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For Development at Bennetstown and Dunboyne
(townlands), Dunboyne North, Co. Meath
on behalf of Marina Quarter Ltd.

May 2026



McCutcheon Halley
CHARTERED PLANNING CONSULTANTS

Document Control Sheet

RECEIVED: 21/05/2026

Client	Marina Quarter Ltd.	
Project Title	Dunboyne Phase 1 Amendment	
Document Title	EIA Addendum Report	
Document Comprises	Volumes	1
	Pages (Including Cover)	45
	Appendices	2
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Office of Issue	Cork	
Document Information	Revision	A
	Status	Submitted
	Issue Date	May 2026

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1. Introduction

On behalf of the applicant, Marina Quarter Ltd., this report provides a review of the Environmental Impact Assessment Report (EIAR) completed for the Phase 1 LRD application at Dunboyne North, Co. Meath, in the context of the development proposed in the current application.

This report should be read in conjunction with the EIAR completed for the Phase 1 LRD application (MCC Ref: 23/60290) and the EIAR Addendum Report submitted with the Dunboyne Road Realignment application (MCC Ref: 25/61001).

The Phase 1 LRD comprised the construction of 267 no. residential units, a creche, a new link road between the R157 and the Old Navan Road including a bridge over the River Tolka, 2 no. signalised junctions, upgrade works and road improvements to the R157 and the M3 Parkway access road, and all associated site development works including drainage, landscaping, and boundary treatments.

The Phase 1 LRD application was submitted to Meath County Council on the 21st September 2023 and Meath County Council granted permission on the 4th June 2024. Construction has commenced on this permitted application.

The Road Realignment application comprised the realignment of the permitted link road and the provision of a pumping station and associated access road. This application was submitted on the 22nd September 2025 and included an EIAR Addendum Report outlining the impact of the proposed road realignment on the completed Phase 1 LRD EIAR. Meath County Council granted permission on the 13th November 2025.

The current application includes modifications to the permitted Phase 1 LRD application comprises the construction of 124 no. apartments in 2 no. blocks which will replace the permitted 76 no. apartments in 2 no. blocks. This results in an overall increase of 48 no. residential units.

The Phase 1 LRD EIAR included 17 no. chapters, completed by various relevant consultants. The full chapter list and the associated consultant for each is provided in the table below.

Table 1 Phase 1 LRD EIAR Chapter List

	Chapter Title	Consultant
1.	Introduction	MHP
2.	Site Location & Project Description	MHP
3.	Project Need & Alternatives Considered	JFA
4.	Population & Human Health	MHP
5.	Land, Soils & Geology	Atkins
6.	Hydrology & Hydrogeology	Atkins

7.	Air Quality	AWN
8.	Climate Change	AWN
9.	Noise & Vibration	AWN
10.	Landscape & Visual Impact	JBA
11.	Material Assets: Traffic & Transport	Atkins
12.	Material Assets: Service Infrastructure & Utilities	Atkins
13.	Biodiversity	Enviroguide (now known as DNV)
14.	Cultural Heritage & Archaeology	John Cronin
15.	Significant Interaction of Impacts	MHP
16.	Summary of Mitigation Measures & Monitoring	MHP
17.	Screening for Major Accidents	MHP

Each of the consultants listed above reviewed their completed Phase 1 EIAR chapters, along with the proposed development to determine whether the proposed development has any material impact on the conclusions or mitigation measures of the completed Phase 1 EIAR.

It is worth noting that the EIAR referenced the total number of permitted units (267 no.) through the completed chapters. With the proposed amendments, the scheme will now provide a total of 315 no. residential units. However, to avoid confusion and unnecessary edits, we have only highlighted this change in the first summary description (in Chapter 1) and in other paragraphs where the change is relevant to its content and conclusions.

2. Review of Phase 1 EIAR Chapters

2.1 Introduction

Section 1.3 and 1.4 of the introduction chapter refer to 267 no. residential units. With the proposed amendments, the total number of residential units is now 315 no., see amended text below.

There are no other material changes to the introduction chapter or the associated appendix.

Section 1.3 Proposed Development

In summary, the proposed Large Scale Residential Development will consist of the construction of ~~267~~ **315** no. residential units, a creche, a new link road between the R157 and the Old Navan Road including a bridge over the River

Tolka, 2 no. signalised junctions, upgrade works and road improvements to the R157 and the M3 Parkway access road, and all associated site development works including drainage, landscaping, and boundary treatments.

Section 1.4 Background and Purpose of the EIAR

The proposed Large-Scale Residential Development (LRD) comprises the construction of ~~267~~ **315** no. residential units, creche and ancillary/associated development on a gross site area of 14.17ha. An EIAR is therefore required as the LRD comprises urban development on a site area that exceeds the 10ha threshold for a mandatory EIAR.

2.2 Site Location and Proposed Development

The proposed development includes amendments to the permitted Blocks A, B and C located in the northern corner of the Phase 1 development to provide a total of 48 no. additional apartment units, with 124 no. residential units now proposed in Blocks A, B and C.

The additional apartment units provide an improved unit mix in both Blocks A, B, C and the overall Phase 1 development. The amendments introduce 31 no. studio apartments and increase the provision of 1 bed units. These changes have been achieved by slightly reducing the number of 2 beds units.

The proposal also includes additional car and cycle spaces to serve the additional apartment units proposed. The car parking provision has been increased from 0.5 no. car parking spaces per unit to 0.85 no. car parking spaces. Cycle parking is provided a rate of 1 no. space per bedroom with 0.5 visitor spaces per unit.

An overview of the changes proposed are provided in the table below. This table should be read in conjunction with Chapter 2 of the submitted Phase 1 EIAR.

Table 2 Overview of changes to permitted scheme

	Permitted	Proposed	Change
Residential Units	267 no. units	315 no. units	+48
Density	51.5uph	60.8uph	+9.8uph
Unit Mix	28 no. 1 beds (10.5%) 144 no. 2 beds (53.9%) 87 no. 3 beds (32.6%) 8 no. 4 beds (3%)	31 no. studios (9.8%) 64 no. 1 beds (20.3%) 125 no. 2 beds (39.7%) 87 no. 3 beds (27.6%) 8 no. 4 beds (2.5%)	+31 no. studios +36 no. 1 beds -19 no. 2 beds
Houses	145 no. houses	145 no. houses	No change

Apartments	122 no. apartments in 7 no. blocks (A to G)	170 no. apartments	+48 no. units
Blocks A, B and C	76 no. units 28 no. 1 beds (36.8%) 48 no. 2 beds (63.2%)	124 no. units 31 no. studios (25%) 64 no. 1 beds (51.6%) 29 no. 2 beds (23.4%)	+31 no. studios +36 no. 1 beds -19 no. 2 beds
Creche	280sqm 65 no. childcare spaces	280sqm 65 no. childcare spaces	No change
Car Parking	357 no. car spaces	366 no. car spaces	+7 no. standard spaces +2 no. GoCar
Cycle Parking	649 no. cycle spaces	671 no. cycle spaces	+30 no. secure spaces -8 no. visitor spaces
Open Space	16.1% open space	15.6% open space	-0.5
Access	Link Road from Navan Road to R157	Link Road from Navan Road to R157	No change

2.3 Alternatives

This chapter outlined the design iterations that were considered during for the Phase 1 application. As part of this EIAR addendum, the following paragraph should be read after section 3.10.7, as a new section.

Section 3.10.8 Phase 1 Amendment

As part of an amendment application, Blocks A, B and C were amended to provide additional apartment units, increasing the overall density of the site and improving the overall unit mix by introducing studio apartments and additional 1 bed units. These units will serve a wider range of households and help to create a sustainable community catering for people at every stage of life.

The location of Blocks A, B and C adjacent to the train station make them the ideal location for additional smaller units and will ensure the residents of these units are at the centre of the scheme.

2.4 Population and Human

The proposed amendments impact on the projected population outlined in chapter 4 Population and Human Health. The changes to the relevant sections of this chapter are shown below with deleted text shown with a ~~strike through~~ and new text shown in **bold**.

Section 4.8.2.1 Population is updated as follows:

The proposed development will provide ~~267~~ **315** no. residential units. Based on the national average household size of 2.74 (census 2022), the population of the proposed development is projected to be c. ~~732~~ **863** no. people.

Based on the demographic analysis of the Dunboyne (Meath) ED, it can be therefore expected that c. ~~52~~ **60** no. of the proposed development's population will be aged 0-4 (c. 7%), c. ~~169~~ **198** will be aged 5-19, and c. ~~72~~ **85** will be aged over 65 years.

Following the above, *Section 4.8.2.2 Schools* is updated as follows:

The proposed development is projected to have a population of ~~732~~ **863** no. people. Based on the local demographics, it is estimated that c. 12.2% of the population are of primary school age (aged 5-12). and 9.4% are of post primary school age (aged 13-18). Applying these percentages to the projected population it is estimated that the proposed development will have c. ~~89~~ **105** no. primary school aged children and c. ~~69~~ **81** no. post primary school.

It is noted that the one bed units are unlikely to include primary and post primary school aged children. If the ~~28~~ **95** no. proposed 1 bed **and studio** units are excluded, the proposal is projected to have ~~80~~ **74** no. primary school aged children and ~~62~~ **57** no. post primary school aged children.

Section 4.8.2.3 Childcare Facilities is updated as follows:

The 2001 Childcare Guidelines recommend the provision of 20 no. childcare spaces for every 75 no. residential units. Based on this standard, the proposed ~~267~~ **315** no. residential units would require ~~72~~ **84** no. childcare spaces. However, it is noted that one bed units are unlikely to require childcare spaces. The proposed development includes ~~28~~ **95** no. 1 bed **and studio** units and when these are excluded the ~~239~~ **220** no. remaining units would require the ~~64~~ **59** no. childcare spaces.

The proposed creche will provide 65 no. childcare spaces and is therefore considered sufficient to cater for the proposed development

Overall, there are no material changes to the conclusions of the Population and Human Health chapter.

2.5 Land, Soils and Geology

AtkinsRealis have reviewed the completed Phase 1 Land, Soils and Geology EIAR Chapter in the context of the proposed development changes (i.e. amendments to Blocks A, B and C, as described within this EIAR Addendum) and concluded that the proposed development changes will not result in a material change to the conclusions of this EIAR chapter. No significant

impacts to the receiving environment, with respect to Land, Soils and Geology are anticipated.

2.6 Hydrology and Hydrogeology

AtkinsRealis have reviewed the completed Phase 1 Hydrology and Hydrogeology EIA Chapter in the context of the proposed development changes (i.e. amendments to Blocks A, B and C, as described within this EIA Addendum) and concluded that the proposed development changes will not result in a material change to the conclusions of the EIA chapter. No significant impacts to the receiving environment, with respect to Water (Hydrology and Hydrogeology) are anticipated.

2.7 Air Quality

AWN Consulting provided the below review of the completed Air Quality EIA chapter. Overall, it concludes that revised development is not expected to have significant impacts on air quality beyond those already assessed.

2.7.2 Introduction

This section of the EIA addendum report provides an assessment of the potential impacts to air quality due to the revised development. The previous assessment undertaken as part of the Original EIA has been reviewed in detail to determine whether the revised development will significantly alter the predicted impacts to air quality that were previously assessed.

Due to the length of time that has passed since the previous assessment, there have been new assessment guidelines published in relation to air quality as well as updated assessment criteria and baseline information. Where relevant the most recent guidance and data has been referenced within this assessment.

The revised development primarily includes an increase in the number of proposed apartment units and an amended unit mix.

In addition to reviewing the assessment undertaken as part of the Original EIA, the more recent assessment undertaken as part of the planning application for the Dunboyne LRD Phase 3 development (Planning Ref. 26/61001) has also been used to inform this revised assessment.

2.7.3 Methodology

Since the previous assessment, there have been several updates to the relevant air quality guidance documents and assessment criteria. Specifically:

- In October 2024, the EU published Directive (EU) 2024/2881 of the European Parliament and of the Council of 23 October 2024 on ambient air quality and cleaner air for Europe (recast).
- In January 2024, the Institute of Air Quality Management published a revised version of the document Guidance on the Assessment of Dust from Demolition and Construction, Version 2.2. The previous assessment was based on the 2014 version of this guidance.

- Transport Infrastructure Ireland (TII) published updated air quality guidelines entitled Air Quality Assessment of Specified Infrastructure Projects – Overarching Technical Document (PE-ENV-01106) in December 2025. The previous assessment was based on the 2022 version of this guidance.

Assessment Criteria

Air quality significance criteria are assessed on the basis of compliance with the appropriate standards or limit values. The applicable standards in Ireland are set out in *Directive (EU) 2024/2881 of the European Parliament and of the Council of 23 October 2024 on ambient air quality and cleaner air for Europe (recast)*. This directive supersedes *EU Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe* (CAFE Directive). It sets out air quality standards for pollutants to be reached by 2026 and by 2030.

The Ambient Air Quality Standards Regulations 2022 (S.I. 739 of 2022) (the Air Quality Standards Regulations 2022) further transposed the CAFE Directive and revoked the Air Quality Standards Regulations 2011, as amended. With the adoption of Directive (EU) 2024/2881, Ireland must similarly transpose this directive into national law within the statutory two-year period, i.e. update the Air Quality Standards Regulations, before December 2026.

The ambient air quality limit values for pollutants are set out in Annex I of Directive (EU) 2024/2881. Table 1 of Annex I in Directive (EU) 2024/2881 sets out the updated air quality limit values for pollutants to be achieved by 1 January 2030, these are more closely aligned with the Interim Target 4 (IT4) in the 2021 WHO air quality guidelines. Table 2 of Annex I in Directive (EU) 2024/2881 sets out the limit values for air pollutants which are to be achieved by 11 December 2026 and are also applicable up to 2030. The limit values in Table 2 of Annex I are the same as the limits set under Directive 2008/50/EC and the Air Quality Standards Regulations 2022.

In relation to the proposed development, the applicable limit values are for nitrogen dioxide (NO₂) and particulate matter (PM₁₀ and PM_{2.5}), as per the previous assessment. Table 2 outlines the limit values pre-2030 and post-2030 for the specified pollutants. The previous assessment, as part of the original EIAR, used the pre-2030 limit values to assess the impacts to air quality. The updated TII PE-ENV-01106 guidelines state that the post-2030 limits set out in Table 1 of Annex I of Directive (EU) 2024/2881 should be applied as a conservative approach.

Table 3 Ambient Air Quality Limit Values

Pollutant	Directive (EU) 2024/2881 Annex I Table 2		Directive (EU) 2024/2881 Annex I Table 1	
	Limit Type	Limit Value (to be attained by 2026 and applicable until 2030)	Limit Type	Limit Value (to be attained by 2030)
Nitrogen Dioxide (NO ₂)	Hourly limit for protection of human health - not to be exceeded more than 18 times/year	200 µg/m ³	Hourly limit for protection of human health - not to be exceeded more than 3 times/year	200 µg/m ³
	N/A	N/A	24-hour limit for protection of human health - not to be exceeded more than 18 times/year	50 µg/m ³
	Annual limit for protection of human health	40 µg/m ³	Annual limit for protection of human health	20 µg/m ³
Particulate Matter (as PM ₁₀)	24-hour limit for protection of human health - not to be exceeded more than 35 times/year	50 µg/m ³	24-hour limit for protection of human health - not to be exceeded more than 18 times/year	45 µg/m ³
	Annual limit for protection of human health	40 µg/m ³	Annual limit for protection of human health	20 µg/m ³
Particulate Matter (as PM _{2.5})	N/A	N/A	24-hour limit for protection of human health - not to be exceeded more than 18 times/year	25 µg/m ³
	Annual limit for protection of human health	25 µg/m ³	Annual limit for protection of human health	10 µg/m ³

2.7.4 Construction Phase Assessment

The Institute of Air Quality Management in the UK (IAQM) guidance document 'Guidance on the Assessment of Dust from Demolition and Construction' 2014 version was used to predict the likely risk of construction dust impacts from the proposed development in the Original EIAR. The updated 2024 version 2.2 of the IAQM guidance contains updated assessment criteria to determine the magnitude of dust emissions for construction activities (see Table 3). However, the recommended mitigation measures to prevent significant impacts remain unchanged from the 2014 version of the guidance and are still applicable. The previous assessment conducted for the Original EIAR and the proposed amendments have been reviewed in the context of the updated IAQM guidance. The use of UK guidance is recommended by

Transport Infrastructure Ireland in their guidance document *Air Quality Assessment of Specified Infrastructure Projects – PE-ENV-01106* (TII, 2025).

The major dust generating activities are divided into four types within the IAQM guidance (2024) to reflect their different potential impacts. These are:

- Demolition;
- Earthworks;
- Construction; and
- Trackout (transport of dust and dirt from the construction site onto the public road network).

The magnitude of each of the four categories is divided into large, medium or small scale depending on the nature of the activities involved (see Table 3). The magnitude of each activity is combined with the overall sensitivity of the area to determine the risk of dust impacts from site activities. This allows the level of site-specific mitigation to be determined.

Table 4 IAQM Criteria to Determine Dust Emissions Magnitude

Dust Emission Magnitude		
Small	Medium	Large
Demolition		
- Total building volume <12,000 m³ - Construction material with low potential for dust release (e.g. metal cladding or timber) - Demolition activities <6 m above ground - Demolition during wetter months	- Total building volume 12,000 - 75,000 m³ - Potentially dusty construction material - Demolition activities 6 – 12 m above ground level	- Total building volume >75,000 m³ - Potentially dusty construction material (e.g. concrete) - On-site crushing and screening - Demolition activities >12 m above ground level
Earthworks		
- Total site area <18,000 m² - Soil type with large grain size (e.g. sand) <5 heavy earth moving vehicles active at any one time - Formation of bunds <3 m in height - Earthworks during wetter months	- Total site area 18,000 m² - 110,000 m² - Moderately dusty soil type (e.g. silt) 5 – 10 heavy earth moving vehicles active at any one time - Formation of bunds 3 – 6 m in height	- Total site area >110,000 m² - Potentially dusty soil type (e.g. clay, which will be prone to suspension when dry due to small particle size) >10 heavy earth moving vehicles active at any one time - Formation of bunds >6 m in height
Construction		

Dust Emission Magnitude		
Small	Medium	Large
- Total building volume <12,000 m³ - Construction material with low potential for dust release (e.g. metal cladding or timber)	- Total building volume 12,000 - 75,000 m³ - Potentially dusty construction material (e.g. concrete) - On-site concrete batching	- Total building volume >75,000 m³ - On-site concrete batching - Sandblasting
Trackout (Truck Movements)		
<20 HDV (>3.5 t) outward movements in any one day - Surface material with low potential for dust release - Unpaved road length <50 m	20 – 50 HDV (>3.5 t) outward movements in any one day - Moderately dusty surface material (e.g. high clay content) - Unpaved road length 50 – 100 m	>50 HDV (>3.5 t) outward movements in any one day - Potentially dusty surface material (e.g. high clay content) - Unpaved road length >100 m

2.7.5 Baseline Environment

Meteorological Data

The previous assessment was based on meteorological data from Dublin Airport meteorological station for the years 2018 – 2022. Since the previous assessment was completed, more recent meteorological data has been published by Met Éireann. Data for the most recent 5-year period 2021 – 2025 was reviewed for its potential to alter the conclusions of the previous assessment. Dublin Airport meteorological station is located approximately 9 km southwest of the application site. Dublin Airport meteorological data has been examined to identify the prevailing wind direction and average wind speeds over a five-year period (Figure 1). For data collated during five representative years (2021 - 2025), the predominant wind direction is westerly to south-westerly with generally moderate wind speeds (Met Éireann, 2026). This is in line with the data used in the previous assessment and thus will not influence the conclusions of the previous assessment.

