14 MATERIAL ASSETS: TRAFFIC AND TRANSPORTATION

14.1 Introduction

This chapter of the Environmental Impact Assessment (EIA) Report presents the assessment of the likely significant effects (as per the "EIA Regulations") of the Proposed Development on Traffic and Transport arising from the construction and operation of the Proposed Development, both alone and cumulatively with other plans and projects.

This chapter provides a summary of topic-relevant guidance and outlines the data sources used to characterise the topic-specific Study Area. Building on the general EIAR methodology outlined in Chapter 1 (Introduction and Methodology), the topic-specific methodology followed in assessing the impacts of the Proposed Development on topic-specific environmental receptors is set out, as is the assessment of likely effects on the topic-specific environmental receptors on arising from the construction and operation of the Proposed Development. Relevant mitigation measures, following the 'mitigation hierarchy' of avoidance, minimisation, restoration and offsets, and/or monitoring requirements, are proposed in respect of any significant effects and a summary of residual impacts is provided, where relevant.

This chapter of the Environmental Impact Assessment Report (EIAR) assesses the likely significant effects on traffic and transport arising from the proposed Boherboy Large-Scale Residential Development (LRD) at Boherboy, Saggart, County Dublin. The assessment considers both the construction and operational phases of the project, with particular regard to vehicular traffic, public transport accessibility, pedestrian and cyclist movement, and road safety.

The methodology follows the principles set out in the IEMA Environmental Assessment for Road Traffic (2023) and the Environmental Protection Agency's (EPA) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (2022). These documents provide the framework for determining the significance of transport-related effects, defining thresholds for environmental change, and identifying appropriate mitigation and monitoring measures.

The study area for the assessment encompasses the local and strategic road network surrounding the site, including Boherboy Road (L2008) as the primary site access route, the connecting N81 corridor, and the adjacent Carrigmore and Corbally residential estates. The wider context also includes links to Fortunestown and Citywest, which provide access to higher-order road, cycle, and public transport networks, including the Luas Red Line and Dublin Bus services

14.1.1 Quality Assurance and Competency of Experts

This Chapter of the EIAR has been prepared by the following:

Ronan Kearns, BA, BAI, MSc, MBA, CEng MIEI

Chartered Engineer

Ronan is a Chartered Engineer with 20 years' post graduate experience. Projects worked on include roads, drainage and civil infrastructure design and project management for residential, retail, data centres, commercial and windfarm developments from feasibility through to construction.

Ronan has led numerous planning applications and infrastructure designs for a variety of developments. These developments have ranged from small scale residential projects to multimillion Euro retail, data centre and windfarm projects.

Ronan specialises in transportation planning and site assessment, preliminary design and detailed design of development. Ronan has completed a number of Traffic and Transport EIAR chapters on sites throughout Ireland.

14.2 Study Methodology

The assessment of potential traffic and transport impacts arising from the Proposed Development has been carried out in accordance with best-practice guidance, including the IEMA Environmental Assessment for Road Traffic (2023) and the EPA Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (2022). The IEMA guidance provides a structured approach to determining when changes in traffic flows may give rise to environmental effects, while the EPA guidelines establish the terminology and criteria for assessing their significance.

The IEMA methodology identifies two primary thresholds for considering whether road links or junctions should be assessed in detail:

- Rule 1 – where total traffic or Heavy Goods Vehicle (HGV) flows are predicted to increase by more than 30%, a perceptible environmental effect may occur; and

- Rule 2 – where traffic flows increase by more than 10% in particularly sensitive areas (such as residential streets, near schools, or areas with high pedestrian activity), a discernible environmental effect may arise.

Traffic increases below these thresholds are generally regarded as unlikely to give rise to measurable environmental effects. The assessment therefore focuses on identifying any road links where these IEMA thresholds could potentially be exceeded, with reference to local sensitivity and existing traffic conditions.

Traffic growth factors and baseline conditions have been established in accordance with Transport Infrastructure Ireland (TII) guidance, specifically PE-PAG-02039 – Project Appraisal Guidelines

for Traffic Forecasting (2022) and PE-PAG-02017 – Expansion Factors (2022). Traffic data for the study area were factored to a 2032 design year, representing the full operational scenario for the Boherboy LRD.

Potential impacts were assessed for both the construction and operational phases of the Proposed Development, considering the nature, magnitude, duration, and reversibility of effects. The assessment addresses impacts on all relevant receptors, including pedestrians, cyclists, public transport users, and general traffic. Where applicable, the effectiveness of embedded mitigation measures—such as the Construction Traffic Management Plan (CTMP) and Mobility Management Plan—has been considered in determining residual effects.

All effects have been classified using EPA (2022) significance terminology (imperceptible, slight, moderate, significant, or profound), with explicit reference to their duration (temporary, short-term, medium-term, or long-term) and nature (positive, neutral, or adverse).

14.2.1 Relevant Legislation and Guidelines

The following policies have been applied when developing the methodology for this assessment:

- Environmental Protection Agency (EPA) Guidelines on the Information to Be Contained in the EIAR (2022);
- IEMA Impact Assessment Guide to Delivering Quality Development (2016);
- Transport Infrastructure Ireland (TII) Traffic and Transportation Assessment Guidelines (2014);
- 'Traffic Management Guidelines' Dublin Transportation Office & Department of the Environment and Local Government (May 2003);
- 'Guidelines for Traffic Impact Assessments' The Institution of Highways and Transportation (1994);
- National Roads Unit 16.1 - Expansion Factors for Short Period Traffic Counts (PE-PAG-02039) (October 2016) - TII; and
- The Route to Sustainable Commuting NTA (2001).

This chapter of the EIAR has been drafted based on the following legislation, policies and published guidance:

- National Legislation:
  - National Planning Framework (NPF) 2019
- Regional Policy:
- South Dublin County Development Plan 2022-2028

National guidance and industry standards:

- IEMA Environmental Assessment for Road Traffic, 2023
- Environmental Protection Agency (EPA) Guidelines on the Information to Be Contained in the EIAR (2022)

14.2.2 Guidance

IEMA Environmental Assessment for Road Traffic, 2023

IEMA methodology has been used for the appraisal of traffic impacts from the Proposed Development. It should be noted that the Republic of Ireland forms part of the IEMA Regional Network.

The purpose of the IEMA Guidelines is to provide the basis for a systematic, consistent, and comprehensive coverage for the appraisal of traffic impacts for a wide range of development projects.

The EIA process should be a continuous activity running throughout the planning and design stages of a project.

To ensure the comprehensive coverage of the environmental impacts arising from changes in traffic levels, the IEMA Guidelines identify a checklist of potential impacts such as driver severance and delay, pedestrian severance and delay, pedestrian amenity, accidents and safety, hazardous and dangerous roads, etc.

According to the IEMA Guidelines the assessment of the environmental impacts of traffic requires the following stages:

- Determination of existing and forecast traffic levels and characteristics;
- Determining the time period suitable for assessment;

- Determining the year of assessment; and
- Identifying the geographical boundaries of assessment.

Further to the above, the study area would be defined by identifying any link or location where it is considered that significant environmental effects may occur as a result of the proposed scheme.

The IEMA Guidelines state two rules to be considered when assessing the impact of development traffic on a highway link:

- Include highway links where traffic flows would increase by more than 30% (or the number of heavy goods vehicles (HGVs) would increase by more than 30%); and
- Include any other specifically sensitive areas where traffic flows would increase by 10% or more.

Less than a 30% increase is considered to result in imperceptible changes in the environmental effects of traffic. The IEMA Guidelines considered that projected changes in traffic flows of less than 10% create no discernible environmental effect.

Specifically, sensitive areas referred to above may include accident 'black spots', conservation areas, hospitals, or links with high pedestrian flows.

EPA Guidelines on the Information to be contained in Environmental Impact Assessment Reports, 2022

The Guidelines have the primary objective of improving the quality of EIARs. The guidance presents the terminology of effects which has been applied to this chapter, where appropriate.

14.2.3 Assessment Methodology

IEMA (Institute of Environmental Management and Assessment) Environmental Assessment for Road Traffic has been used for the appraisal of traffic impacts likely to arise from the construction, operation and decommissioning of the Proposed Development. The Environmental Assessment for Road Traffic offers a systematic approach to the assessment of the traffic impacts for developments on the local highway network.

The Environmental Assessment for Road Traffic provides a checklist for the assessment of environmental impacts arising from the changes in traffic levels during the mobilisation, construction, operational, maintenance and decommissioning phase of the project. These impacts include driver severance and delay, pedestrian severance and delay, pedestrian amenity, accidents and safety and hazardous and dangerous roads.

The sensitive receptors are pedestrians, cyclists and road users that use the local road network. The study area includes links and junctions which provided the most direct access routes to the application site and are, therefore, most likely to be affected by site traffic (construction, operational and decommissioning) traveling to/from the development site.

Any links that do not meet the defined selection criteria have not been considered as part of the study area and have been excluded from further analysis.

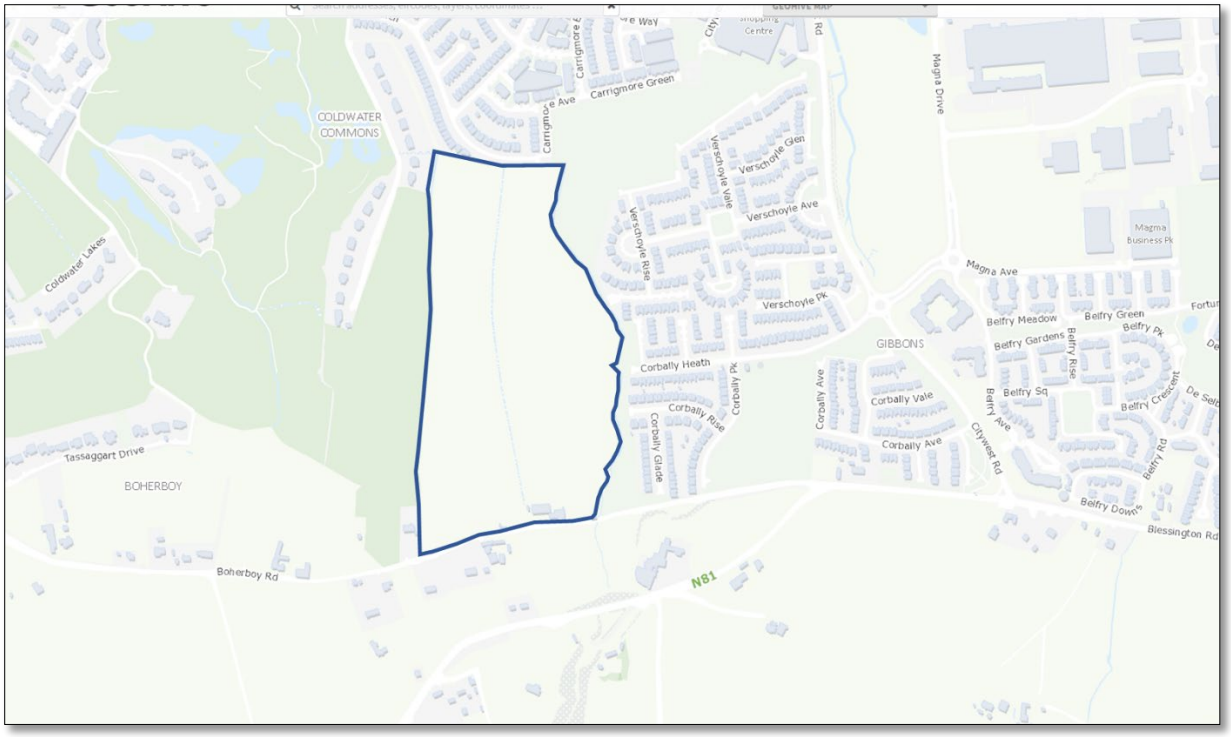

Figure Error! No text of specified style in document.**.1: Study Area**

Construction Phase

The IEMA Guidelines state that two rules need to be considered when assessing the impact of development traffic on a highway link:

- Include highway links where traffic flows would increase by more than 30% (or the number of heavy goods vehicles (HGVs) would increase by more than 30%); and
- Include any other specifically sensitive areas where traffic flows would increase by 10% or more.

Less than a 30% increase is considered to result in imperceptible changes in the environmental effects of traffic. The IEMA Guidelines consider that projected changes in traffic flows of less than 10% create no discernible environmental effect.

Specifically, sensitive areas referred to above may include accident 'black spots', conservation areas, hospitals or links with high pedestrian flows.

The Construction Phase assessment has been limited to roads immediately adjacent to the application site and any roads further afield where traffic would increase by greater than 30% or 10% at nodes such as accident 'black spots', conservation areas, hospitals or links with high pedestrian flows.

Operational Phase

The Proposed Development is anticipated to be completed and fully operational in 2027. The assessment considers the full quantum of development at this future year.

Estimated trip generation for the Proposed Development was provided for the assessment. Trips were distributed onto the local highway network based upon the directional splits from the 2024 traffic survey data that were commissioned in support of the Proposed Development.

