are being designed as urban streets with street lighting and footpaths, I consider that this signalised approach is acceptable from an operational safety, performance and urban design perspective.

- **N84 Headford Road (Ch. 12+100):** Proposed standard grade-separated junction located directly on the N84 Headford Road. Again, the Motorway designation of the PRD at this location dictates a grade-separated junction and the design is a standard diamond arrangement. As a result of the traffic modelling the standard 'dumbbell' arrangement with roundabouts positioned at the termini of the slip lanes has been replaced with signalised junctions on the N84. This signalised approach prevents the dominant traffic movements totally controlling the junctions during peak hours and allows for dedicated crossing points for pedestrians and cyclists on each arm of the junction and footpaths through the N84 Junction, linking to existing footpaths on either side. LINSIG analysis shows that this will be a busy junction, with a high degree of saturation in the peak periods, however, the level of queuing predicted can be cleared in a single cycle without impacting on other junctions. I consider that the proposed junction arrangement is justified and that the signalised approach on the N84 interconnection is acceptable from an operational safety, performance and urban design perspective.
- **N83 Tuam Road Junction and Parkmore Link Road (14+000):** Proposed grade-separated junction and associated link roads. Various options and iterations of this junction were considered by the applicant, as outlined in the Junction Strategy Report, and the proposed junction is a relatively complex

split-junction arrangement, requiring a substantial landtake. The reason for the split arrangement is to accommodate the volume of traffic coming from the west of the City to access the N83 and Parkmore Link Road in the morning peak and the reverse movement in the evening peak. Again, the Motorway designation requires full grade separation at this junction. This area will experience the highest AADTs (c. 60,000¹⁰) of the entire PRD, due to the proximity to major trip generators, including various business parks, industrial estates and Galway Racecourse and the role of the N83 as a primary access to the City. As a result a third lane in each direction is proposed on this section of Motorway as outlined above.

Eastbound traffic on the PRD can exit onto the N83 or access the PRD via the Parkmore Link Road. Conversely, westbound traffic on the PRD can exit onto the Parkmore Link Road or access the PRD via the N83. A proposed single carriageway link (City North Business Park Link) to the south of the mainline links the N83 and Parkmore Link Roads, allowing for the relatively low level of southbound traffic on the N83 that wishes to access the PRD in an eastbound direction.

I note that dedicated crossing points are provided on each arm of the N83 junction, with cycleways and footpaths provided through the junction. These will connect into existing and proposed networks in the area and I note that a dedicated inward bus only lane is also accommodated on the portion of the N83 within the PRD boundary. All of these measures will improve connectivity and pedestrian/cycle infrastructure in the area.

The splitting of the junction and the associated construction of the Parkmore Link Road and City North Business Park Link will also connect a number of the major industrial areas/employment centres of the City with new urban streets featuring dedicated cycleways and footpaths along their length. The new links will also support future bus routes serving the Ballybrit and Parkmore industrial estates and improve connectivity more generally within this north eastern section of the City.

¹⁰ Updated figure included in NPF Traffic Sensitivity Test.

While the proposed design of this junction and link roads with its split arrangement requires a significant land take, the final design is more compact and less complex than earlier iterations considered by the applicant and includes significant improvements to connectivity, pedestrian and cycle infrastructure in this area. Given the extremely high traffic levels forecast in this area and the strategic importance of providing high quality access to and from some of the City's key employment locations/trip generators, while maintaining the freeflow of traffic on the mainline and minimising delays on the N83 at the signalised junctions where it intersects the merge and diverge arms, I consider the proposed approach to be acceptable.

- **Coolagh Junction (Ch. 16+500):** Proposed grade-separated junction at the intersection of the PRD and the existing N6 at Coolagh. The N6 is the primary access point to Galway from both the east and the south, since the opening of the M17/M18, and the current at-grade Coolagh Roundabout junction experiences significant congestion, as addressed above. Various options and iterations of the proposed junction were considered by the applicant, as outlined in the Junction Strategy Report and the junction, as proposed, is a complex arrangement with a substantial footprint that seeks to provide a partial free-flow transfer of traffic from the existing N6 to the PRD.

Traffic destined for the eastern part of the city will diverge from the existing N6 to an at-grade junction in the vicinity of the existing N6 Coolagh Roundabout, with access via the proposed Briarhill Link to Bóthar na dTreabh. This junction will also provide for interchange between the R446/N67 and the PRD.

No footpaths or dedicated cycleways are proposed at this junction. I consider this to be acceptable, given the complex nature of the junction, the high traffic speeds and the availability of safer alternatives.

The area to the east of this proposed junction is known as Ardaun and is identified as one of the key growth areas for the City. Its future development is governed by the Ardaun Local Area Plan 2018-2024, which post-dates the selection of the preferred route option for the PRD, and it includes the proposed PRD alignment in the land use zoning map. Mr Brendan Mulligan

queried the impact of the PRD on the future development of Ardaun, particularly with regard to public transport/active travel access arrangements.

A transport access review of the Ardaun lands was undertaken by Galway City Council in consultation with the NTA in 2018 and this identified access arrangements and associated phasing for the development of the lands. This includes an upgrade of the Martin Roundabout to signals, new access onto the R446, links to Doughiska and a public transport, pedestrian and cyclist crossing over the proposed N6 GCRR to link Ardaun North and South.

While the future Ardaun development area will be severed somewhat from the existing built-up area of the City by the PRD, I consider that the provision of adequate car, pedestrian and public transport access to the LAP lands once the PRD has been constructed has been fully considered and has been incorporated within the LAP.

The proposed Coolagh Junction is quite complex in its configuration. This arises from the number of high capacity roads meeting at this location, the high traffic flows on the N6, the PRD and the R446 in the Design Year and the need to provide a partial free-flow of traffic arriving at Galway from the east and south at this location. In the circumstances I conclude that the design of the proposed Coolagh Junction is acceptable.

10.5.16. In addition to the junctions on the PRD mainline there are numerous overbridges, underbridges and new/realigned junctions on roads that intersect the PRD mainline. In particular, I would note the Na Foraí Maola to Troiscaigh Overbridge (Ch. 1+375). This is an overbridge over the PRD mainline, linking to the proposed Na Foraí Maola to Troiscaigh Link Road North and South. These Link Roads are required due to the severance of the Foraí Maola Road and Troiscaigh Road (L5387) either side of the PRD and the overbridge provides a combined route over the N6 GCRR mainline with no access provided to the mainline. Footpaths are proposed on the overbridge. The impact of severance on local communities was raised by a number of parties at the oral hearing and is addressed in Section 10.8 and 11.6. From a traffic perspective I consider the proposed approach to be acceptable and I do not consider that a direct connection to the PRD would be warranted at this rural location.

10.5.17. Additional LINSIG analysis of a number of the abovementioned junctions was also undertaken to assess the implications of the NPF growth scenario on the junction capacity and performance. The results of this are set out in Appendix A of the NPF Traffic Sensitivity Test submitted in response to the RFI and I note that it demonstrates that the proposed junctions will continue to operate successfully in the 2039 design year with some minor changes to signal timings and flare lane lengths.

Road Levels

10.5.18. The PRD is variously located in cut or on embankments, with a limited extent of the road mainline at-grade. The most extensive embankments and cuttings are generally where the PRD interacts with existing roads, where over or under bridges or grade separated junctions are proposed. A number of parties have raised concerns with regard to proposed road levels, particularly with regard to their impact on residential and visual amenities.

10.5.19. To a large degree I consider that the levels of the PRD are driven by the confluence of topography, interfaces with existing roads and the technical requirements of the relevant TII standards which dictate permissible horizontal and vertical alignment.

10.5.20. A considerable number of the CPO objections contended that there was inadequate information or uncertainty with regard to road levels. Having reviewed the drawings submitted, particularly the Proposed Design Geometry series (Figures 5.2.01 – 5.2.11) and the Plan & Profile series (Figures 5.3.01 – 5.3.21), I consider that the proposed road levels are clear and unambiguous.

10.5.21. The proposed Na Foráí Maola to Troscaigh Link Road and Overbridge were raised as a concern by a number of residents of the area due to their elevated nature and the associated embankments. This link road and overbridge is required to retain connectivity for the local community due to the proposed severance of Na Foráí Maola Road and Troscaigh Road (L5387). Photomontages of the overbridge and link road are included in Appendix 12.3 of the EIAR, where the c. 7m elevated link can be seen from various vantage points. There will be visual impacts associated with these elevated structures, which are addressed elsewhere, however, I consider that the rationale for their elevation has been sufficiently demonstrated and that the link serves an important role in avoiding total community severance and maintaining linkages.

10.5.22. In conclusion, I am satisfied that the proposed road levels are clear and are justified with regard to the local topography, interactions with local road and technical requirements.

Boundary Treatments and Stone Walls

10.5.23. Many of the submissions and objections raised issues with regard to proposed boundary treatments, generally contending that there was inadequate detail or uncertainty with regard to boundaries or that the proposed boundaries were not acceptable. The loss of existing stone walls and requests for replacement stone walls were also raised by a number of parties.

10.5.24. These issues are addressed in respect of individual affected property owners in detail in Section 13 while the landscape and visual impacts of the boundaries and cultural heritage issues associated with the stone walls are addressed in the EIA section 11.14 of this report.

10.5.25. In general, however, I consider that the proposed boundary treatments are acceptable. The use of a stone boundary along the mainline, as sought by a number of parties, would create its own visual issues, due to what would be a homogenous and somewhat alien landscape feature in contrast with the existing dry stone walls in the area. I consider that the provision of timber post-and-rail fences and substantial landscaping planting is generally preferable along the PRD mainline, with replacement stone or render boundary walls to affected houses.

Drainage Design, Attenuation Ponds, Major Structures

10.5.26. The design of the drainage system, attenuation ponds and major structures, such as the River Corrib bridge, and associated mitigation measures, are addressed in detail in the relevant sections of the EIA section of this report and are not repeated here in the interests of minimising repetition. In general, however, the design of these elements of the PRD is considered to be acceptable and appropriate to the context of the receiving environment.

Parkmore Link Road Modification

10.5.27. As noted in Section 4.10 above, the applicant proposed a modification to the proposed Parkmore Link Road at the oral hearing. It is stated that changes to the Boston Scientific Campus that have occurred since the publication of the EIAR

provide the rationale for the modification. The proposed routing of the Parkmore Link Road has been amended to a route to the east of the Boston Scientific Campus. Each of the applicant's specialists, in their submissions to the oral hearing, addressed the proposed modification and all concluded that there were no changes to the relevant conclusions of the EIAR or the NIS. The EIA sections of this report also include an assessment of this proposed modification.