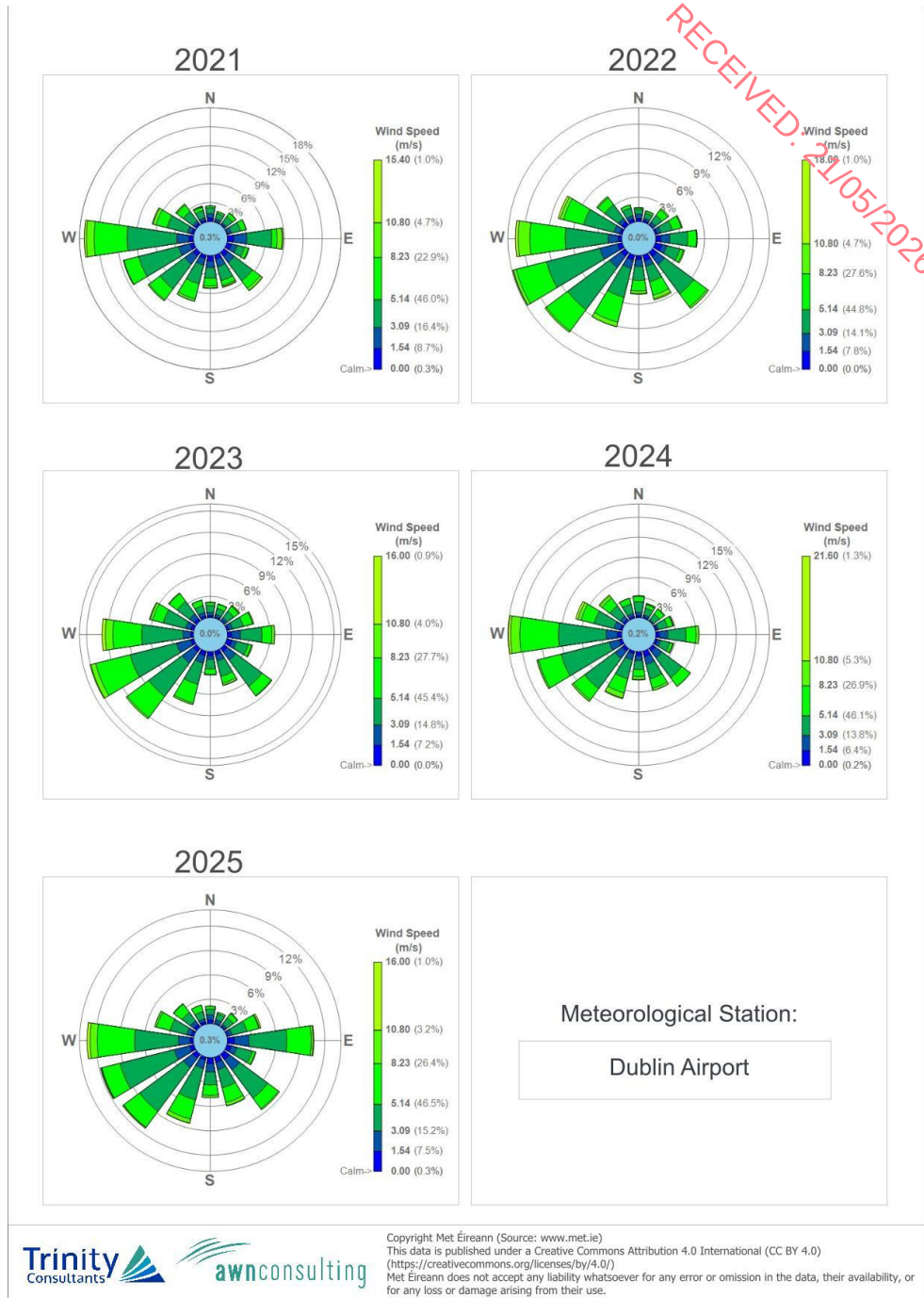


Figure 1 Wind Roses for Dublin Airport Meteorological Station

Baseline Air Quality

Air quality monitoring programs have been undertaken in recent years by the EPA. The most recent annual report on air quality in Ireland is 'Air Quality in Ireland 2024' (EPA, 2025). The Environmental Protection Agency (EPA) carry out ambient air quality monitoring at a variety of locations throughout the country. The previous assessment in the Original EIAR was based on air quality data over the period 2017 – 2021 for the monitoring stations at Castlebar, Carrick-on-Shannon, Birr, Swords and Dublin Airport. This

information was used to inform the background air quality levels in the region of the development. Concentrations of the key pollutants, NO₂, PM₁₀ and PM_{2.5} were identified as being well below their respective ambient air quality limit values (as set out in Table 2). The background pollutant concentrations used in the previous assessment are outlined in Table 4.

Updated air quality monitoring data from the EPA (EPA, 2025), for the most recent 5-year period 2020 – 2024, for the locations of Castlebar, Carrick-on-Shannon, Birr, Swords and Dublin Airport indicate that concentrations of pollutants are decreasing somewhat, and at most sites are lower than the concentrations used in the previous assessment.

In relation to NO₂, annual mean concentrations at the relevant monitoring sites (as used in the previous assessment) ranged from 9 – 13 µg/m³ over the 2020 – 2024 period. Additionally, there were no exceedances of the hourly limit value of 200 µg/m³. Annual mean PM₁₀ concentrations at the representative monitoring sites ranged from 9 - 14 µg/m³ over the five-year period with at most 3 exceedances (in Birr) of the 24-hour limit value of 50 µg/m³. Average PM_{2.5} levels over the period 2020 - 2024 ranged from 5 - 9 µg/m³ (EPA, 2025). Using this updated monitoring data background pollutant concentrations for the region of the application site have been estimated and shown in Table 4. The previous estimated concentrations remain appropriate. They are higher than the updated background concentrations and, as a result, represent a worst-case and conservative assessment.

Table 5 Estimated Background Pollutant Concentrations

Pollutant	Background Concentration (µg/m ³) based on 2017 – 2021 data	Updated Background Concentration (µg/m ³) based on 2020 – 2024 data
NO ₂	14.0	10.0
PM ₁₀	16.0	11.0
PM _{2.5}	10.8	7.0

Sensitivity of the Receiving Environment

In line with the UK Institute of Air Quality Management (IAQM) guidance document '*Guidance on the Assessment of Dust from Demolition and Construction*' (IAQM, 2024) prior to assessing the impact of dust from a proposed development, the sensitivity of the area must first be assessed. The sensitivity assessment previously undertaken remains valid, as there have been no significant changes to the local environment, receptor types, or their locations. The revised development does not introduce any new sources or construction activities that would justify a reassessment of sensitivity. Therefore, the original sensitivity categorisation continues to apply for the purposes of this addendum.

The worst-case sensitivity of the area to dust soiling impacts is medium and the worst-case sensitivity of the area to dust-related human health effects is low.

2.7.6 Potential Significant Effects

Construction Phase

Impacts to air quality during the construction phase are focussed on exhaust emissions from construction traffic, particularly HGVs, and dust emissions from construction activities. These impact categories remain the same for the proposed amendments.

As part of the Original EIAR, the construction stage traffic was reviewed, and a detailed air quality assessment was scoped out as none of the road links impacted by the proposed development satisfy the TII scoping assessment criteria in Section 7.4.4 of Chapter 7 of the Original EIAR. The amended development is not predicted to alter the number of construction vehicles required and the previous assessment remains valid. It can therefore be determined that the construction stage traffic will have an imperceptible, direct, neutral and short-term impact on air quality, which is overall not significant.

In terms of dust impacts, these are assessed under the headings of demolition, earthworks, construction and trackout as per the IAQM guidance (IAQM, 2024). There is no demolition associated with the proposed development or associated amendments. Previously, using the 2014 version of the IAQM guidance it was determined that there was a medium risk of dust soiling impacts due to earthworks, construction and trackout activities. The construction activities associated with the proposed amendments were reviewed against the updated 2024 IAQM assessment criteria outlined in Table 3. The previously determined 'medium risk' of dust impacts remains appropriate for the proposed amendments. Best practice dust mitigation measures will be implemented, as outlined in Section 7.9.1 of the Original EIAR, to ensure there are no significant impacts at nearby sensitive receptors.

Dust emissions from the construction phase have the potential to impact human health through the release of PM₁₀ and PM_{2.5} emissions. The surrounding area is of low sensitivity to dust-related human health impacts. In addition, there is at most a low risk of dust-related human health impacts due to the proposed earthworks, construction and trackout activities. As all risks are identified as low, no significant air quality impacts to human health from dust emissions are predicted, as per the previous assessment.

Operational Phase

During the operational phase traffic emissions, as a result of an increased number of vehicles on the local road network, are the primary source of air quality impacts, this remains the case for the proposed amended development.

The proposed amendments are not predicted to significantly alter the previously assessed traffic figures. The air quality assessment of traffic emissions, undertaken as part of the air quality EIAR chapter for the Dunboyne LRD Phase 3 application (Planning Ref. 26/61001), was reviewed in order to inform this assessment. The Phase 3 air quality assessment included cumulative traffic associated with the Phase 1 and Phase 2 developments on

the wider lands and also other relevant cumulative developments. The Phase 3 air quality assessment was considered the most up to date assessment and the most appropriate for determining whether the proposed amendments to the Phase 1 development will cause a significant air quality impact.

The traffic figures were reviewed by AtkinsRealis (the traffic consultants for the project) and it was determined that the proposed amendments will result in similar or slightly lesser traffic than previously assessed. Therefore, the air quality assessment for the Phase 3 application remains appropriate. The Phase 3 air quality assessment determined that impacts to air quality would not be significant.

The updated TII PE-ENV-01106 guidance (TII, 2025) states that, as a conservative approach, predicted pollutant concentrations for the opening and design years should be compared with the post-2030 limit values outlined in Table 2, which are set for the protection of human health and the environment. The predicted NO₂, PM₁₀ and PM_{2.5} pollutant concentrations determined as part of the Phase 3 air quality assessment were reviewed and compared to the post-2030 limits. Predicted pollutant concentrations remain in compliance with the post-2030 limit values and impacts are predicted to be 'neutral' as per the TII significance criteria (TII, 2025).

Therefore, as previously assessed, during the operational phase the predicted impact to air quality is long-term, direct, negative, and not significant.

Overall, the amended development is not expected to have significant impacts on air quality beyond those already assessed.

2.7.7 References & Sources

Additional references to the previously submitted EIAR include:

Environmental Protection Agency (2025) Air Quality in Ireland 2024 (& previous annual reports 2020 – 2023)

Institute of Air Quality Management (IAQM) (2024) Guidance on the Assessment of Dust from Demolition and Construction (Version 2.2)

Transport Infrastructure Ireland (2025) Air Quality Assessment of Specified Infrastructure Projects – PE-ENV-01106

2.8 Climate Change

AWN Consulting provided the below review of the completed Climate Change EIAR chapter. Overall, it concludes that revised development is not expected to have significant impacts on air quality beyond those already assessed.

2.8.8 Introduction

This section of the EIAR addendum report provides an assessment of the potential impacts to climate due to the revised development. The previous assessment undertaken as part of the Original EIAR has been reviewed in detail to determine whether the revised development will significantly alter the predicted impacts to climate that were previously assessed.

Due to the length of time that has passed since the previous assessment, there have been new policy documents published in relation to climate as well as updated baseline information. Where relevant the most recent guidance and data has been referenced within this assessment.

The revised development primarily includes an increase in the number of proposed apartment units and an amended unit mix.

In addition to reviewing the assessment undertaken as part of the Original EIAR, the more recent assessment undertaken as part of the planning application for the Dunboyne LRD Phase 3 development (Planning Ref. 26/61001) has also been used to inform this revised assessment.

2.8.9 Methodology

Policy Updates

In common with all environmental legislation, in Ireland climate legislation is driven primarily by international agreements or European Directives that are then transcribed into domestic law by the Government of Ireland. This is then interpreted through European and domestic policy instruments that clarify aspects, objectives, targets and requirements described in the legislation. The following provides a brief overview of the updated relevant policies since the Original EIAR was undertaken.

Policy

The latest iteration of the Government of Ireland's **Climate Action Plan** (CAP25) (Government of Ireland, 2025a) was published in 2025 updating many of the suggested measures and actions required to achieve carbon budgets and sectoral emissions ceilings from CAP24, (Government of Ireland, 2023a). Both CAP24 and CAP25 should be read together. The plans taken together provide the roadmap for halving Ireland's emissions by 2030 and achieving carbon neutrality by 2050. The CAP25 advances sector-specific measures including decarbonising the residential building sector. This includes the complete phase-out of fossil fuel heating for both new builds and retrofits. CAP25 details the 5-year carbon budget periods and the Sectoral Emissions Ceilings, as required by the Climate Action and Low Carbon Development (Amendment) Act 2021 and the Climate Action and Low Carbon Development Act 2015 (hereafter referred to collectively as the 'Climate Act').

The **Long-Term Strategy on Greenhouse Gas Emissions Reductions** (Government of Ireland, 2023b) provides the indicative pathways beyond 2030 on how Ireland will transition towards carbon neutrality by 2050. The strategy is intended to bridge the gap between the short-term objectives of the Climate Action Plans and the longer-term objectives of EU Climate Law and Ireland's National Climate Objective.

The **National Planning Framework (First Revision)** (Government of Ireland, 2025b) specifies policies relevant for the proposed development, and amended development:

- National Policy Objective 1: Ensure that all plans, projects and activities requiring consent arising from the National Planning Framework are subject to the relevant environmental assessment requirements including SEA, EIA, SFRA and AA as appropriate.
- National Policy Objective 66: The planning system will be responsive to our national environmental challenges and ensure that development occurs within environmental limits, having regard to the medium and longer-term requirements of all relevant environmental and climate legislation and the sustainable management of our natural capital.
- National Policy Objective 69: Reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions as expressed in the most recently adopted carbon budgets.
- National Policy Objective 82: Integrated planning for Green and Blue Infrastructure will be incorporated into the preparation of statutory land use plans while maintaining ecosystem services and ecosystem functions and conserving and/or restoring biodiversity.
- National Policy Objective 93: Improve air quality and help prevent people being exposed to unacceptable levels of pollution in our urban and rural areas through integrated land use and spatial planning that supports public transport, walking and cycling as more favourable modes of transport to the private car, the promotion of energy efficient buildings and homes, heating systems with zero local emissions, green and blue infrastructure planning and innovative design solutions.

Climate Change Vulnerability Policy

The **Second National Adaptation Framework** (NAF) (Government of Ireland, 2024) outlines a comprehensive, whole-of-government and whole-of-society approach to climate adaptation. Its core objective is to enhance Ireland's resilience to a wide range of climate risks, including extreme weather events, flooding, drought, biodiversity loss, sea level rise, and rising temperatures. The NAF sets out the roles of the Taoiseach, Government and non-governmental organisations, incorporates an evidence base for climate change and incorporates sectoral and local requirements and indicators for adaptation planning.

In relation to the built environment, the NAF states in Chapter 3, "deepening of adaptation considerations in the planning and building standards processes is considered the most appropriate way of increasing the resilience of the built environment". Within the NAF it mentions that there is a risk of damage to buildings and structures from severe weather events such as high

winds and intense rainfall. New development should accommodate predicted future climate change impacts without requiring major redesign or redevelopment in the future, which may be costly and inefficient. This will require facilitating innovative building design, new materials and standards (to accommodate hotter summers while withstanding changes in precipitation patterns and more intense storms for example).

The **National Climate Change Risk Assessment** (NCCRA) (Environmental Protection Agency, 2025a) was required as part of the 2021 CAP. The NCCRA approached the risk assessment through:

- **Hazard** - the potential occurrence of a natural or human-induced physical event or trend or physical impact that may cause loss of life, injury, or other health impacts, as well as damage and loss to property, infrastructure, livelihoods, service provision, ecosystems, and environmental resources
- **Exposure** - the presence of people, livelihoods, species or ecosystems, environmental functions, services, and resources, infrastructure, or economic, social, or cultural assets in places and settings that could be adversely affected
- **Sensitivity** - refers to the degree to which a system or asset is affected by climate hazards. It reflects how vulnerable something is to changes such as temperature extremes, flooding, or drought, based on its physical, functional, or ecological characteristics
- **Vulnerability** - the propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts including sensitivity
- **Risk** - the potential for adverse consequences for human or ecological systems

Compilation of the NCCRA was undertaken using scenarios from the fifth Intergovernmental Panel on Climate Change Assessment Report (AR5). The NCCRA used a high concentration scenario resulting a predicted average global temperature increase of 4.3°C by 2100 (RCP8.5) generally accepted as an extreme worst-case scenario, and a moderate scenario (RCP4.5) where emissions are predicted to peak by 2040 and then decline resulting in an average global temperature increase of between 2.5°C and 3°C. Both scenarios are considered conservative for Ireland as they assume that emissions targets are not met.

Local policy

Meath County Council (Meath CoCo) have published a Climate Action Plan 2024 – 2029 which outlines their commitment to “*create a low carbon and climate resilient County, by delivering and promoting best practice in climate action, at the local level*”. As per the Meath CoCo Climate Action Plan 2024 – 2029, the key targets are:

- Energy Efficiency: 50% improvement in energy efficiency by 2030.

- Resilience: make Meath a climate resilient region by reducing the impacts of future climate change-related events.
- GHG Reduction: 51% reduction in GHG emissions by 2030.
- Awareness: Actively engaging and informing citizens, communities and businesses on climate change.
- Net Zero by 2050.

The actions of the plan are divided across five thematic areas: governance and leadership; built environment and transport; natural environment and green infrastructure; communities, resilience and transition; sustainability and resource management.

Meath CoCo have identified 9 decarbonizing zones in their administrative area to promote GHG emission reductions, of which Dunboyne is one. The residential, manufacturing & commercial, transport and waste emissions sectors were found to be the primary sectors in relation to the decarbonizing zones.

Transitioning towards more sustainable transport systems is a key priority of Meath CoCo. Supporting active travel and public transport initiatives as well as enabling the development of electric vehicle charging infrastructure across the county will aid in reducing transport-related GHG emissions.

2.8.10 Baseline Environment

Since the Original EIA was undertaken, more recent background data on GHG emissions has been published, this is reviewed below in order to assess the amended development against the most recent climate baseline. The Transport Infrastructure Ireland (TII) guidance 'Climate Guidance for National Roads, Light Rail, and Rural Cycleways (Offline & Greenways) - Overarching Technical Document - PE-ENV-01104 (2022) states that a current and a future GHG baseline shall be established. The current baseline is an assessment of current GHG emissions without the proposed project in place while the future baseline are future GHG emissions without the proposed project in place.

Current Greenhouse Gas Baseline

Data published in March 2026 (Environmental Protection Agency, 2026), indicates that Ireland exceeded, without the use of flexibilities, its 2024 annual limit set under EU's Effort Sharing Decision (ESD) (EU 2018/842) by 3.93 MtCO₂e. However, the reported emissions for 2024 represent the second consecutive year in which Ireland's emission were below 1990 levels, by 4.2%. Emissions Trading Scheme emissions have decreased by 49.7% or 11.1 MtCO₂e compared to 2005 and Effort Sharing Regulation emissions decreased by 10.2% or 5 MtCO₂e. Ireland is now a net 2,020 ktCO₂e distant from its target under the Effort Sharing Regulation.

The EPA estimate that 2024 total national GHG emissions, excluding LULUCF, have decreased by 1.9% on 2023 levels to 53.93 MtCO₂e, with an 8.8% reduction in electricity industries alone. This was driven by an increase in generation from renewables in 2024 by 1.6% and the complete phase-out of

peat for electricity generation. Manufacturing combustion and industrial processes decreased by 4.4% to 6.2 MtCO₂e in 2024 due to declines in fossil fuel usage. The sector with the highest emissions in 2024 was agriculture at 36.2% of the total, followed by transport at 20.9%. For 2024, total national emissions (including LULUCF) were 58.74 MtCO₂e (Table 5).

The current estimates of National greenhouse gas emissions (including LULUCF) in 2024 are 12.6% below 2018 emissions, well off the target for the National Climate ambition of a 51% reduction by 2030. The data indicate that from 2021 to 2024 Ireland has used 85.2% of the 295 MtCO₂e Carbon Budget for the five-year period 2021-2025. This leaves 17.5% of the budget available for 2025, requiring a substantial 14.8% annual emissions reduction across all sectors for 2025 to stay within the budget.

Figures for 2025 emissions are due to be provisionally published by the EPA in July 2026. The final 2025 emissions outturn will determine whether the first carbon budget (2021 to 2025) has been exceeded and, consequently, may necessitate adjustments to the subsequent carbon budget period for 2026 to 2030 in accordance with national carbon budgeting arrangements under the Climate Action and Low Carbon Development (Amendment) Act 2021.

Table 6 Trends in Total National GHG Emissions 2021 – 2024

Sector ^{Note 1}	Annual Total Emissions for Carbon Budget 1 (Mt CO ₂ e)				Total Budget (Mt CO ₂ e) (2021-2025)	% Budget 2021-2025 Used	Annual % Change 2023-2024
	2021	2022	2023	2024			
Electricity	9.88	9.68	7.56	6.95	40	85.19%	-8.11%
Transport	11.19	11.88	11.93	11.78	54	86.66%	-1.26%
Buildings (Residential)	6.71	5.62	5.23	5.48	29	79.47%	4.84%
Buildings (Commercial and Public)	1.42	1.38	1.34	1.44	7	79.69%	8.05%
Industry	7.25	6.81	6.46	6.18	30	89.00%	-4.37%
Agriculture	21.97	21.78	20.72	20.45	106	80.11%	-1.33%
Other Note 2	1.82	1.85	1.75	1.65	9	78.45%	-5.82%
LULUCF	2.87	2.47	2.96	2.51	-		
Total including LULUCF	63.11	61.48	57.96	56.45	295	81.01%	-2.61%

Sector <i>Note 1</i>	Annual Total Emissions for Carbon Budget 1 (Mt CO ₂ e)				Total Budget (Mt CO ₂ e) (2021-2025)	% Budget 2021-2025 Used	Annual % Change 2023-2024
	2021	2022	2023	2024			
Total excluding LULUCF	60.24	59.01	54.99	53.93	-	-	-1.93%

Note 1 Reproduced from latest emissions data from the EPA (EPA, 2026).