Based on the construction of projects having similar scale and complexity, it is expected that the construction works would take up to 24 months (2 years) to construct

14.2.4 Assessment Criteria

The EPA and IEMA Guidelines were reviewed to identify appropriate significance criteria applicable to the assessment.

Paragraph 3.12 of the IEMA Guidelines states the following: "*A critical feature of an environmental assessment is determining whether a given effect is significant.*

Having quantified the magnitude of the impact (i.e. the level of change), there are various ways of interpreting whether or not the resulting outcome is considered significant. There is no definition of a 'significant effect' in the EIA Regulations.

Furthermore, for many effects, there are no simple rules or formulae that define appropriate assessment thresholds and therefore there is a need for interpretation and judgement on the part of the competent traffic and movement expert, backed up by data or quantified information wherever possible. Such judgements will include the assessment of the numbers of people experiencing an impact and the sensitivity of those people, as well as the assessment of the damage to various natural or cultural resources.

The competent traffic and movement expert will need to make it clear how they have defined whether a change (and the resultant effect) is considered significant or no".

Under EPA guidelines quality effects are described as either:

- Positive – a change which improves the quality of the environment (such as reduction of traffic, travel time or patronage, or provision of a new service, access or facility);
- Neutral – no effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error; and
- Adverse – a change which reduces the quality of the environment (such as increase of traffic, travel time, patronage or loss of service or facility).

The significance of pedestrian severance, delay, amenity, fear and intimidation effects has been determined by considering future baseline traffic flows obtained from the traffic surveys, as well as the potential impact of the Proposed Development in terms of change in traffic flows on each link within the study area by reference to the IEMA Guidelines and applying professional judgment.

Pedestrian Severance

The IEMA Guidelines acknowledge that the measurement and prediction of severance is extremely difficult and that the correlation between the extent of severance and the physical barrier of a road is not clear.

It notes that there are no predictive formulae which give simple relationships between traffic factors and levels of severance. However, the IEMA Guidelines do accept that in general, marginal changes in traffic flows are, by themselves, unlikely to create or remove severance.

Factors which need to be considered when determining severance comprise road width, traffic flows, speed of traffic, the presence of pedestrian crossing facilities and the number of pedestrian movements across the affected route.

The IEMA Guidelines suggest that:

- Changes in flow of up to 30% would produce slight changes in severance;
- Changes in flow of up to 60% would produce moderate changes in severance; and
- Changes in flow of up to 90% would produce substantial changes in severance.

It is recognised that these are guidelines only and are highly dependent on existing ambient traffic levels.

They are not considered to be definitive measures of severance and should be used with care and regard paid to specific local conditions. The guidelines have been used to inform impact magnitude criteria for the assessment. Professional judgment has been applied to identify the likely scale of effects.

Pedestrian Delay

The IEMA Guidelines note that changes in the volume, composition and/or speed of traffic may affect the ability of people to cross roads. Typically, increases in traffic levels result in increased pedestrian delay, although increased pedestrian activity itself also contributes. The IEMA Guidelines do not set any thresholds for absolute or actual changes in delay, recommending instead that assessors use their judgment to determine the significance of the impact.

The IEMA Guidelines refer to a report published by the Transport Research Laboratory (TRL) Supplementary Report 356 as providing a useful approximation for determining pedestrian delay. The TRL research concludes that the mean pedestrian delay was found to be eight seconds at flows of 1,000 vehicles per hour, and below 20 seconds at 2,000 vehicles per hour for various types of crossing condition.

A two-way flow of 1,400 vehicles per hour has been adopted as a lower threshold for assessment (equating to a mean 10 second delay for a link with no pedestrian facilities) in the TRL report.

Below this flow, pedestrian delay is unlikely to be a significant factor. This is deemed to be a robust starting point for narrowing down the modelled routes within the study area and ensuring the routes selected exceeded the suggested threshold of analysis in IEMA Guidelines. It should be noted that for controlled forms of pedestrian crossing the pedestrian delays are less.

As a result, any road with a two-way flow of less than 1,400 vehicles per hour is deemed to have a negligible effect. Roads above this are assessed on the basis of professional judgment.

Pedestrian Amenity

IEMA Guidelines define pedestrian amenity as the relative pleasantness of a journey and may be influenced by fear and intimidation if they are relevant. As with pedestrian delay, pedestrian amenity is considered to be affected by traffic volumes and composition along with pavement width and pedestrian activity. The IEMA Guidelines suggest that a tentative threshold for judging the significance of changes in pedestrian amenity would be where the traffic flows are halved or doubled.

The Guidelines have been used to inform impact magnitude criteria for the assessment. Professional judgment has been applied to identify the likely scale of effects.

Pedestrian Fear and Intimidation

A number of factors are considered relevant in determining changes in the level of fear and intimidation experienced by pedestrians and cyclists including volume of traffic; percentage of HGVs; speed of traffic; proximity to people; and the availability and quality of pedestrian infrastructure.

*Table **Error! No text of specified style in document.**-1 Pedestrian Fear and Intimidation Criteria*

Pedestrian Fear and Intimidation Criteria			
Average Traffic Flow over 18hr day (vehicles per hour) **(a)**	**Total 18-hr HGV Flow** **(b)**	**Average Speed (mph)** **(c)**	**Degree of Hazard Score**
1,800+	3,000+	->40	30
1,200–1,800	2,000–3,000	30-40	20
600–1,200	1,000–2,000	20-30	10
<600	<1000	<20	0

The IEMA Guidelines set out the criteria reproduced in **Table 14.2** for measuring the effects of fear and intimidation.

*Table **Error! No text of specified style in document.**-2 Levels of fear and intimidation*

Levels of fear and intimidation	
Level of fear and intimidation	**Total hazard score (a) + (b) + (c)**
Extreme	71+
Great	41-70
Moderate	21-40
Small	0-20

The magnitude of impact is approximated with reference to the changes in the level of fear and intimidation level.

*Table **Error! No text of specified style in document.**-3 Fear and intimidation magnitude of impact*

Fear and intimidation magnitude of impact	
Magnitude of impact	**Change in step/traffic flows (24-HR) from baseline condition**
High	Two step changes in level
Medium	One step change in level, with >400 veh increase in average 18hr AV two-way flow and/or >500 HV increase in total 18HR HV flow
Low	One step change in level, with <400 veh increase in average 18hr

	AV two-way flow and/or <500 HV increase in total 18HR HV flow
Negligible	No change in step change

The IEMA Guidelines stress the need for professional judgment when applying the above criteria. Accordingly, the guidelines have been used to inform impact magnitude criteria for the assessment. Professional judgment has been applied to identify the likely scale of effects.

Driver Delay

IEMA Guidelines note that driver delay can occur at several points on the network, although the effects are only likely to be significant when the traffic on the highway network is predicted to be at or close to the capacity of the system. Professional judgment has been applied to determine the significance of residual effects.

Accidents and Safety

There is no formal published guidance for the assessment of accidents and safety. Therefore, professional judgment has been applied to assess the implications of local circumstances and the Proposed Development 's likely effect which may increase or decrease the risk of accidents.

Hazardous Load

This development does not involve the transportation of dangerous or hazardous loads by road and therefore is not included in this assessment.

14.2.5 Receptor Sensitivity/Value Criteria

Highway Network

The potential receptors are the users of transport networks within the relevant study area. The sensitivity of a road can be defined by the vulnerability of the user groups who are likely to use it, i.e., the elderly or children.

A sensitive area may be where pedestrian activity is high, near a school, or an accident black spot.

It also takes into account the existing nature of the road, i.e., an existing residential area is likely to be more sensitive than a road capable of carrying larger volumes of traffic such as an R-Road (regional roads), N-Road (national roads) or M-Road (motorways).

Professional judgement has been used to define the value of receptors in accordance with LA 1047 Section 3.1. [1]

The sensitivity of receptors has been classified as low, medium or high, in accordance with the criteria set out in **Table 14.4**.

*Table **Error! No text of specified style in document.**-4 Receptor Sensitivity*

Receptor Sensitivity	
Sensitivity	**Criteria**
High	Receptors of greatest sensitivity to traffic flow: schools, colleges, playgrounds, accident clusters, retirement homes, roads without footways that are used by pedestrians.
Medium	Receptors of moderate sensitivity to traffic flow: congested junctions, doctors' surgeries, hospitals, shopping areas with roadside frontage, roads with narrow footways, recreation facilities.
Low	Receptors with some sensitivity to traffic flow: places of worship, public open space, tourist attractions and residential areas with adequate footway provision.
Very Low	Receptors with very low sensitivity to traffic flows and those

[1] 7 LA 104 Environmental assessment and monitoring, Rev 01, DMRB, July 201

	sufficiently distant from affected roads and junctions.

Impact Magnitude Criteria

The magnitude of impact has been classified as low, medium or high, in accordance with the criteria set out in **Table 14-5**.

*Table **Error! No text of specified style in document.**-5 Scale of Impact Criteria*

Scale of Impact Criteria				
Impact	**Assessment Criteria**			
	Low	**Medium**	**High**	**Very High**
Severance	Increase in total traffic flows of 30% or under	Increase in total traffic flows of 30% – 60%	Increase in total traffic flows of 60%-90%	Increase in total traffic flows of 90% and above
Pedestrian, cyclist and equestrian delay.	Two-way traffic flow < 1,400 vehicles per hour.	A judgement based on the road links with two-way traffic flow exceeding 1,400 vehicles per hour in context of the individual characteristics.		
Pedestrian, cyclist and equestrian amenity.	Change in total traffic or HGV flows < 100%	A judgement based on the routes with >100% change in context of their individual characteristics		
Fear and intimidation.	18hr average of <600 veh/hr and <10mph, <1,000 HGVs in 18 Hr	18hr average of 600-1200 veh/hr and 10-15mph, 1,000-	18hr average of 1200-1800 veh/hr and 15-20mph,	18hr average of >1800veh/hr and >20mph,

		2000 HGVs in 18 Hr	2,000-3000 HGVs in 18 Hr	>3000 HGVs in 18 Hr
Driver and passenger delay	This has been assessed on a case-by-case basis using professional judgement subject to the sensitivity and vulnerability of the receptor. Impacts are only likely to be significant when the traffic on the network surrounding the development is already at, or close to, the capacity of the system.			

Scale of Effect Criteria

Impacts have been assessed based on the value/sensitivity of receptors against the magnitude of impact to determine the scale of effect as presented in **Table 14.6**. The matrix has been informed by the EPA Guidelines.

*Table **Error! No text of specified style in document.**-6 Significance Criteria*

Significance Criteria				
Magnitude	**Sensitivity of Receptors**			
	Very Low	**Low**	**Medium**	**High**
Low	Imperceptible	Not Significant	Slight	Slight
Medium	Not Significant	Slight	Slight	Moderate-Significant
High	Slight	Slight	Moderate-Significant	Very Significant
Very High	Slight	Moderate-Significant	Very Significant	Profound

The criteria used to assess whether an effect is significant or not, are given in the EPA Guidelines 2022 and are set out in **Table 2.1** in **Chapter 2: EIA Process and Methodology**. The significance of effects is determined by consideration of the sensitivity of the receptor, the magnitude of impact and scale of the effect. In assessing the significance of an effect, consideration has been given to the quality, duration, probability and type of the effect, and its geographical extent, and the application of professional judgement.

Based on professional judgement, moderate-significant, very significant and profound effects are considered significant in EIA terms.

Where the existing baseline HGV or total traffic flows are very minor, a small increase in vehicles would produce a large change in magnitude whereas in real terms the increase in traffic may still be considered to be negligible or slight. In these instances, appropriate professional and experienced judgements have been made.

Nature of Effect Criteria

The nature of the effect has been described as either adverse , neutral or positive as follows:

- Positive – An advantageous effect to a receptor;
- Neutral – An effect that on balance, is neither positive nor adverse to a receptor; or
- Adverse – A detrimental effect to a receptor.

14.2.6 Topic-specific Consultation

A Section 247 meeting was held with South Dublin County Council on the 2nd of May 2023 which was attended by representatives of South Dublin County Council's Transportation Department and Parks Department. At this meeting, it was agreed that the original count locations would be re-surveyed for the revised planning application that this EIAR will accompany.

In preparation for the Stage 2 Application as part of the LRD process, a site meeting was held with representatives of the Parks Department and Roads Department of South Dublin County Council on Boherboy Road on the 24th of October 2023. This was in the context of the following:

- Determining if the Boherboy Road upgrade could be built without affecting the existing hedges/trees and
- Whether or not the Boherboy Road upgrade was still required given that connections to Corbally, Carrigmore and Boherboy Road could be delivered Day 1 of this application by the Applicants.

The original requirement for the Boherboy Road upgrade came from the first phase requirement of the Fortunestown LAP. Given that this is no longer applicable and given the taking in charge of Corbally and Carrigmore has been completed, the clear desire line for pedestrians and cyclists towards Citywest can be achieved without the need for a footpath along Boherboy Road. In this scenario, all hedge/trees are retained whilst also providing high-level pedestrian/cyclist permeability along the relevant desire lines.