10.5.28. The applicant's initial proposal for the Parkmore Link Road would have run to the west of the main Boston Scientific building, severing the campus, in order to link proposed Business Park Junction 2 to the existing Morris Junction of Bóthar na dTreabh. The proposed modification would still run from Business Park Junction 2 to Bothar na dTreabh but it would run along the eastern edge of the Boston Scientific Campus, adjoining Galway Racecourse, connecting to Bóthar na dTreabh at the proposed City East Business Park Junction. I note that the proposed modified alignment retains the cycle paths and footpaths of the original proposal. I note that Boston Scientific withdrew their objection to the proposal on foot of the proposed modification being presented at the oral hearing.

10.5.29. I am of the opinion that the proposed modification is a significantly improved design. There are thousands of people employed in the Boston Scientific Campus, and severance of the two sides of the campus could clearly have negative impacts on the operation of the facility. The proposed modification mitigates these severance impacts while maintaining the functionality of the Link Road and I am satisfied that there will be no significant additional or changed impacts as a result of this proposed modification.

10.6. Evaluation of Alternatives

10.6.1. Alternatives to the subject proposal are addressed herein and in section 11.3 of the EIA below. The EIA section 11.3 below summarises the information presented in the EIAR and throughout the course of the project and should be read in-conjunction with this section. Various alternative solutions were discussed and proposed by objectors both at a fundamental level with respect to the concept of a road as well as alternative route options once it was decided that a road was needed. Having regard to the importance of this topic there is considerable overlap between the assessment undertaken here and that presented in the EIA below.

- 10.6.2. Based on the information before the Board, it is clear that a significant amount of work has been conducted over the duration of the project with respect to alternatives following on from the legal judgements relating to the 2006 GCOB. In my opinion the consideration of alternatives is of utmost importance for this project having regard to the negative impacts that the route, the subject of this application, will result in, particularly in terms of the demolition and acquisition of 54 residential properties and other commercial properties.
- 10.6.3. Having regard to the number of alternative solutions to Galway's traffic problems that were raised in submissions, and the significant level of discussion of the issue at the oral hearing, I am of the view that it is appropriate to recap work carried out to date to address the transportation issues, before addressing the alternative route options to the proposed road development itself. The fundamental issue of whether a road as proposed in the subject application is required at all was raised by many observers and many believed that other modes of transport should be prioritised before the necessity for a new road is considered. This is addressed below. This will be followed by an assessment of the alternative routes and alternatives put forward as well as considering the 2006 GCOB.
- 10.6.4. At the hearing the applicant's Project Lead explained the process of assessing alternatives in response to many questions. The process of starting in 2013 after the CJEU judgement, the involvement of ARUP, the assessment of the numerous routes and the fact that it quickly became apparent that a road alone would not solve the issues but would be required as part of the solution was restated on numerous occasions throughout the hearing.

Alternative Options

- 10.6.5. With respect to the question of whether the road itself is the correct response to the traffic issues being experienced in Galway currently, I am satisfied that the applicant has provided a description of the reasonable alternatives studied which are relevant to the proposed project. I am satisfied that a reasonable assessment of option alternatives including 'do nothing', 'do minimum' etc. has been carried out. I would also draw the Board's attention to the fact that the road is included in the City and County Development Plans which were themselves subject to a Strategic Environmental Assessment (SEA) as was the relevant variation to the County Plan.

Of note is the fact that the Galway Transport Strategy (GTS) which is part of the Statutory Plans was also subject to SEA. It could be argued that as a decision to include a road has been fully assessed and adopted as part of the statutory plans, there is no need to revisit this decision. However, as it was the subject of so much discussion at the hearing and in written objections it is appropriate for the benefit of the Board to recap the history and to address the submissions.

10.6.6. The GTS SEA reviewed four alternatives as part of that assessment including:

- Do-minimum approach
- Prioritisation of a Road Transport based approach
- Prioritisation of a Public Transport based approach
- Provision of an Integrated Transport based approach

10.6.7. The last alternative above, 'the Integrated Transport based approach', is considered to provide for '*sequential provision of transport related measures which are aimed at reducing existing congestion in order to provide an improved public transport service and improved infrastructure for alternative modes of transport such as walking and cycling*'¹¹. It is noted that the approach allows for a new road link to the north of the city which will be sequentially followed by public transport measures to reduce volumes of traffic on Quincentenary Bridge and Wolfe Tone Bridge. The medium to long term outcome of this alternative is stated as allowing for the provision of an effective high frequency bus network in Galway City resulting in increased usage of public transport and improved corridors for alternative modes of transport.

10.6.8. An Taisce and many others questioned the GTS and the conclusions of the Report which support the provision of the subject road. It was contended that the GTS cannot objectively be described as a reasonable attempt to maximise the use of public transport to solve traffic congestion problems in Galway City before building the subject road. However, I would note that the GTS is not before the Board for approval – the GTS is a strategy and is not a project for approval by the Board. While I accept that An Taisce and others were highlighting and questioning the GTS as it supports the provision of a road, the GTS is an approved and adopted part of

¹¹ SEA Statement P.10

the County and City Development Plans. This is also addressed above in Section 10.2 and 10.3.

10.6.9. With respect to a number of objectors making points querying the solution to the congestion being a road, I draw the Board's attention to submissions made by certain individuals which are reflective of comments made by many parties. Mr Frank McDonald on behalf of An Taisce referred to international best practice in tackling traffic and transport to create more civilised urban environments and how examples of cities such as Vienna and Zurich have all worked to reduce the dominance of private cars in favour of public transport, cycling and walking. He notes that this road proposal would be Galway's second ring road and that the first ring road including the Quincentennial Bridge did not solve the traffic problems. Mr McDonald also stated that the proponents of the road are *'locked into outdated 1970s thinking about transport planning'*. This is also echoed somewhat by Professor Kerin and his team of Consultants. When the oral hearing resumed in October 2020 following the adjournment due to the Covid-19 pandemic, Professor Kerin and his team stated that *'the road is a 20th Century solution to a 21st Century problem'*. The 'Hands across the Corrib' group made similar points in their submission (submission no. 46 at the oral hearing) and stated that the road *'has been included in so many plans and strategies that it is now unthinkable for anyone to develop a plan without it. That has heavily influenced the skewed thinking which has gone into researching and justifying the GCRR'*. In addition, the point is made that *'the obvious problems'* in the general Parkmore/Briarhill area can be resolved with separate projects but are not separate projects because they have been *'rolled into the GCRR because they can benefit from the 'ring-fenced' funding'*. Mr Kilgariff also made the point at the hearing that the 2006 GCOB was part of an overall plan in the late 90s/early 2000s to tackle Galway's traffic problems.

10.6.10. At the oral hearing many observers questioned the adequacy of assessments of public transport options. In particular, An Taisce submitted that the proposals for conversion of public roads to bus lanes in the GTS were inadequate and submitted that it would be premature to approve the proposed road until serious efforts have been made to maximise the conversion of private car users to public transport. I refer the Board to submission no. 34 presented at the oral hearing by Mr Peter Butler on behalf of An Taisce. Mr Butler was afforded the opportunity to present the

detailed and substantial work that has been carried out by An Taisce including analysis of average journey speeds between two representative locations and at different times of the year (including August outside of school times with corresponding conclusions that school runs are contributing to the morning traffic peaks – this point was also made by Mr Damien Kelly and others). In addition, Mr Butler presented, with accompanying photographs, works required to provide for the development of a bus corridor across the city.

10.6.11. I would consider that this is a viable option and could be pursued. As discussed in Section 10.4 and 11.13, I am satisfied that the road network is under-developed along its northern half resulting in Galway lacking the connected road network which would facilitate more direct travel, thereby diverting through traffic away from the central spine. I am satisfied that the construction of the road would not preclude the development of any bus corridor or impede the other works identified in the GTS. This point was repeated often at the hearing by the applicant – the provision of the road would effectively ‘free up space’ by facilitating the reallocation of road space in the city centre to active modes and public transport as well as improvements to the public realm, making journeys by foot or by cycling far more pleasant and safe.

10.6.12. A Light Rail option for Galway or the GLUAS was also raised in written submissions and at the oral hearing by many including Mr Kevin Gill, Mr Derrick Hambleton (An Taisce), Mr Brendan Mulligan and Mr John J Martin amongst others. This option was comprehensively addressed by the applicant at the hearing and in the EIAR. The applicant stated that analysis of potential light rail routes showed that there is not sufficient demand to warrant the implementation of a light rail system as the highest demand achievable for travel on an east-west light rail corridor would amount to approximately 25% of the capacity of a light rail system during peak periods. This can be catered for by a bus-based public transport network. Based on the data presented at the hearing, I am satisfied that there is insufficient demand to warrant a light rail option at this stage. Furthermore, while this could in the future become an option it is currently not an option for assessment before the Board and the road would not preclude the development of a Light Rail system in the future.

10.6.13. Park and Ride options were also suggested at the hearing by many observers including Ms Deirdre Goggin, Mr Brendan Mulligan and Ms Catherine Connolly TD, as well as improvements/additions to the School Cycle Bus which has been

successfully implemented in Galway. I consider that all these options can contribute to, and some are included in, the GTS.

10.6.14. The Galway Cycling Campaign made significant contributions to the hearing on many topics (addressed throughout this report). Submissions were made on the role of cycling in cities as well as the problems faced by cycling and walking which they consider derive from car promotion. While their submissions were informative, they were wide ranging and focussed on issues that potentially would be better addressed at plan making stages rather than in the context of the subject road. I acknowledge that some of their comments were in relation to the provision of cycling lanes and safe passage for cyclists, and as noted by the applicant, where legal to do so, (i.e. not on the motorway/protected road) the subject road and link roads includes cycling lanes and walkways.

10.6.15. Upon the resumption of the hearing in October 2020, Mr John J. Martin referred to a ferry across Lough Corrib. The applicant advised that this option had been considered in the early stages but was not considered to be a feasible option, which I accept. I would consider that this option would not meet the project objectives for journey time reliability, amongst others.