Note 2 Other includes Petroleum refining, F-Gases and Waste (emissions from solid waste disposal on land, solid waste treatment (composting and anaerobic digestion), wastewater treatment, waste incineration and open burning of waste).

Future Greenhouse Gas Baseline

The future GHG baseline is considered in relation of the ability of the proposed development to contribute positively or negatively to the ability of Ireland to meet the binding commitment as part of the Climate Act for carbon neutrality by 2050.

The targets for 2030 and 2050 are described in CAP24 and CAP25 as required by the Climate Act that codified the GHG reductions required by EU Regulation 2018/842 amended by EU Regulation 2023/857 put in place to enable European Member States to meet their obligations under the Paris Agreement. The future baseline is determined by Ireland being able to meet its requirements under these regulations.

Ireland's Greenhouse Gas Emissions Projections 2024-2055 (EPA, 2025b) summarises total projected emissions and a breakdown of projected emissions per sector under the 'With Existing Measures' and 'With Additional Measures' scenarios. The EPA projections indicate that currently implemented measures (With Existing Measures) will achieve a reduction of 9.5% on 2005 levels by 2030, significantly short of the 42.0% reduction target. If measures in the higher ambition (With Additional Measures) scenario are implemented, EPA projections show that Ireland can achieve a reduction of 21.7% by 2030, still short of the 42.0% reduction target.

Climate Change Risk Baseline

Ireland has a temperate, oceanic climate, resulting in mild winters and cool summers. This baseline data is derived from the European Centre for Medium-Range Weather Forecasts (ECMWF) ERA5 data reanalysis and presented on the World Bank Group Climate Change Knowledge Portal which includes observed data from local meteorological weather stations across Ireland from 1950-2023. This data is reanalysed to model a complete picture of Ireland's historical climate. This method has been chosen to ensure data can be analysed at the daily level and harmoniously compared with future scenarios. The baseline time-period referred to in this assessment was from 1991-2020 and is specific to the county of Dublin.

Climate averages for the 30-year period from 1991-2020 are shown in Figure 2. The data show that there are two distinct peaks in precipitation, one

occurring in the period June to September peaking in August at 81.8 mm, and another wetter period from October to January with November being the wettest month on average with rainfall of 87.6 mm. The driest month is February with 60.7 mm of rainfall.

July is the warmest month on average with a mean surface air temperature of 15.4°C. January is the coldest month on average with a mean average surface temperature of 5.7°C and recording the daily minimum temperature (-1.2°C), however the average minimum surface air temperature of 3.5°C occurs in February.

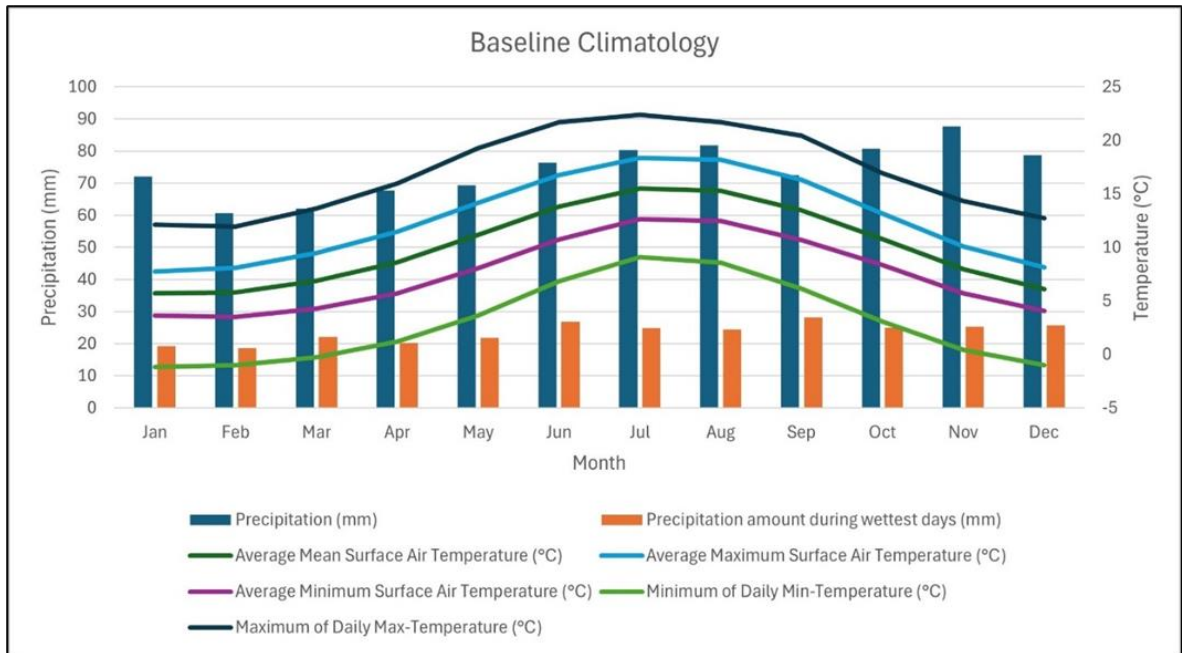


Figure 2 Climate Averages for Dublin, Ireland, for the period 1991-2020

Data from Met Éireann indicates that at Dublin Airport during the period 1991-2020, the average wind speed was 10.5 knots (19.5 kmph), the average windiest month being January at 12.3 knots (22.6 kmph) with the average highest gust of 30.0 knots (55.2 kmph) also occurring in January. Historically, the highest absolute gust of 80.0 knots (147.3 kmph) was recorded in January 2007 during Cyclone Kyrill. With reference to recent extreme weather events in Ireland, storm Éowyn hit the island in January 2025 and recorded a 10-minute mean wind speed of 142 kmph in Galway, with the highest gust being 184 kmph. Four weather stations broke their highest gust records during this storm and two stations reached hurricane force 12 on the Beaufort scale. Later in the year storm Amy also resulted in strong winds such that five recording stations broke their records for 10-minute mean wind speeds. Overall there were five named storms to hit Ireland in 2025.

The data from Dublin Airport remains representative of current site weather conditions.

Since the preparation of the Original EIAR, Met Éireann's 2025 Climate Statement (Met Éireann, 2026) has been published. The 2025 Climate Statement confirms that 2025 was the second warmest year on record in

Ireland since 1900 with the last four years now the top four warmest years on record (2022-2025). Seven of the ten warmest years have occurred since 2005. Sea surface temperatures (SSTs) have remained at or near record highs since 2022, contributing to extreme rainfall events and localised flooding. Provisionally rainfall data suggests 2025 was the 15th wettest year since 1941, there were numerous periods of intense rainfall leading to flood events. These observations align with projected climate change impacts for Ireland, including increased temperature, more frequent heavy rainfall events, longer dry spells, and greater flood risk, including from compound events such as coastal surges combined with extreme rainfall. These trends and risks remain consistent with projections considered in the original assessment and do not change the previously identified climate-related vulnerabilities.

2.8.11 Potential Significant Effects

The revised development primarily includes an increase in the number of proposed apartment units and an amended unit mix. The previously identified impacts of GHG emissions from construction activities, construction materials, traffic, operational energy use, etc. and climate change vulnerability remain appropriate for the amended development.

Greenhouse Gas Emissions Assessment

There will be an increase in the overall unit numbers which may result in some increases in GHG emissions associated with construction activities and materials. However, as per the TII PE-ENV-01104 guidance (TII, 2022), the assessment of significance of effects is not based on the quantity of GHG emissions but rather the level of mitigation proposed and the alignment of the proposed development to achieve the National climate ambition of Net Zero by 2050.

Best practice mitigation measures were proposed within the Original EIAR and remain appropriate for the amended development. Additionally, as discussed in the climate assessment for the Dunboyne LRD Phase 3 development (Planning Ref. 26/61001), the project developer, Marina Quarter Ltd. (Glenveagh Properties) has committed to achieving Net Zero by 2050 across its whole business. Therefore, the proposed development and amended development will be built with carbon reduction and sustainability in mind and will include reductions of embodied emissions during the construction phase. Glenveagh Properties have published a Net Zero Transition Plan and Annual Reports which detail a commitment to achieving Net Zero by 2050.

The above listed measures are supported by Glenveagh Properties PLC's *Net Zero Transition Plan 2023*, published in March 2023, which identifies the sources of Glenveagh Properties PLC's emissions and proposed measures to reduce these. A commitment to achieve a 55% reduction in Scope 3 (construction methods) emissions intensity (tCO₂e per 100 m² of complete floor area) by 2031 (using 2021 as the baseline year) will involve supplier engagement to make informed procurement decisions, engaging with subcontractors to support their transition to less carbon intensive fuels (diesel and gas oil is currently the norm) and investing in innovation of

designing and building homes to reduce their associated embodied carbon. A reduction target of 46.2% by 2031 is also set in the plan for Scope 1 and 2 emissions (company operations). All targets have been validated by the Science Based Targets initiative (SBTi).

The Science Based Targets initiative (SBTi) is a corporate climate action organisation, incorporated as a charity, which develops standards, tools and guidance enabling companies to set GHG emissions reductions targets in line with net-zero by 2050 at the latest. Science-based targets show companies and financial institutions how much and how quickly they need to reduce their GHG emissions to prevent the worst effects of climate change (SBTi, 2024a). Glenveagh Properties PLC is one of over 4,000 companies and financial institutions who have had their emission reduction targets validated by the SBTi (Glenveagh's targets can be searched in the SBTi's target dashboard (SBTi, 2024b)).

Glenveagh Properties PLC's *Full Year 2024 Results*, published in March 2025, identified that Scope 3 emissions are 7% below the 2021 baseline, measured on an intensity basis (tCO₂e per 100m²). This is primarily due to the focus on the energy efficiency of the residential units. Scope 1 and 2 emissions decreased by 47% compared to 2021 baseline, which can be attributed to the first full year HVO (hydrotreated vegetable oil) was used across all sites as a replacement to diesel.

Therefore, with the level of mitigation proposed and the commitment of the project developer to sustainability and GHG emissions reductions, the amended development is unlikely to significantly impact the climate as previously assessed. The proposed amended development is considered to have a **direct** impact due to its presence, that is **long-term** as a result of the estimated lifetime of the buildings and **negative** due to the emission of GHGs. Due to the mitigation measures in place and the fact that the proposed amended development does not impede the trajectory to carbon neutrality, the impact on the climate is considered to be **not significant** in EIA terms.

Climate Change Risk Assessment

The operational phase climate change risk assessment remains as previously assessed. There is no change in terms of the location of the project therefore, the potential climate hazards remain unchanged. The proposed development was assessed as having at most low risks to the identified climate hazards, this remains appropriate for the amended development. There are no significant impacts predicted.

2.8.12 References & Sources

Additional references to the previously submitted EIAR include:

Environmental Protection Agency (2025a) National Climate Change Risk Assessment (NCCRA)

Environmental Protection Agency (2025b) Ireland's Greenhouse Gas Emissions Projections 2024-2055

Environmental Protection Agency (2026) Ireland's Final Greenhouse Gas Emissions 1990-2024

European Centre for Medium-Range Weather Forecasts (2023) ECMWF ERA5 data reanalysis

Glenveagh Properties PLC (2023) Net Zero Transition Plan 2023

Glenveagh Properties PLC (2025) Full Year 2024 Results

Government of Ireland (2023a) Climate Action Plan (CAP) 2024

Government of Ireland (2023b) Long-term Strategy on Greenhouse Gas Emissions Reductions

Government of Ireland (2024) Second National Adaptation Framework (NAF)

Government of Ireland (2025a) Climate Action Plan (CAP) 2025

Government of Ireland (2025b) National Planning Framework (First Revision)

Meath County Council (2024) Meath County Council Climate Change Action Plan 2024 -2028

Met Éireann (2026) Met Éireann's 2025 Climate Statement

Science Based Targets initiative (SBTi) (2024a) Science Based Targets initiative - About Us. [Online] Available at: <https://sciencebasedtargets.org/about-us>

Science Based Targets initiative (SBTi) (2024b) Science Based Targets Dashboard (beta). [Online] Available at: <https://sciencebasedtargets.org/target-dashboard>

2.9 Noise & Vibration

AWN Consulting have reviewed the proposed development and the Phase 1 EIAR Noise and Vibration Chapter, and concluded that the proposed amendments to Blocks A, B and C will not a significant impact on the conclusions of the Noise EIAR chapter, beyond those already assessed in the Phase 2 EIAR, Phase 3 EIAR, and Phase 1 EIAR Addendum report completed for the Road Realignment application.

2.10 Landscape and Visual Impact

2.10.1 Introduction

This document constitutes an Addendum to the previously submitted Landscape and Visual Impact Assessment (LVIA), which accompanied the planning application (MCC Ref: 23/60290) for the proposed development at Dunboyne.

The purpose of this addendum is to identify, describe and assess only those aspects of the landscape and visual assessment that vary as a result of the revised development proposal (hereafter referred to as the Addendum Application), and to confirm explicitly where the findings and conclusions of the original LVIA remain unchanged.

The addendum has been prepared in accordance with the Guidelines for Landscape and Visual Impact Assessment (GLVIA3), relevant Landscape

Institute Technical Guidance, and EPA / DoHPLG guidance on proportionate EIAR updates. It follows the principle of proportionality, focusing on change rather than repetition.

2.10.2 Relationship with the Previously Submitted LVIA

This addendum should be read in conjunction with, and not as a replacement for, the previously submitted LVIA.

Unless expressly stated otherwise in this addendum:

- The LVIA methodology remains unchanged;
- The landscape and visual baseline descriptions remain unchanged;
- The landscape character assessment remains unchanged;
- The visual receptor selection and sensitivity judgements remain unchanged;
- The magnitude criteria and significance thresholds remain unchanged;
- The mitigation strategy remains unchanged;
- The landscape and visual significance conclusions remain unchanged.

This approach accords with LI TGN 1/20, which confirms that LVIA reviews should focus on whether conclusions remain reasonable and robust, rather than re-assessing unchanged components.

2.10.3 Description of the Development Changes

A detailed description of the changes between the Original Application and the Addendum Application is provided separately within the Planning Addendum / Planner's Report.

In summary the Addendum Application comprises revisions to the proposed development parameters and layout. The LVIA addendum does not interpret or justify these changes but considers only whether they give rise to any material change in landscape or visual effects compared with those previously assessed.

Where relevant, this LVIA addendum cross-refers to the planner's description for factual confirmation of the revised proposal.

2.10.4 Scope of the LVIA Addendum

The LVIA addendum addresses the following matters only:

- Comparison of Zone of Theoretical Visibility (ZTV) between the Original and Addendum Applications;
- Comparison of Zone of Visual Influence (ZoVI) between the Original and Addendum Applications;
- Review of the relationship between revised visibility patterns and the previously assessed visual receptors;
- Clarification of the ZTV study area extent used for LVIA purposes;

- Confirmation of whether any landscape or visual effects, or their significance, differ from those previously reported.

No new landscape or visual effects are assessed unless explicitly identified.

2.10.5 Methodology Review

General Approach

The addendum has been prepared as a comparative review, drawing on:

- Updated ZTV and ZoVI figures prepared for the Addendum Application;
- The receptor framework established in the original LVIA;
- Professional judgement applied in accordance with GLVIA3 principles.

ZTVs and ZoVIs are used as analytical tools to inform professional judgement, not as measures of effect or significance in their own right, consistent with GLVIA3 guidance.

ZTV Study Area Clarification

The original LVIA included a 3 km ZTV for the specific purpose of screening for very high sensitivity visual receptors at longer distances.

That screening exercise confirmed that:

- No very high sensitivity visual receptors were present within the 2–3 km distance band;
- No designated landscapes, strategic viewpoints, or receptors of exceptional susceptibility were identified beyond 2 km;
- All receptors with potential for significant visual effects were located within 2 km of the site.

As a result, the original LVIA focused detailed assessment within a 2 km study area.

The Addendum Application does not alter this position. The revised ZTV confirms that no new theoretical visibility affecting receptors beyond 2 km is introduced. Accordingly, the 2 km LVIA study area remains appropriate and unchanged, consistent with the GLVIA principle of proportionality.

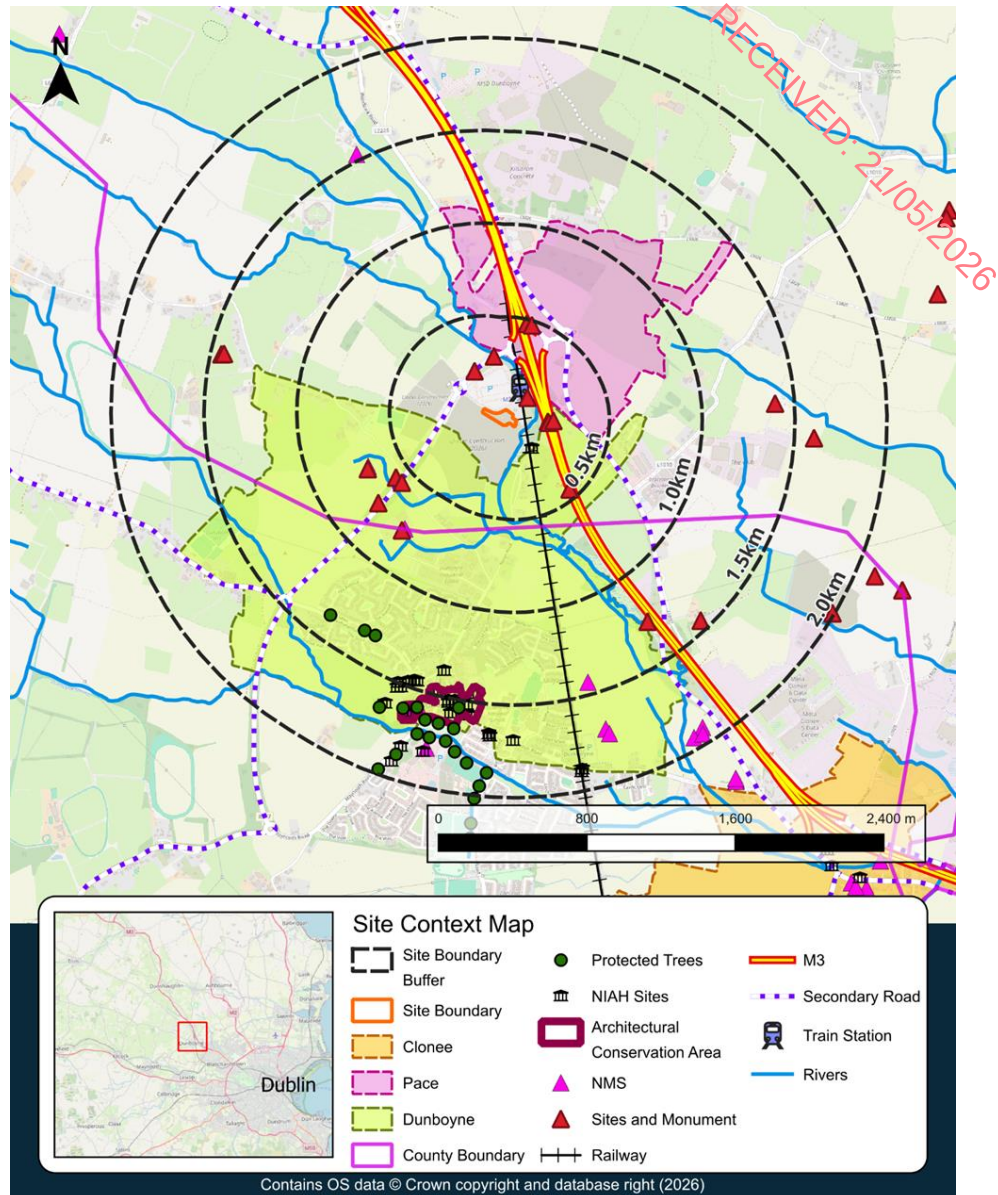


Figure 3 Site Context and Constraints Map

2.10.6 ZTV and ZoVI Comparison

Zone of Theoretical Visibility (ZTV)

Comparison of the ZTV prepared for the Original Application and the Addendum Application demonstrates a very high degree of correspondence between the two visibility envelopes.