At that meeting it was agreed that the Applicants would investigate the impact that the proposed Boherboy Road upgrade would have on the trees/hedges on Boherboy Road. Should this impact be deemed to be significant, the Applicants were to examine the possibility of connecting the southeast corner of the site to Corbally. This was the be facilitated through the new 'rectangle site' which was not part of the original SHD application.

Following the informal site meeting, and as part of the LRD process, a Stage 2 Meeting was held with South Dublin County Council on the 14th of August 2024. South Dublin County Council issued an Opinion Report relating to a Large-Scale Residential Development (LRD) meeting with the following issued raised:

- Sustainable Movement (Roads) - Further consideration shall be given to the design recommendations set out in Appendix 10. Particular attention should be given to reducing the level of car parking, ensuring all road of similar type are the same width across sit.

- Environmental Considerations – An EIAR and an AA Screening Assessment shall be submitted with the final application

Appendix 10 include the following suggestions:

1. The proposed development is in a study area for a future national road scheme. The Authority recommends that the planning authority consult with the local Road Design Office (RDO) in considering this application.

2. The applicant is requested to submit a layout of appropriate scale showing the areas to be taking in charge.

3. The applicant is requested to provide an analysis of the impact of the development upon the existing traffic network.

4. A stage 1 road safety audit is required.

5. The amount of parking is at the maximum the applicant is requested to reduce the overall parking provision.

6. The western shared cycle tracks should be designed with reference to the cycle design manual and in consultation with South Dublin's Active travel section.

7. The applicant is requested to provide a layout of the southern boundary showing pedestrian links, and any possible future links east and west.

8. Details of the connection of the access roads to the existing should be provided.

9. Statement of Compliance with DMURS.

10. The applicant is requested to clearly show the provision of dedicated cycle infrastructure along the central roadway north-south and to provide connections east to west through the central green space.

11. A layout detailing the road hierarchy that is consistent with DMURS.

12. A layout showing the cycle routes across the development, ensuring connectivity across the site and that takes account of the change in elevation.

These items will be included in the final planning application, and where relevant, include in this chapter of the EIAR.

14.2.7 Data Sources

There are two primary data sources:

Traffic survey undertaken by the Applicant on the 10th April 2025.

Additional data was sourced from the National Transport Authority in the form of public transport information.

14.2.8 Approach to Assessment of Effects

The baseline information obtained has been used to provide an understanding of the value of each receptor relevant to this topic (the 'baseline scenario'), and its sensitivity to the potential impacts associated with the construction and operation of the Proposed Development.

The baseline scenario has been determined with due consideration of the 'do nothing' scenario.

The 'source-pathway-receptor' model has been used to identify potential impacts resulting from the Proposed Development activities on the environment and sensitive receptors within it.

The potential environmental impacts identified have been assessed using a systematic approach to identify and evaluate the significance of the potential impacts both alone and in combination with other plans and projects.

Effects can be beneficial (positive), neutral or adverse (negative) in nature.

Significance of effects has been categorised as follows:

- *Imperceptible* − An effect capable of measurement but without significant consequences.
- *Not Significant* − An effect which causes noticeable changes in the character of the environment but without significant consequences.
- *Slight* − An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
- *Moderate* − An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
- *Significant effects* − An effect which, by its character, magnitude, duration or intensity, alters a sensitive aspect of the environment.
- *Very Significant* − An effect which, by its character, magnitude, duration or intensity, significantly alters most of a sensitive aspect of the environment.
- *Profound Effects* − An effect which obliterates sensitive characteristics.

Effects determined as slight or lower are considered to have ‘no likely significant effect’. Any effect with a greater than moderate significance is considered to have a 'likely significant effect'.

The assessment described above includes consideration of mitigation measures that are incorporated into the design (i.e., primary mitigation) and which are intended to prevent, reduce and where possible offset any significant adverse impacts on the environment.

Where potentially significant adverse effects have not been eliminated by project design or embedded mitigation, further mitigation measures (i.e., secondary mitigation) have been proposed.

For each significant effect identified, appropriate secondary mitigation measures are prescribed. Secondary mitigation measures have been informed by stakeholder engagement and determined by the relevant technical experts.

Where relevant, residual effects have been determined for each significant effect, considering all proposed mitigation.

In cases where residual uncertainty of impact is identified within the EIAR, or the success of implemented mitigation measures requires validation, commitments have been made for the provision of monitoring.

14.2.9 Limitations of Assessment

The impact of the development has been limited to the nodes located in Figure 14.14. Classified counts were carried out on the 10th April 2025. The traffic data is valid on that only and is influenced by network conditions on the day. It is assumed the data is representative based on previous traffic counts that were undertaken in May 2023.

14.3 The Existing and Receiving Environment (Baseline Situation)

The proposed development site is located at Boherboy, Saggart, County Dublin, within the administrative area of South Dublin County Council (SDCC). The site lies to the south of the existing Carrigmore residential estate and north of Boherboy Road (L2008), which forms the principal access route to the site. The wider area is characterised by a mix of residential and educational uses, with connections to Corbally to the east and open agricultural lands to the west. The site is approximately 1.2 kilometres west of the Fortunestown Luas stop and the Citywest employment and retail centre, which together form the main public transport and employment hubs in the local area.

14.3.1 Receiving environment

This section considers the baseline conditions, providing background information for the site in order to determine the significance of any traffic implications. This section also considers the existing accessibility of the site by sustainable modes of transport.

14.3.2 Site location

The application site is located approximately c. 13.7 Km southwest of Dublin City Centre and is bounded to the north by Carrigmore Estate; Corbally Estate to the east; agricultural land to the west and Boherboy Road to the south.

14.3.3 Local road network

The road network surrounding the site provides a variety of movement functions. Boherboy Road links Tallaght in the east with Saggart in the West. The N82 provides access to Dublin via the M7/N7 and to other inter urban motor ways via the M50.

Boherboy Road, Corbally Estate and Carrickmore Estate will be the primary access points into the proposed development.

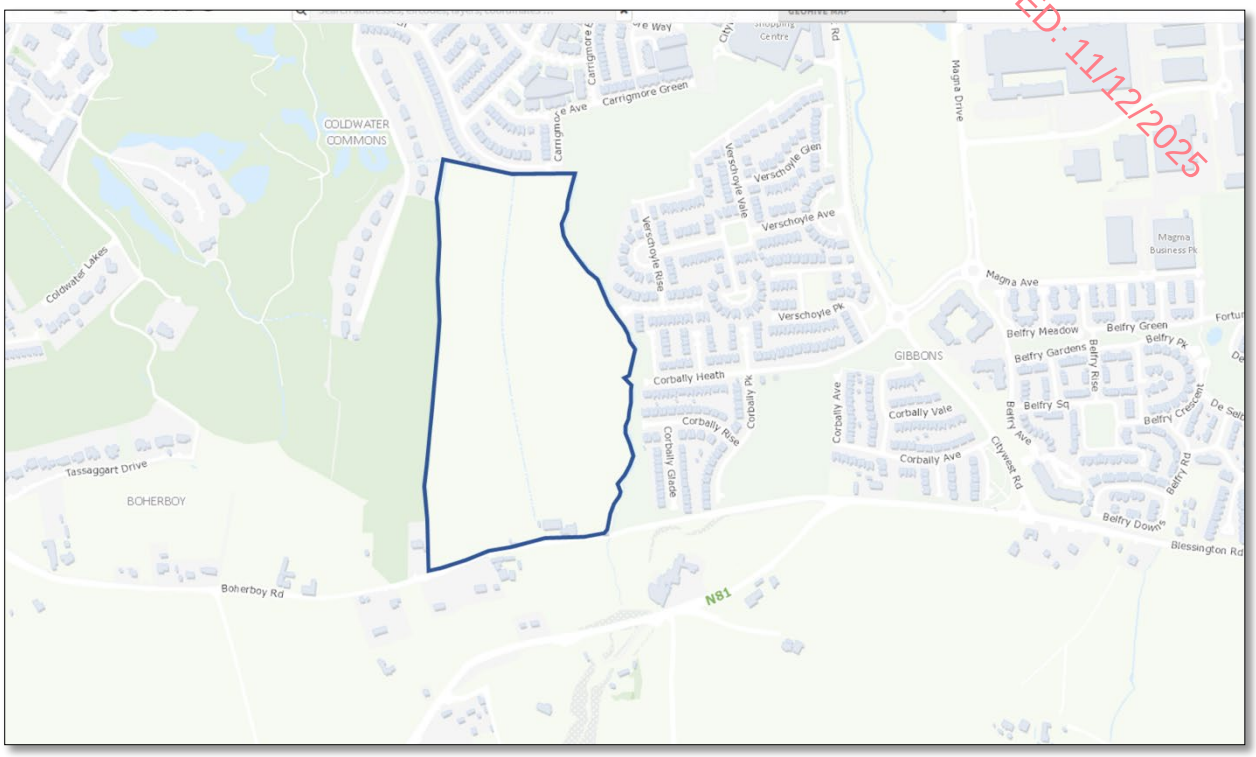

Figure Error! No text of specified style in document.**.2 Local Highway Network**

These routes provide for pedestrians, cyclists and motorists alike and a general commentary on these facilities is presented below:

Boherboy Road

Boherboy Road is a local country road forming a priority-controlled junction with the N81 to the east and a signal-controlled junction with Church Street/Castle Street to the west.

The carriageway width is approximately c6.0m along the site frontage with no footpaths along the site frontage

Boherboy Road has a country road character providing access to Saggart from the N81. A speed limit of 60km/h was noted on Boherboy Road along the site frontage.

No cycle facilities are provided along Boherboy Road.

Figure Error! No text of specified style in document..**3 Boherboy Road (Looking west)**

Figure Error! No text of specified style in document..**4 Boherboy Road (Looking east)**

N81

The N81 road is a national secondary road starting at the M50 motorway and ending in Tullow, County Carlow.

The carriageway width is approximately 11.0m at the junction with the Boherboy Road. As the N81 leaves Tallaght the speed limit increases to 80km/h.

There is limited pedestrian infrastructure adjacent to the junction with the Boherboy Road. No

Figure Error! No text of specified style in document.**.5 The N81 at the junction with Boherboy Road**

Corbally

The proposed development will connect to Corbally Heath on its eastern boundary.

Corbally Heath is forms part of the Corbally Estate and provides access to the Citywest Road to the east.

The carriageway width is approximately c 7.2m with grass verges and footpaths.

The Corbally Estate has a slow zone in operation with a 30km/h speed limit in operation.

No cycle facilities are provided along Corbally Heath.

Figure Error! No text of specified style in document.**.6 Corbally Heath looking towards proposed development**

Carrickmore

The proposed development will connect to Carrickmore Green on its northern boundary.

Carrickmore Green is forms part of the Carrickmore Estate and provides access to the Fortunestown Lane to the north

The carriageway width is approximately c 7.2m with grass verges and footpaths.

The Carrickmore Estate has a slow zone in operation with a 30km/h speed limit in operation.

No cycle facilities are provided along Carrickmore Green.

Figure Error! No text of specified style in document.**.7 Carrigmore Avenue looking towards proposed development**

14.3.4 Permeability

Permeability for residents and visitors to the proposed development is a key factor in determining the long-term sustainability when considering modal choice.

To encourage a shift away from car dependency, residents and visitors to the development must have viable alternative choices such as walking routes and cycle routes public transport links.