10.6.16. In addition to the above on alternatives to a road, I draw the Board's attention to Section 10.4 of this Report which considers the 'need' for the road. I also refer the Board to Section 11.13, Traffic, which identifies that a road is needed if the highlighted inadequacies in transportation for the city are to be addressed. As noted above, all the other alternative modes or facilities to encourage modal shift such as Park and Ride, Cycle Routes, improved bus corridors etc. are included or have been considered by the Council as part of the GTS as well as other public realm improvements. I would also note that there is progress on the projects that are identified in the GTS already. Based on these facts, I am satisfied that the applicant has addressed alternatives to a road satisfactorily. Furthermore, as noted in policy considerations in section 10.3 above, the road is identified in the many statutory documents from the National Planning Framework to the City Development Plans which have all been subject to SEA and AA, including those alternatives.

10.6.17. In conclusion, I am of the view that the applicant has fully addressed alternatives to a road satisfactorily and I concur with the applicant that a road solution is required and

that other alternative modes are not precluded and indeed will be supported by the provision of a road on the northern half of the city and environs. I concur with the applicant that the transport solution must address the existing road network capacity in support of an efficient public transport option. I also draw the Board's attention to the fact that the alternatives to a road have already been subject to SEA in the many policy documents.

Alternative Routes

- 10.6.18. I will now turn to the alternative route options for a road put forward by the applicant and will consider the alternatives submitted by some of the objectors. As well as addressing alternatives to the mainline road, other alternatives considered by the applicant included alternatives at Rosan Glas housing estate for the N59 link road (this is also addressed in section 10.8 and 11.13). Alternatives raised by individuals near their dwellings have been addressed in the CPO section 13 of this report. I also note that a number of objectors and observers were keen to stress that they were not objecting to the road per se – but to the route it was taking, and this fed into individual's reasons for objecting.
- 10.6.19. As noted above, an alternative route for the Parkmore Link Road at the Boston Scientific campus was submitted by the applicant at the oral hearing and is addressed elsewhere in this report. As a result of the revision, Boston Scientific withdrew their objection to the proposal. I am of the opinion that this alternative as put forward at the hearing is preferable, as I did not consider a road splitting the campus in two was acceptable from a safety point of view as well as other concerns raised in their original written submission. I have further addressed this under section 10.2 and 10.5.
- 10.6.20. With respect to the applicant's alternative route options, the detail included in the EIAR and the Route Selection Report submitted by the applicant at Further Information stage has been considered as well as submissions raised in writing and at the hearing. I have summarised the stages considered in determining the preferred route in the EIA section of my report below, section 11.3. I draw the Board's attention to the detailed work carried out by the applicant and the step-by-step description of how the preferred route option was determined as detailed in the

EIAR, the Route Selection Report and again repeated by the Project Lead in response to many questions at the oral hearing.

10.6.21. Alternatives for the mainline were repeatedly raised at the oral hearing and in numerous submissions in relation to the mainline road including the 2006 GCOB, an alternative presented by Mr John M Gallagher, the N6 Action Group and others, as well as queries on the design of the mainline raised by Mr Kilgariff and his Consultant Mr Gabor Molinar.

10.6.22. The 2006 GCOB was raised continuously over the course of the development of the project, including at the various public consultation stages as described in the Route Selection Report submitted at the F1 stage. Many observers queried why this was not investigated further particularly considering the lower level of residential demolitions required (including Mr Michael Murphy, N6 Action Group, Ms Deirdre Goggin). Mr Murphy, in particular, questioned why no meeting was held between the applicant, An Bord Pleanála and the NRA following the CJEU decision – this was not addressed by the applicant. Furthermore, Mr Murphy queried why the 2006 GCOB was ruled out at such an early stage – Mr Murphy posited that the ‘blue’ route was already determined to be the preferred route at that stage. Ms McCarthy emphasised that the ‘blue’ route was not pre-determined and was subject to public consultation along with the other 5 routes in January 2015.

10.6.23. Questions were raised as to why the applicant did not reapply for the 2006 GCOB route under Article 6(4) of the Habitats Directive. Notwithstanding the fact that it is the Board who determines if a project should be progressed for reasons of IROPI, I am of the view that there is not an *absence of alternative solutions* as referred to in Article 6(4) – the option before the Board is an alternative solution - and therefore proceeding with the 2006 GCOB under Article 6(4) would be likely to fail at the first test. Article 6(4) states:

*If, in spite of a negative assessment of the implications for the site and **in the absence of alternative solutions**, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is*

protected. It shall inform the Commission of the compensatory measures adopted. (my emphasis)

Thus, I am satisfied that the 2006 GCOB as originally presented is very unlikely to have been successfully progressed under Article 6(4) as suggested by numerous objectors as there is at least one alternative solution.

10.6.24. With respect to other points made by objectors about the merits of the 2006 GCOB route, the applicant stated that while the 2006 GCOB Scheme had the least number of property demolitions, the western section did not receive planning permission from ABP under the earlier application due to potential environmental impacts in the area of Moycullen Bog Complex NHA, as well as the European Court Judgement on the eastern side. The applicant did look at an alternative route for the west side to avoid the NHA and called it the Cyan Route. This route resulted in the number of property demolitions increasing to 16.

10.6.25. It is also stated by the applicant that the 2006 GCOB would not deliver the optimum intermodal transport solution and noted that there was almost twenty years of a time lapse and significant changes in the interim in technology and planning policy. At the oral hearing the Project Lead's Brief detailed a list of reasons why it was not selected as the preferred route, e.g. no connectivity with the N83, no Parkmore Link Road, impact on SAC, and profound impact on Menlo Castle. Of note the Project Lead acknowledged that the 2006 GCOB has less impacts on communities and amenities but at the expense of longer journey times and less relevant journey possibilities between east and west. It was restated on many occasions throughout the hearing, on behalf of the applicant by many consultants, that the 2006 GCOB did not address the problems now faced by Galway and the applicant's legal team stated that the 2006 GCOB "*was an answer to a different question*".

10.6.26. At the hearing the issue of potential amendments to the 2006 GCOB route to address the perceived shortcomings was raised – as noted above this is the Cyan Route. The applicant was asked if consideration was given to tunnelling under the section of the SAC that was to be crossed by the 2006 GCOB. The applicant confirmed that this had been looked at, but the tunnel would have been excessively long (in excess of 2km) and would have missed connecting with the other sections of road. In the applicant's submission at the hearing '*Response to Queries raised in*

Module 2 re 2006 GCOB, (submission no.65) the applicant submitted that a tunnel peer review was undertaken in December 2014 with the ARUP London tunnelling team to understand the scale of engineering involved. Based on the length of tunnel required, the presence of karst bedrock and the complex hydrogeology and sensitive receptors, it was determined that the type of tunnelling would require a Tunnel Boring Machine and have a very real potential to have adverse impacts on the integrity of the Lough Corrib SAC.

10.6.27. In addition, the applicant confirmed that a junction with the N83 was considered as part of the cyan route option to address the previous lack of connectivity with that road. This is detailed in *Appendix 5.5 Cyan Route Option Report* to the Route Selection Report submitted at Further Information stage. This report also notes that the cyan route option directly impacts on Lough Corrib SAC at three locations. With respect to the impact on Menlo Castle, I note that this was not considered a reason for refusal by the Board at that time and do not agree with the applicant that this was a reason to discount the 2006 GCOB.

10.6.28. Following a question from Ms Goggin in relation to the route selection, the applicant explained that the traffic analysis which was undertaken to inform the 2006 GCOB utilised manual origin and destination surveys using roadside surveys undertaken by An Garda Síochána of every tenth vehicle. By comparison, the current design team had the 2011 Census data available which gave detail on place of work and education (POWSCAR) for every home in the study area which provided them with a better understanding of the problems and the proposed route is preferred for addressing these problems. It was further noted that the traffic modelling available for the 2006 GCOB was not capable of modelling public transport, walking or cycling. Modelling techniques have advanced significantly and the Western Regional Model (WRM) is capable of modelling walking, cycling, public transport as well as private vehicle trips. It was also noted that the development pattern that the 2006 GCOB was designed to serve did not materialise and the 2006 GCOB would not have been the correct solution for the reality of the actual development of the city and county – the envisaged development of the Ardaun area to the east of the city did not happen, as an example.

10.6.29. In conclusion, with respect to the 2006 GCOB route option, I am satisfied that there would be an impact on the Lough Corrib SAC and, along with the points made by the

applicant in terms of it not addressing the problems identified by the team, that the 2006 GCOB alternative was fully assessed and addressed by the applicant and was properly discounted.

10.6.30. With respect to other route alternatives, I note that Mr Gallagher's alternative involved the demolition of an additional 3 houses, and I am not persuaded that the alternative would be justified for an increase in demolitions. In addition, some high-level alternatives were presented on Day 8 of the hearing. Mr Gabor Molinar (Road Engineer) raised questions on behalf of Mr Kilgariff. Mr Molinar was of the opinion that the road should be assessed as part of the overall GTS and not as a standalone road. I have addressed this point above. In addition, Mr Molinar was of the view that the road should be reduced to a simple dual carriageway (citing the Athlone Bypass as an example) and was of the view that other issues other than economy should be considered. He made the point that the impact of this road on humans is unprecedented because of how many people it affects. An alternative route option was proposed by Mr Molinar on behalf of Mr Kilgariff. It was noted as requiring demolitions and as going through some karst features. It is acknowledged as being a longer route and more expensive but considered less impactful on humans. Mr Kilgariff restated that he was of the opinion that the proposed route is over-engineered. The applicant addressed this option at the hearing as part of the response to the Module 2 questions (submission no. 78 dated 16th October 2020). It was stated that at-grade junctions on the section from N6/M6 to the N59 would fail due to the predicted traffic volumes on the mainline and that west of the N59 Letteragh Junction traffic is much lower and, therefore, has at-grade junctions. I am satisfied with the applicant's response having regard to my assessment in section 11.13 below.

10.6.31. Mr Stephen Dowds represented the N6 Action Group. Mr Dowds contended that the EIA process was fundamentally flawed and that a two-tier system was used for route selection. The first phase was to define 'Option Development Zones': areas that were suitable or unsuitable "from a human beings and ecological perspective". Mr Dowds submitted that it was very difficult to see how human beings informed the designations on the map (EiAR p.124) but that ecology certainly did. I have listed the specific concerns raised by Mr Dowds and have added in brackets where else in this report these are addressed. Mr Dowds urged the Board to reject the proposal due to

the unprecedented demolition of dwellings (see section 10.8, 11.6 and 11.17); the route through an urban area (see 10.3); it is neither a bypass nor a distributor road (see 10.4 and 10.5); failure to demonstrate the need for the road (see 10.4 and 11.13); failure to justify the scale and capacity of the motorway (see 10.4, 10.5 and 11.13); encouraging increased use of private cars (11.13); the skewing of the route selection process to protect ecology over human beings and the route was pre-determined (EIA Section 11); and, that it is not possible to drive a motorway through an SAC and IROPI procedure should be used (AA Section 12). Following the reading into the record of this list, Mr Dowds proceeded to present an alternative/amendment to the route.