In spatial terms, the comparison shows:

- A very high degree of spatial overlap between the Original and Addendum ZTV extents;
- No material outward expansion of the overall ZTV envelope;
- Areas of addendum only ZTV are minor, peripheral and fragmented, occurring primarily at the outer edge of the ZTV.

In order to support interpretation of the scale of change, a descriptive review of relative areal coverage has been undertaken based on visual inspection of the published ZTV comparison figure. Treating 100% as the total area shown to have any theoretical visibility, the following indicative proportions are identified:

- Overlap between Original and Addendum ZTV (purple): approximately 85–90%;
- Original only ZTV (blue): approximately 8–12%;
- Addendum only ZTV (pink): approximately 2–4%.

These proportions are visual estimates only, derived from inspection of the rendered figure rather than from GIS based area calculations, and are intended to illustrate the relative dominance of overlapping visibility, not to provide quantified spatial data.

From an LVIA perspective, the ZTV comparison confirms that the Addendum Application largely replicates the theoretical visibility envelope already considered in the original LVIA. The very limited proportion and peripheral nature of addendum only ZTV does not indicate the introduction of new areas requiring detailed landscape or visual assessment.

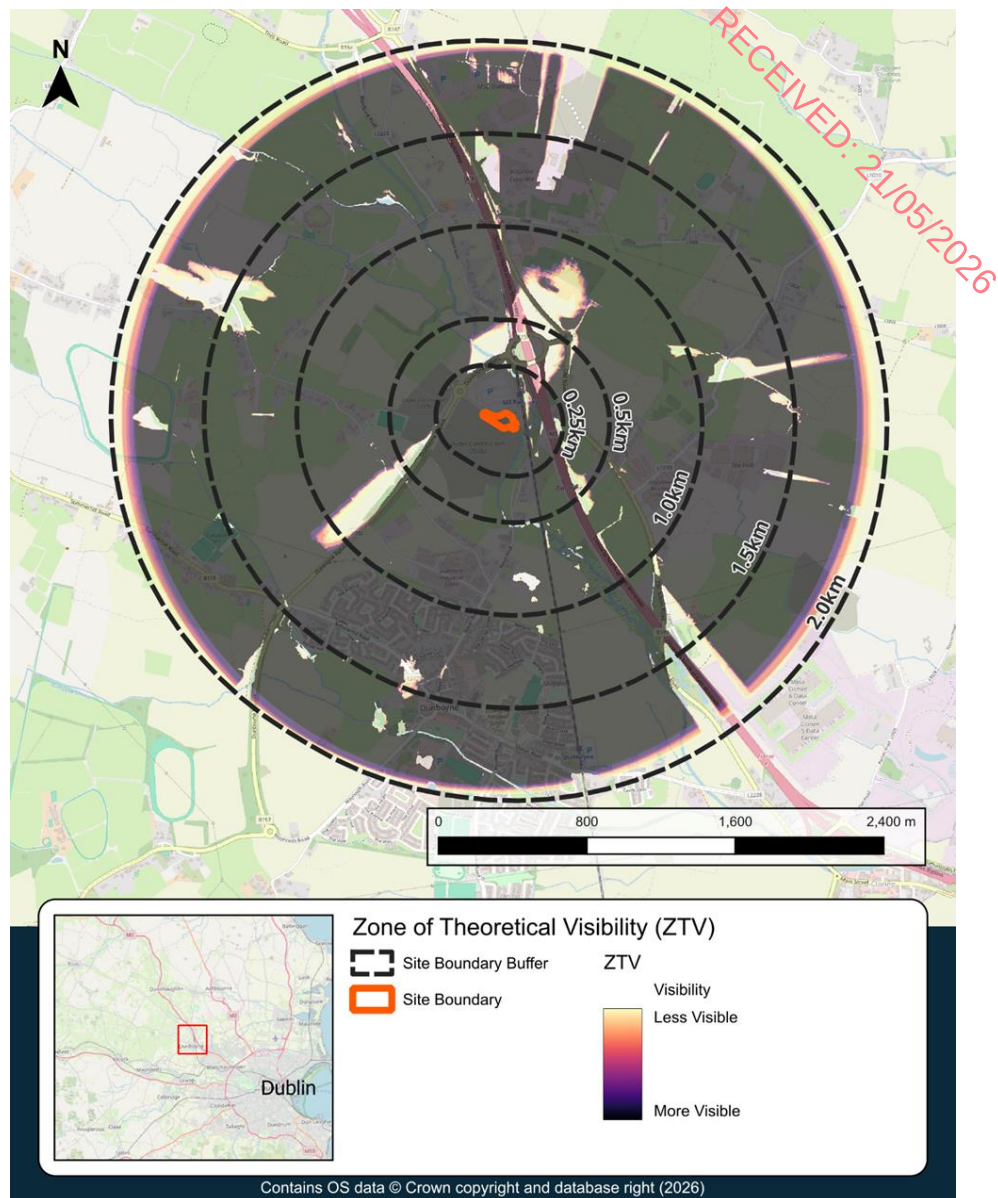


Figure 4 Zone of Theoretical Visibility (ZTV)

Zone of Visual Influence (ZoVI)

Comparison of the Zone of Visual Influence (ZoVI) outputs for the Original and Addendum Applications similarly demonstrates a high degree of continuity in the pattern of likely experienced visibility.

The ZoVI comparison indicates that:

- The majority of ZoVI is shared between the Original and Addendum Applications;
- Addendum only ZoVI is limited in extent, fragmented and visually subordinate to overlapping areas;
- The overall pattern of likely experienced visibility remains consistent with that previously assessed.

A descriptive review of relative areal coverage has also been undertaken for the ZoVI comparison figure. Based on visual inspection and treating 100% as the total area shown to have any ZoVI visibility, the following indicative proportions are identified:

- Overlap between Original and Addendum ZoVI (purple): approximately 65–70%;
- Original only ZoVI (blue): approximately 20–25%;
- Addendum only ZoVI (pink): approximately 8–12%.

While the ZoVI shows a slightly higher proportion of non overlapping visibility than the ZTV, the dominant condition remains overlapping visual influence, with addendum only ZoVI occurring as narrow, discontinuous and peripheral fragments rather than as new coherent areas of visibility.

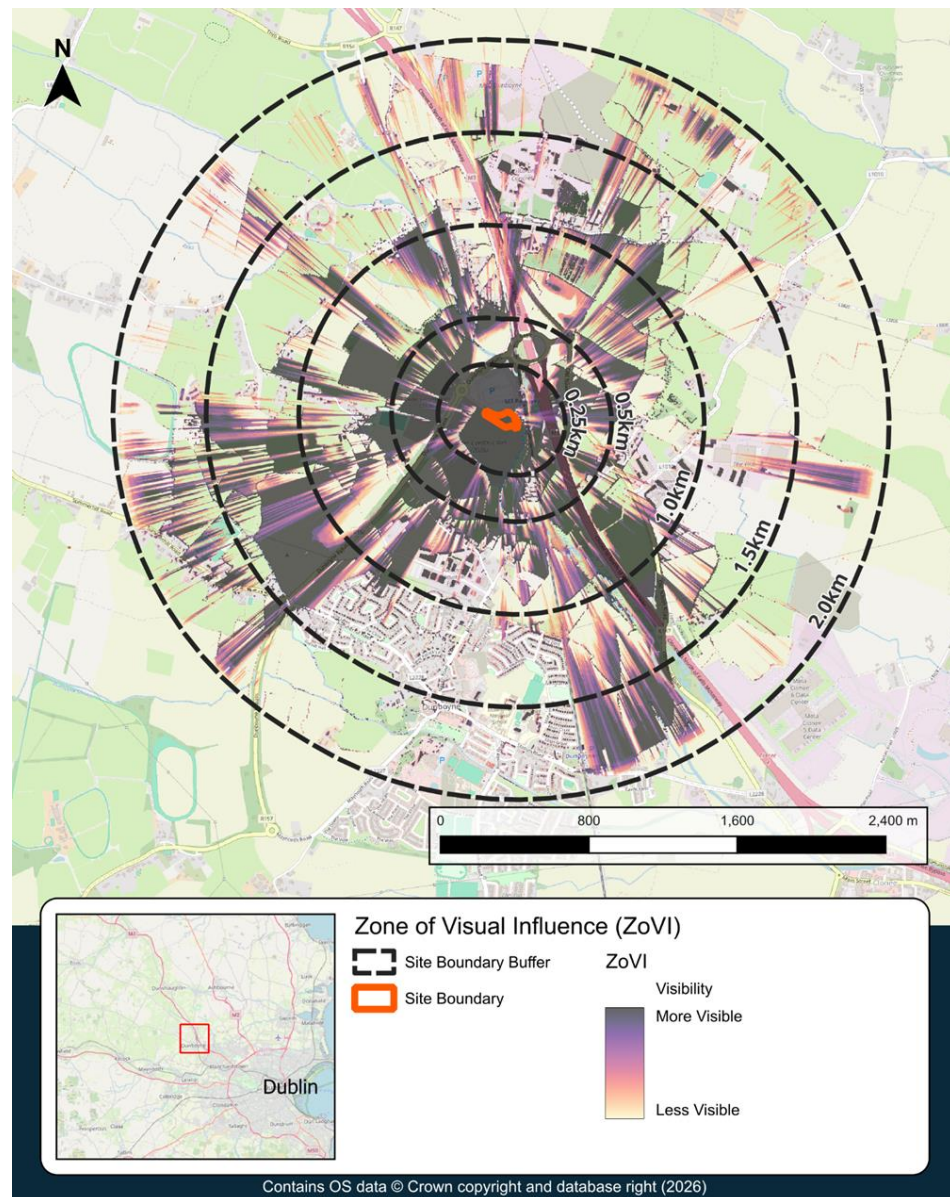


Figure 5 Zone of Visual Influence (ZoVI)

Interpretation in LVIA Context

Taken together, the ZTV and ZoVI comparisons indicate that:

- The Addendum Application does not introduce a materially expanded envelope of theoretical or likely visibility;
- The dominant condition across both ZTV and ZoVI remains shared visibility already assessed in the original LVIA;
- Areas of addendum-only visibility represent a minor component of the overall visibility extents and are spatially peripheral.

When considered alongside the receptor mapping and assessment presented elsewhere in this addendum, the limited proportion and distribution of addendum-only visibility does not correspond with the introduction of new visual receptors or an increase in the magnitude of effects previously identified.

Accordingly, the revised ZTV and ZoVI do not indicate a materially different pattern of visual influence, and the conclusions of the original LVIA remain applicable and unchanged

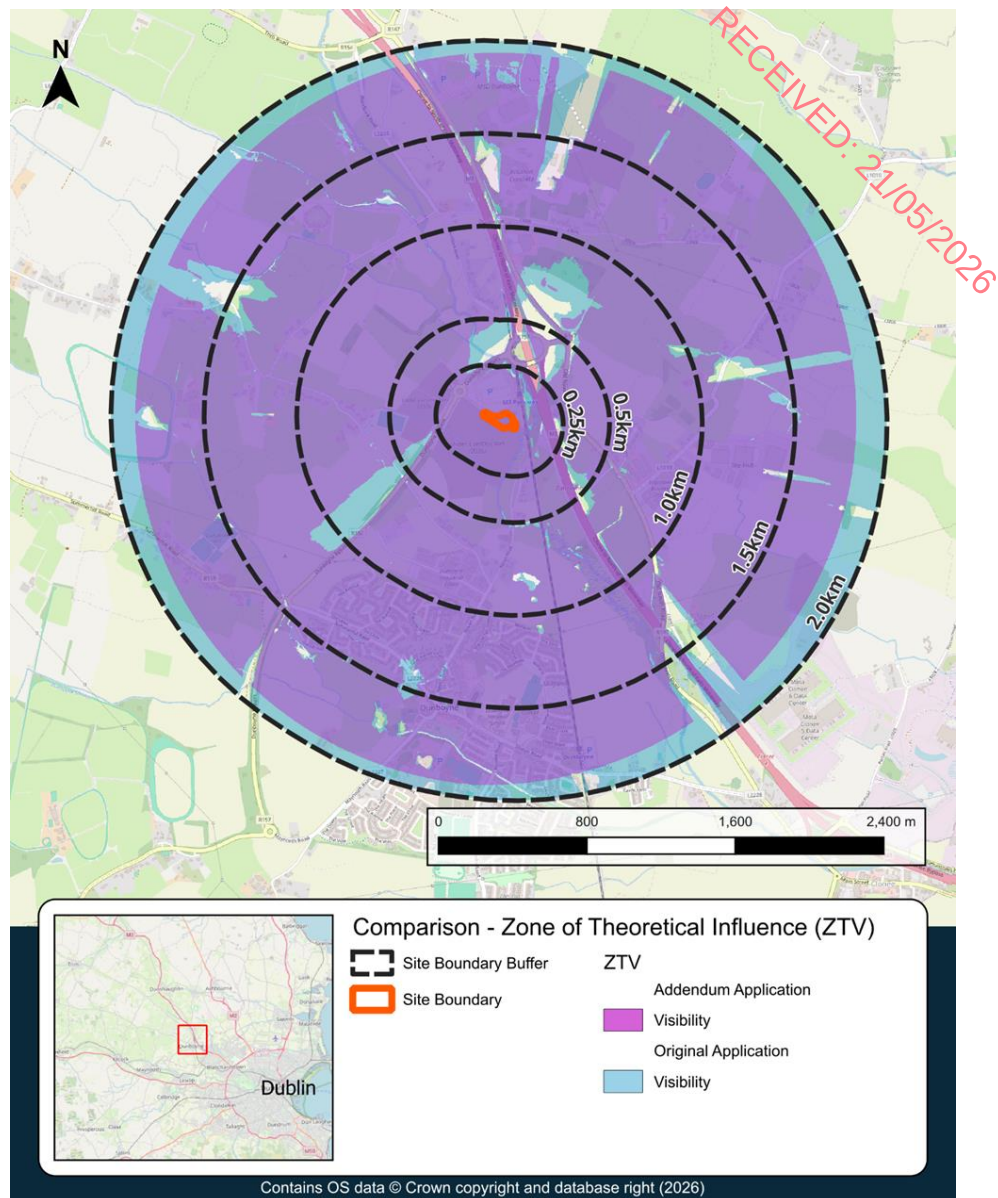


Figure 6 ZTV Comparisons

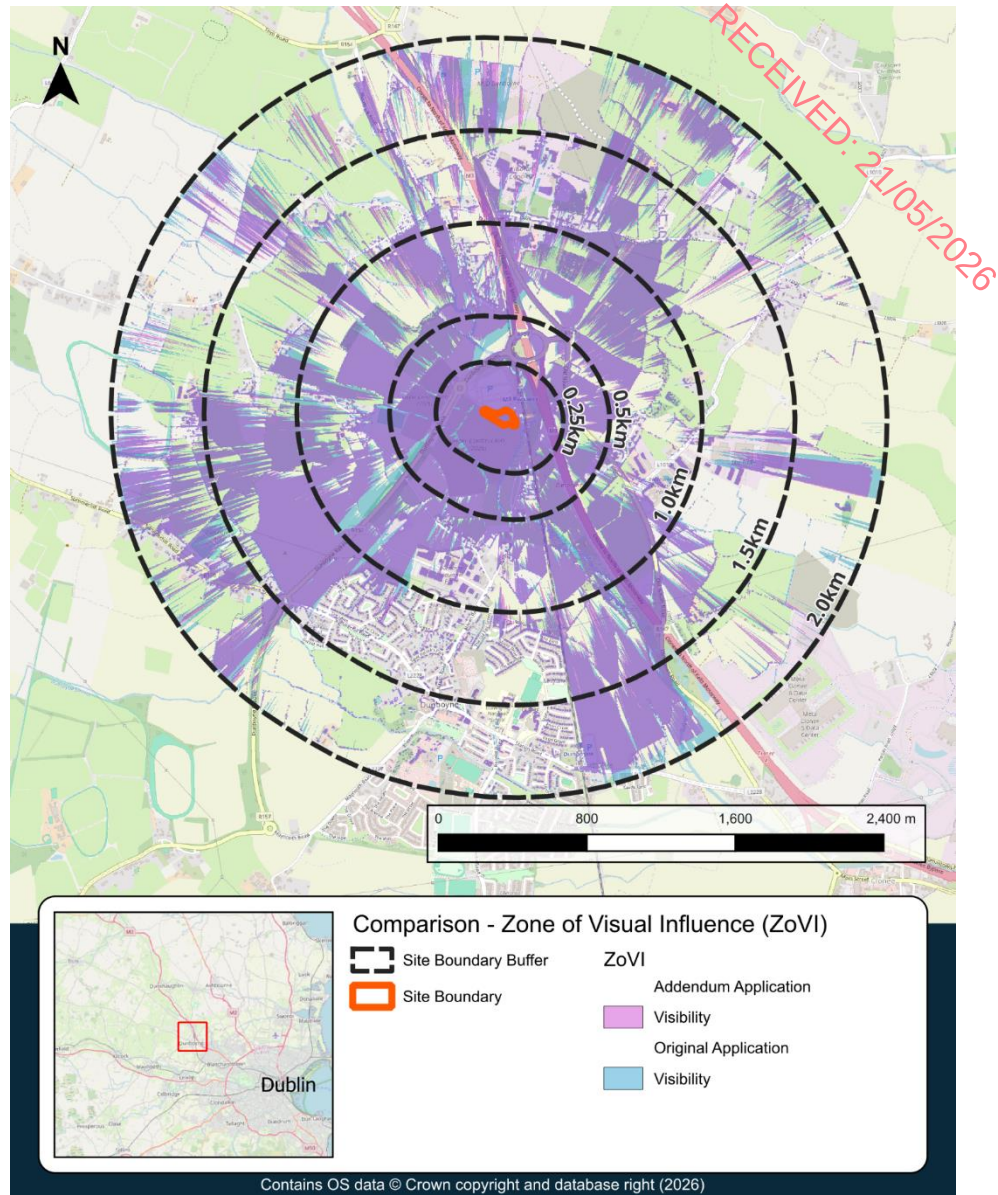


Figure 7 ZoVI Comparison

2.10.7 Visual Receptors

The original LVIA identified and assessed a comprehensive range of visual receptors, focusing on residential, community, commercial and open-space receptors within approximately 1.0–1.5 km of the site.

Review of the revised ZTV and ZoVI in conjunction with the receptor mapping indicates that:

- No new visual receptor groups fall within areas of addendum-only ZTV or ZoVI;
- All receptors assessed in the original LVIA remain within areas of overlapping visibility or areas where visibility was already assessed as limited or negligible;

- The receptors identified as most affected in the original LVIA remain unchanged.

The receptor selection and assessment framework therefore remain valid, and no additional visual receptor assessments are required.