Walking

Figure 14.8 outlines the walking distance covered by the average person in a 15-minute period. It illustrates the local amenities that are available to the proposed development. Local amenities within 15-minutes' walk of the proposed development include:

- Citywest Shopping Centre
- Fotutnestown Luas Stop
- Access to bus network

- School
- Carrigmore District Park

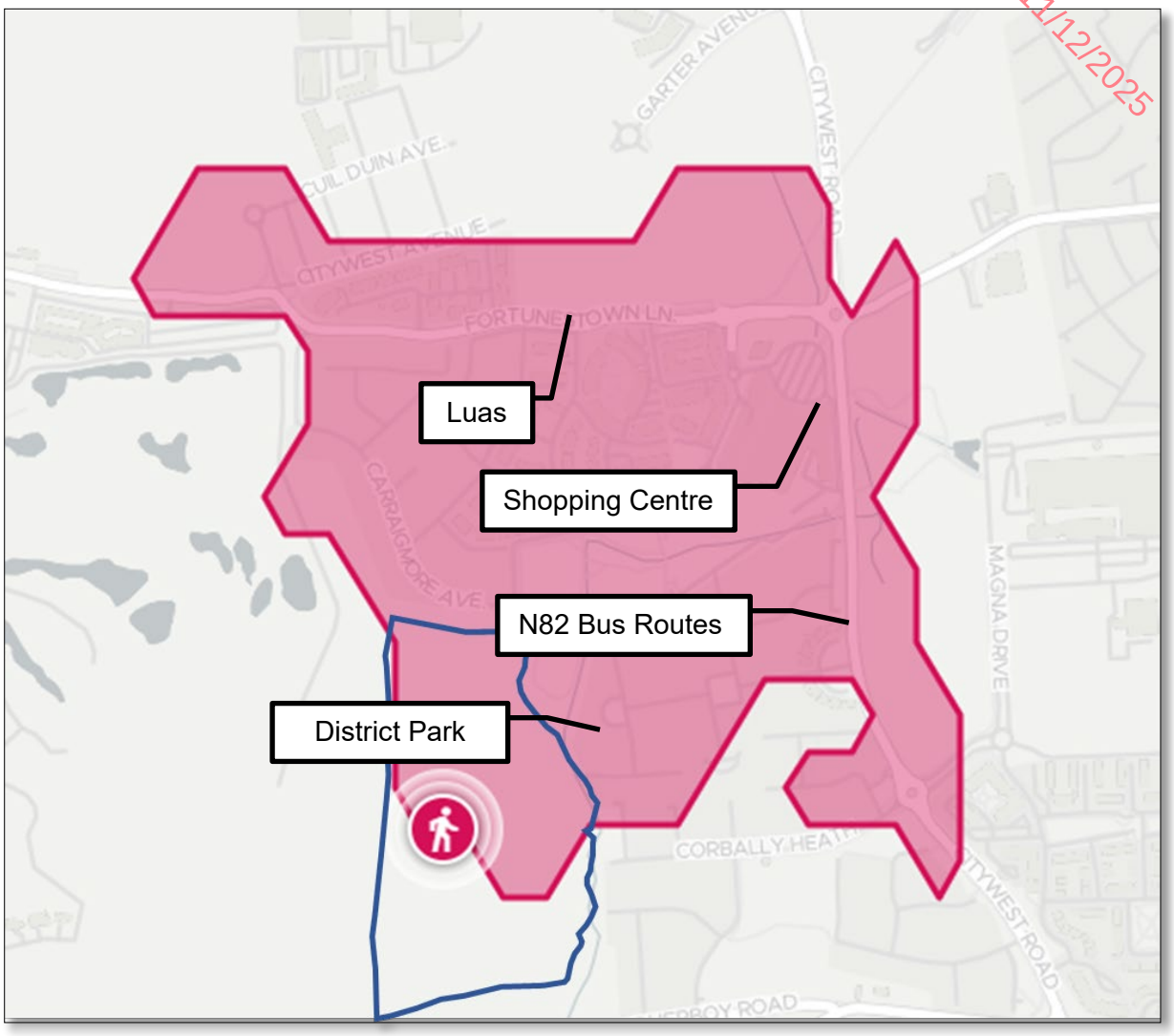

Figure Error! No text of specified style in document..**8 Walking Distance (15 Min Travel Time)**

Cycling

Figure 14.9 outlines the cycling distance covered by the average person in a 30-minute period. These routes are a combination of cycle lanes and shared routes.

Figure 14.9 illustrates the local amenities that are available to the proposed development. Local amenities within 30-minutes cycle of the proposed development include:

- Citywest Shopping Centre
- Fotutnestown Luas Stop
- Access to bus network
- School
- Carrigmore District Park
- Access to areas of employment (Citywest Business Campus, Tallaght Village)
- Allows access to/from surrounding areas including:
  - Tallaght
  - Clondalkin
  - Firhouse
  - Rathchoole
  - Newcastle

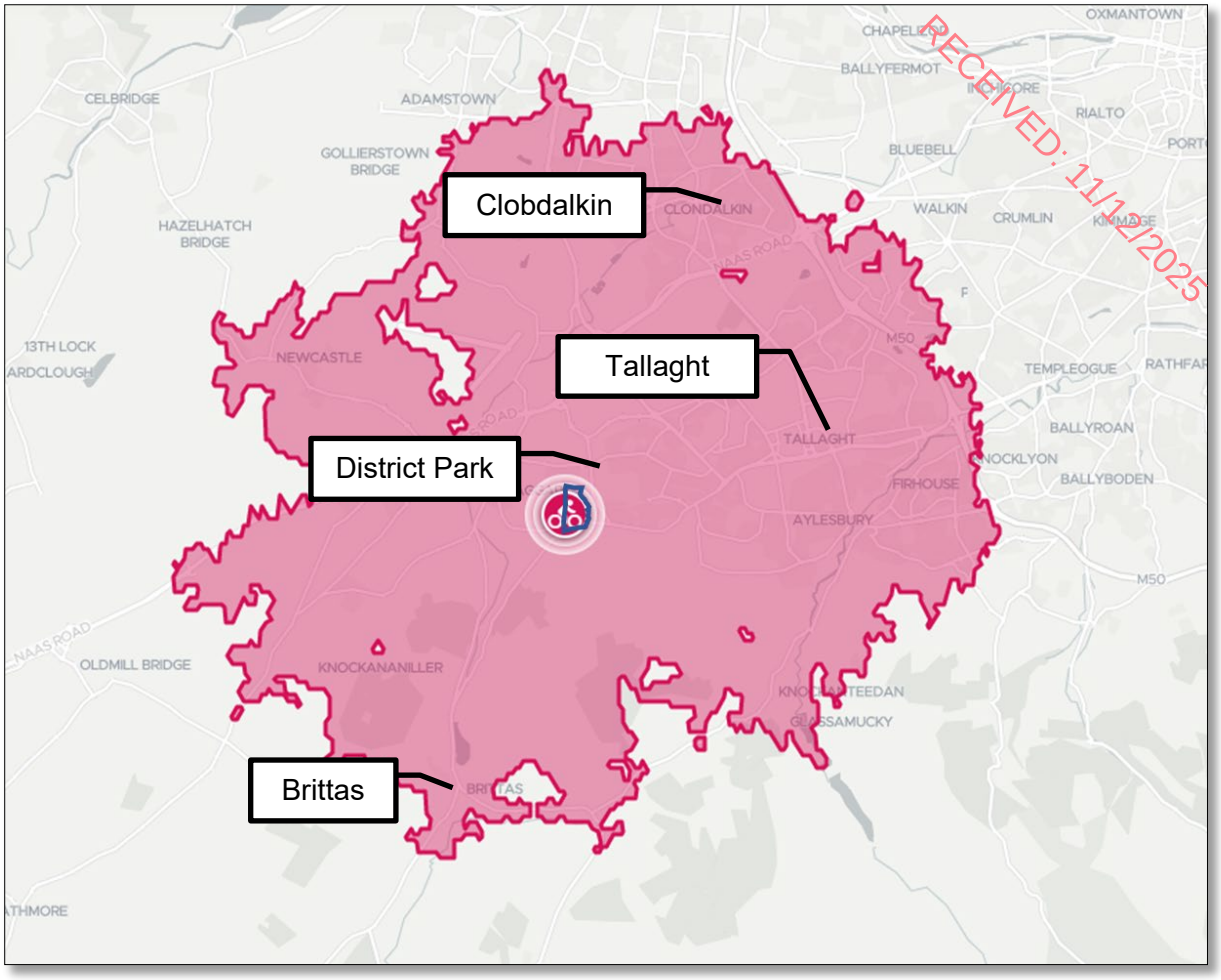

Figure Error! No text of specified style in document..**9 Cycle Distance (30 Min Travel Time)**

Public Transport

Figure 14.10 outlines the distance that maybe covered on a 90minute public transport journey.

A 90-minute public transport journey allows access to areas of employment such as:

- Citywest Business Campus
- Tallaght
- Dublin City Centre
- IFCS

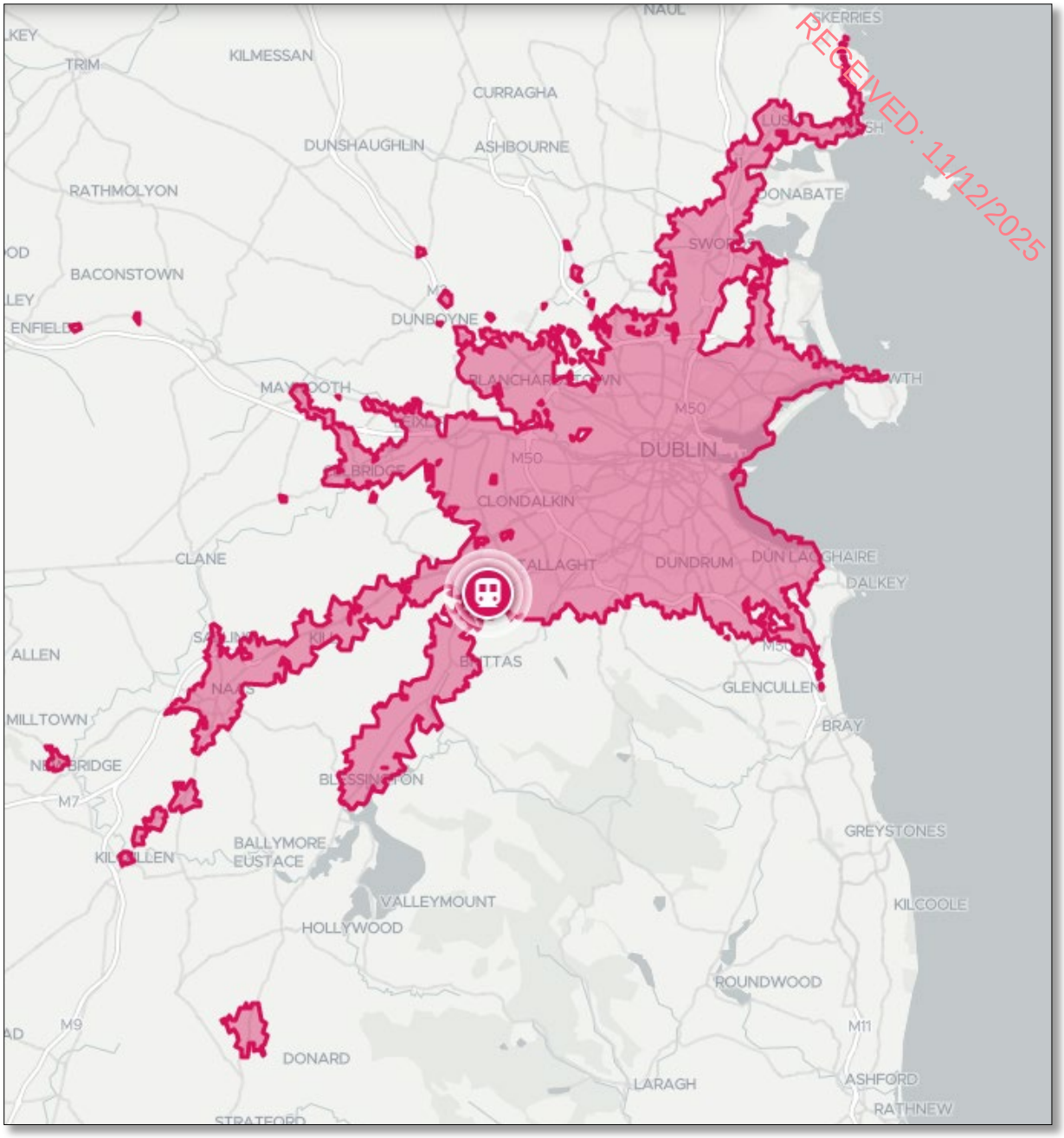

Figure Error! No text of specified style in document.**.10 Public Transport (90min Travel Time***)*

A 90-minute public transport journey allows access from areas such as:

- Lusk (North County Dublin)
- Donard (North Wicklow)

- Dun Laoghaire (West Dublin)
- Maynooth (North Kildare)

This permeability opens up the site to all Third Level Institutions located within Dublin and Kildare (NUIM). It also offers permeability the major amenities located within Dublin City Centre (shopping, entertainment) and the gateway towns into Dublin where the likes of major retail parks are located.

The proposed site is located within 90-minute public transport link to all major Dublin sporting and event venues.

Driving

The site has strong permeability to local amenities via walking, cycling and public transport. This will help reduce, but not eliminate, car trips.

Where car-based trips are required, the proposed development has good access to the M50, M7/N7 and the N81.

For car heading north and east via the M50, the direct route is via Carrigmore and the N7. For car heading south and east via the M50, the direct route is via the N81. For car heading west via the M7, the direct route is via Carrigmore and the N7.