10.6.32. An alternative route was presented in the region of the river crossing by the N6 Action Group Roads Engineer Mr Cormac Rabbitt. Mr Dowds stated that since the adjournment of the hearing due to the Covid-19 pandemic this amendment was presented to the Council. This alternative has clearly been considered in some detail. I draw the Board's attention to this submission no. 89 and 89A, which I consider has merit. The advantage of this alternative stated by the N6 Action Group is that it avoids the impact on NUIG Sports Campus; the demolition of dwellings at Aughnacurra and Ard an Locha; noise, air and visual impacts; a number of CPO's; and avails of a river crossing previously approved by the Board.

10.6.33. The applicant responded to the alternative proposed. The Project Lead Ms McCarthy explained that they had considered this alternative when first proposed by Mr Dowds and his team. It was stated that drawings were shared with Mr Dowds of their crossing point overlaid with the constraints including ecology, severance of Menlo Castle, and it was stated that it does not meet the functionality of the N6 GCRR – it restores primacy to the N59 – primacy to the wrong order. The Project Lead concluded that this was not a reasonable alternative to meet the project objectives. Mr Dowds acknowledged that the proposed alternative is not perfect but having regard to the fact that it saves so many dwellings was of the view that it merits consideration. Having regard to the other factors as detailed throughout this report, I am persuaded that while this option would address some of the traffic problems facing Galway, it would not address all of the issues that are required to be addressed as detailed in the EIAR and addressed throughout this report. In

particular, I am persuaded that the junction with the N59 would be problematic in terms of primacy.

10.6.34. In conclusion, it is considered that the process undertaken by the applicant has been a robust assessment of alternative options having regard to environmental considerations and the stated Project Objectives which are considered to be reasonable. I agree that the route chosen is the one which best meets these objectives. I also accept that the consideration of options within the selected route corridor and the strategy for key junctions was a rigorous process which had regard to environmental considerations and to the Project Objectives. I generally concur with the reasons for choosing the preferred alternatives as presented in the EIAR and as revised during the oral hearing.

10.6.35. Many of the residents of the Rosan Glas housing development submitted objections to the route of the N59 link road south. This road will run to the west of their housing estate and result in a reroute of their access onto the Ragoon Road. The residents were of the opinion that the road should have moved further west. However, I am satisfied that the location of the road acts as a transition between the residential development and the area to the west that is zoned 'Enterprise, Industrial and Related'. I am of the opinion that the alternative options were explored and am satisfied that this option is acceptable. This is addressed further in section 11.13.

Alternative Designs

10.6.36. Many observers queried the need for the road to be motorway standard and considered that less impactful alternative designs would suffice, contending that a 'full' motorway designation was not required and that the PRD is over-engineered. The assessment of the road type and cross-section is carried out in section 10.5 and 11.13. As the road forms part of the TEN-T network at a minimum the road needs to be a 'high quality' road. I have assessed the type of road and the junction strategy alternatives examined by the applicant and am satisfied that a reasonable assessment of the main alternatives has been considered and assessed.

Conclusion

10.6.37. In conclusion, I am satisfied that the applicant has addressed alternatives comprehensively and as part of consultation has considered the alternative proposals put forward by the objectors. As noted throughout this report, there are

some significant negative impacts associated with the preferred option currently before the Board with respect to the number of residential demolitions and acquisitions which the Board will have to consider but, in terms of considering alternatives I am satisfied that main alternatives have been considered and assessed. This is further expanded upon in section 11.3 below.

10.7. Socio-Economic Impacts

- 10.7.1. The socio-economic impacts are addressed across a range of chapters in the EIAR and will also be detailed in sections 11.6, 11.16 and 11.17 below. Included in the project is the demolition of two industrial and two commercial properties as well as the impacts during construction. I have addressed the demolition of dwellings in section 10.8, 11.3, 11.6 and 11.17 below.
- 10.7.2. However, in the first instance, it is noted that a number of objectors withdrew their submissions/objections at the start of, or during the course of the hearing, including Boston Scientific and the Clada Group. Furthermore, many people from the business community made submissions in support of the project. This included IBEC, IDA, Parkmore Traffic Action Group (made up from members of various businesses), the Irish Hotels Federation and other individuals. Údarás na Gaeltachta also made a submission in support of the proposal stating that it was of the opinion that the road would support jobs thereby supporting local people to stay in the Gaeltacht area. At the oral hearing some individuals spoke about the impact the traffic congestion was having on their staff as well as on their business. They urged the Board to approve the proposal.
- 10.7.3. I am satisfied, as will be demonstrated throughout this report, that the road will have a positive impact on businesses as it will help improve journey times, and more importantly journey time reliability. As detailed in section 10.3 above, Galway City is a key driver for the west of Ireland and balanced regional development. The road is recognised in policy documents as a requirement to support the objectives of the GTS, which will further enhance the city centre and businesses therein.
- 10.7.4. With respect to Tourism, I am satisfied that the road will result in a positive impact on the tourism industry. I note that submissions in support of the PRD were submitted by the Irish Hotel Federation, and Coach Tourism and Transport Council of Ireland.

In addition, the road will make access to the west easier including Connemara and the Gaeltacht areas.

- 10.7.5. Galway Racecourse contributes to the tourism offering of Galway also. As part of the project the racecourse will benefit from new state-of-the-art stables and the applicant has made commitments around works not taking place during festival periods. Concerns were raised by Brooks Timber and Building Suppliers Ltd (Brooks) who currently occupy one of the commercial buildings to be demolished and located where the new stables are to be placed. The landowner withdrew the objection to the CPO but Brooks as the tenant did not. At the hearing Brooks argued that the lands are not required for the purposes of the road but for the development of stables and that CPO powers do not provide for development for third parties. The applicant contended that the building Brooks occupy will be significantly impacted due to the construction works of the Galway Racecourse tunnel and that it is those works that require the demolition of the buildings. Having regard to this fact, the opportunity arose to avail of this site after construction of the tunnel to provide replacement stables for the racecourse. This is further addressed in section 10.2, 11.17 and section 13 below.
- 10.7.6. Tesco raised concerns about severance on the Ardaun lands where they have plans to develop. The Ardaun lands have already been severed by the current N6/M6 motorway and the subject proposal is clearly detailed in the Ardaun LAP. While the severance will potentially be increased, this option has already been subject to SEA process and has been adopted by the Councillors as part of the LAP process.
- 10.7.7. Dunnes Stores in Briarhill Shopping Centre made a written submission requesting details of access to the centre. The design of the development at this location is identified in Figures 5.1.11.
- 10.7.8. Dangan House Nurseries made a written submission expressing concern with the impact of the road on Dangan and the tranquillity and amenities the riverside offers. They are located near the NUIG sportsgrounds and have a thriving restaurant and garden centre and consider the house and grounds an institution. They expressed concerns with noise and the fundamental issue of a road. Noise will be addressed in section 11.12 below and the decision to pursue a road as the solution is addressed above and in 11.3 below.

10.7.9. A number of objectors raised concerns about the impact of the road to obtain planning permission for development or second dwellings for their children in the future. I concur with the applicant's response that the future development potential of any site is a matter for zoning under the Development Plan and an application to the planning authority for planning permission. The applicant addressed individual issues raised in relation to this in section 4.21.3 of the Projects Leads Brief (submission no.3).

10.7.10. Value for money was raised as an issue by some objectors including Mr Brendan Mulligan. I am of the opinion that value for money is not a matter for the Board. However, I also note that the project is clearly highlighted as being included in the National Development Plan.

10.7.11. Access to businesses was raised as an issue by Connolly Motors. The applicant has put forward solutions to minimise impacts during construction which I am satisfied will reduce impacts.

Conclusion

10.7.12. In conclusion, I am satisfied that the road will result in positive impacts on the socio-economics of the area. The majority of the business community who made a submission support the road. The road is seen as being vital to support Galway city as an economic driver for the western region and to continue to attract inward investment and support balanced regional development.

10.8. Residential and Community Amenities

10.8.1. Section 13 of this Report addresses the CPO and specific individual issues raised, including the loss of dwellings, hence I intend to address the potential impacts on residential and community amenities in a more general way in this section. However, I have had full regard to the individual issues raised as will be seen below and will address such individual issues as appropriate. I have split this section into considering impacts on residences followed by impacts on the overall community.

Residential Amenities

10.8.2. With respect to **residential amenities**, observers raised many issues relating to potential impacts on their amenities. This section will consider concerns such as the

potential overbearing impact due to the embankments and noise barriers, loss of privacy, noise, street lighting, and location of infiltration ponds. In addition, I will address the loss of 54 residential dwellings of which 44 will be demolished and another 10 will be acquired. This topic is also assessed in Section 11.6 and 11.17 of this report.

- 10.8.3. As will also be addressed in many sections, objectors and observers were of the opinion that ecology was prioritised over human beings. I am satisfied that this is not the case and the development of the road has assessed the impacts as required by European and Irish legislation which address both topics. Furthermore, at the hearing the applicant explained how the impact on human beings was considered and addressed.

Loss of dwellings

- 10.8.4. I have listed exactly where all the dwellings that are being demolished are in detail in section 11.6. However, having regard to the number of dwellings being subject to CPO, the consideration of the impact on residential amenities as a result is addressed herein. This aspect of the project is one of the most significant negative impacts of the project. At the oral hearing many of the individual property owners who will lose their homes spoke at length about the impact this project has had on their lives to date and into the future¹². Many objectors very clearly articulated how they have been 'living in limbo' since the preferred emerging route was published and how this has impacted on their health and wellbeing and will continue to do so well after a decision on the project is made by the Board. 28 homeowners made a submission in relation to the acquisition and demolition of their homes. 27 of them object to being forced to leave their homes and state that their homes are irreplaceable and unique in their setting. I note that at the hearing one objector made the point that just because 28 of the 54 homeowners made a submission, it cannot be assumed that the remaining homeowners do not object. I fully concur with this point. There may be many reasons why the other homeowners did not make a submission. At the hearing one objector who took the opportunity to speak, detailed how she and her husband will not be able to afford a new home which provides them

¹² Having regard to the sensitivity of this topic I have not named the individuals who spoke on this topic throughout this report, but should the Board wish to hear the detail it is available on the recording of the hearing.

with the same garden space that they enjoy currently in such close proximity to the city centre and within walking distance to their place of work. The same objector stated that, at her and her husband's age, they will not qualify for a mortgage that they would need to be able to buy a house in any way comparable to their current home.