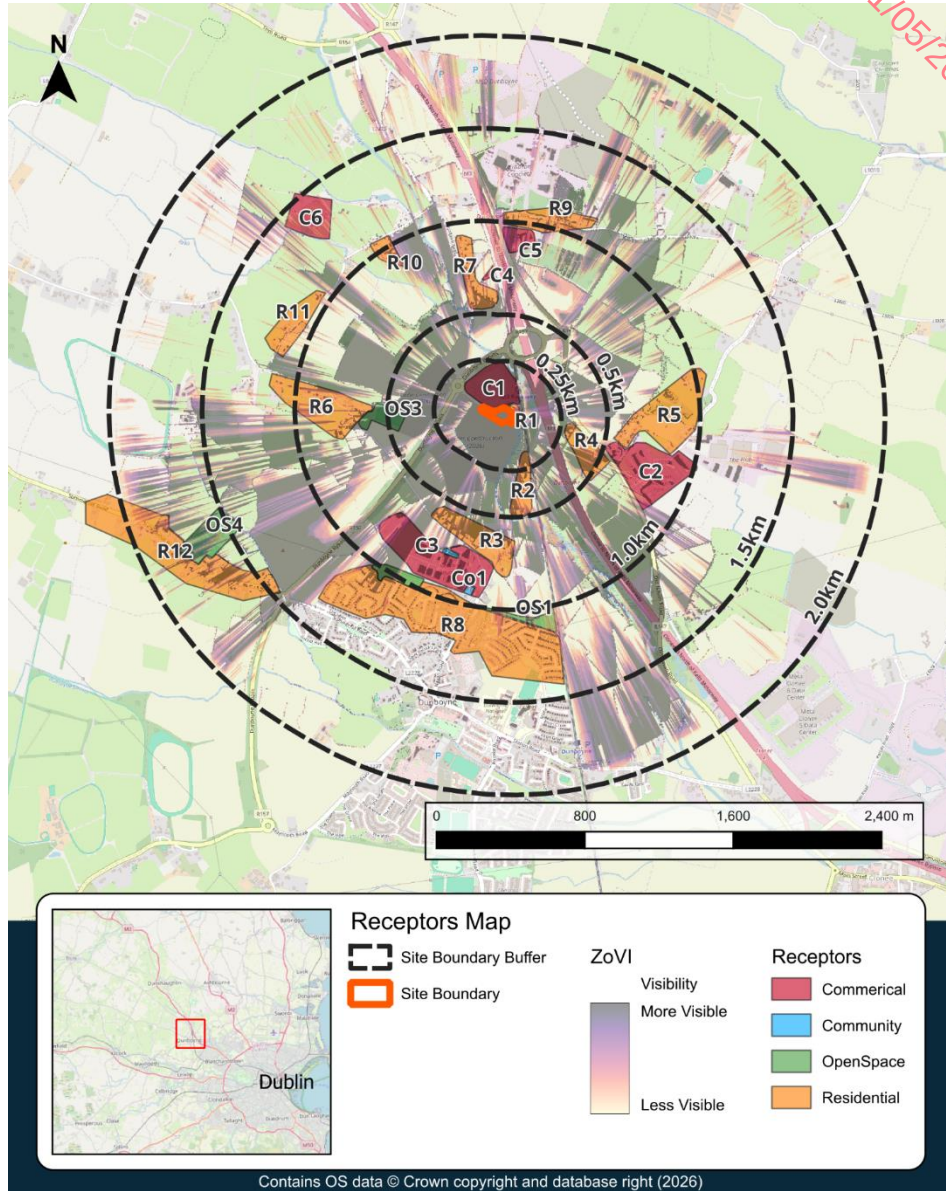


Figure 8 Receptors overlaid with proposed ZoVI

2.10.8 Landscape Effects

The original LVIA concluded that the site lies within a landscape character area with capacity to accommodate change, and that landscape effects would not be significant following mitigation.

The Addendum Application does not introduce:

- New land-take affecting landscape character;
- New influence on designated or valued landscapes;

- Any change in the nature or extent of landscape change previously assessed.

The landscape effects and their significance remain unchanged.

2.10.9 Visual Effects and Significance

The original LVIA concluded that:

- The highest visual effects would be experienced by the closest residential receptors;
- Effects would be moderate or lower in magnitude;
- No significant adverse visual effects would arise.

Based on the revised ZTV and ZoVI:

- No increase in magnitude of visual change is identified for any receptor;
- No new visual effects arise that were not previously assessed.

The visual effect significance conclusions remain unchanged, consistent with GLVIA3 requirements that significance be judged objectively.

2.10.10 Development Plan Context

The original LVIA was informed by the relevant Development Plan and Local Area Plan policies applicable at the time of submission.

A review undertaken for the purposes of this addendum has not identified any adopted changes to Development Plan or Local Area Plan policy that would materially alter the landscape or visual policy context of the site.

The policy baseline therefore remains unchanged.

2.10.11 Summary of Changes and Non-Changes

Elements That Vary

- Updated ZTV and ZoVI figures reflecting the Addendum Application;
- Clarification of ZTV extent used for LVIA purposes.

Elements That Do Not Vary

- LVIA methodology;
- Landscape baseline and character assessment;
- Visual receptor selection and sensitivity;
- Mitigation strategy;
- Landscape and visual effect significance conclusions.

3. Conclusion

This LVIA addendum confirms that the Addendum Application does not give rise to any new or materially different landscape or visual effects compared with those previously assessed.

The conclusions of the previously submitted LVIA therefore remain robust, applicable and unchanged.

3.1 Material Assets: Traffic and Transport

Atkins reviewed of the completed Material Assets Traffic and Transport EIAR chapter in the context of the proposed development and prepared an addendum report which is included as Appendix 1 of this EIAR report.

3.2 Material Assets: Service Infrastructure and Utilities

AtkinsRealis have reviewed the completed Phase 1 Utilities and Waste EIAR Chapter, in the context of the of the proposed development changes (i.e. amendments to Blocks A, B and C, as described within this EIAR Addendum) and concluded that the proposed development changes will not result in a material change to the conclusions of this EIAR chapter. No significant impacts to the receiving environment, with respect to Material Assets, specifically Utilities and Waste Management, are anticipated.

3.3 Biodiversity

DNV (previously Enviroguide) reviewed the completed Biodiversity EIAR chapter, in the context of the proposed amendments. They provided a letter outlining their assessment of the Biodiversity EIAR chapter and Appropriate Assessment which is submitted with this amendment application and included as an appendix to this EIAR addendum report.

In their letter, DNV noted that the EIAR Biodiversity Chapter prepared as part of the previous LRD application assessed the ecology of the Site and the potential for significant effects on same. The key ecological receptors (KERs) identified as part of this assessment were as follows:

- Hedgerows (WL1), Treelines (WL2) and Drainage Ditches (FW4).
- River Tolka (FW2).
- Hedgehog, Badger and Otter.
- Breeding Bird Assemblage.
- Bat Assemblage.
- Common Frog.
- Fish Assemblage of the River Tolka

The assessment carried out within the Biodiversity Chapter concluded that the construction mitigation measures and embedded design features detailed therein were sufficient to reduce any adverse effects on KERs associated with the Site to 'not significant' i.e., that there would be no significant adverse effects on any valued habitats, designated sites or species as a result of the LRD. The Proposed Amendments would not result in any change in these conclusions given their small-scale nature.

DNV concluded that the proposed changes with this application will have no material effect on the findings and conclusions of the ecology assessments submitted with the permitted Phase 1 application.

Please see letter included in Appendix 2 of this report for further details.

3.4 Cultural Heritage and Archaeology

John Cronin and Associates have reviewed the proposed development and the completed Phase 1 Dunboyne LRD EIAR and determined that the proposed amendments will not have a significant impact on the conclusions of the EIAR.

There are no extant archaeological sites listed in the SMR/RMP located within the boundary of the proposed development site and the construction phase will, therefore, have a neutral effect on the known archaeological resource listed in these records.

There are no Protected Structures located within the proposed residential development site or within the surrounding 1km study area and it is not located within, or adjoining, an Architectural Conservation Area. There are no NIAH-listed buildings or lands within the proposed development site and the nearest structure listed in the inventory is a railway bridge (NIAH ref. 14405001) located c.160m southeast end of the site boundary. The construction phase of the proposed development will, therefore, have a neutral effect on the architectural heritage resource.

3.4.12 Mitigation measures

Site-specific archaeological mitigation measures were presented in Section 14.4 of the EIAR to ensure that a potential slight/moderate range of significance of effect in the context of residual impacts on the unrecorded archaeological resource is mitigated. Since the completion of the Phase 1 EIAR the following archaeological mitigation measures have been enacted in relation to the Permitted Development:

Test trenching was carried out in February 2025 (Licence No. 25E0056) to comply with planning condition No. 18, Planning Ref. ABP-320049-24 and as recommended within the Environmental Impact Assessment Report for the permitted development. The testing strategy was informed by a geophysical survey (Licence No. 23R0292).

Testing identified two areas of archaeology – AA1 and AA2. Both are located outside the boundary of the proposed apartment development and its immediate vicinity.

- a. AA1 represented a large enclosure site and as preservation in situ was not feasible it was recommended the remains be fully excavated in advance of construction.
- b. AA2 represents the site of a ringbarrow, and it was recommended that these remains be preserved in situ.

Archaeological excavation of AA1 was carried out under a reactivation of licence 25E0056, with works completed in April 2026. Initial results of the excavation indicate the presence of a large (c. 30-40m diameter) enclosure of possible prehistoric date. No internal features were identified, although a cobbled surface and two entrances were noted. Finds include flint, possible prehistoric pottery and animal bone. Post-excavation analysis will be undertaken for all environmental and artefactual material and radiocarbon

dates will be sought to indicate an approximate period of use for the monument.

Monitoring of topsoil stripping is currently ongoing under licence 25E0056. Following completion of fieldwork a preliminary report will be prepared and submitted to the NMS within 4 weeks, and a Final Excavation Report will be issued within a year.

A small portion of the Permitted Phase 2 Dunboyne LRD boundary overlaps with the proposed development site. The following archaeological mitigation measures have been enacted for Phase 2:

Test trenching informed by a geophysical survey (Licence No. 24R0165) was carried out in June 2024 (Licence No. 24E0676), prior to an application for planning. A second phase of test trenching was carried out in November 2025 (Licence No. 25E1048) to comply with planning condition No. 4 of the grant of planning (MCC Planning Ref. 24/60805) and as recommended within the Environmental Impact Assessment Report for the permitted development. The two programmes of test trenching identified four areas of archaeology. The nearest area of archaeology was located 200m west of the proposed development boundary.

Archaeological excavation of the four areas of archaeology (Cutting 1 – 4) was carried out under licence 25E0986, with works completed in February 2026. Initial results of the excavation indicate the presence of two enclosures, two house structures, two ringditches and other discrete features consistent with prehistoric domestic and funerary activity, cereal drying/processing, metal working and pyrolithic activity. Finds include flint, chert, prehistoric pottery and animal bone. Post-excavation analysis will be undertaken for all environmental and artefactual material and radiocarbon dates will be sought. The results of the excavation will be presented in a final, comprehensive report within one year.

3.4.13 Cumulative impacts

There are no material changes to Section 14.3.5 Cumulative Impacts. Since the completion of the Dunboyne North LRD EIAR all archaeology within the Permitted Development Phase 2 Dunboyne LRD (MCC ref. 2460805) has been mitigated through preservation by record (excavation). It is concluded that the proposed development will not act in combination with other developments to result in any significant cumulative impacts on the cultural heritage resource.

3.5 Significant Interaction of Impacts

There are no material changes to the Significant Interaction of Impacts chapter.

3.6 Summary of Mitigation Measures and Monitoring

There are no material changes to the Mitigation Measures and Monitoring chapter. There were no changes identified to the mitigation measures proposed throughout the EIAR.

3.7 Screening for Major Accidents

There are no material changes to the Screening for Major Accidents chapter.

4. Conclusion

This report has provided a review of the completed Phase 1 EIA in the context of the proposed amendments to the permitted Blocks A, B and C to provide a total of 124 no. apartment units, an increase of 48 no. units on the permitted scheme.

Overall, it is concluded that the proposed modifications to the permitted LRD application do not have a significant impact on the conclusions of the completed EIA.

Appendix 1

Traffic and Transport EIA Addendum Report

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DUNBOYNE NORTH - PHASE 1 AMENDMENT

Notice

This document and its contents have been prepared and are intended solely as information for Marina Quarter Limited and use in relation to Dunboyne North Phase 1 Addendum (EIAR Chapter)

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This document has 43 pages including the cover.

Document history

Document title: Phase 1 EIAR Traffic Chapter Addendum

Document reference: 5205505DG0074 rev 1

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
Rev 0	Draft	MD	MA/PD	SW	SW	30/04/2026
Rev 1	Draft	PD	MA/PD	SW	SW	13/05/2026

Client signoff

Client	Marina Quarter Limited
Project	DUNBOYNE NORTH - PHASE 1 AMENDMENT
Job number	5205505
Client signature/date	



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Table 1-1 - Planning application details

Phase	Quantum of development	Planning Reference No	Date
Phase 1	315 residential units: 145 houses 122 apartments	Meath Planning Application Reference: 2360290 ¹ Appealed to An Bord Pleanála under reference ABP-320049-24 ²	The application was granted permission by Meath County Council (MCC) in June 2024. However, the decision was appealed to An Bord Pleanála (ABP) at the end of June 2024. ABP approved the application in November 2024.
Phase1 Amendment	Same as Phase 1	Meath Planning Application Reference: 2561001 ³	In September 2025, an amendment to Phase 1 application (reference: 2360290) was submitted. The amendment included modifications consist a re-alignment of a portion of the link road (including new bridge over the River Tolka) connecting the R157 and the Old Navan Road, the provision of 1 no. pumping station and associated access road off the Old Navan Road and all associated ancillary development works. The application was approved in November 2025.
Phase 2	309 residential units: 169 houses 140 apartments	Meath Planning Application Reference: 2460805 ⁴	The application was granted permission by MCC in November 2024.
Phase 3	356 residential units: 252 houses 104 apartments	Meath Planning Application Reference: 2660001 ⁵	The application was submitted in December 2025 and is due for decision in April 2026.

1.2 Purpose of this document

A planning application for the residential development at the Phase 1A lands, located to the east of the R157 and south of the M3 Parkway Station (refer to Figure 1-1), was submitted to Meath County Council (MCC) in September 2023. This application was approved by An Coimisiún Pleanála (ACP) at the end of June 2024 (refer to Table 1-1). This planning application formed Phase 1 of the overall Masterplan.

As part of the Phase 1 planning application, the development included:

¹ <https://www.eplanning.ie/MeathCC/AppFileRefDetails/2360290/0>

² <https://www.pleanala.ie/en-ie/case/320049>

³ <https://www.eplanning.ie/MeathCC/AppFileRefDetails/2561001/0>

⁴ <https://www.eplanning.ie/MeathCC/AppFileRefDetails/2460805/0>

⁵ <https://www.eplanning.ie/MeathCC/AppFileRefDetails/2660001/0>



- 267 residential units, consisting of 145 houses and 122 apartments/duplexes, providing a mix of 1-, 2-, 3- and 4-bed units.
- A single-storey creche.
- Modifications to the R157 regional road, including changes to the existing carriageway/traffic lanes and the replacement of an existing roundabout with a new signalised junction.
- A new signalised junction and link road (including a new bridge over the River Tolka) connecting the R157 and the Old Navan Road.
- The provision of footpaths, cycle lanes and two pedestrian crossings on the existing M3 Parkway access road.
- A foul pumping station and a connection to the existing public sewerage system via the Old Navan Road.
- A watermain connection to the north of the site at Pace townland.
- Three ESB substations/kiosks and the undergrounding/re-routing of existing electricity lines.
- Reprofiting of land and relocation of the existing berm adjoining the River Tolka as part of flood mitigation measures.
- All associated ancillary works including footpaths, cycle lanes, car and bicycle parking, drainage, public lighting, bin storage, boundary treatments and landscaping/amenity areas.

As noted in Table 1-1, in November 2025 the applicant was granted permission for modifications to part of the previously granted application. These modifications included the re-alignment of a portion of the link road (including the new bridge over the River Tolka) connecting the R157 and the Old Navan Road but did not change any of the proposed schedule of accommodation. The Meath planning reference for this application is 2561001.

The applicant now plans to submit a second addendum to the existing Phase 1 application approved by ACP and its subsequent amendment. This addendum proposes increasing the total number of residential units from 267 to 315, with all additional units being apartments. Details of the updated schedule are provided in the following section.

This report includes:

- A comparison of the proposed schedule of development for the Phase 1 lands with the schedule approved in the original Phase 1 planning application.
- A comparison of the proposed car parking provision for Phase 1 with the car parking approved in the original Phase 1 planning application.
- A comparison of the assessment submitted as part of the Phase 3 planning application (refer to Table 1-1) with the new modifications to the Phase 1 planning application.



2. Summary of Updated Schedule of Accommodation

For the other phases of the development (Phase 2 and Phase 3), the applicant has proposed a higher proportion of apartments relative to houses in order to align with the more urban character of the area.

For this amendment to the Phase 1 planning application, the applicant similarly proposes to increase the number of apartments to reflect this more urban context. The proposed changes to the Phase 1 quantum of development are summarised in table below.

Table 2-1 –Schedule of Accommodation (Phase 1)

Dwelling Type	Bedroom	Currently Granted Phase 1 application (Ref: 2360290)	Proposed Updated Phase 1 Schedule
Apartment	Studio	0 unit	31 (+31 units)
	1 Bed	28 units	64 (+36 units)
	2 Bed	48 units	29 (-19 units)
	All	76 units	124 (+48 units)
Duplex	All	46 units	46 (no change)
Houses	All	145 units	145 (no change)
Total		267 units	315 (+48 units)

For the other phases of the development (Phase 2 and Phase 3), no changes are proposed. Accordingly, the updated schedule of accommodation for all three phases is summarised in table below.

Table 2-2 - Updated Schedule of Accommodation (All Phases)

Dwelling Type	Old Schedule of Accommodation	Updated Schedule of Accommodation
Apartment/Duplex	322 units	370 units (+48 units)
Houses	610 units	610 units (no change)
	932 units	980 units (+48 units)

2.1 Impact on Trips Generation

As shown in Table 2-2, a total of 48 additional apartments are proposed across all three phases of the development. However, for the analysis submitted as part of the Phase 3 planning application (Meath Planning Application Reference: 2660001), a higher number of housing units was assumed than those presented in Table 2-2. This difference arises from the assumption that 3-bed duplex units were treated as houses for the purposes of trip generation.

Applying the same assumption, a comparison of trip generation based on the previous and updated schedules is presented in the table below for the ultimate design year (Opening Year + 15).



Table 2-3 – Comparison of trip generation

Schedule	Houses					Apartments					Total	
	No.	Trip rate		Trips		No.	Trip rate		Trips		Trips	
		Arr	Dep	Arr	Arr		Arr	Dep	Arr	Arr	Dep	
AM Peak (07:00 - 08:00)												
Old	719	0.037	0.154	27	111	213	0.016	0.055	3	12	30	123
Revised	719	0.037	0.154	27	111	261	0.016	0.055	4	14	31	125
AM Peak (08:00 - 09:00)												
Old	719	0.08	0.264	58	190	213	0.055	0.142	12	30	70	220
Revised	719	0.08	0.264	58	190	261	0.055	0.142	14	37	72	227
PM Peak (17:00 - 18:00)												
Old	719	0.344	0.176	247	127	213	0.251	0.188	53	40	300	167
Revised	719	0.344	0.176	247	127	261	0.251	0.188	66	49	313	176

For the AM peak, the dominant movement is departures, while for the PM peak, arrivals are dominant. It can be observed from the table above that, at most, 3 to 7 additional trips are expected based on the revised assumptions, which is considered to be low and will have no material impact on the traffic in the area.

In addition, as noted above, 3-bed duplex units are treated as houses for the purposes of the trip generation analysis. Given their lower parking provision, this assumption represents an overestimate of likely trips.

Background trips for all zones within Dunboyne were also grown in line with NTA growth factors. However, as the traffic model already includes trips from all future permitted and proposed developments, including Dunboyne East Development and non-residential trips from Dunboyne North, the application of background growth to trips within Dunboyne again represents an overestimate of traffic volumes.

Additionally, parking for apartments is provided at a reduced ratio of 0.85 spaces per unit, compared to 1.5 spaces per unit as set out in the Meath Development Plan guidelines. Similarly, for houses, a considerably lower parking ratio than 1.5 spaces per unit has been proposed across the three phases of development. However, this reduced parking provision has not been reflected in the trip generation assumptions as they are based on unit type only. As a result, the estimated traffic generated by the development is again on the conservative (higher) side.

Furthermore, the trip generation exercise is based on the number of units rather than the number of bedrooms. In the revised schedule, the additional apartment units comprise studio and 1-bed units, while the number of 2-bed apartments is reduced. Studio and 1-bed units generally generate fewer trips than 2-bed apartments. Therefore, again, the estimated trips are on the higher side.

Overall, the trips considered in the Phase 3 traffic model are highly conservative. Therefore, the assessment submitted as part of the Phase 3 planning application (Meath Planning Application Reference: 2660001) remains valid, and no changes to the traffic model have been made as part of this addendum.

The following section summarises the results of the transport modelling for the future horizon year (Opening Year + 15) used in the Phase 3 planning application.

3. Modelling Results

This section summarises the results of the updated assessment for the ultimate design year, Opening Year + 15 (2040), for the following scenarios:

- Opening Year +15 (2040) – Do Minimum scenario
- Opening Year +15 (2040) – Do Minimum + Marina Quarter Ltd Scenario
- Opening Year + 15 (2040) – Do Minimum + All Dunboyne North Development Scenario

Similar to Phase 1 planning application:

- The Do Minimum scenario includes:
 - No development in Dunboyne North but includes residential development in Dunboyne East.
 - Extension of Dunboyne Business Park link on its western side where it would join the R157 at a newly designed priority junction.
 - Eastern Distributor Road connecting the residential development in the east to the business park link road.
 - Upgrade of R147/R157 roundabout junction to a signalised junction
- The Do Minimum + Marina Quarter Ltd scenario includes the development and infrastructure upgrade included in Do Minimum plus:
 - Residential development in Dunboyne North
 - New updated Access Junctions on R157 (M3 Parkway Access Junction and southern Access Junction)
 - Updated alignment of R157 – Old Navan Road link road
- The Do Minimum + All Development will include all development and infrastructure upgrades included in Do Minimum + Marina Quarter Ltd plus:
 - All Remaining MP22 Masterplan development

The comparison of the Do Minimum + Marina Quarter Ltd scenario with the Do Minimum scenario provides the impact of the residential portion of lands owned by Marina Quarter Ltd, while the Do Minimum + All Development scenario provides the cumulative impact on the surrounding road network.