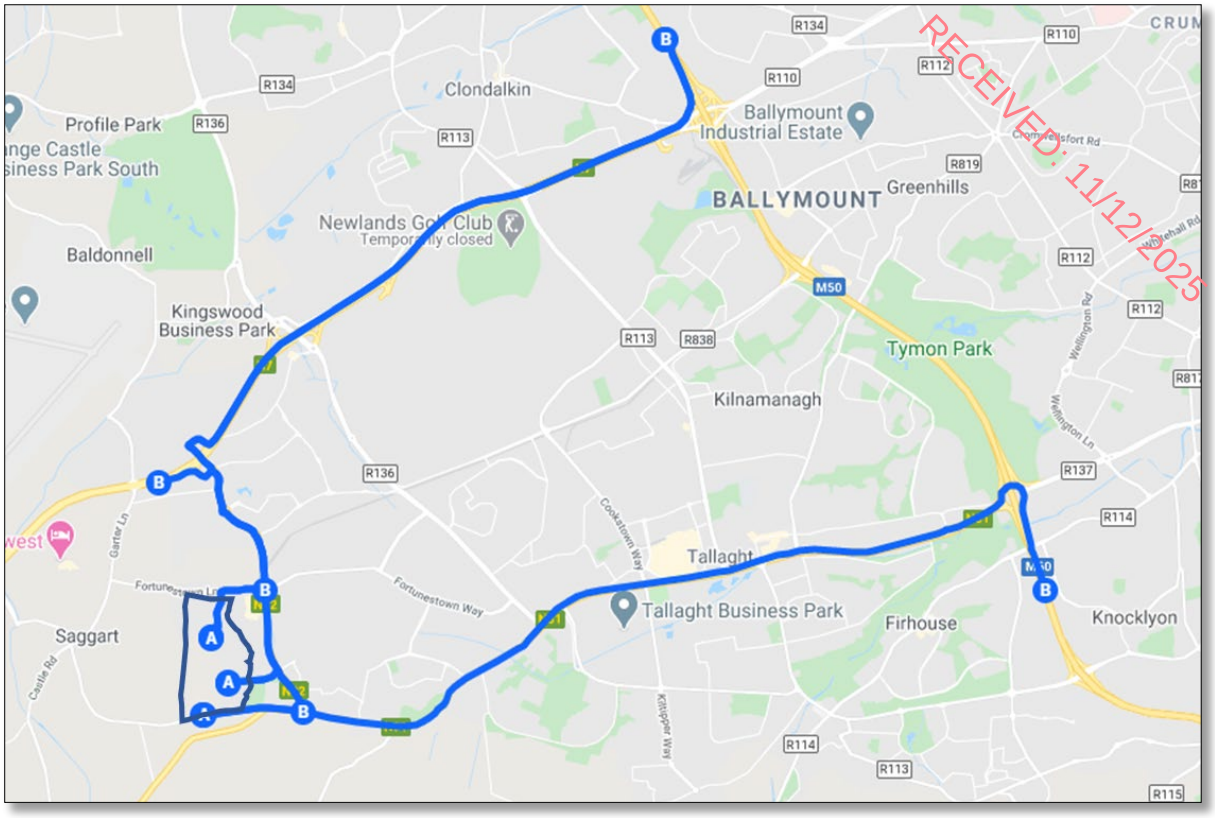

Figure Error! No text of specified style in document..**11 Road Accessibility**

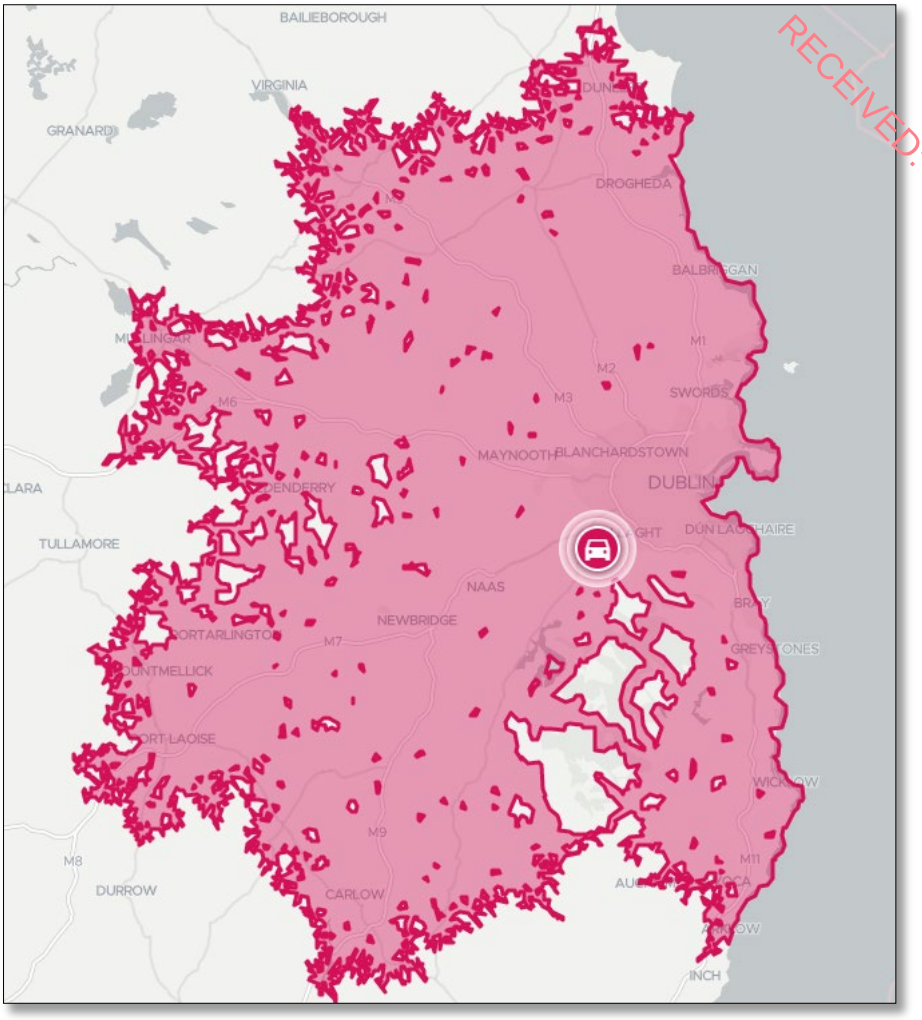

Figure Error! No text of specified style in document.**.12 Road Travel Distance (60 min Travel Time)**

Figure 14.12 outlines the travel distance by car for a 60 min travel time.

14.3.5 Accident Data

A review of the Road Safety Authority (RSA) traffic collision database has been undertaken for the road network in the vicinity of the proposed site to identify any collision trends. This review will assist to identify and potential safety concerns in relation the existing road network.

Traffic collision data was obtained for the period 2005-2016 which is the most recent data available from the RSA website. These incidents are categorised into class of severity, which includes minor, serious or fatal collisions. The analysis is shown in **Figure 14.13**.

The analysis has 3 No, minor incidents along Boherboy Road adjacent to the proposed development frontage. These incidents were classed as 2 No. single vehicle collisions and 1 No. head on collision.

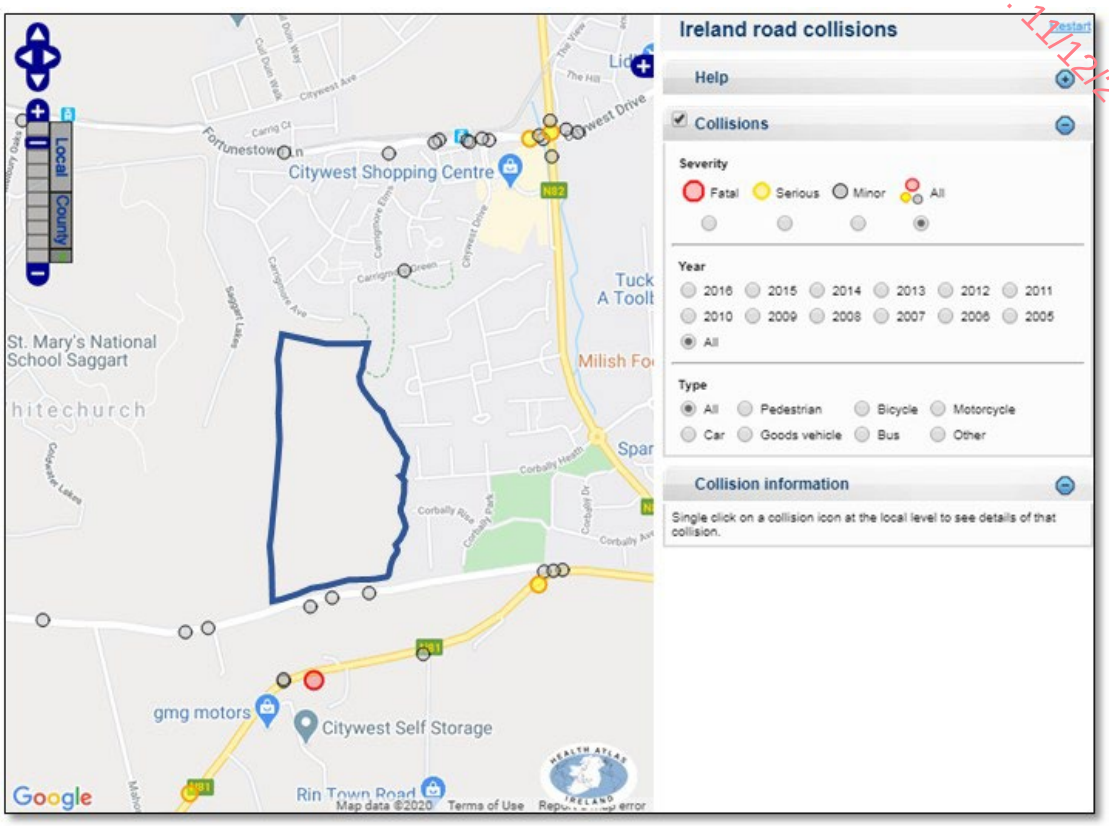

Figure Error! No text of specified style in document.**.13 Road Collisions (Source: RSA)**

Note, the RSA has stopped publishing crash data for GDPR reasons. The data above was sourced in 2020.

14.3.6 Spatial Scope

In accordance with the IEMA Guidelines, the study area has been defined by identifying any link or location where it is considered that significant environmental effects could occur as a result of the Proposed Development.

The local highway network study area has been informed by the following two rules, as set out in IEMA Guidelines :

- **Rule 1** – Screening Based on Traffic Change: Include all routes where traffic flows are expected to increase by more than 30% (or where the number of heavy goods vehicles (HGVs) increases by more than 30%).

- Below this level of change, it is unlikely that environmental effects of traffic will be perceptible or significant.

- Rule 2 – Sensitive Locations: Include any routes where traffic flows are expected to increase by 10% or more (or HGVs by 10% or more) if the route passes through a particularly sensitive area — such as near schools, hospitals, residential streets, conservation areas, or locations with high pedestrian activity.

The assessment has been undertaken when the perceived environmental impact is at its greatest during the construction stage.

In addition, the development will be assessed for the year of opening.

1. The assessment has considered the 'Do Nothing scenario', which assumes no Proposed Development , against the 'Do Something' scenario, which includes the same baseline traffic as the 'Do Nothing' but also includes Proposed Development traffic.

2. Construction traffic will travel to/from the development area using primary, secondary, and tertiary roads. Key haulage routes are likely to coincide with the primary, secondary, and tertiary roads that lead to the site.

   Key nodes along the haulage route have been identified in **Figure 14.14.**

   To quantify the volumes of traffic movements at key points on the road network adjacent to the site, a set of classified turning movement traffic counts were commissioned.

   Accordingly, classified counts were carried out on the 23rd of May 2023 at locations as shown in **Figure 14.14.**

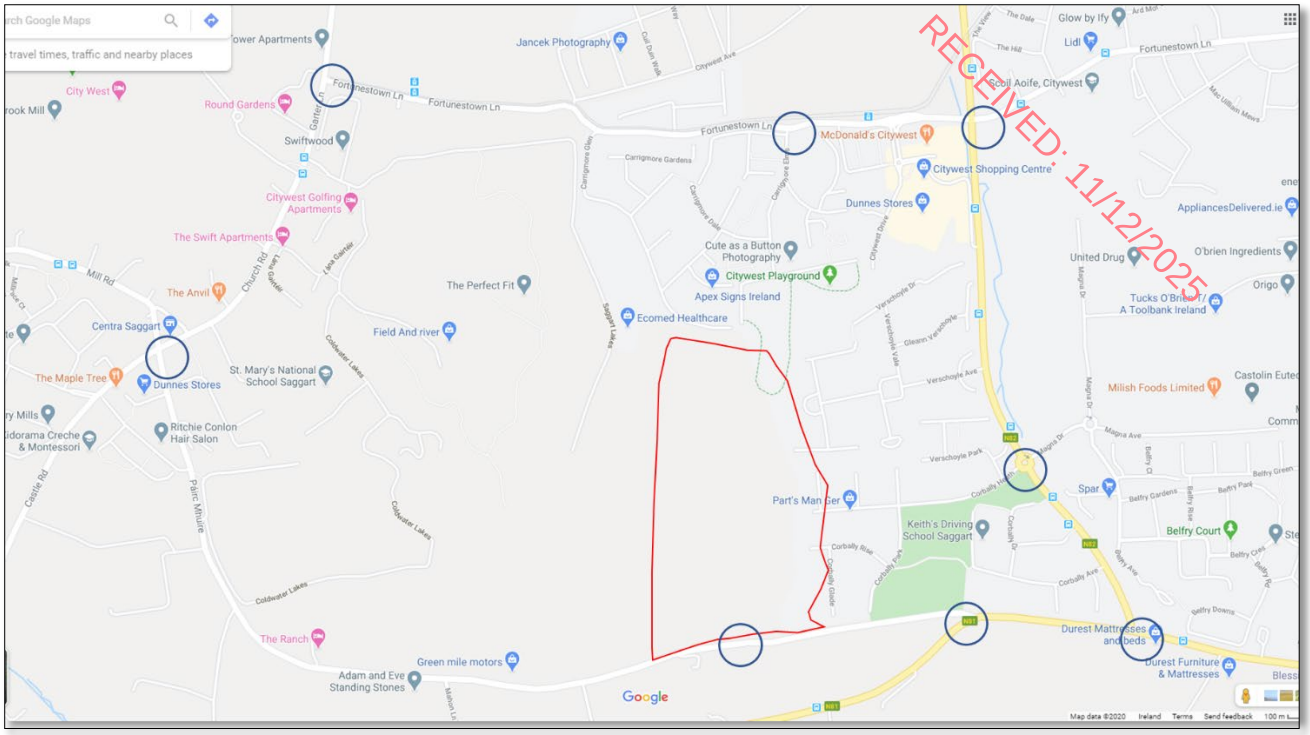

Figure Error! No text of specified style in document..**14 Traffic survey locations**

These locations are summarised in

*Table **Error! No text of specified style in document.**-7 Traffic Survey Locations*

Significance Criteria		
Site No	**Location**	**Type**
1	Citywest Road/Citywest Road	Signal Controlled Junction
2	Fortunestown Lane/Carrigmore	Priority Controlled junction
3	Garter Lane/ Fortunestown Lane	Signal Controlled Junction
4	Slade Road/Boherboy Road	Signal Controlled Junction
5	Development Access	Priority Controlled Junction

6	Boherboy Road/N81	Priority Controlled junction
7	N81/N82	Signal Controlled Junction
8	N82/Corbally Access	Roundabout

14.3.7 Temporal Scope

In line with EPA guidance, as outline in **Volume 1 Chapter 2: EIA Process and Methodology**, the duration of effects has been classified using the following: Momentary (seconds to minutes), Brief (<1 Day), Temporary (<1 Year), Short-term (1 to 7 years), Medium-term (7 to 15 years), Long-term (15 to 60 years), Permanent (>60 years).