- 10.8.5. It was raised many times by many objectors that the 2006 GCOB would have resulted in the demolition of only 8 houses. It was further stated that the 2006 GCOB Inspector noted that the demolition of 8 houses was the 'limit of acceptability' for such a project. Another objector queried how many people live in the dwellings noting that while 54 houses would be demolished, 123 people would be affected directly. Another objector made the point that those people losing houses should have been dealt with as one group. Time and again the point was made that the people losing their homes were not given any additional consultation time over and above any other landowners.
- 10.8.6. Many objectors losing their homes stated that the Council should provide alternative homes or parcels of land. Concerns were raised that those within the City boundary, but in houses on relatively large plots, would be at a disadvantage and unable to get planning permission within the County area, where it was considered any possibility of self-builds would be.
- 10.8.7. The applicant in response to the submissions, and as noted in the EIAR, stated that, from the outset of the project, every effort was made to avoid property demolitions. It was explained that it was not possible to avoid demolitions given the constraints and the need for proximity between the proposed road development and the urban environment. The applicant stated that the unavoidable acquisition of dwellings must be considered and balanced with the overall benefits that the road presents for the future of Galway. To mitigate the impact the applicant commits to serving Notice to Treat on dwellings to be acquired within six months of confirmation of the scheme approval and homeowners can engage early with the Council to seek to agree on a compensation amount in advance of any Notice to Treat being served. The applicant also stated that through the services of a property advisory company they have entered into negotiations with the homeowners with a view to agreeing a compensation amount and stated that 51 of the 54 homeowners have engaged with the process.

- 10.8.8. I am of the view that the loss of homes is the most significant negative impact of this project. To compound matters, some areas are losing a substantial proportion of their community, such as in Castlegar and Aughnacurra, and the remaining homeowners will experience a sense of loss and severance with submissions expressing the concerns with being 'left behind'. For the Board's information the *clusters* of homes to be demolished are as follows: 7 homes are to be acquired north of Bearna where the road crosses the Na Forai Maola Road and the Troiscaigh Road; 9 homes are to be acquired at the N59 Moycullen Road (Ard an Locha and Aughnacurra); 14 homes at the N84 Headford Road; 6 at School Road; and, 3 at the N83 Tuam Road.
- 10.8.9. With respect to consultations, particularly for those homeowners losing their home, based on submissions made in writing and at the hearing, the homeowners experienced frustration and did not believe that they had been treated fairly. Of course, the applicant is constrained by law in terms of the CPO process. However, the Council have stated that they will serve the Notice to Treat within six months should the Board approve the project. This will expedite the process and avoid undue delay which was a concern of some objectors.
- 10.8.10. However as made very clear by affected parties who spoke at the oral hearing, this in no way mitigates their losses. In my opinion the demolition/acquisition of dwellings is the most significant negative impact arising from the construction of this road and is a key element in the decision to approve or refuse this proposal.
- 10.8.11. I am of the view that the Board must be satisfied that the 'need' for this road and the 'greater good' this road will serve outweighs the impact on the immediately affected residents and the communities. For the residents that will unwillingly lose their homes and their communities, no amount of compensation or mitigation will suffice. However, I am also mindful of the fact that this road is grounded in policy at all levels of the planning hierarchy and is considered necessary to enable Galway function and continue to grow as a driver of the western region. As stated above, I am satisfied that the need for the road has been established; sufficient examination of alternatives has been carried out; and the number of dwellings to be demolished, albeit high, has been minimised.

Overbearing Impact

- 10.8.12. A number of observers raised concerns about the overbearing nature of the road, in particular the addition of embankments and noise barriers (including Maura O'Connell, Audrey Dineen, residents of Aughnacurra). In general, these residents are those who live in close proximity to the road but are not part of the CPO process. This is particularly the case where residents live near the road that is on fill and embankments, such as the Ard an Locha and Aughnacurra housing developments.
- 10.8.13. Chapter 12 of the EIAR addresses the visual impact from individual residences. This information can assist in understanding the overbearing impact that may be perceived by individuals. Photomontages from key locations in Appendix A12.3 are supplied to assist the Board. In particular, I draw the Board's attention to the images relating to Aughnacurra as a representative image. I also draw the Board's attention to Figures 12.1.01 to 12.1.15 of the EIAR. While these figures are in respect of visual impact they will assist in understanding where a sense of overbearance will be experienced. In particular, I draw the Board's attention to Figure 12.1.06 and 12.1.08. Landscape and Visual Impact is also considered in detail in section 11.14 of this report.
- 10.8.14. At the oral hearing the Project Lead addressed the submissions made regarding the level of the road in relation to the surrounding lands in section 4.23 of her brief. Each submission is addressed and the reason for the level of the road is explained. Where photomontages have been prepared these are indicated.
- 10.8.15. Having regard to the photomontages and the drawings, it is clear that there will be a short-term impact in some areas and a sense of the road being overbearing on remaining adjacent properties not subject to CPO. This is particularly the case in Aughnacurra and Ard an Locha housing developments. However, as the landscaping matures this impact will lessen but, nonetheless, will remain as a negative impact. The impact on these two estates as well as other dwellings is addressed in detail in section 11.14 below.

Loss of privacy

- 10.8.16. Loss of privacy was raised as an issue. Parts of the route cross over very rural and sparsely populated areas of the county. The project will introduce a new development and there may be a perception of being overlooked by passing traffic,

where there was no traffic before. This was raised by many objectors, in particular, over the west side of the proposed road north of Bearna.

10.8.17. As stated at the hearing by the applicant landscaping along the road boundary has been designed to establish a relatively low-growing but dense planting that will provide for effective screening of the road which will also assist in ameliorating any concerns of overlooking from vehicles travelling along the road. As further stated by the applicant in proposing landscape measures, due to the exposed nature of the landscape in certain areas, overall growth of the planting will be restricted which will help to maintain existing open views from properties whilst screening the road.

10.8.18. At the oral hearing, the applicant provided a detailed response to the individual objections that raised the issue of landscaping which assists in understanding if there could be an issue with privacy and overlooking. This is set out in section 4.2.21 of the submission of Mr Thomas Burns at the hearing (submission 26). While this primarily relates to landscaping it provides details of specifics for individuals to assist in understanding of potential privacy impacts.

10.8.19. Overall visual impact is further assessed in section 11.14 of this report. I am satisfied that there is not a seriously negative impact on privacy.

New and diverted access roads

10.8.20. As a result of the proposed road, certain other roads will be diverted permanently (e.g. Ann Gibbons Road). Other roads will be rerouted e.g. Na Forai Maola road. Other areas will be opened up to traffic to enable access to and from the mainline road – some of these roads previously being very lightly trafficked. Other areas will experience a potential increase in traffic due to the requirement to provide access to isolated and bisected parcels of land. These changes are detailed in Figures 7.101 to 7.124. This will result in changes including for the residents of Rosan Glas and The Heath. These areas are dealt with in section 11.13 and 13 below also. However, in terms of impacts on residential amenities these two areas are addressed further.

10.8.21. The Heath is a small residential development located off the Circular Road which is in turn located off the N59 Moycullen Road. The applicant intends to provide an agricultural access from this residential development into a parcel of land that will be isolated as a result of the proposed road (see Figure 7.106 – AR07/10). Almost every resident in this development objected to the plan to provide an alternative

agricultural access via their housing estate to what they consider is a small, isolated parcel of land. It was queried why the Council were simply not taking this remaining parcel of land as it was too small to be of use. The objectors contend that the internal estate road is in no way suitable for agricultural traffic, that it was designed only for light traffic loading for a small number of dwellings and that safety issues would arise from its use by agricultural machinery and livestock. This will be dealt with further in the CPO below, but as was clarified at the hearing, this road already serves agricultural zoned lands. The applicant contends that the road has the capacity to serve this additional agricultural zoned land. Having regard to the fact that agricultural lands can already be accessed through The Heath, I consider that the very limited extent of additional agricultural lands that will be accessed via the estate road (i.e. 1.14 ha) is such that any additional agricultural traffic is likely to be negligible. A number of the objectors in The Heath also expressed concern regarding the use of the estate road by construction traffic. The applicant confirmed at the oral hearing that there will be no access via this road to the mainline construction site and that the only construction traffic will be the traffic required to construct the Access Road AR 07/10 (stated to be c. 250 truck movements over a 4-week period). Given the short duration of the works, I do not consider that any significant issues arise from this limited level of construction traffic. This is further detailed in section 13 below.

10.8.22. A substantial number of residents of the Rósan Glas housing estate objected to the proposal to route the N59 Link Road South via their housing estate and to funnel their access onto the Link Road at one location midway along Bóthar Diarmuida. The applicant clarified that the proposed alignment was selected to eliminate conflict between direct accesses from existing homes and traffic accessing the proposed road development in the three roads in this area, namely Bóthar Diarmuida, Bóthar Stiofáin and Gort na Bró road. The proposed Link Road would travel adjacent but separate from Bóthar Diarmuida allowing it to function as an estate road. The access to the N59 will be moved further north and will still serve the needs of the estate. Access at all times during construction will be maintained as will pedestrian access. In addition, a 1.2m high boundary wall between Bóthar Diarmuida and the N59 Link Road South will be erected to maintain safety, amenity and sense of privacy. I am

satisfied that there is no significant inconvenience or negative impact to residents of Rósan Glas.

10.8.23. Works are included on the Gort na Bró roundabout as part of the N59 Link Road South. The Council have committed to provide a cycle path from the newly installed pedestrian crossing at the entrance to Gael Scoil Mhic Amhlaigh north to Ragoon Road. In addition at the hearing the applicant stated that a detailed topographic survey had been undertaken on the completed construction of the boundary of Gael Scoil Mhic Amhlaigh and Gort na Bró road. An amendment to the road has been made to complete the tie-in with no works proposed on the school's landscaped area and plot 473a.201 was removed from the schedule.