The summary of results included:

- Overall network performance
- Travel time along M3 mainline
- Junction impact results of key junction

3.1 Overall Network Performance

Do Minimum Scenario

- Across all modelled periods, the average delay across the entire network was observed to be in the order of 25 to 30 seconds.
- The average speed throughout the network was observed to be in the order of 60 to 65 km/hr.
- The latent demand was observed to be zero across the network for all the modelled periods.



Operational Traffic Impact: Do Minimum+Marina Quarter Ltd Development Scenario

- Compared to the Do Minimum Scenario, the average delay increased by around 8-10 seconds across both hours of the morning peak, and by around 17 seconds for the PM peak.
- Compared to the Do Minimum Scenario, the average speed reduced by an order of 5 to 6 km/hr for both peak periods during the AM peak and by 8 km/hr for the PM peak.
- The latent demand was observed to be zero across all the modelled periods.
- The Do Minimum + Marina Quarter Ltd Development scenario results in a very small impact on the overall network function.

Cumulative Impact: Do Minimum + All Development Scenario

- When compared to Do Minimum+Marina Quarter Ltd Development scenario, the average delay further increased by 11 seconds for 7 to 8 am, by 46 seconds for 8 to 9 am and by around 77 seconds for 5 to 6 pm.
- When compared to Do Minimum+Marina Quarter Ltd Development scenario, the average speed further reduced by 4 km/hr for 7 to 8 am, by around 13 km/hr for 8 to 9 am and 5 to 6 pm period.
- For the AM Peak, the latent demand was observed to be under 10 vehicles at the end of the modelled period (7 to 9 am) which was observed to be clear during the cooldown period (9 to 9.15 am).
- For the PM Peak period, the latent demand was observed to be 75 vehicles at the end of the modelled peak period (5 to 6 pm). This is attributed to the congestion along the northwest access arm at the M3 Parkway junction which primarily serves the commercial lands, and the congestion was still observed after the cooldown period (6 to 6.15 pm).
- For the Do Minimum+All Development scenario, when compared to the other two scenarios, the impact on the overall network parameters was found to be reasonably small for the 7 – 8am time period while a larger impact was observed for the 8 – 9am and 5 to 6 pm periods. This is due to congestion observed on the R157 between M3 Junction 5 and the new R157 Southern Access. The causes of congestion within the network are described below:
 - For All Development Scenario, the majority of the additional trips are associated with commercial lands located northwest of the R157. In the AM Peak, these trips arrive to these lands primarily from the M3 and R147 zones and have to turn right from the R157 to access the development site. These right turning movements increase the congestion along the R157 southwest bound arm at the M3 Parkway access junction. In the PM Peak, the trips departing from these lands increase the congestion along the north-western arm.
 - For the future development scenarios both the M3 Parkway junction and Southern Access junctions were upgraded to a protected signalised junction in which tighter radii are provided and cycle path and pedestrian crossings are set back from the vehicle movements. Hence, this increased the intergreen time between the stages and also the pedestrian crossing time and associated green time for the pedestrian stage increased resulting in congestion along the R157 arms. In Do Minimum + All Development scenario, due to the addition of Dunboyne North commercial trips, the situation is further aggravated, and congestion was observed along R157 arms for both peak hours of Do Minimum+All Development scenario.
 - In addition, the congestion can be observed along all arms of the R147/R157 junction during AM Peak.
 - For all the modelled periods, congestion was also observed along the Business Park Link Road at the new priority junction with the R157, primarily due to it being a priority junction with no dedicated control for vehicles accessing onto the R157.
 - Vehicles were observed to be moving slowly along the new link road between the R157 and the Old Navan Road compared to the Dunboyne Business Park Link Road. This is attributed to the fact that this link has been made unattractive to through traffic by provision of traffic management measures (reduced speed limit, raised tables, controlled crossings and horizontal deflections) which encourages vehicles to use the new link through the Business Park.
 - Traffic flows were observed to be reasonably free-flowing on the on and off ramps at the motorway interchange as well as on the M3 itself, indicating that there is no real impact on the national road network.



Summary

- The Do Minimum+Marina Quarter Ltd Development scenario results in very small impact on the overall network function with small increases in delay with average speeds in the network. Hence the impact of the proposed development trips was found to be **“not-significant”**.
- For the cumulative impact assessment, in the Do Minimum+All Development scenario, overall, the average delay across the network was observed to be in the order of 80 seconds during AM peak, and 120 seconds for the PM peak. For the given quantum of development across Dunboyne and the associated trips, this level of congestion should be expected for an urban town. And thus, the impact of the cumulative development trips was found to be **“slight”**.

3.2 Travel Time along M3 mainline

The travel time data for the M3 mainline was collected in order to determine the impact of queuing along the off-ramps of M3-Junction 5. The results are summarised in the table below for all the scenarios.

Table 3-1 - Average Travel Time: M3 mainline (Opening Year +15 scenario)

Parameters	Do Minimum	Do Minimum + Marina Quarter Ltd Dev	Do Minimum + All Dev
7.00 to 8.00 am			
M3 Northbound from R147 bridge to M3 Toll Plaza	1 min 59 sec	1 min 59 sec	1 min 59 sec
M3 Southbound from M3 Toll Plaza to R147 bridge	2 min 13 sec	2 min 13 sec	2 min 13 sec
8.00 to 9.00 am			
M3 Northbound from R147 bridge to M3 Toll Plaza	1 min 58 sec	1 min 59 sec	1 min 59 sec
M3 Southbound from M3 Toll Plaza to R147 bridge	2 min 10 sec	2 min 10 sec	2 min 10 sec
5.00 to 6.00 pm			
M3 Northbound from R147 bridge to M3 Toll Plaza	2 min 9 sec	2 min 8 sec	2 min 8 sec
M3 Southbound from M3 Toll Plaza to R147 bridge	2 min 6 sec	2 min 6 sec	2 min 6 sec

From the above table, it can be seen that the journey time along the M3 mainline for both Do Minimum+Marina Quarter Ltd Development and Do Minimum+All Development scenarios were found to be almost the same as in the Do Minimum scenario. This suggests that the development has no impact on the M3 mainline, primarily as queuing on the off-ramps does not extend onto the M3 mainline, allowing it to continue to flow freely.

Hence, the impact of Do Minimum + Marina Quarter Ltd Development scenario and cumulative impact of All Development scenario on the M3-mainline was found to be **“not significant”**.



3.3 Junction Impact Assessment

3.3.1 R147/R157 junction and M3-Junction 5

Operational Impact: Do Minimum + Marina Quarter Ltd Development Scenario

- For the Do Minimum + Marina Quarter Ltd Development AM and PM peak scenarios, when compared to the Do Minimum Scenario, the maximum increase in the average queue was observed to be around 6 PCU, and the increase in the average delay was limited to 15 seconds only.
- This suggests that the impact due to additional trips associated with the Marina Quarter Ltd development was found to be “not-significant”.

Cumulative Impact: Do Minimum + All Development Scenario

- For R147 southbound arm of R147/R157 junction, during AM Peak, the queue was found to increase from 10 pcu in Do Minimum+Marina Quarter Ltd scenario up to 35 pcu. However, delays remain around 35 seconds suggesting that queue observed was transitional. For remaining arms, during both peak periods, the impact was found to be small.
- For M3-Junction 5, for the AM Peak, the average queue was found to increase by a maximum of around 3 PCU, while the average delay was found to increase by a maximum of 23 seconds
- For the interchange during evening peak:
 - The average queue was found to be approximately 24 PCU for the R157 eastbound arm. The increase in queues compared to the Do Minimum scenario is mainly attributed to the additional traffic from the non-residential development in Dunboyne North. However, the delay experienced was under 1 minute, smaller than may be anticipated based on the queue length. The shorter delay compared to the queue length is mainly attributed to the transitory nature of the queue, which is continuously moving. Additionally, as observed in the model, the delay and queue were mostly experienced from 5 to 5:30 pm, after which they cleared during the latter part of the evening peak.
 - For the northbound off-ramp, similar to the R157 eastbound arm, the queue was observed to be higher at around 27 PCU. However, the delay experienced was under 1 minute, which is small given the longer queue.
 - For the southbound off-ramp, compared to the Do Minimum scenario, the average delay increased to over 2 minutes. The delay is mainly attributed to the queue along the R157 eastbound arm at R147/R157 junction which backs up on the gyratory. However, the average queue was found to be small, at around 4 PCU.
- Overall, for both junctions, the impact of the overall master plan development was found to be “slight”.

3.3.2 M3-Parkway Access Junction and Southern Access Junction

Operational Impact: Do Minimum + Marina Quarter Ltd Development Scenario

- For Do Minimum+Marina Quarter Ltd scenario, the queue was found to be less than 11 pcu, and delay was observed to be less than 50 seconds for all the arms of both junctions.
- Overall, the impact of additional trips was found to be “not-significant” for the Do Minimum + Marina Quarter Ltd Development scenario.

Cumulative Impact: Do Minimum + All Development Scenario

- For M3 Parkway junction ,
 - For both peak periods, the queue along R157 arms increased to under 40 pcus. However delays were observed to be around 50-80 seconds for both the arms which is typical for urban environment.
 - For the evening peak (5 to 6 pm), the queue along the northwest access arm was found to be around 37 pcu with delay observed of 90 seconds.



- The large queue along the arms of this junction is mainly attributed to the trips from the commercial lands of Dunboyne North.
- For the southern access junction, the delay was found to increase in order of 5-45 seconds as compared to Do Minimum+Marina Quarter Ltd scenario.
- Overall, for both junctions, the impact of the overall master plan development was found to be “slight”.

3.3.3 R157/Dunboyne Business Park Access Link New Junction

Operational Impact: Do Minimum + Marina Quarter Ltd Scenario

The impact of additional development in both the Do Minimum and Marina Quarter Ltd Development scenarios was found to be “not significant”, with the maximum increase in the average queue observed to be 0.4 pcu and the maximum increase in average delay approximately 29 seconds.

Cumulative Impact: Do Minimum + All Development Scenario

As compared to Do Minimum + Marina Quarter Ltd scenario, the queue was found to increase by around 1 pcu with increase in delay observed to be around 60 seconds, suggesting that the cumulative impact of all trips on the junction was found to be “slight”.

3.3.4 Other Junctions

For the remaining junctions, which include the Summerhill Roundabout, Main Street signalised junction, Eastern Distributor Road signalised junction, and the Dunboyne Business Park Link with Old Navan Road, the impact of the proposed development and the cumulative impact of all development was found to be “not-significant”.

3.4 Sensitivity Scenario

Due to the COVID-19 pandemic and the associated restrictions, traffic surveys conducted during this period reflected reduced traffic levels compared to pre-pandemic conditions. As a part of the Phase 2 planning application, to accurately assess the impact on the road network, traffic data from the TII TMU counter between M3 Junction 4 and Junction 5 for the month of May (during which the survey was undertaken) for the years 2019, 2021, and 2023 were compared.

However, at the time when the new assessment was undertaken, data for the year 2024 was also included in the analysis. The analysis is summarised in the Table 3-2 below.

Table 3-2 - Comparison of TMU Counter Traffic

Period	TMU Between Jn 4 and Jn 5		
	AM Period	PM Period	24 hr
May 2019 Traffic	9,380	11,106	44,519
May 2021 Traffic	8,264	9,445	38,674
May 2023 Traffic	9,436	10,852	46,150
May 2024 Traffic	9,563	10,814	47,419
May (2021/2019 comparison)	-12%	-15%	-13%
May (2023/2021 Comparison)	14%	15%	19%
May (2024/2021 comparison)	+15.7%	+14%	+23%

For the Phase 2 planning application, to account for the increased traffic in 2023, a sensitivity analysis was undertaken for the Opening+15 design year scenarios. For the analysis the methodology to adjust the traffic is summarised below:



- All background traffic from year 2021 was increased by 15%, and this referred to as the new baseline traffic for the year 2023.
- Thereafter, the background traffic was grown using the NTA growth factor as discussed earlier to reflect the baseline traffic for the year 2040.
- Then, the trips from all the residential and non-residential developments along Dunboyne North and residential development trips in Dunboyne East will be added on top of the background traffic to represent the traffic for the Opening year + 15 Development scenarios.

However, in 2024 (when the modelling for the Phase 3 application was carried out), the observed increase in traffic was 15.7%. If the same analysis is conducted—where background traffic from 2021 is grown by 15.7% until 2028 and then adjusted using NTA growth factors to estimate 2040 traffic—the same traffic volume would result. This can be demonstrated as follows:

- Suppose the base traffic in 2021 is 100 vehicles.
- With 15% growth, the estimated traffic for 2023 is 115 vehicles.
- With 15.7% growth, the estimated traffic for 2024 is 116 vehicles.
- From 2023 to 2040, assuming an NTA growth factor of 0.8% per annum, traffic will grow to approximately 132 vehicles [$115 * (1+0.8\%)^{17} = 131.6$]
- From 2024 till 2040, based on the NTA growth factor of 0.8% per annum, the traffic will grow to approximately 131 vehicles [$116 * (1+0.8\%)^{16} = 131.4$]

Since the net increase in traffic is nearly identical, no changes were made to the traffic volume for the updated assessment.

In the future year scenarios, the majority of proposed development in the Dunboyne area has been explicitly included within the model before any background growth factors and growth based on TMU counters being applied. Therefore, this likely represents a double counting of traffic in future year scenarios in this area and thus making the traffic forecast for Dunboyne more conservative than likely to be encountered in reality.

The results for the sensitivity scenarios are summarised below. Similar to the other assessments, the results are present for Opening+15 design year only.

3.4.1 Overall Network Performance

Operational Impact: Do Minimum + Marina Quarter Ltd Development Scenario

As compared to Do Minimum Scenario, for Do Minimum+Marina Quarter Ltd Development scenario,

- The average delay increased by around 4-30 seconds across both hours of the morning peak, and by around 33 seconds for the PM peak.
- The average speed reduced by an order of 3-6 km/hr for both peak periods during the AM peak and by 11 km/hr for the PM peak.
- The latent demand was observed to be around 16 vehicles for AM peak. However, the congestion was found to be clearing during the cooldown period (9 to 9.15 am). For the PM peak, the latent demand was observed to be zero vehicle.
- The network is mostly free flowing with slight slow areas near the R157 access signalised junctions and R147/R157 signalised junction which is common for the urban signalised junctions.
- M3 motorway is free flowing and no impact on the mainline was observed.
- Similar to other scenarios, the new link road from R157 to Old Navan Road was again observed to be slow as it was made unattractive for the through traffic.

Therefore, based on the above results, the impact of Do Minimum + Marina Quarter Ltd Development scenario for sensitivity analysis was found to be “slight”.

Cumulative Impact: Do Minimum + All Development Scenario



- For cumulative impact assessment, in Do Minimum + All development scenario: For the sensitivity analysis, the average delay was found to be in order of 75 seconds to 3 minutes for both AM and PM peaks. When compared to Do Minimum+Marina Quarter Ltd Development scenario, the average delay further increased by 23 seconds for 7 to 8 am, by 89 seconds for 8 to 9 am and by around 1 minute 48 seconds for 5 to 6 pm.
- When compared to Do Minimum+Marina Quarter Ltd Development scenario, the average speed further reduced by 5 km/hr for 7 to 8 am, by 8 km/hr for 8 to 9 am and by 13 km/hr for 5 to 6 pm period.
- For the AM Peak, the latent demand was observed to be around 182 vehicles at the end of the modelled period (7 to 9 am) which was not observed to clear during the cooldown period (9 to 9.15 am).
- For the PM Peak period, the latent demand was observed to be 145 vehicles at the end of the modelled peak period (5 to 6 pm) and the congestion was still observed after the cooldown period (6 to 6.15 pm).
- Similar to the non-sensitivity scenario, a greater impact was observed due to the additional non-residential development trips at Dunboyne North. For the sensitivity scenarios, congestion observed along the R157 at access junctions and at the entrance of M3 Junction 5 increased compared to the non-sensitivity scenario for the same design year. Additionally, during the AM peak, congestion along the R147 southbound arm further increased, leading to latent demand at the end of the modelled period. For the PM peak, the latent demand was still due to congestion along the northwest non-residential development arm at the M3 Parkway junction. However, congestion also increased along the northbound off-ramp, sometimes backing up to the M3 mainline. This was limited to the left two lanes, which were found to have sufficient stacking capacity to cater to the additional trips without impacting the mainline.
- The congestion along the R147 southbound during the AM peak and the northbound off-ramp during the PM peak was mainly attributed to trips using the R147 as a bypass to avoid the toll along the M3. It is anticipated that this level of congestion will further reduce this rat run and encourage people to use the M3 instead of the R147 as an alternative.
- Congestion along the Business Park Link Road at the new priority junction increased for the sensitivity scenario. The usage of the new link road from the southern access junction to Old Navan Road was again found to be smaller compared to other distributor roads.
- For AM peak, the latent demand was observed due to congestion along R147 southbound arm, while for PM peak, similar to non-sensitivity scenario, the latent demand was attributed to the congestion along northwestern non-residential development arms at M3 Parkway junction.

Therefore, based on the above results, the cumulative impact on the network for All Development scenario for sensitivity analysis was found to be “**moderate**”.

3.4.1 Travel Time

Similar to non-sensitivity scenario, the travel time data for the M3 mainline was collected in order to determine the impact of queuing along the off-ramps of M3-Junction 5. The results are summarised in the table below for all the scenarios.



Table 3-3 - Average Travel Time: M3 mainline (Opening Year +15 sensitivity scenario)

Parameters	Do Minimum	Do Minimum + Marina Quarter Ltd Dev	Do Minimum + All Dev
7.00 to 8.00 am			
M3 Northbound from R147 bridge to M3 Toll Plaza	1 min 59 sec	1 min 59 sec	1 min 59 sec
M3 Southbound from M3 Toll Plaza to R147 bridge	2 min 14 sec	2 min 14 sec	2 min 14 sec
8.00 to 9.00 am			
M3 Northbound from R147 bridge to M3 Toll Plaza	1 min 59 sec	1 min 59 sec	1 min 59 sec
M3 Southbound from M3 Toll Plaza to R147 bridge	2 min 11 sec	2 min 11 sec	2 min 11 sec
5.00 to 6.00 pm			
M3 Northbound from R147 bridge to M3 Toll Plaza	2 min 10 sec	2 min 9 sec	2 min 11 sec
M3 Southbound from M3 Toll Plaza to R147 bridge	2 min 6 sec	2 min 6 sec	2 min 6 sec

As stated earlier, during PM peak, the queue occasionally backs up to the M3 mainline but is limited to the exit lane without impacting the mainline. The journey time data reinforces this, as the travel time for all three scenarios was found to be similar. During the AM peak, the queue did not back up to the M3 mainline, and the journey time was again found to be the same for all the scenarios. Therefore, overall, no impact was observed along the M3 mainline. Hence, the impact of the proposed development and cumulative impact of all development on performance of M3-mainline was found to be **“not-significant”**.

3.4.2 Junction Impact Assessment

Compared to the Do Minimum scenario, queues and delays were observed to increase at major junctions, including the R147/R157 signalised junction, M3 Junction 5 Pace Interchange, M3 Parkway Access Junction, Southern Access Junction, and the proposed Dunboyne Business Park Link with the R157.

R147/R157 junction

- For the Do Minimum scenario during the AM peak, the queue on the R147 southbound arm was observed to be around 55 PCU.
- For the Do Minimum + All Development AM peak scenario, the queue increased slightly to around 60 PCU.
- However, for R147 southbound arm, the delay remained under 40 seconds, suggesting that the queue was transitory in nature, even under the sensitivity scenario.

For M3-Junction 5 Pace Interchange

- For the Do Minimum + Marina Quarter Ltd AM peak scenario, the queue remained within 4 PCU, with delays under 60 seconds.
- For the PM peak scenario, queue and delay increases were minor for most arms, except for the northbound off-ramp, where the queue increased by 17 PCU to around 22 PCU. However, the delay only increased from 15 seconds to 34 seconds, indicating a slight impact.
- For the Do Minimum + All Development scenario:
 - During 8:00–9:00 AM, the average queue increased by around 1–4 PCU, and the average delay increased by a maximum of 6 seconds compared to the Do Minimum scenario.
 - During the PM peak, the average queue on the northbound off-ramp was observed to be around 65 PCU, with delays of approximately 70 seconds.