The assessment has considered impacts arising during the construction stage (up to 5 years) which would be expected to be short-term in nature and from the operational stage which would be expected to be long-term to permanent.

The greatest environmental change will generally be when the project traffic is at its largest proportion of the total flow. It is therefore recommended that the environmental assessment should be undertaken at the construction/decommissioning phase, year of opening of the project and/or the first year of its operation.

The construction phase will generate movements for the importation and exportation of demolition waste, construction waste and construction materials.

It is expected that the majority of traffic generated by the Proposed Development will be generated during the operation phase through the general movement of residents of the development.

The assessment will consider the future years at which the peak construction traffic of the development occurs and when the Proposed Development is built out and fully operational.

The assessment scenarios are anticipated to be:

- Existing Baseline – ‘Do-Nothing’;
- Construction Phase - ‘Do-Nothing’+ Construction Traffic; ;
- Operational Phase - ‘Do-Nothing’+ Operational Traffic; and

- Cumulative Impact - 'Do-Nothing'+ Construction Traffic + cumulative development

14.3.8 Desktop study

Expansion Factors for Short Period Traffic Counts

TII Publications PE-PAG-02039 Project Appraisal Guidelines for National Roads Unit 16.1 - Expansion Factors for Short Period Traffic Counts May 2024 has been prepared to support the conversion of Short Period Traffic Counts to 24-HR, or to facilitate the estimation of short period traffic flows at any point in a year using only a sample dataset of traffic information.

The guidance achieves this by developing an annual traffic flow profile that considers time of day, day of week and month of year, thereby generating a series of indices to allow short period traffic counts from one period to be extrapolated to any period of the year, or to 24-HR. This is referred to as the Generic Expansion Factor Method.

14.3.8.1 Field work

Manual Classified Turning Count was undertaken on 23rd of May between 07:00 – 10:00 and 16:00 – 19:00.

This data was converted into 24 Hour Flows figures using Project Appraisal Guidelines for National Roads Unit 16.1 - Expansion Factors for Short Period Traffic Counts (PE-PAG-02039) (October 2016) published by TII.

The recorded data, measured in vehicles, is illustrated in **Table 14.8** along with the expansion factor and corresponding estimate of the AADT Flow.

*Table **Error! No text of specified style in document.**-8 Traffic Survey Locations*

AADT		
Site No	**Location**	**2025 AADT**
1	Citywest Road/Citywest Road	20 930
2	Fortunestown Lane/Carrigmore	7 578
3	Garter Lane/ Fortunestown Lane	12 513

4	Slade Road/Boherboy Road	13 328
5	Development Access	4 826
6	Boherboy Road/N81	14 487
7	N81/N82	18 337
8	N82/Corbally Access	15 147

14.3.8.2 Growth Factors

The estimated opening year for the Proposed Development is 2032. This has therefore been the focus of the road network assessment.

PE-PAG-02017-03 sets out growth rates for forecasting future traffic.

The factor used is outlined below:

*Table **Error! No text of specified style in document.**-9 Growth Factors*

Growth Factors		
Survey Year	Future Year	Growth Factor
Construction Phase		
2025	2032	1.081
Operational Phase		
2025	2032	1.091

These growth rates are applicable to Dublin for centralised growth. LV growth factors have been used.

14.4 Characteristics of the Proposed Development

A full detailed description of the Proposed Development is included in Chapter 2 of this EIAR.

14.4.1 Construction Phase

Construction activities, including but not limited to ground works, foundation pouring and equipment installation, will result in a temporary uplift in traffic on the local roads network.

Light and heavy vehicle construction traffic has been distributed across the surrounding network based on current directional flows as surveyed at the surveyed junctions.

Care will be taken to ensure existing pedestrian and cycling routes are suitably maintained or appropriately diverted as necessary during the construction period, and temporary car parking is provided within the site for contractor's vehicles.

The envisaged traffic generated during the construction period will depend on the phasing of the construction which will be determined by the Client.

The majority of traffic generated by delivering materials during the project are envisaged to occur during the following construction elements:

- Site clearance
- Laying of internal road
- Concrete, steel, and other material deliveries to site during the construction of structures

For the construction of the proposed development, it will be necessary to transport the construction materials, equipment, and personnel to and from the work sites.

This includes (but is not limited to):

- Establishing the construction site compounds.
- The removal of surplus soil material, suitable surplus excavated material for reuse and unsuitable excavated material, which will be taken offsite to a site permitted for deposition.
- The importation of suitable soil material where required;
- The importation of relevant construction materials and equipment;

- The exportation of C&D Waste and C&D Waste Demolition;
- Transportation of workers to and from the site;

Several construction traffic movements will be undertaken by heavy goods vehicles, though there will also be vehicle movements associated with the appointed contractors and their staff.

The following is a non-exhaustive list of possible vehicles that will be used:

- HGV
- Rigid Truck
- Box Van
- Panel Van
- Concrete Truck
- Concrete Pump Truck
- Mobile Crane (various sizes)
- JCB (various sizes)
- Excavators (various sizes)
- Dump Truck

Specialist vehicles maybe required on occasion.

Details of size and weights of vehicles will be confirmed on appointment of a Main Contractor.

Access to the site will be via a newly formed access off the Boherboy Road. This will coincide with the finished development access.

Access to the site will be gated. The gate will be set back off the external road network to ensure that vehicles entering the site can do so without causing an obstruction on the main carriageway.

The contractor shall provide advanced warning signs, in accordance with Chapter 8 of the Department of the Environment's Traffic Signs Manual 2019, on the approach to proposed site access locations a minimum of one week prior to construction works commencing at the site.

There will be heras fencing secured to a minimum height of 2 metres surrounding the construction site or solid panel hoarding in areas with high/low viewing panels to help reduce unauthorised access to the constriction compound.

This fence will be checked daily and maintained as necessary, and it will be the responsibility of the Site Manager to open and lock the gates each working day to ensure the site is not left open and unattended at any time.

Access to the construction site will only be to authorised persons. During afterhours, security will be employed by the main contractors to ensure no unauthorised access.

Where possible, construction traffic and non-construction traffic will be separated for all modes of transport. Where the construction programme requires mixing of traffic, additional temporary traffic management measures will be put in place.

Deliveries of materials to site will generally be between the hours of 07:00 and 19:00 Monday to Friday, and 08:00 to 13:00 on Saturdays. No deliveries will be scheduled for Sundays or Bank Holidays.

There may be occasions where it is necessary to make certain deliveries outside these times, for example, where large loads are limited to road usage outside peak times.

All access roads used by contractors will be monitored for mud and any construction materials and cleared using a shovel and broom and if required a mechanical road sweeper. The construction period for the proposed development is anticipated to be approximately 5 years from the commencement of the site works. This is subject to change and dependent on market conditions.

The proposed development is located on Boherboy Road. The haul route will be designed to ensure demolition waste, construction materials and construction waste is brought to the M50 in the shortest route possible while avoiding as many schools as possible (primary, secondary and Third Level).

This will ensure that HGVs and other larger construction and delivery vehicles will spend a minimum amount of time on regional roads and local streets whilst avoiding schools.

A description of the haulage routes is offered below:

From M50 to Development ~ 7 km, 11 minutes

Take Exit 11 of M50, Redcow -> Head southeast -> Keep right at the fork, follow signs for N81/Tallaght/Blessington -> At the roundabout, take the 3rd exit onto Tallaght Rd/N81 ->Slight right -> Turn right onto Blessington Rd/N81Continue to follow N and enter site.

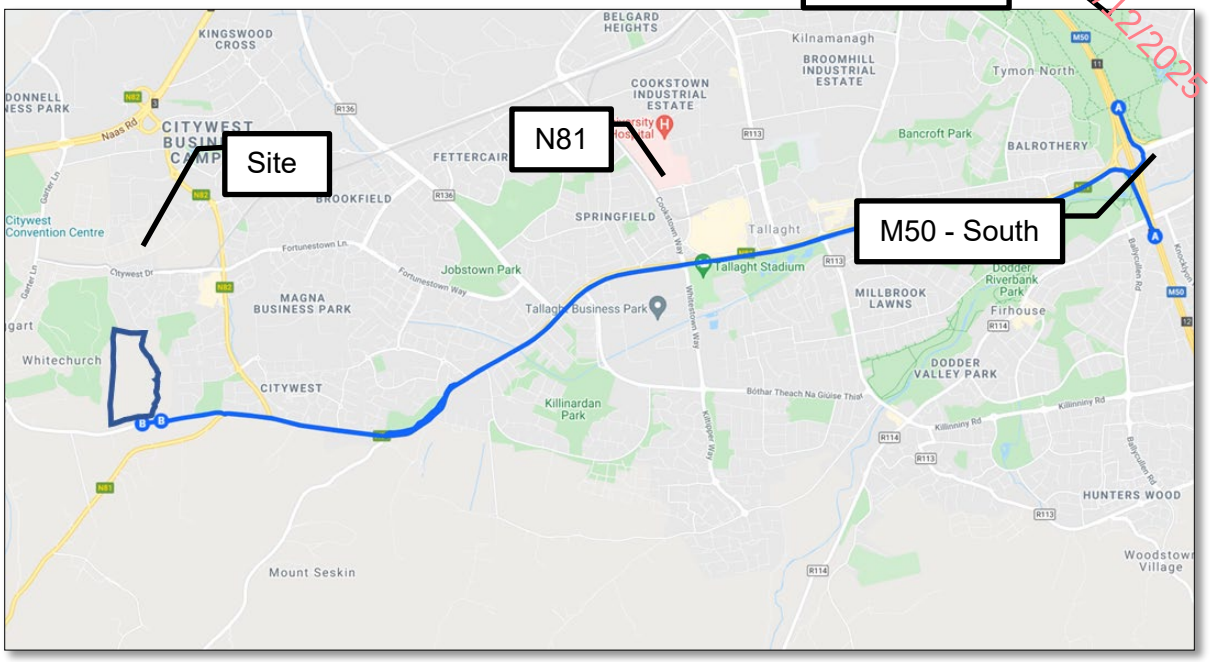

Figure Error! No text of specified style in document.**.15 Haul route to site**

From Development to M50 ~ 8 km, 11 minutes

Starting on Boherboy Road -> Slight left onto N81 -> Keep right to continue on Tallaght Rd/N81 -> At the roundabout, take the 3rd exit onto the M50 ramp to Southbound -> Merge onto M50

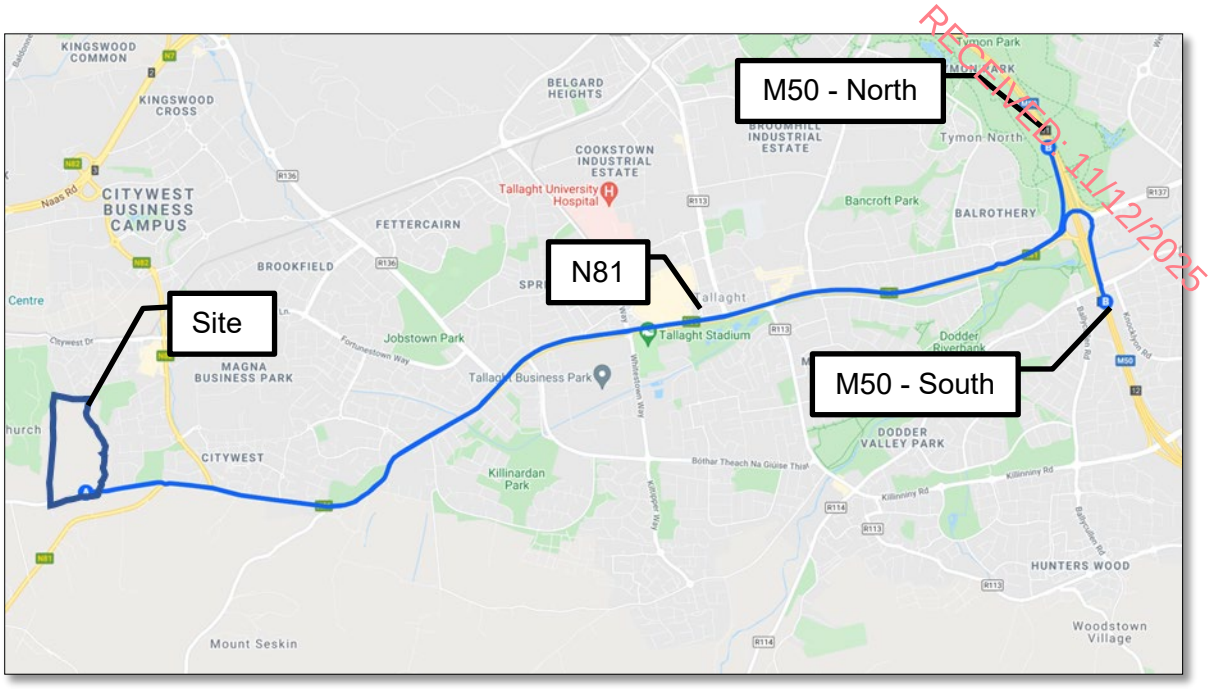

Figure Error! No text of specified style in document..**16 Haul route from site**

Arrivals and departures to the site compound are to be carried out in as few vehicle movements as possible in order to minimise potential impacts on the road network.