Lighting/Light Pollution

10.8.24. Chapter 5 of the EIAR describes the street lighting incorporated into the design. It is stated that limiting light trespass is a key priority and that multiple measures have been taken to ensure that light is applied only where it is required. It is proposed to provide public lighting at roundabouts as well as at junctions with the Cappagh Road, Ballymoneen Road, N59 Letteragh, N84 Headford Road, N83 Tuam Road and the Coolagh Junction, and associated slip roads. There will also be lighting at the entrances to the tunnels. The City North Business Park Link, Parkmore Link and N59 Link Road North and South will also be lit as they are urban roads.

10.8.25. Numerous observers raised concerns about lighting, both from street lighting and from the introduction of car headlights travelling along the new road(s) including Mr Kevin Gill. One objector made the point that their dwelling has very large windows with no curtains and they will be subject to lighting from cars. I am of the view that lighting from cars are a fact of modern life and I am satisfied that the traffic will be relatively light at this section of the road.

10.8.26. At the oral hearing concerns were raised about the introduction of 'new' lighting, including on behalf of Mr James Treacy. As stated in the Landscape Chapter of the EIAR (Chapter 12) the introduction of roadside lighting will emphasise the degree of change in the rural landscape brought about by the proposal and associated traffic use. This will be a new feature in the environment, particularly in the rural parts of the county where there is limited light pollution currently. However, while I accept

that this will be a new feature, I do not consider it to be a significant or unusual impact.

10.8.27. The applicant presented, in Section 4.16 of the Project Lead's Statement, individual responses to the lighting concerns raised in the submissions received. The distance from the nearest lighting column is provided for each property as well as the isolines which indicate the level of light spill from the lanterns. In the majority of cases, the light level at the edge of dwellings is the equivalent of moonlight from a full moon.

10.8.28. I am satisfied that lighting and light spill is minimised and I do not consider it to be a significant negative impact on residential amenities.

Infiltration Ponds

10.8.29. Concerns were raised about the location of the infiltration ponds for reasons of possible anti-social behaviour, attraction of vermin and safety concerns where they are located in more urban areas.

10.8.30. I am satisfied that these ponds are a feature of road development around the country and are not a new or unusual feature of roads. Secure fencing is proposed as well as appropriate screen planting. Therefore, I do not accept that there will be a significantly serious adverse effect on amenities. A condition requiring that the fences are paladin rather than palisade type fences is recommended should the Board consider approving the proposal. This is dealt with in detail in section 11.14 below.

Septic tanks

10.8.31. Concerns were raised by the residents of Aughnacurra housing development about the potential damage to individual septic tanks with respect to road drainage runoff. The applicant confirmed at the hearing that the road drainage in the vicinity of the estate will be to an existing drainage channel which will be attenuated to greenfield runoff rates. Based on the information provided I am satisfied that the proposed road drainage will not damage the existing drainage or cause flooding.

10.8.32. Another issue raised was in relation to the possibility of providing access to foul sewer connections for private dwellings in the vicinity of the project that are currently operating on a septic tank. The applicant clarified that if an existing connection to

either a public water supply or a foul system is affected by the proposed works it will be reconnected but any 'new' connections were not included as part of the project.

Oversized vehicles

10.8.33. Concerns were raised about the rerouting of oversized vehicles away from tunnels and via residential areas. This was raised particularly in relation to the possible rerouting at Lackagh Quarry. Following Inspectors' queries at the hearing the applicant provided information on the numbers of oversized vehicles that have to be rerouted at tunnels such as the Port Tunnel and Limerick Tunnel. I am satisfied that the tunnel has been designed to the latest standards and that the numbers of vehicles that would have to be rerouted would be low and not of sufficient quantity to cause a significant negative impact.

Property prices

10.8.34. Many objectors raised concerns about the impact of the proposed road on the value of their properties. The applicant stated at the hearing that road schemes can have a positive impact on property prices where the scheme leads to improved accessibility and offered the M17/M18 by way of example. The opening up of the motorway linking Tuam, Corofin and Gort has had a positive impact on property prices in the catchment area. It is considered that improved accessibility and reliable journey times assist in that regard. The applicant further states that the road is a key component of the GTS and will enable the maximum benefits of the GTS to be realised. It is, therefore, expected that property prices will be increased. It is acknowledged that a road scheme can have a negative impact on property prices where it results in the loss of amenity, but it is stated that the mitigation measures proposed will result in no significant impact on the value of most properties.

10.8.35. I would agree with the applicant that property prices may be impacted during the construction phase, but that they are likely to recover during the operational phase. I am satisfied, therefore, that there will not be a significantly negative impact on property prices.

Other housing

10.8.36. Some objectors queried if the road would impact on plans for social housing (Mr Kevin Gill). The applicant confirmed that the PRD would not impact on any housing

plans be it social or recently granted permissions outside of those identified in the EIAR.

Community Amenities

10.8.37. With respect to **community amenities**, observers were particularly concerned with the impact on access to the riverside as well as National University of Ireland Galway (NUIG) Sports Campus facilities. In addition, concerns were raised about the impact on school children and how they get to school, the impact on Bushy Park church, graveyards, Castlegar Nursing Home, Galway Racecourse and severance of communities.

NUIG Sports Campus

10.8.38. The impact on NUIG Sports Campus is described within the EIAR and was the subject of much discussion at the oral hearing. The Sports Campus will be impacted during both construction and operation phases. The Sports Campus will lose some sports fields as well as part of the sports pavilion. I draw the Board's attention to Figure 5.1.07 as well as Figure 7.001 submitted. As can be seen the clubhouse will be reduced in size and some playing fields will be lost. As part of mitigation it was initially proposed to construct an all-weather full size GAA pitch and a training pitch at the location of the existing GAA pitches. However, at the start of the hearing, the University withdrew their objection and it was clarified that the proposed mitigation measures included in the application originally are not required because the University was in the process of seeking permission from the Council for revisions to the layout of their facilities based on their own plans. The sports pavilion will be modified and will continue to function as a sports facility post construction.

10.8.39. Chapter 7 of the EIAR details the construction activities around the campus. It states that at the beginning of the construction phase the land to be acquired as per the proposed development boundary will be fenced and access across it restricted. In addition, temporary construction fencing or hoarding may be required during construction. Table 7.1 of the EIAR states that the construction of the River Corrib bridge will take 18 – 24 months. At the oral hearing it was clarified that the pavilion will be out of use for the duration of the construction of the bridge. Following this the pavilion will be amended to accommodate the new viaduct. However, at the hearing the applicant committed to ensuring that welfare facilities would be made available at

all times throughout the duration of construction and the Schedule of Environmental Commitments was updated to reflect this.

10.8.40. Section 15.5.2.4 of the EIAR also refers to the campus and it is stated that the sporting facilities will be severely affected during the course of the construction works as the central part of the sporting campus will become a construction site with restricted access for a period of approximately 18 months. At the hearing the applicant restated and acknowledged there would be a significant amenity impact during construction. Access to the bank of the River Corrib, which is used as a local amenity and the river itself will also be impacted at times during construction but it was clarified that access to the river will not be prohibited. The existing sports pitches adjacent to the River Corrib will be unavailable for use. As noted above a planning permission for new pitches has recently been approved for NUIG separate to this application. During operation there will be no severance of the facility and the principal effect will be the presence of traffic on the bridge overhead. It is noted that noise screening is provided by way of mitigation.

10.8.41. While the University withdrew their objection to the CPO, a number of other sporting bodies continued to object to the proposal. Other sporting bodies expressed concern with the impact on the sporting grounds which are available to the public and not just the students. At the oral hearing detailed submissions were made by the Galway Athletics Board and the Galway City Harriers. It was stated that they had a petition against the road that was signed by over 3,000 people. They questioned the zoning of the site on the basis that it is not zoned for a road; they consider that strategic objectives in the City Development Plan would be contravened by the road; they consider it is contrary to the Healthy Galway City Strategy 2019-2021; and, consider that there would be a negative amenity impact on the area including Menlo Castle, as well as the sporting impact. Other concerns raised are addressed under the relevant headings of this report. Other individuals including Mr John J. Martin raised concerns and believed that students needs were not being represented.

10.8.42. The zoning issue and relevant strategic objectives have been addressed in section 10.3 above. The Healthy Ireland Strategy referred to by the observers is noted and impacts on health via the vectors of noise and air are addressed under section 11.6 of this report. The benefits of sporting activity for the community were detailed by many individuals at the hearing on behalf of the various sporting organisations. The

importance of the NUIG sports grounds to provide those sporting opportunities at all levels and for all ages was described in detail. Concerns were raised about the impact of air and noise pollution at operation stage of the road due to its proximity to the facilities.

10.8.43. Noise and air are addressed in section 11.11 and 11.12 below. There is no doubt that there will be a change to the current environment of the sports campus. However as detailed below this is an unavoidable impact. The applicant amended the Schedule of Environmental Commitments to ensure that convenience welfare facilities will be available at all times (during works to the Pavilion) and that while there will be restrictions during certain construction activities these will be minimised. Notwithstanding the mitigation measures proposed I am of the view that while these will reduce the impact there will continue to be a moderate negative impact.

Riverside walk

10.8.44. A number of observers expressed concern with the lack of access to the river during the construction phase. The amenity of the river so close to the city and the attractive pedestrian facility therein was noted by many.

10.8.45. At the oral hearing it was clarified that access will be maintained across the construction site via a sequence of pathways which will enable the public to continue to use this area for recreation and training.

10.8.46. There is no doubt that the existence of the bridge will result in higher noise levels along the river at Dangan and on the eastern bank near Menlo Castle, which attracts a substantial number of tourists and residents alike. However, as noted in the relevant sections of this report, the noise levels will be mitigated and will not result in a significant adverse impact on users of the area.

10.8.47. The impact of the bridge across the river on the visual amenities is also discussed in Section 11.14 below. At the hearing the applicant was asked if consideration was given to the architectural treatment of the bridge. What is proposed and presented in the photomontages is a very utilitarian and 'engineering' type structure. The applicant confirmed that consideration had been given to the architectural treatment of the bridge but it was decided to keep the design simple so as not to detract from the river or the amenities.

Green Network Policies

- 10.8.48. As noted in section 5.10 above, Chapter 4 of the Galway City Development Plan addresses Natural Heritage, Recreation and Amenity and lists policies therein. Many observers were of the opinion that the PRD was contrary to the policies relating to amenities and the green network.
- 10.8.49. The loss of amenity area at NUIG and access to the riverside is of significant concern to objectors. However, while there may be a loss of pitches, this will be mitigated with the new pitch development recently granted permission by the Board. In addition, at the hearing the applicant committed to maintaining access at all times to the riverside walk during construction.
- 10.8.50. As noted throughout, the PRD has been an integral part of the City Development Plan and all zonings, policies and objectives of the Plan have taken it into account.
- 10.8.51. Section 5.11 above refers to the heritage and amenity policies stated in the County Development Plan. I have had regard to policies outlined therein including general heritage policies and natural heritage policies. I am satisfied that the applicant has taken account of the policies throughout the EIAR and that they do not conflict with policies relating to the road.