- As previously noted, congestion occasionally backed up along the M3 mainline but remained confined to the exit lane. This congestion is attributed to vehicles diverting from the M3 to the R147 to avoid the toll. The resulting delays may encourage drivers to remain on the M3 instead of using the R147 as a bypass.

M3-Parkway Junction

- For the Do Minimum + Marina Quarter Ltd Development scenario, the average queue was observed to be less than 20 PCU, with delays under 90 seconds.
- For the Do Minimum + All Development scenario, the average queue increased to under 40 PCU, with delays reaching up to 130 seconds.

Southern Access Junction

- For the Do Minimum + Marina Quarter Ltd scenario, the queue reached up to 27 PCU, with delays under 60 seconds.
- For the Do Minimum + All Development scenario,:
 - The queue increased to as high as 40 PCU.
 - Delays on the R157 arms remained under 60 seconds; however, delays on the secondary arms were found to be around 3 minutes..

Proposed extension of Dunboyne Business Park link with R157

For the Business Park Link junction:

- The queue increased up to 3 PCU for the Do Minimum + Marina Quarter Ltd scenario
- The queue increased up to 6 PCU for the Do Minimum + All Development scenario
- Delays were around 1 minute 30 seconds for the former scenario and around 4 minutes for the latter

Overall

- The impact of the proposed development trips was found to be **“slight” to “moderate”** for most junctions.
- The cumulative impact of all development was found to be **“moderate” to “significant.”**
- Similar to the main scenarios, in the sensitivity scenarios, the impact on the remaining junctions for both the proposed development and the cumulative development scenarios was observed to be **“not significant.”**



4. Parking Provision

4.1 Car Parking

To accommodate the proposed additional apartment units, the car parking provision for apartments has been revised. Car parking provision for houses, duplexes, and visitor spaces remains unchanged. As per the Meath County Development Plan 2021–2027, a maximum of 1.5 car parking spaces per dwelling should be provided for apartments and houses. The proposed car parking provision is summarised below:

Table 4-1 - Currently Permitted vs. Proposed Car Parking Numbers for Phase 1

Unit Type	Currently Permitted Parking Spaces	Proposed Parking Spaces	Difference
Houses	205	205	0 (no changes)
Duplexes	46	46	0 (no changes)
Apartments	38	45 + 4 GoCar spaces	+10 (+70 equivalent)
Creche	11	11	0 (no changes)
Visitors	27	27	0 (no changes)

- It is noted that each GoCar space has the potential to replace the journeys of up to 15 private cars, as confirmed by the experience of the scheme operator at various existing developments. In this case, the provision of four GoCar spaces, can be said to be equivalent to 60 standalone parking spaces, bringing the total equivalent parking spaces for apartments to 105.
- Total car parking provision:** 205 (for Houses) + 46 (for Duplexes) + 105 (for Apartments) + 27 (Visitor) + 11 (Crèche) = 394 car parking spaces

The equivalent parking ratio for the proposed development is set out in the table below:

Table 4-2 -. Proposed Car Parking Ratio for Phase 1

Unit Type	Unit Numbers	Proposed Parking Spaces	Ratio
Houses	145	205 + 9 visitor	1.48
Duplexes	46	46 + 9 visitor	1.20
Apartments	124	105 + 9 visitor	0.92
Creche	1	11	11
Total	268	394	1.47

Based on the above, it is concluded that the proposed car parking provision is below the maximum permitted limit, in compliance with the Meath Development Plan 2021–2027. The reduced parking provision reflects an approach that accommodates vehicular demand while also encouraging a shift towards more sustainable modes of transport while still maintaining a realistic level of parking to reflect demand.



4.2 Bicycle Parking

Similar to car parking, the bicycle parking provision for apartments has been revised, while no changes are proposed for the bicycle parking provision for houses and duplexes.

As per the Meath Development Plan 2021–2027, a minimum of one bicycle parking space per bedroom is required for houses and apartments. In addition, a minimum of one visitor bicycle space per two units is required.

The required and proposed bicycle parking provision is summarised below:

- **Houses:** 290 spaces permitted, with no changes proposed
- **Duplexes:** 72 spaces permitted, with no changes proposed
- **Apartments:** Total units: 124 units (95 studio/1-bed, 29 two-bed apartments/duplexes) Total bedrooms: 153 bedrooms
 - Minimum required spaces (per Development Plan): 153 spaces
 - Spaces provided: 155 spaces, exceeding the minimum requirement
- **Visitor bicycle parking:** For a total of 315 units in Phase 1, a minimum of 158 visitor spaces is required. 162 visitor spaces are provided, exceeding the standard.
- **Crèche: 32 bicycle parking spaces** are provided.
- **Total bicycle parking provision:** 290 (Houses) + 227 (Apartments/Duplexes) + 162 (Visitor) + 32 (Crèche) = 711 bicycle parking spaces

The updated bicycle parking provision exceeds the minimum number of spaces required and therefore promotes sustainable modes of transport.



5. Summary and Conclusion

5.1 Background

An application for 267 residential units in Bennetstown (townland), located to the south of the M3 Parkway Park and Ride and rail station, was granted approval in November 2024 by An Coimisiún Pleanála (Meath Planning Application Reference: 2360290, ACP Reference: LH17.320049). These lands form part of the wider MP22 Masterplan development for Dunboyne North. In September 2025 the applicant applied for modifications to part of the previously granted application. These modifications include the re-alignment of a portion of the link road (including the new bridge over the River Tolka) connecting the R157 and the Old Navan Road. The Meath planning reference for this application is 2561001.

The applicant now plans to submit a second addendum to the existing Phase 1 application approved by ACP and its subsequent amendment. This addendum proposes increasing the total number of residential units from 267 to 315, with all additional units being apartments.

5.2 Updated Schedule of Accommodation and Trips Generation

In the revised Phase 1 schedule, an additional 48 apartment units are proposed. The majority of these comprise studio and 1-bed units, while the number of 2-bed units is reduced.

Based on the revised schedule of accommodation, the trip generation analysis indicates only a minor increase of approximately 3–7 trips. The trip generation exercise undertaken for the Phase 3 planning application is considered to be highly conservative for the following reasons:

- The assessment adopts a conservative approach, with 3-bed duplex units treated as houses for trip generation purposes, despite their lower parking provision, resulting in an overestimation of likely trips.
- Background traffic growth has been applied to all zones within Dunboyne in accordance with NTA growth factors, even though the traffic model already accounts for trips from permitted and proposed developments, including Dunboyne East and non-residential developments in Dunboyne North. This further inflates forecast traffic levels.
- Parking provision across the development is significantly below the Meath Development Plan guideline of 1.5 spaces per unit, with apartments provided at 0.85 spaces per unit and similarly reduced parking ratios for houses. However, these lower parking ratios have not been reflected in the trip generation assumptions, adding further conservatism.
- The trip generation methodology is based on the number of units rather than the bedroom mix. The revised schedule introduces a greater proportion of studio and 1-bed apartments, while reducing 2-bed units, which typically generate higher trip rates. As such, actual traffic demand is likely to be lower than forecast.

Overall, the traffic modelling undertaken for Phase 3 is considered to be highly conservative, and the transport assessment submitted under Meath Planning Application Reference 2660001 remains robust, with no amendments to the traffic model required as part of this addendum.



5.3 Results

5.3.1 Overall Network Performance

For the impact of the proposed development trips, compared to the Do Minimum scenario, the average delay throughout the network was found to increase by approximately 5–30 seconds across all scenarios, including sensitivity scenarios. The impact of the proposed development on overall network performance was found to be “**not significant**” for the main scenario, while the impact was found to be “**slight**” for the sensitivity scenario.

For the cumulative impact under the Do Minimum + All Development scenario, when compared to the Do Minimum + Marina Quarter Ltd Development scenario, the average delay further increased by:

- 11 seconds for 7:00–8:00 AM
- 46 seconds for 8:00–9:00 AM
- Around 77 seconds for 5:00–6:00 PM

For the sensitivity analysis, the average delay was found to be in the range of 75 seconds to 3 minutes. The cumulative impact on overall network performance was found to be “**slight**” for the main scenario and “**moderate**” for the sensitivity scenario.

5.3.2 Travel Time

During the AM peak, queues did not back up to the M3 mainline, and journey times were found to be the same across all scenarios, including the sensitivity scenario. Therefore, no impact was observed along the M3 mainline.

For the PM peak:

- In the main scenario, queues did not back up to the M3 mainline
- In the sensitivity scenario, queues occasionally backed up to the M3 mainline but were confined to the exit lane, without impacting the mainline flow
- Therefore, travel time along M3 mainline for all scenarios—both main and sensitivity—were found to be of similar order.

Hence, the impact of the proposed development and the cumulative impact of all development on the M3 mainline for both main and sensitivity scenarios were found to be “**not significant**.”

5.3.3 Junction Impact Assessment

For the main scenarios:

- The impact of the proposed development was found to be “**not significant**” for all junctions
- The cumulative impact of all development was found to be “**slight**”

For the sensitivity scenario:

- For key junctions near the M3 Junction 5 Interchange and along the R157 corridor, the impact of the proposed development was found to be “**slight**” to “**moderate**”
- The impact of the overall development was found to be “**moderate**” to “**significant**”



5.4 Parking provisions

- **Total car parking provision:** 205 (Houses) + 151 (Apartments/Duplexes/Maisonettes) + 25 (Visitor) + 11 (Crèche) = 392 car parking spaces
- **Total bicycle parking provision:** 290 (Houses) + 227 (Apartments/Duplexes) + 162 (Visitor) + 32 (Crèche) = 711 bicycle parking spaces
- The updated car parking and bicycle parking provision for the revised apartment schedule has been prepared in accordance with the Meath Development Plan 2021–2027 guidelines



Appendix A. TRICS Data

RECEIVED: 21/05/2026



A.1 Apartments

Atkins Airside Swords

Licence No: 332901

Calculation Reference: AUDIT-332901-250325-0330

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

- 11 SCOTLAND
- HI HIGHLAND 1 days
- 14 LEINSTER
- LU LOUTH 1 days
- WX WEXFORD 1 days

This section displays the number of survey days per TRICS® sub-region in the selected set



Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
Actual Range: 16 to 42 (units:)
Range Selected by User: 6 to 724 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 05/09/24

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Wednesday 2 days
Thursday 1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count 3 days
Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town Centre 2
Neighbourhood Centre (PPS6 Local Centre) 1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone 3

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included 36 days - Selected
Servicing vehicles Excluded 10 days - Selected

Secondary Filtering selection:**Use Class:**

C3 3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included



Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000 3 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

25,001 to 50,000 2 days
50,001 to 75,000 1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

1.1 to 1.5 3 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No 3 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present 3 days

This data displays the number of selected surveys with PTAL Ratings.

Covid-19 Restrictions Yes At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions



LIST OF SITES relevant to selection parameters

1	HI-03-C-02	BLOCK OF FLATS	HIGHLAND
	KING STREET		
	NAIRN		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	16	
	Survey date: WEDNESDAY	19/04/23	Survey Type: MANUAL
2	LU-03-C-04	BLOCKS OF FLATS	LOUTH
	RIVER COURT		
	DROGHEDA		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total No of Dwellings:	42	
	Survey date: WEDNESDAY	22/09/21	Survey Type: MANUAL
3	WX-03-C-01	BLOCKS OF FLATS	WEXFORD
	UPPER GEORGE'S STREET		
	WEXFORD		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	28	
	Survey date: THURSDAY	20/04/23	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.



TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.33

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	29	0.023	3	29	0.128	3	29	0.151
08:00 - 09:00	3	29	0.081	3	29	0.174	3	29	0.255
09:00 - 10:00	3	29	0.198	3	29	0.151	3	29	0.349
10:00 - 11:00	3	29	0.128	3	29	0.105	3	29	0.233
11:00 - 12:00	3	29	0.058	3	29	0.128	3	29	0.186
12:00 - 13:00	3	29	0.093	3	29	0.058	3	29	0.151
13:00 - 14:00	3	29	0.140	3	29	0.093	3	29	0.233
14:00 - 15:00	3	29	0.116	3	29	0.163	3	29	0.279
15:00 - 16:00	3	29	0.140	3	29	0.174	3	29	0.314
16:00 - 17:00	3	29	0.116	3	29	0.116	3	29	0.232
17:00 - 18:00	3	29	0.198	3	29	0.174	3	29	0.372
18:00 - 19:00	3	29	0.174	3	29	0.093	3	29	0.267
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.465			1.557			3.022

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected: 16 - 42 (units:)
 Survey date range: 01/01/16 - 05/09/24
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.



TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Total People to Total Vehicles ratio (all time periods and directions): 2.33

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	29	0.047	3	29	0.163	3	29	0.210
08:00 - 09:00	3	29	0.163	3	29	0.419	3	29	0.582
09:00 - 10:00	3	29	0.337	3	29	0.349	3	29	0.686
10:00 - 11:00	3	29	0.233	3	29	0.244	3	29	0.477
11:00 - 12:00	3	29	0.116	3	29	0.337	3	29	0.453
12:00 - 13:00	3	29	0.256	3	29	0.326	3	29	0.582
13:00 - 14:00	3	29	0.326	3	29	0.198	3	29	0.524
14:00 - 15:00	3	29	0.337	3	29	0.326	3	29	0.663
15:00 - 16:00	3	29	0.430	3	29	0.407	3	29	0.837
16:00 - 17:00	3	29	0.384	3	29	0.302	3	29	0.686
17:00 - 18:00	3	29	0.419	3	29	0.314	3	29	0.733
18:00 - 19:00	3	29	0.372	3	29	0.233	3	29	0.605
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.420				3.618	7.038	

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

A.2 Houses

Calculation Reference: AUDIT-332901-250325-0315

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02 SOUTH EAST	
ES EAST SUSSEX	3 days
HC HAMPSHIRE	4 days
HF HERTFORDSHIRE	1 days
KC KENT	4 days
SC SURREY	1 days
WS WEST SUSSEX	4 days
03 SOUTH WEST	
DC DORSET	1 days
04 EAST ANGLIA	
CA CAMBRIDGESHIRE	2 days
NF NORFOLK	9 days
05 EAST MIDLANDS	
LE LEICESTERSHIRE	1 days
07 YORKSHIRE & NORTH LINCOLNSHIRE	
NY NORTH YORKSHIRE	2 days
08 NORTH WEST	
AC CHESHIRE WEST & CHESTER	2 days
09 NORTH	
FU WESTMORLAND & FURNESS	1 days
IM ISLE OF MAN	5 days
11 SCOTLAND	
AS ABERDEENSHIRE	1 days
12 CONNAUGHT	
CS SLIGO	2 days
13 MUNSTER	
TI TIPPERARY	1 days
14 LEINSTER	
LU LOUTH	1 days
15 GREATER DUBLIN	
DL DUBLIN	1 days
16 ULSTER (REPUBLIC OF IRELAND)	
DN DONEGAL	1 days
MG MONAGHAN	2 days
17 ULSTER (NORTHERN IRELAND)	
DE DERRY	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set



Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
Actual Range: 6 to 514 (units:)
Range Selected by User: 4 to 1817 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 18/09/24

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday 23 days
Wednesday 9 days
Thursday 18 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count 50 days
Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town Centre 3
Suburban Area (PPS6 Out of Centre) 4
Edge of Town 25
Neighbourhood Centre (PPS6 Local Centre) 18

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone 30
Village 17
Out of Town 3

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included 35 days - Selected
Servicing vehicles Excluded 86 days - Selected

Secondary Filtering selection:**Use Class:**

C3 50 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included



Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
Actual Range: 6 to 514 (units:)
Range Selected by User: 4 to 1817 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 18/09/24

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

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Selected Locations:

Edge of Town Centre 3
Suburban Area (PPS6 Out of Centre) 4
Edge of Town 25
Neighbourhood Centre (PPS6 Local Centre) 18

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

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Residential Zone 30
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Servicing vehicles Included 35 days - Selected
Servicing vehicles Excluded 86 days - Selected

Secondary Filtering selection:**Use Class:**

C3 50 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included



LIST OF SITES relevant to selection parameters

1	AC-03-A-03	SEMI-DETACHED & TERRACED	CHESHIRE WEST & CHESTER
	MEADOW DRIVE		
	NORTHWICH		
	BARNTON		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	40	
	Survey date: TUESDAY	04/06/19	Survey Type: MANUAL
2	AC-03-A-04	TOWN HOUSES	CHESHIRE WEST & CHESTER
	LONDON ROAD		
	NORTHWICH		
	LEFTWICH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	24	
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL
3	AS-03-A-02	MIXED HOUSES	ABERDEENSHIRE
	FARROCHIE ROAD		
	STONEHAVEN		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	131	
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL
4	CA-03-A-07	MIXED HOUSES	CAMBRIDGESHIRE
	FIELD END		
	NEAR ELY		
	WITCHFORD		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	32	
	Survey date: THURSDAY	27/05/21	Survey Type: MANUAL
5	CA-03-A-08	DETACHED & SEMI-DETACHED	CAMBRIDGESHIRE
	GIDDING ROAD		
	SAWTRY		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	83	
	Survey date: THURSDAY	13/10/22	Survey Type: MANUAL
6	CS-03-A-03	MIXED HOUSES	SLIGO
	TOP ROAD		
	STRANDHILL		
	STRANDHILL		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	30	
	Survey date: THURSDAY	27/10/16	Survey Type: MANUAL
7	CS-03-A-04	DETACHED & SEMI-DETACHED	SLIGO
	R292		
	STRANDHILL		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	63	
	Survey date: THURSDAY	27/10/16	Survey Type: MANUAL



LIST OF SITES relevant to selection parameters (Cont.)

8	DC-03-A-10	MIXED HOUSES	DORSET
	ADDISON CLOSE		
	GILLINGHAM		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	26	
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL
9	DE-03-A-04	SEMI-DETACHED & TERRACED	DERRY
	GREENHALL HIGHWAY		
	COLERAINE		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	38	
	Survey date: THURSDAY	19/05/22	Survey Type: MANUAL
10	DL-03-A-10	SEMI DETACHED & DETACHED	DUBLIN
	R124		
	MALAHIDE		
	SAINT HELENS		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	65	
	Survey date: WEDNESDAY	20/06/18	Survey Type: MANUAL
11	DN-03-A-06	DETACHED HOUSING	DONEGAL
	GLENFIN ROAD		
	BALLYBOFEY		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	6	
	Survey date: WEDNESDAY	10/10/18	Survey Type: MANUAL
12	ES-03-A-07	MIXED HOUSES & FLATS	EAST SUSSEX
	NEW ROAD		
	HAILSHAM		
	HELLINGLY		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	91	
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL
13	ES-03-A-11	MIXED HOUSES	EAST SUSSEX
	BISHOPS LANE		
	RINGMER		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	105	
	Survey date: THURSDAY	28/09/23	Survey Type: MANUAL
14	ES-03-A-12	MIXED HOUSES & FLATS	EAST SUSSEX
	HOREBEECH LANE		
	HORAM		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	123	
	Survey date: TUESDAY	03/10/23	Survey Type: MANUAL



LIST OF SITES relevant to selection parameters (Cont.)

15	FU-03-A-02 MACADAM WAY PENRITH	DETACHED/TERRACED HOUSING	WESTMORLAND & FURNESS
	Edge of Town Centre Residential Zone Total No of Dwellings:	50	
	Survey date: TUESDAY	21/06/16	Survey Type: MANUAL
16	HC-03-A-18 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:	62	
	Survey date: TUESDAY	29/11/16	Survey Type: MANUAL
17	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:	62	
	Survey date: TUESDAY	19/11/19	Survey Type: MANUAL
18	HC-03-A-27 DAIRY ROAD ANDOVER	MIXED HOUSES	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	73	
	Survey date: TUESDAY	16/11/21	Survey Type: MANUAL
19	HC-03-A-38 CROW LANE RINGWOOD CROW	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	195	
	Survey date: WEDNESDAY	26/06/24	Survey Type: MANUAL
20	HF-03-A-06 A505 ROYSTON	MIXED HOUSES & FLATS	HERTFORDSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	180	
	Survey date: TUESDAY	28/11/23	Survey Type: MANUAL
21	IM-03-A-01 BALLAKILLOWEY ROAD COLBY BALLAKILLOWEY Neighbourhood Centre (PPS6 Local Centre) Village	MIXED HOUSES	ISLE OF MAN
	Total No of Dwellings:	31	
	Survey date: TUESDAY	21/05/24	Survey Type: MANUAL
22	IM-03-A-02 SHORE ROAD KIRK MICHAEL	MIXED HOUSES	ISLE OF MAN
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings:	27	
	Survey date: THURSDAY	23/05/24	Survey Type: MANUAL



LIST OF SITES relevant to selection parameters (Cont.)