14.4.2 Operational Phase

14.4.3 Introduction

To the immediate north of the site is the Carrigmore residential estate, to the west are agricultural lands and a single dwelling, to the east is the Corbally residential estate while to the south is the Boherboy Road.

Access to the development will by via one no. new vehicular access point from the Boherboy Road, along with vehicular, pedestrian and cyclist connections to adjoining developments at Corbally Heath and Corbally Glade to the east and Carrigmore Green to the north, and pedestrian/cyclist access into Carrigmore Park to the east.

14.4.4 Site Access

The proposed site access points are illustrated in **Figure 14.8.**

Figure Error! No text of specified style in document.**.17 Proposed Site Accesses**

Primary vehicular access to the development will be via Boherboy Road (Access No. 1), via Corbally Estate (Access No. 2) and via Carrigmore (Access No. 3).

A fourth access will be provided via Corbally Glade (Access No. 4). This will not provide vehicular access to the entire development as this portion of the site is separated by local watercourse. Pedestrian and cyclist access will be provided to the entire development via a bridge crossing the stream.

Pedestrian access will coincide with the vehicular access with additional access points onto Boherboy Road and through the Carrigmore District Park.

14.4.5 Servicing

An AutoTrack analysis has been carried on the internal service access to demonstrate its capability to cater for residents and service vehicles such as refuse vehicles.

The results of this analysis show that the proposed development can accommodate the anticipated service vehicles that will serve the proposed development.

The auto tracking has been undertaken noting the following from DMURS: Tighter junction radii in accordance with section 4.3.3 of DMURS has been provided. This results in larger vehicles crossing the centre line of the intersecting street or road. Such manoeuvres are acceptable when turning into/or between local or lightly trafficked link streets as keeping vehicle speeds low is of higher priority.

14.4.6 Car Parking

A total of 861 parking spaces will be provided for the development.

Parking will be provided within the curtilage of each house. On street surface car parking will be provided for the apartments, duplexes, creches and visitor car parking spaces.

14.4.7 Cycle Parking

A total of 711 cycle parking spaces will be provided for the development.

14.5 Potential Impact of the Proposed Development

14.5.1 Do-Nothing Scenario

If the Proposed Development does not proceed there will be no additional traffic generated or works carried out on the road network and therefore no effects with respect to traffic.

14.5.2 Construction Phase

Construction of the proposed Boherboy Large-scale Residential Development (LRD) will generate temporary traffic movements associated with workforce travel, material and equipment deliveries, waste removal, and plant servicing. The development comprises a total of 611 dwellings (306 houses, 133 duplex units, and 172 apartments), along with supporting infrastructure, open spaces, and a single site access from Boherboy Road. Construction activity is expected to occur over multiple phases, with peak traffic generation arising when structural and fit-out works for the housing, duplex, and apartment blocks overlap.

Based on comparable large-scale residential schemes, it is estimated that the peak construction workforce will range between 200 and 260 personnel. Assuming an average car/van occupancy rate of 1.3 persons per vehicle (i.e., approximately 0.75 vehicles per worker), this equates to roughly 170 light vehicles (cars and crew vans) accessing the site per day during the peak construction phase. Two-way movements (arrivals and departures) would therefore total approximately 340–360 light-vehicle movements per day.

In addition to workforce travel, heavy goods vehicle (HGV) activity will occur throughout the construction period to facilitate the delivery of materials such as concrete, blockwork, steel, timber, and mechanical/electrical equipment, as well as waste and spoil removal. HGV traffic will vary depending on the construction stage but is expected to reach approximately 30–40 two-way HGV movements per day during peak periods (with short-term surges of up to 50 movements during major concrete pours or bulk material deliveries). This equates to approximately 10% of total daily movements, with HGVs scheduled outside of local commuter peak periods wherever possible to minimise impact on the surrounding network.

The combined daily construction traffic volume is therefore anticipated to range between 380 and 420 two-way movements per day, including both workforce and HGV trips. On exceptional pour or delivery days, total movements may temporarily rise to up to 500 two-way trips. The site will operate between 07:00 and 21:00, with the majority of activity occurring between 07:30–18:00. The distribution of construction traffic throughout the day is expected to follow typical industry patterns, with workforce arrivals concentrated in the morning (07:30–09:00) and departures in the late afternoon (16:00–18:00), while HGV and supplier deliveries will be spread more evenly through the mid-morning and early afternoon periods.

All construction traffic will route via the new access on Boherboy Road, which will act as the single point of entry and exit for the duration of the works. Appropriate management measures, including a Construction Traffic Management Plan, staff car-sharing strategy, and delivery time-slot system, will be implemented to reduce congestion and ensure safety along Boherboy Road and the local road network.

*Table **Error! No text of specified style in document.**-10 Estimated Construction Traffic Profile (07:00–21:00, Two-Way Movements)*

Time Period	Typical Site Activity	Estimated Two-Way Movements (All Vehicles)	Approx. Composition
07:00–08:00	Early workforce arrivals, initial deliveries	60–70	95% light, 5% HGV
08:00–09:00	Main workforce arrival peak	90–100	90% light, 10% HGV
09:00–10:00	Late arrivals and first bulk deliveries	35–40	60% light, 40% HGV
10:00–11:00	Steady site activity	25–30	40% light, 60% HGV
11:00–12:00	Mid-morning deliveries	25–30	40% light, 60% HGV
12:00–13:00	Lunch period	15–20	70% light, 30% HGV
13:00–14:00	Afternoon deliveries resume	25–30	40% light, 60% HGV
14:00–15:00	Continued site activity	25–30	40% light, 60% HGV
15:00–16:00	Early workforce departures	35–40	70% light, 30% HGV
16:00–17:00	Workforce departure peak	90–100	95% light, 5% HGV
17:00–18:00	Final workforce departures	45–55	95% light, 5% HGV
18:00–21:00	Occasional after-hours activity	10–15	90% light, 10% HGV

Total (07:00–21:00)	—	≈ 410–440 two-way movements/day	~90% light, 10% HGV

It is assumed that a total of 440 two-way movements/day will be generated during peak construction activities.

The traffic generated by the development is applied to each node to give the worst-case scenario and would take into account potential variations in traffic generated by the development depending on the phase in question.

*Table **Error! No text of specified style in document.**-11 Construction Stage Phase Impact*

Construction Phase Impact				
Site No	**Location**	**AADT (2032) - Do Nothing**	**Construction Flows – Do Something**	**% Impact**
1	Citywest Road/Citywest Road	22628	0	0.00%
2	Fortunestown Lane/Carrigmore	8193	0	0.00%
3	Garter Lane/ Fortunestown Lane	13529	0	0.00%
4	Slade Road/Boherboy Road	14410	0	0.00%
5	Development Access	5218	440	8.43%
6	Boherboy Road/N81	15662	440	2.81%
7	N81/N82	19825	440	2.22%
8	N82/Corbally Access	16376	0	0.00%

Table 14.12 presents the results of the operational phase assessment for the 2032 scenario, which represents the year of full build-out and occupancy of the Proposed Development. The analysis indicates a maximum increase in traffic volumes of up to 8.43% across the assessed links on the local highway network.

In accordance with the IEMA Environmental Assessment for Road Traffic (2023), the assessment focuses on links where traffic flows are predicted to increase by more than 30%, or by 10% or more in particularly sensitive areas such as residential streets, schools, or locations with high pedestrian activity.

As the predicted increases are below 10% on all links, the resulting changes in environmental conditions such as severance, delay, amenity, or road safety are considered not discernible in accordance with IEMA (2023). Projected changes in traffic flows of less than 30% are unlikely to result in perceptible environmental effects.

Consequently, the effects on transport and access during the operational phase are assessed as slight, adverse, long-term, and not significant in EIA terms for:

- Pedestrian severance, delay, amenity, fear and intimidation; and
- Driver delay.

With respect to accidents and road safety, the additional development traffic is not anticipated to materially alter baseline conditions. With appropriate internal design measures and compliance with DMURS principles, these effects are assessed as slight, adverse, long-term, and not significant in EIA terms.

14.5.3 Operational Phase

The development is likely to be built from 2025 to 2032, the length of its planning permission. The development will be built and occupied on a phased basis with full occupancy expected to happen in 2032.

*Table **Error! No text of specified style in document.**-12 Operational Phase Impact*

Operational Phase Impact				
Site No	**Location**	**AADT (2032) - Do Nothing**	**Development Flows – Do Something**	**% Impact**

1	Citywest Road/Citywest Road	22841	467	2.04%
2	Fortunestown Lane/Carrigmore	8270	601	7.26%
3	Garter Lane/ Fortunestown Lane	13657	134	0.98%
4	Slade Road/Boherboy Road	14546	103	0.71%
5	Development Access	5267	190	3.61%
6	Boherboy Road/N81	15810	53	0.34%
7	N81/N82	20012	342	1.71%
8	N82/Corbally Access	16530	900	5.45%

There are no highway links identified in the Table 14.9 with an increase of over 10% in operational vehicle movements.

Table 14.9 identifies the impact of the operational phase of the Proposed Development on the local highway network for the 2032 assessment scenario. The analysis indicates a maximum increase in traffic levels of up to 7.26% across the assessed links.

Due to the residential nature of the Proposed Development, no regular HGV movements are expected during the operational phase. Occasional heavy vehicle movements may occur on an ad hoc basis (e.g., maintenance, waste collection, or deliveries) but will not materially influence daily traffic flows.

The resulting effects on the surrounding local highway network are expected to be adverse in nature due to the increase in vehicle movements but long-term and slight in magnitude, reflecting the permanent operational character of the development.

In accordance with the IEMA Environmental Assessment for Road Traffic (2023), the assessment focuses on links where traffic flows are predicted to increase by more than 30%, or by 10% or more in sensitive areas such as residential streets or near schools.

As the forecast increases are below 10% across all assessed links, the projected changes are considered not discernible in environmental terms. Consequently, the effects on transport and access during the operational phase are assessed as slight, adverse, long-term, and not significant in EIA terms for:

- Pedestrian severance, delay, amenity, fear and intimidation; and Driver delay.

With respect to accidents and road safety, the additional development traffic is not anticipated to materially alter baseline conditions. Any potential impacts are assessed as slight, adverse, long-term, and not significant in EIA terms.

14.5.4 Potential Cumulative Impacts

In accordance with the requirements of the Environmental Protection Agency (EPA) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (2022) and the Transport Infrastructure Ireland (TII) Guidelines for the Assessment of the Effects of Road Schemes on the Environment (PE-PAG-02017), a review of other permitted and proposed developments in the vicinity of the site has been undertaken to determine the potential for cumulative effects in combination with the proposed development.

The assessment has considered recent and relevant residential, commercial, and mixed-use schemes within the Saggart–Citywest area that may contribute to cumulative effects on the surrounding transport network, land use patterns, or local amenity. These include Strategic Housing Developments (SHDs), Large-Scale Residential Developments (LRDs), and standard planning applications determined by both An Bord Pleanála and South Dublin County Council (SDCC).

The following table summarises the principal planning applications reviewed as part of this cumulative assessment. These schemes collectively represent a substantial quantum of new residential and mixed-use floor space that will, when fully built out, contribute to the overall level of activity and demand on the local transport infrastructure serving the wider Saggart, Fortunestown, and Citywest area.