Galway City Cycling

- 10.8.52. The Galway City Cycling Campaign raised concerns with cycling around the city. There was also a submission made about the Galway Cycle Bus which is an innovative cycling programme whereby children cycle to school as a group and are supported by parents.
- 10.8.53. There was much discussion about cycling lanes and bus lanes particularly around Gort na Bro and along the N59. While a number of the concerns raised will be addressed by way of the GTS, the applicant confirmed that a segregated cycle lane will be provide at the roundabout at Gort na Bro and drawings were submitted and the Schedule of Environmental Commitments was updated to confirm that.
- 10.8.54. Other concerns were raised about crossing roads as a cyclist or taking young children to sporting events on bicycles. There were concerns about rural roads used by cyclists currently being used in the future to access the PRD.
- 10.8.55. In response Mr Finn from the Council, on behalf of the applicant, referred to works ongoing as part of the GTS to improve safety for cyclists and pedestrians. He

referred to the current works removing the roundabouts and stated that this work was being done solely to provide more suitable and sustainable walking and cycling through the junctions.

10.8.56. I am of the opinion that, while a lot of concerns were raised about facilities for cyclists at the hearing, these concerns will be addressed by the subject road by way of moving traffic out of the city. The GTS includes a number of projects relating to improving facilities for cyclists. The GTS identifies this road as being a requisite to free-up space in the city to enable a number of these projects to proceed.

Galway Racecourse and environs

10.8.57. The Galway Racecourse plays an important role in community events as well as being a key tourism attraction, particularly the Galway Summer Race Festival. The specific issues that the racecourse has with the CPO will be addressed below. I intend to address the proposed changes to the racecourse and the potential impact on the wider community amenities herein.

10.8.58. It is proposed to tunnel under the racecourse and new stables will be provided as part of the project. During construction temporary stables are proposed. Appendix A7.4 details how the tunnel will be constructed.

10.8.59. It is stated that there are four race meetings per year of which the most prolific is the Galway Summer Race Festival. The applicant states that no construction activity will take place during any of the race meetings and to accommodate preparations for the main Summer Race Festival, lands will be fully available to the Galway Race Committee (GRC) for the months of June and July during the construction phase. The submission from the GRC states that the races attract visitors from all over the world and in 2017 over 150,000 persons attended the races. It is further submitted that the Summer Race Festival contributes enormously to the local economy and that spending within the confines of the racecourse is only a fraction of the total spend generated within the local economy.

10.8.60. The GRC consider that it has not been provided with sufficient detail that the aspirations set out in the EIAR will be delivered, to avoid disruption to the operation and functioning of all operations conducted at the Racecourse. The GRC in their submission outline a long number of items of concern where they require confirmation from the applicant that the activity will be carried out as per the

commitments in the EIAR, and/or where they consider further information and detail is required.

10.8.61. Appendix A15.1 in Appendix 4L includes a Stableyard Project Design Report prepared by Coady Architects on behalf of the applicant. The report describes the provision of a Temporary Stableyard for the construction duration and describes the provision of a new permanent stableyard and horsebox parking. In summary the new schedule of accommodation includes 158 no. stables, covered machinery area, Maintenance shed, Turf club offices, Racecourse vet, grooms area and bedding store.

10.8.62. In terms of the impact on community amenities, I accept that the racecourse provides an important amenity for residents as well as tourists. I accept that there will be some inconvenience during construction but the commitments made in the EIAR, and again at the oral hearing, will limit and minimise those impacts. The new facilities proposed include new state-of-the-art stables which are detailed on drawings submitted as part of the application and as detailed above. In addition, there is a commitment that all temporary access provisions or diversions are to be constructed to the same standard of existing access roads. Water quality from new wells will be monitored and assessed for 12 months after the construction period.

10.8.63. In conclusion, I do not accept that there will be a seriously adverse impact on the amenities enjoyed by the local community, or the tourism offer of the Racecourse. Following completion of the road, the racecourse will enjoy new stables as well as a permanent access from the new Parkmore Link Road. I am satisfied that the racecourse mitigation measures will ensure there will not be serious adverse effects during construction. Overall, I am of the opinion that the racecourse will benefit positively as a result of this proposal.

Severance of Communities

10.8.64. The requirement to demolish individual dwellings is addressed as part of the CPO in Section 13 below and addressed above. I intend to address the broader impact of the severance of communities due to the introduction of the road in this section. A substantial number of observers expressed concern with the route of the road which in their opinion splits villages and communities in two by introducing a physical barrier.

- 10.8.65. Chapter 15 of the EIAR addresses Material Assets – Non-Agriculture and is further examined in Section 11.17 below. There are over 300 non-agricultural properties directly impacted by the proposal, i.e. full acquisition or part acquisition of the property. As noted elsewhere 44 residential dwellings will be demolished and another 10 will be acquired.
- 10.8.66. Chapter 18 of the EIAR considers Population and Human Health and addresses community severance. It is stated that severance is a typical impact of a road and its effect is to potentially discourage community interaction and occurs where access to community facilities or between neighbourhoods is impeded. In addition to the physical severance that is discussed in the EIAR, there can also be an impact on communities whereby there is a sudden reduction in the numbers of people in the community due to the demolition of dwellings. Castlegar is one such area where there is a significant number of demolitions proposed. The EIAR also acknowledges that the most significant construction related severance will occur in Castlegar.
- 10.8.67. The EIAR considers that the transfer of through and other traffic from more central areas of the city will allow space for improved and new crossing facilities for both pedestrians and cyclists in line with the GTS. Other crossing facilities are proposed which are considered to reduce any residual impact on severance.
- 10.8.68. The communities and small hamlets around the Na Faorí Maola Road (L5386), the Troiscaigh Road (L5387), as well as around the Ann Gibbons Road (L13215) and the Clybaun Road will, in particular, be severed from each other. For these residents, whereby they previously travelled up or down these roads with relative ease, they will now need to take detours to meet neighbours etc. This was raised by many at the hearing including by Mr John O'Carroll. On the eastern side of the river, there will be similar issues for the communities around the junctions with the N83 road and the N84 road.
- 10.8.69. There are also clusters of dwellings being demolished in areas such as the Aughnacurra estate which will impact on the cohesion of communities (See Figure 15.3.06). On the eastern side of the river, communities around the N84 junction, the School Road/Castlegar village, and the N83 junction will lose a significant number of their community due to the number of dwellings being demolished in these areas (see Figures 15.3.08 and 15.3.09).

10.8.70. All new road projects by their very nature will cause division of land and in this case communities. As part of the overall project the applicant is providing numerous access roads and connections to private land to minimise the impact on landholdings. In addition, where roads are being severed, such as Troscaigh Road alternative access is being provided. I acknowledge that there will be an impact on the amenities of communities and, in particular, the smaller communities as a result of the road severance. Other communities will benefit by virtue of the fact that heavy traffic and congestion will be taken out of their communities as a result of the project. This will be of benefit to some communities but there will be an impact on the smaller communities of Castlegar, for example, which is losing a substantial number of dwellings as well as being divided. Similar to the loss of dwellings, the Board need to be satisfied that the positive impact outweighs the significant negative impact that will undoubtedly be felt by individual homeowners and communities left behind. As noted above with respect to the loss of dwellings, I am mindful of the fact that this road is grounded in policy at all levels of the planning hierarchy and is considered necessary to enable Galway function and continue to grow as a driver of the western region. I am satisfied that the need for the road has been established; sufficient examination of alternatives has been carried out; and the number of dwellings to be demolished has been minimised.

10.8.71. The Ardaun corridor was raised by objectors. This is the area identified for future development and expansion to the east of the city. Concerns were raised that the road would result in this area developing separately to the rest of the city. I note that the existing N6 already bisects this area and that the route of the proposed road is clearly identified in all Development Plans for the area. As the road is identified, any future designs will take account of its existence and will address any real or perceived issues of severance.

Community Facilities

10.8.72. The Castlegar Nursing Home made a substantial submission at the oral hearing and contended that they would have to close as a result of the project. Arguments were put forward that they had not been assessed as a sensitive receptor for EIAR purposes and that the residents would be seriously affected by noise, dust and visually both during construction and operation. I have addressed the issue regarding the fact that they were assessed for EIAR purposes in section 10.2 above.

10.8.73. I fully accept that there will be potential serious impacts on the Nursing Home during construction. However, I am satisfied that mitigation measures as outlined and detailed in the EIAR and assessed below in section 11.11 and 11.12 will reduce the impacts to an acceptable level. I have also addressed the home during the operation of the road and I have concluded that there will not be a seriously negative impact.

Schools, Graveyards and Churches

10.8.74. Concerns were raised about children accessing schools and more vulnerable people accessing facilities such as churches and community services. This is addressed further in section 11.6. However, I am of the opinion that once the road is constructed there will be a positive impact on school children and more vulnerable persons. The road is designed to remove traffic from the city centre and out of villages such as Bearna and Castlegar thereby leading to safer environments for local people. Cycling lanes are being provided, where legal to do so, improving facilities for pedestrians and cyclists. The road is a key component of the GTS and will enable the Council to pursue such projects.

10.8.75. Concerns were raised about access to Lisheen Graveyard. The design has provided for a crossing point to allow for access but it is noted that there will be a significant negative residual impact on amenity use of the path compared with the existing environment due to the extensive new road network.

Safety and Security

10.8.76. Concerns were raised about the road providing easy access to more rural and isolated dwellings. In addition, concerns were raised about trespassing on newly formed private access roads serving severed lands. I am satisfied that, while new roads are being created or others diverted, this will not result in changes to the opportunities for anti-social behaviour or trespassing over and above the current situation. While the Ann Gibbons road is being severed this road leads into agricultural lands and is overlooked by dwellings as it currently is. There are no dwellings north of where the road is being severed currently, therefore, there is no change or reduction in passive surveillance.