23	IM-03-A-03	MIXED HOUSES	ISLE OF MAN
	MAIN ROAD COLBY		
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	111	
	Survey date: TUESDAY	21/05/24	Survey Type: MANUAL
24	IM-03-A-05	MIXED HOUSES	ISLE OF MAN
	SCARLETT ROAD CASTLETOWN		
	Edge of Town Residential Zone		
	Total No of Dwellings:	45	
	Survey date: TUESDAY	21/05/24	Survey Type: MANUAL
25	IM-03-A-06	MIXED HOUSES	ISLE OF MAN
	MOORAGH PROMENADE RAMSEY		
	Edge of Town Residential Zone		
	Total No of Dwellings:	129	
	Survey date: THURSDAY	23/05/24	Survey Type: MANUAL
26	KC-03-A-07	MIXED HOUSES	KENT
	RECVLVER ROAD HERNE BAY		
	Edge of Town Residential Zone		
	Total No of Dwellings:	288	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
27	KC-03-A-08	MIXED HOUSES	KENT
	MAIDSTONE ROAD CHARING		
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	159	
	Survey date: TUESDAY	22/05/18	Survey Type: MANUAL
28	KC-03-A-10	MIXED HOUSES	KENT
	HEADCORN ROAD STAPLEHURST		
	Edge of Town Residential Zone		
	Total No of Dwellings:	106	
	Survey date: TUESDAY	09/05/23	Survey Type: MANUAL
29	KC-03-A-12	MIXED HOUSES & FLATS	KENT
	WESTERN LINK FAVERSHAM DAVINGTON		
	Edge of Town Residential Zone		
	Total No of Dwellings:	186	
	Survey date: TUESDAY	19/09/23	Survey Type: MANUAL



LIST OF SITES relevant to selection parameters (Cont.)

30	LE-03-A-02	DETACHED & OTHERS	LEICESTERSHIRE
	MELBOURNE ROAD		
	IBSTOCK		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	85	
	Survey date: THURSDAY	28/06/18	Survey Type: MANUAL
31	LU-03-A-01	TERRACED & SEMI-DETACHED	LOUTH
	RATHMULLAN ROAD		
	DROGHEDA		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total No of Dwellings:	111	
	Survey date: TUESDAY	21/09/21	Survey Type: MANUAL
32	MG-03-A-01	SEMI-DETACHED HOUSES	MONAGHAN
	ORIEL WAY		
	MONAGHAN		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	49	
	Survey date: TUESDAY	12/10/21	Survey Type: MANUAL
33	MG-03-A-02	MIXED HOUSES	MONAGHAN
	GLEN ROAD		
	MONAGHAN		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	76	
	Survey date: TUESDAY	12/10/21	Survey Type: MANUAL
34	NF-03-A-05	MIXED HOUSES	NORFOLK
	HEATH DRIVE		
	HOLT		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	40	
	Survey date: THURSDAY	19/09/19	Survey Type: MANUAL
35	NF-03-A-23	MIXED HOUSES & FLATS	NORFOLK
	SILFIELD ROAD		
	WYMONDHAM		
	Edge of Town		
	Out of Town		
	Total No of Dwellings:	514	
	Survey date: WEDNESDAY	22/09/21	Survey Type: MANUAL
36	NF-03-A-27	MIXED HOUSES & FLATS	NORFOLK
	YARMOUTH ROAD		
	NEAR NORWICH		
	BLOFIELD		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	93	
	Survey date: THURSDAY	16/09/21	Survey Type: MANUAL



LIST OF SITES relevant to selection parameters (Cont.)

37	NF-03-A-30	MIXED HOUSES		NORFOLK
	BRANDON ROAD			
	SWAFFHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	266		
	Survey date: THURSDAY	23/09/21		Survey Type: MANUAL
38	NF-03-A-33	MIXED HOUSES		NORFOLK
	LONDON ROAD			
	ATTLEBOROUGH			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	143		
	Survey date: THURSDAY	29/09/22		Survey Type: MANUAL
39	NF-03-A-34	MIXED HOUSES		NORFOLK
	NORWICH ROAD			
	SWAFFHAM			
	Edge of Town			
	Out of Town			
	Total No of Dwellings:	80		
	Survey date: TUESDAY	27/09/22		Survey Type: MANUAL
40	NF-03-A-37	MIXED HOUSES		NORFOLK
	GREENFIELDS ROAD			
	DEREHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	44		
	Survey date: TUESDAY	27/09/22		Survey Type: MANUAL
41	NF-03-A-39	MIXED HOUSES		NORFOLK
	HEATH DRIVE			
	HOLT			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	212		
	Survey date: TUESDAY	27/09/22		Survey Type: MANUAL
42	NF-03-A-46	MIXED HOUSES & FLATS		NORFOLK
	BURGH ROAD			
	AYLSHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	300		
	Survey date: TUESDAY	14/09/21		Survey Type: MANUAL
43	NY-03-A-12	TOWN HOUSES		NORTH YORKSHIRE
	RACECOURSE LANE			
	NORTHALLERTON			
	Edge of Town Centre			
	Residential Zone			
	Total No of Dwellings:	47		
	Survey date: TUESDAY	27/09/16		Survey Type: MANUAL



LIST OF SITES relevant to selection parameters (Cont.)

44	NY-03-A-14	DETACHED & BUNGALOWS	NORTH YORKSHIRE
	PALACE ROAD RIPON		
	Edge of Town Residential Zone		
	Total No of Dwellings:	45	
	Survey date: WEDNESDAY	18/05/22	Survey Type: MANUAL
45	SC-03-A-09	MIXED HOUSES & FLATS	SURREY
	AMLETS LANE CRANLEIGH		
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	136	
	Survey date: TUESDAY	24/05/22	Survey Type: MANUAL
46	TI-03-A-01	MIXED HOUSES	TIPPERARY
	BRITTAS ROAD THURLES		
	Edge of Town Out of Town		
	Total No of Dwellings:	76	
	Survey date: THURSDAY	17/06/21	Survey Type: MANUAL
47	WS-03-A-07	BUNGALOWS	WEST SUSSEX
	EMMS LANE NEAR HORSHAM BROOKS GREEN		
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	57	
	Survey date: THURSDAY	19/10/17	Survey Type: MANUAL
48	WS-03-A-16	DETACHED & SEMI-DETACHED	WEST SUSSEX
	BRACKLESHAM LANE BRACKLESHAM BAY		
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	58	
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL
49	WS-03-A-21	MIXED HOUSES	WEST SUSSEX
	HILLAND ROAD BILLINGSHURST		
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	480	
	Survey date: THURSDAY	09/11/23	Survey Type: MANUAL
50	WS-03-A-23	MIXED HOUSES & FLATS	WEST SUSSEX
	TURNERS HILL ROAD EAST GRINSTEAD		
	Edge of Town Residential Zone		
	Total No of Dwellings:	197	
	Survey date: TUESDAY	14/05/24	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.



TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.69

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	50	113	0.076	50	113	0.270	50	113	0.346
08:00 - 09:00	50	113	0.161	50	113	0.366	50	113	0.527
09:00 - 10:00	50	113	0.151	50	113	0.176	50	113	0.327
10:00 - 11:00	50	113	0.129	50	113	0.151	50	113	0.280
11:00 - 12:00	50	113	0.141	50	113	0.150	50	113	0.291
12:00 - 13:00	50	113	0.160	50	113	0.149	50	113	0.309
13:00 - 14:00	50	113	0.163	50	113	0.149	50	113	0.312
14:00 - 15:00	50	113	0.163	50	113	0.176	50	113	0.339
15:00 - 16:00	50	113	0.253	50	113	0.174	50	113	0.427
16:00 - 17:00	50	113	0.274	50	113	0.177	50	113	0.451
17:00 - 18:00	50	113	0.337	50	113	0.173	50	113	0.510
18:00 - 19:00	50	113	0.257	50	113	0.161	50	113	0.418
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.265			2.272			4.537

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected: 6 - 514 (units:)
 Survey date range: 01/01/16 - 18/09/24
 Number of weekdays (Monday-Friday): 50
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 7
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.



Atkins Airside Swords

Licence No: 332901

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Total People to Total Vehicles ratio (all time periods and directions): 1.69

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	50	113	0.108	50	113	0.453	50	113	0.561
08:00 - 09:00	50	113	0.234	50	113	0.776	50	113	1.010
09:00 - 10:00	50	113	0.227	50	113	0.282	50	113	0.509
10:00 - 11:00	50	113	0.188	50	113	0.235	50	113	0.423
11:00 - 12:00	50	113	0.220	50	113	0.238	50	113	0.458
12:00 - 13:00	50	113	0.243	50	113	0.228	50	113	0.471
13:00 - 14:00	50	113	0.253	50	113	0.228	50	113	0.481
14:00 - 15:00	50	113	0.263	50	113	0.265	50	113	0.528
15:00 - 16:00	50	113	0.545	50	113	0.295	50	113	0.840
16:00 - 17:00	50	113	0.513	50	113	0.293	50	113	0.806
17:00 - 18:00	50	113	0.574	50	113	0.294	50	113	0.868
18:00 - 19:00	50	113	0.431	50	113	0.286	50	113	0.717
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.799			3.873			7.672

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

AtkinsRéalis



RECEIVED: 21/05/2026

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otherwise

Appendix 2

Ecology Note

RECEIVED: 21/05/2026

Colm McEldowney
Glenveagh Homes Limited,
Block C,
Maynooth Business Campus,
Naas, Co. Kildare, W23W5X8.

Synergy Environmental Limited
T/A DNV
3D Core C, Block 71,
The Plaza,
Park West
Dublin 12,
D12F9TN
Tel: +353(01)5654730

Date:	Our reference:	Your reference:
14 th May 2026	Bennetstown Phase 1 LRD Amendment Application – Ecology Letter	Bennetstown Phase 1 LRD Amendment Application – Ecology Letter

Re: Large-scale Residential Development (LRD) – Planning permission for the construction of 124 no. apartment units at Bennetstown, Dunboyne North, Co. Meath. This LRD is a modification to part of a permitted LRD application under ref: 23/60290 (ABP Ref: 320049-24). The proposed modifications consist of the construction of 124 no. apartments which will replace the 76 no. apartment units within Apartment Block A, B and C.

A Chara,

I am writing to you in reference to a proposed amendment to the permitted Phase 1 LRD at Bennetstown, Dunboyne North, Co. Meath (ref: 23/60290, ABP Ref: 320049-24).

I can confirm that in 2024 Enviroguide Consulting (now known as DNV), prepared an Appropriate Assessment (AA) Screening Report, a Natura Impact Statement (NIS) and a Biodiversity Chapter of an EIAR (Enviroguide, 2024a, 2024b & 2024c respectively¹), on behalf of the applicant Marina Quarter Limited to accompany an LRD planning application submission to Meath County Council (MCC). Please see the following summary of the findings of these reports, and their relevance to the Proposed Amendment application.

EIAR Biodiversity Chapter

The EIAR Biodiversity Chapter prepared as part of the previous LRD application assessed the ecology of the Site and the potential for significant effects on same. The key ecological receptors (KERs) identified as part of this assessment were as follows:

- Hedgerows (WL1), Treelines (WL2) and Drainage Ditches (FW4).
- River Tolka (FW2).
- Hedgehog, Badger and Otter.
- Breeding Bird Assemblage.
- Bat Assemblage.
- Common Frog.

¹ Enviroguide (2024a) Appropriate Assessment Screening Report for Proposed Development at lands at Bennetstown, Dunboyne, Co. Meath. Prepared for Marina Quarter Ltd., in September 2023 and updated in March 2024 as per Meath CoCo RFI.
Enviroguide (2024b) Natura Impact Statement for Proposed Development at lands at Bennetstown, Dunboyne, Co. Meath. Prepared for Marina Quarter Ltd., in September 2023 and updated in March 2024 as per Meath CoCo RFI.
Enviroguide (2024c) EIAR Biodiversity Chapter for Proposed Development at lands at Bennetstown, Dunboyne, Co. Meath. Prepared for Marina Quarter Ltd., in September 2023 and updated in March 2024 as per Meath CoCo RFI.

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- Fish Assemblage of the River Tolka.

The assessment carried out within the Biodiversity Chapter concluded that the construction mitigation measures and embedded design features detailed therein were sufficient to reduce any adverse effects on KERs associated with the Site to 'not significant' i.e., that there would be no significant adverse effects on any valued habitats, designated sites or species as a result of the LRD. The Proposed Amendments would not result in any change in these conclusions given their small-scale nature. Further information is provided in the concluding sections of this letter.

Appropriate Assessment

The AA Screening identified North Dublin Bay SAC (000206), South Dublin Bay and River Tolka Estuary SPA (004024) and North Bull Island SPA (004006) as the only Natura 2000 or 'European' sites potentially at risk of likely significant effects as a result of the development in question. The AA Screening (Enviroguide, 2024a) concluded the following with regard the previous permitted LRD:

"On the basis of the screening exercise carried out above, it can be concluded, on the basis of the best scientific knowledge available and objective information, that the possibility of any significant effects on the above listed European sites, whether arising from the project itself or in combination with other plans and projects, cannot be excluded in light of the above listed European sites' conservation objectives. Thus, there is a requirement to proceed to Stage 2 of the Appropriate Assessment process; and a NIS has been prepared and accompanies this submission under separate cover."

The NIS was prepared to provide information for the competent authority (in this case MCC) to carry out a Stage 2 AA in respect of the LRD application on the site in question.

The NIS prepared for the previous application assessed the potential for the permitted Phase 1 LRD's construction and operation to adversely affect the integrity of North Dublin Bay SAC (000206), South Dublin Bay and River Tolka Estuary SPA (004024) and North Bull Island SPA (004006). The NIS confirmed that the development in question was unlikely to adversely affect the integrity of the European sites identified in the AA Screening and included a suite of mitigation measures to further ensure this (e.g., Construction Phase surface water mitigation included in a robust CEMP, targeted mitigation measures for the bridge construction to protect the Tolka River). The NIS (Enviroguide, 2024b) concluded the following with regard to the permitted LRD's potential to impact on the integrity of European sites connected by way of identified impact pathways:

"Where potentially significant effects were identified, a range of mitigation and avoidance measures have been suggested to avoid them. This NIS has concluded that, once the avoidance and mitigation measures are implemented as proposed, the Proposed Development will not have an adverse effect on the integrity of the above European sites, individually or in combination with other plans and projects. Where applicable, a suite of monitoring has been proposed to ensure the efficacy of said measures in ensuring no adverse impacts on the relevant European sites downstream."

As a result of the complete, precise and definitive findings in of this NIS, it has been concluded, beyond reasonable scientific doubt, that the Proposed Development will have no significant adverse effects on the QIs, SCIs and on the integrity and extent of the relevant European sites."

The Proposed Amendments would not result in any change in these conclusions given their small-scale nature. Further reasoning to this effect is provided in the concluding sections of this letter.

North-west Irish Sea SPA & South Dublin Bay SAC

In the interest of transparency and to avoid confusion regarding the assessments carried out as part of the previous permitted Phase 1 LRD application and subsequent Phases of the Bennetstown LRDs, it is noted that in the AA Screening submitted with the permitted Phase 1 LRD, the North-west Irish Sea SPA (004236) and South Dublin Bay

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SAC (000210) were not screened in for further Stage 2 assessment in the NIS. At the time of submission, both of these European sites were screened out due to what was deemed to be a lack of potential for likely significant effects as a result of the Phase 1 development, by virtue of to their being located a significant distance downstream and within Dublin Bay and separated by the waters of the bay and the 'South Bull Wall' pier at the River Liffey estuary, respectively. The Phase 1 LRD was subsequently granted by MCC. As is detailed below, the two above European sites were assessed by Enviroguide/ DNV in subsequent applications for LRD phases that overlap with the permitted Phase 1 site in terms of key infrastructure and impact pathways.

LRD applications were prepared and submitted in 2024 and 2025, for Bennetstown Phases 2 and 3 by the applicant, on lands that overlap with the Phase 1 Site and that share the same bridge and link-road infrastructure permitted in the Phase 1 LRD application. Enviroguide/ DNV prepared the AA Screening and NIS reports for both Phase 2 and Phase 3 LRD applications. Following the preapplication consultation process undertaken with MCC as part of both of these subsequent LRD applications, and taking on board feedback received from MCC ecologists at the time, the AA screening approach developed with iterative changes made to include South Dublin Bay SAC and the North-West Irish Sea SPA for assessment in the AA Screenings in an overabundance of caution.

The AA Screening prepared and submitted for the Phase 2 LRD application therefore considered the South Dublin Bay SAC in its assessment, in addition to the North Dublin Bay SAC (000206), South Dublin Bay and River Tolka Estuary SPA (004024) and North Bull Island SPA (004006), and the AA Screening prepared and submitted for the Phase 3 LRD application considered both the South Dublin Bay SAC and the North-West Irish Sea SPA in its assessment, in addition to the above listed Dublin Bay European sites. Bennetstown Phase 2 was subsequently granted planning permission by MCC in 2025, and Bennetstown Phase 3 has been submitted and is currently with the Council for consideration and pending a decision.

Although South Dublin Bay SAC and the North-West Irish Sea SPA were not screened in for assessment in the permitted Phase 1 LRD application's AA Screening, it is respectfully submitted that these two European sites have been considered in the Phase 2 and Phase 3 reports, with potential impact pathways mitigated accordingly to ensure no impact on their integrity in line with their conservation objectives² and targets. The conclusions of these reports can therefore be relied upon to inform this assessment.

This is due to the overlapping nature of the shared key infrastructure of all three Phased LRD at Bennetstown, Dunboyne (i.e., bridge and link-road, foul and storm water infrastructure), the analogous impact pathways associated with these developments (i.e., the River Tolka), and the consequently analogous nature of the mitigation measures recommended in the NIS reports submitted for all three LRD applications (e.g., Construction Phase surface water mitigation included in a robust CEMP, targeted mitigation measures for the bridge construction to protect the Tolka River etc.).

The Proposed Amendment Application

Taking the above information into consideration, it is noted that the amendment proposed to the design of the permitted Phase 1 LRD can be summarised as modifications to two blocks of permitted apartments to increase the number of units from 76 to 124 no. units. The proposed modifications include no significant changes to the layout of this part of the Phase 1 site in terms of landscaping, drainage etc., however, it is noted that the pumping station has been revised in size to accommodate the increased residential load which has resulted in minor adjustments to the storage volume.

On review of the AA Screening, NIS and EIAR Biodiversity Chapter prepared in 2024 as part of the previously permitted Phase 1 LRD application, as well as those submitted with the subsequent Phase 2 & 3 LRD applications, DNV can confirm that we have reviewed the plans and relevant particulars for the Proposed Amendment to Phase 1 LRD, and can confirm that we are satisfied that the assessments carried out in the these reports with respect to Appropriate Assessment and

² It is noted that the Conservation Objectives for South Dublin Bay SAC (000210) were updated in April 2026 (Version 2). On review of the 2026 CO's there is no change to the findings and conclusions of the assessment of this SAC in the Phase 2 & 3 LRD reports resulting from the update.

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Ecological Impact Assessment are valid and applicable to the Proposed Amendment in question. It is our professional and expert opinion that the proposed changes will therefore have no material effect on the findings and conclusions of the ecology reports submitted with the permitted LRD application (ref: 23/60290, ABP Ref: 320049-24), i.e., that the Proposed Amendment will not result in any adverse impact on the integrity of downstream designated sites (including South Dublin Bay SAC and the North-West Irish Sea SPA), and will also not significantly affect the surrounding environment and biodiversity of the Site. Please refer to the 2024 ecology reports³ for further details.

We trust that this will aid the competent authority in its deliberations with regard to the Appropriate Assessment and Environmental Impact Assessment of the Proposed Development from a biodiversity perspective. Please do not hesitate to contact DNV should you have any queries on the above.

Yours Sincerely
Liam Gaffney BSc MSc MCIEEM
DNV Senior Ecologist

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Direct: +353 01 565 4730
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³ Enviroguide (2024a) Appropriate Assessment Screening Report for Proposed Development at lands at Bennetstown, Dunboyne, Co. Meath. Prepared for Marina Quarter Ltd., in September 2023 and updated in March 2024 as per Meath CoCo RFI.
Enviroguide (2024b) Natura Impact Statement for Proposed Development at lands at Bennetstown, Dunboyne, Co. Meath. Prepared for Marina Quarter Ltd., in September 2023 and updated in March 2024 as per Meath CoCo RFI.
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