Conclusion on Residential and Community Amenities

10.8.77. In conclusion, I accept that there will be serious impacts on residential and community amenities including loss of dwellings and severance of communities

which cannot be avoided or mitigated. As noted above, the Board needs to be fully satisfied that the benefits of the road outweigh the serious negative impacts on individuals and communities left behind. However, I am also mindful of the fact that this road is grounded in policy at all levels of the planning hierarchy and is considered necessary to enable Galway function and continue to grow as a driver of the western region. I am satisfied that the need for the road has been established; sufficient examination of alternatives has been carried out; and the number of dwellings to be demolished has been minimised.

10.8.78. There will be impacts to other residences that currently enjoy a lightly trafficked environment. Noise and light will become more prevalent in rural areas as access roads are rerouted particularly on the western side of the proposal. Some dwellings that currently enjoy long distance views will have those views interrupted or experience a sense of overbearance where the road is on an embankment. Some dwellings will experience a loss of privacy – particularly dwellings in more rural and remote areas.

10.8.79. However, with every linear project there will be impacts that cannot be mitigated but equally the positive advantages for the amenities of communities will also be significant. These positive impacts include reduced traffic in the city centre and in villages as traffic makes use of the link road and avoids rat-runs. Some rural dwellings will see benefits in a reduction of traffic on more rural and unsuitable roads. The road design includes cycle lanes and pathways, where legal to do so, thereby improving facilities for non-vehicular users and more vulnerable persons. There are also the main significant advantages of improving journey times and journey reliability both for private and public transport. These advantages will be experienced by individual residents and communities alike.

10.9. Services and Utilities

10.9.1. The infrastructure of a number of service providers will be impacted by the PRD. No permanent disruptions to services provided by these bodies are expected and all temporary disruptions are expected to be kept to a minimum. In order to avoid trenching in the new road for services after completion, provision will be made at construction stage for future crossing by services where agreed with the local authority.

- 10.9.2. A number of existing 110kV electricity transmission circuits (which are owned by ESB Networks and operated by EirGrid) traverse the corridor of the PRD and are widespread throughout the study area. These comprise both overhead power lines as well as an underground cable circuit. In addition, a significant number of existing low voltage (38kV) electricity distribution overhead circuits (which are also owned and operated by ESB Networks) are located within or adjacent to the corridor of the PRD. A number of these existing electricity circuits cross the corridor of the PRD and, consequently, require a local diversion and/or modification to facilitate the PRD. There is an existing ESB distribution substation located in Ballybrit. The PRD traverses the existing 110kV lines at four areas (townlands) and existing 38kV lines at 12 areas. The applicant states that a working group has been formed with ESB Networks, EirGrid, and ESBI.
- 10.9.3. Following consultations and over the course of the project local changes were made.
- 10.9.4. There are also dwellings within the proposed development boundary that have private wells. There are no private group water schemes within the proposed development boundary. The PRD traverses a number of watermains in both the rural and urban areas. The PRD traverses a number of foul and surface water sewers in the urban areas. There is one private sewer in Ballybrit that will also be traversed by the PRD.
- 10.9.5. The majority of properties in the rural areas within the study area utilise septic tanks. At the hearing the possibility of dwellings that are currently served by individual septic tanks being connected to the foul sewer, if works were in proximity, was raised. The applicant confirmed public water supply and foul water systems affected will be reconnected. All necessary diversions will be carried out in accordance with the local authority and Irish Water's requirements. Where private potable water supplies are impacted, a new well or alternative water supply or financial compensation for the loss of the well will be provided. However, it was clarified that any future connection to public water mains and sewers is a matter to be discussed and agreed with Irish Water and Galway City Council separately and is not part of this proposed road development.
- 10.9.6. Irish Water made a submission stating that it has no objection in principle to the proposed development subject to the provision of diversion/build over agreements,

future proofing sleeves at Ardaun to be agreed prior to construction, provision of connection agreements and employing best practice measures.

- 10.9.7. In response to the further information request Irish Water requested the Board to be cognisant of a number of items relating to their proposed new water intake for the Terryland Water Treatment Plant. This included ongoing liaison, consultation in the preparation of incident response plans, regular project updates, compliance with the Water Framework Directive, EIA Directive and other requirements which I am satisfied can be subject to conditions.
- 10.9.8. Other objectors raised concerns with potential impact of surface water pollution, adequacy of drainage details and implications for flooding of properties. This is addressed further in section 11.10 below. The applicant provided an overview of the HAWRAT analysis carried out at the hearing. The analysis confirmed that the pollution control measures proposed upstream of the storm outfall are acceptable and ensure there would not be a significant impact on any receiving watercourse. I am satisfied that the proposed drainage systems for the road will not have a significant impact. The hydrological assessment and dispersion modelling carried out by the applicant indicates that routine road drainage discharge to the River Corrib via the proposed drainage outfalls will not impact the drinking water quality at either the existing or proposed Galway City supply intake.
- 10.9.9. The PRD crosses the gas transmission and distribution lines. Works along School Road in Castlegar were discussed in detail during the hearing. In particular concerns were raised about the impact of the works on the Castlegar Nursing Home on School Road which is addressed in section 11.6 and 11.12. Works along School Road are quite extensive and involve the rerouting of a foul sewer and the main gas supply to the city as part of the Enabling Works. The diversion of the gas distribution network at Ragoon and gas transmission network at School Road is described in Chapter 7 of the EIAR. However while there will be some impacts these are temporary only and will be acutely felt for a short duration while the diversion works are ongoing adjacent to properties. They will be subject to the mitigation measures as described in the Construction Environmental Management Plan which will mitigate the impacts to an acceptable level.

10.9.10. At the oral hearing a submission was made by Vantage Towers who operate Vodafone Towers across Ireland. A mast tower will be removed on plot 226 which it was stated provides coverage across Knocknacara and surrounding areas. The applicant referred to the planning history of this structure. It is noted that retention permission was granted with a condition stating that it was for two years only (Reg. Ref. 18/173) and would be reassessed having regard to the subject road. I am satisfied that it is very clear that the retention permission for the mast was clearly identified as being for a short duration.

Conclusion

10.9.11. In conclusion, I am satisfied that there will not be a seriously negative impact on services and utilities. There will be some short-term impacts where services are being diverted but this will be carried out with appropriate mitigation measures in place.

10.10. Construction Activities

10.10.1. Construction activities are addressed in Chapter 7 of the EIAR. Figures 7.001, 7.002 and 7.101 – 7.124 identify the proposed site compounds, haul routes and construction sections. Figures 7.201 and 7.202 identify potential and proposed blasting locations, and Figures 7.301 and 7.302 identify proposed Material Deposition Areas. Appendices A.7.1 to A.7.4 contain constructability reports for the main structures proposed (i.e. the River Corrib Bridge, Menlough Viaduct, Lackagh Tunnel and Galway Racecourse Tunnel, respectively), while Appendix A.7.5 provides the Construction Environmental Management Plan. The detailed drawings of the structures submitted by the applicant in response to the request for further information are also of relevance to this section.

10.10.2. The Schedule of Environmental Commitments, which was updated at numerous stages over the course of the oral hearing, also sets out commitments in relation to construction activities.

10.10.3. The primary submission responding to the construction activity-related written submissions/objections, was given at the oral hearing on 18th February 2020 by Eileen McCarthy of ARUP on behalf of the applicant. However, as with the EIAR,

construction activities were also addressed by other members of the applicant's project team under a number of the other environmental headings.

10.10.4. I consider that the main issues in relation to construction activities are as follows:

- Environmental impacts associated with construction.
- Sources of materials and site compounds.
- Construction traffic and haul routes.
- Material Deposition Areas and Lackagh Quarry.
- Galway Racecourse Tunnel.
- Waste Management.
- Invasive species management.
- Pest Control.

Environmental Impacts Associated with Construction

10.10.5. A considerable number of parties raised issues in relation to construction phase environmental impacts, particularly with regard to stress and disturbance, noise and vibration, air emissions, dust, water pollution, impacts on services and access to houses and agricultural lands. These issues are addressed in detail in the relevant EIA sections of this report. Where CPO objectors raised issues with regard to construction impacts on their retained lands, these are addressed in Section 13 in respect of each objector's property.

10.10.6. One issue that was of concern to a number of parties was the potential for structural damage to properties as a result of blasting. This issue is addressed in the Noise and Vibration, Land and Soils and Hydrogeology Sections of the EIA section below. In summary, it is considered that the applicant has set out a clear and comprehensive protocol for blasting operations, including blast design, trial blasts and the application of suitable limit values. In particular, I note the commitment to carrying out pre-construction and post-construction condition surveys on properties in the vicinity of areas where blasting will be utilised and to carry out remedial works if necessary. Subject to compliance with the commitments made, I do not consider that structural damage to properties is likely to occur. Furthermore, I consider the use of blasting to be preferable to elongated periods of mechanical rock breaking in

the interests of minimising the duration of construction works in any one area and the associated potential impacts on the surrounding population.

Sources of Materials and Site Compounds

- 10.10.7. The design of the PRD includes substantial areas of cut and fill and the applicant's modelling has identified an overall surplus of excavation material west of the River Corrib and an overall deficit of fill material east of the River Corrib. All excavated material that meets the required standards will be reused as part of the fill sections, following testing to ensure it is suitable for its proposed end use.
- 10.10.8. If the PRD is constructed in phases, then there will be an overall surplus in Phase 1 and overall deficit in Phase 2. The surplus material from Phase 1 will be stored within the PRD boundary in a series of Material Deposition Areas (MDAs) located at various points along the alignment, and subsequently used to balance the deficit in Phase 2. The location of the MDAs is shown in Figures 7.301 and 7.302 of the EIAR (and subsequently modified). Unsuitable materials will be treated as waste and delivered to authorised waste facilities. The issue of waste management is addressed separately below.
- 10.10.9. While the construction of the PRD will generate the majority of required fill materials, significant quantities of other construction materials will be also required. The applicant has not identified specific sources of construction materials, but the EIAR notes that there are operational quarries located in close proximity to the PRD and states that there is potential to import bituminous material for paving from one of these quarries. The EIAR states that materials required from quarries will only be sourced from quarries which are listed on the register maintained by the local authority.
- 10.10.10. With regard to rock arising from excavation, which it is proposed to re-use for fill, I note that the applicant proposes to undertake rock crushing at a number of site compounds. The primary Site Compound will be located at Lackagh Quarry (Site Compound SC 11/01) and will include rock crushing and concrete batching plants. Several residents in the vicinity of Lackagh Quarry are opposed to its use as a construction compound. However, given its size, its readily accessible location relative to the various working areas to the east and west along the alignment of the PRD, and its deeply sunken nature surrounded by rock faces, which will assist in