*Table **Error! No text of specified style in document.**-13 Summary of Relevant Permitted and Proposed Developments Considered in the Cumulative Assessment*

Ref.	Site / Applicant	Main Proposal Description	Status / Outcome

SHD3ABP-300555-18	Parklands, Fortunestown / Garter Lane, Saggart (Greenacre Residential DAC)	Strategic Housing Development comprising 526 dwellings (houses, duplexes, apartments), a 4.3 ha district park, new signalised junction on Fortunestown Lane, two vehicular accesses on Garter Lane, and 804 car parking spaces.	Granted by An Bord Pleanála (2019), subject to conditions including separate delivery of crèche and community facilities.
SD22A/0357	Garters Lane, Saggart (Cairn Homes Properties Ltd)	Amendments to permitted SHD (ABP-308088-20), including minor alterations to unit mix and building layout; total number of dwellings reduced from 224 to 223; updated lift cores and internal layouts.	Granted by SDCC (2022); Extension of Duration lodged in 2025 (SD22A/0357/EP).
LRD24A/00062	Unknown (no public record found)	Reference number included for completeness; no verified file available on the SDCC or ABP portals.	Not applicable – no record located.
SHD3ABP-310570-21	Cooldown Commons & Fortunestown, Citywest (Cairn Homes Properties Ltd)	Construction of 421 apartments within 9 blocks (1–13 storeys), with retail, office (≈376 m²), and resident amenity areas (≈555 m²); 289 car and 650 bicycle spaces; includes public plaza adjacent to the Fortunestown Luas stop.	Granted by An Bord Pleanála (2022).
ABP-305556-19 / SD22A/0299 / SD22A/0422 / LRD24A/0009W	Citywest Shopping Centre Lands (Prop. Cairn Homes)	Mixed-use development of 290 apartments in 6 blocks, with crèche, 4 retail and 2 café/restaurant units; 153 car and 298 cycle spaces; associated public realm	Granted by ABP (2019); subsequent amendments approved by SDCC (2022–2025).

		works. Subsequent permissions addressed minor amendments (PV panels, layout adjustments) and change of use to a 220 m² medical clinic (Block F).	
SD20A/0232	Former Embankment Site, Boherboy / Saggart Road (Mardivale Ltd)	Demolition of former public house and incomplete structures; construction of 3-storey 129-bedroom hotel, 311 m² restaurant, and 45 aparthotel units in 3 blocks; provision of 120 car and 30 cycle spaces, new entrance and footpath along the L2008.	Granted by SDCC (May 2021).

Collectively, the developments listed above provide for over 2,100 new residential units, alongside hotel, retail, and community floorspace, and associated infrastructure upgrades. The majority of these schemes are located within a 1.5 km radius of the subject site and will contribute to cumulative increases in local traffic volumes, pedestrian and cyclist demand, and service connections to the regional road network, including Fortunestown Lane, the N82 Citywest Road, and Boherboy/Saggart Road (L2008).

These developments have been taken into account in traffic modelling and qualitative assessments, ensuring that the cumulative impacts on junction performance, construction traffic, and sustainable transport accessibility are appropriately reflected within this EIAR chapter.

14.5.5 Construction Phase

For the purposes of assessing potential cumulative impacts during the construction phase, only Planning Application Ref. SD20A/0232 (Former Embankment Site, Boherboy/Saggart Road) has been considered. This scheme, which provides for the demolition of existing structures and the construction of a hotel, aparthotel units, and a restaurant, is located in close proximity to the subject site.

It is considered probable that the construction haulage routes associated with SD20A/0232 will overlap with those proposed for the current development, particularly along the

Boherboy/Saggart Road (L2008) and its immediate connecting road network. Accordingly, this project has been included in the construction-phase cumulative assessment to capture any potential combined effects arising from overlapping HGV movements, construction workforce traffic, or temporary traffic management measures.

No other permitted or proposed developments in the surrounding area are expected to generate concurrent construction-phase traffic that would materially overlap with or compound the effects of the subject proposal.

Construction of the proposed Hotel and Aparthotel development at Boherboy / Saggart Road will give rise to temporary traffic associated with site clearance, demolition, material deliveries, waste removal, and workforce travel. The project involves the demolition of the existing public house and incomplete structures, followed by construction of a three-storey 129-bedroom hotel, a single-storey restaurant/bar, and three three-storey Aparthotel blocks comprising a total of 45 units, with associated car parking, substation, and landscaped areas. The total gross floor area of the new buildings is approximately 8,313 m².

During peak construction activity—expected to coincide with the overlapping superstructure, fit-out, and external works phases—the site is anticipated to accommodate a workforce of approximately 120 to 150 personnel. Based on an average occupancy of 1.3 persons per vehicle (i.e. 0.75 vehicles per worker), this equates to around 90–110 light-vehicle arrivals per day. Accounting for two-way movements (arrivals and departures), this represents approximately 180–220 light-vehicle movements per day.

HGV traffic associated with the delivery of concrete, steel, blockwork, mechanical/electrical plant, and waste removal will vary throughout the programme. At peak, it is expected that 20–30 HGVs per day will access the site, resulting in approximately 40–60 two-way HGV movements per day. HGV movements will be scheduled primarily between 09:00 and 16:00 to avoid the local commuter peaks and to ensure safe operation along the Boherboy / Saggart Road (L2008).

Combining workforce and goods vehicle activity, total daily construction traffic is expected to range between 320 and 370 two-way movements per day, with occasional short-term increases (to around 400) during large concrete pours or major delivery days. The existing Blessington Road access will remain for emergency use only throughout the construction period, with all regular construction traffic using the new site entrance on Boherboy / Saggart Road. The Contractor will prepare a Construction Traffic Management Plan to manage deliveries, define haul routes, and implement a Travel Plan for construction personnel to promote car-sharing and use of shared crew vans.

The temporal distribution of trips across the working day (07:00–21:00) is expected to follow normal construction industry patterns, as outlined in Table 14.15 below. The busiest periods will occur between 07:30–09:00 (worker arrivals) and 16:00–18:00 (departures), together accounting for roughly half of all daily traffic.

*Table **Error! No text of specified style in document.**-14 Estimated Construction Traffic Profile for SD20A/0232 (07:00–21:00, Two-Way Movements)*

Time Period	Typical Site Activity	Estimated Two-Way Movements (All Vehicles)	Approx. Composition	Notes
07:00–08:00	Early crew arrivals, light deliveries	**35–45**	90% light, 10% HGV	Site opening and setup
08:00–09:00	Main workforce arrival peak	**60–70**	90% light, 10% HGV	Peak inbound flow
09:00–10:00	Initial material deliveries	**25–30**	60% light, 40% HGV	Concrete and steel deliveries begin
10:00–11:00	Ongoing works / HGV deliveries	**20–25**	50% light, 50% HGV	Structural and façade materials
11:00–12:00	Continued deliveries / pours	**20–25**	40% light, 60% HGV	May include concrete pours
12:00–13:00	Lunch period	**10–15**	70% light, 30% HGV	Minimal site movements
13:00–14:00	Afternoon deliveries resume	**20–25**	40% light, 60% HGV	Fit-out and plant deliveries
14:00–15:00	Steady activity	**20–25**	40% light, 60% HGV	Mid-afternoon HGV window
15:00–16:00	Early workforce departures	**25–30**	70% light, 30% HGV	Trades leaving site
16:00–17:00	Workforce departure peak	**60–70**	95% light, 5% HGV	Evening egress period

17:00–18:00	Final staff departures	**30–40**	95% light, 5% HGV	Site closing
18:00–21:00	Occasional after-hours work	**5–10**	90% light, 10% HGV	Rare snagging or extended fit-out
Total (07:00–21:00)	—	**≈ 320–370 two-way movements per day**	~85% light, 15% HGV	Peak construction phase

The traffic generated by the development is applied to each node to give the worst-case scenario and would take into account potential variations in traffic generated by the development depending on the phase in question.

*Table **Error! No text of specified style in document.**-15 Construction Stage Phase Impact*

Construction Phase Impact				
Site No	**Location**	**AADT (2032) - Do Nothing**	**Construction Flows – Do Something**	**% Impact**
1	Citywest Road/Citywest Road	22628	0	0.00%
2	Fortunestown Lane/Carrigmore	8193	0	0.00%
3	Garter Lane/ Fortunestown Lane	13529	0	0.00%
4	Slade Road/Boherboy Road	14410	0	0.00%
5	Development Access	5218	810	15.52%
6	Boherboy Road/N81	15662	810	5.17%

7	N81/N82	19825	810	4.09%
8	N82/Corbally Access	16376	0	0.00%

During the construction phase, traffic generated by the Proposed Development was assigned to each assessment node to provide a worst-case scenario, accounting for potential variations in construction phasing and vehicle routing.

The analysis indicates a maximum uplift of 15.52% in daily traffic volumes at any assessed junction. This increase will be temporary, limited to the duration of the construction programme, and represents a worst-case daily scenario, assuming all deliveries occur via the same haul route.

In accordance with the IEMA Environmental Assessment for Road Traffic (2023), projected changes in traffic flows of less than 30% are considered unlikely to give rise to perceptible environmental effects, while changes of less than 10% are generally deemed to create no discernible environmental effect.

On this basis, the effects on transport and access during the construction phase are assessed as temporary, slight, adverse, and not significant in EIA terms for:

• Pedestrian severance, delay, amenity, fear and intimidation; and

• Driver delay.

With respect to accidents and road safety, temporary effects may arise due to construction vehicle activity. However, with the implementation of a Construction Traffic Management Plan (CTMP) and adherence to standard safety measures, these effects are assessed as temporary, slight-to-moderate, adverse, and not significant in EIA terms.

14.5.6 Operational Phase

The development is likely to be built from 2025 to 2032, the length of its planning permission. The development will be built and occupied on a phased basis with full occupancy expected to happen in 2032.

For the purpose of this assessment, it is considered that these movements would primarily be via Carrigmore, Corbally and Boherboy Road.

*Table **Error! No text of specified style in document.**-16 Operational Phase Impact*

Operational Phase Impact				
Site No	**Location**	**AADT (2032) - Do Nothing**	**Development Flows – Do Something**	**% Impact**
1	Citywest Road/Citywest Road	22841	1054	4.61%
2	Fortunestown Lane/Carrigmore	8270	1357	16.41%
3	Garter Lane/ Fortunestown Lane	13657	303	2.22%
4	Slade Road/Boherboy Road	14546	232	1.60%
5	Development Access	5267	429	8.15%
6	Boherboy Road/N81	15810	120	0.76%
7	N81/N82	20012	773	3.86%
8	N82/Corbally Access	16530	2034	12.30%

The maximum uplift in traffic volume on any assessed link is 16.41%, and there are no highway links identified in Table 14.16 with an increase of more than 30% in operational vehicle movements.

In accordance with the IEMA Environmental Assessment for Road Traffic (2023) guidance, projected increases in traffic flows of less than 30% are considered unlikely to give rise to perceptible environmental effects, while increases of less than 10% in sensitive areas are typically regarded as having no discernible environmental effect.

As all forecast changes fall below the 30% threshold, the associated effects on the surrounding highway network are predicted to be slight, adverse, and long-term, but not significant in EIA terms. These effects relate primarily to:

• Pedestrian severance, delay, amenity, fear and intimidation;

• Driver delay; and

• Accidents and road safety.

On this basis, the operational traffic effects of the Proposed Development are not considered significant in accordance with IEMA (2023) and EPA (2022) criteria.

14.5.7 "Do Nothing" Impact

If the Proposed Development does not proceed there will be no additional traffic generated or works carried out on the road network and therefore no effects with respect to traffic.

14.6 Avoidance, Remedial & Mitigation Measures

14.6.1 Do-Nothing Scenario

If the Proposed Development does not proceed there will be no additional traffic generated or works carried out on the road network and therefore no effects with respect to traffic.

14.6.2 Construction Phase

The successful completion of the Proposed Development will require significant coordination and planning, and a comprehensive set of mitigation measures will be put in place before and during the construction phase to minimise the effects of the additional traffic generated by the Proposed Development. The range of measures will include the following which are also set out in the Construction Traffic Management Plan:

- A detailed **Construction Traffic Management Plan** (CTMP), incorporating all the mitigation measures set out in the TMP submitted as part of the CTMP, will be finalised and agreed with the relevant road authorities and An Garda Síochána prior to construction works commencing on site. The detailed TMP will include the following:

- **Traffic Management Coordinator** – a competent Traffic Management Co-ordinator will be appointed for the duration of the project and this person will be the main point of contact for all matters relating to traffic management.

- **Communications**: Local residents in the area will be informed of any upcoming traffic related matters e.g., temporary lane/road closures (if required), via letter drops and door knocks. Information will include the contact details of the Contract Project Co-ordinator, who will be the main point of contact for all queries from the public or Local Authority during normal working hours. An "out of hours" emergency number will also be provided.

- **Travel Plans** – Given the site location, the assessment above has assumed the worst case i.e., that construction workers will drive to the site. The Main Contractor will be required to provide a

travel plan for construction staff, which will include the identification of routes to / from the site and identification of an area for parking.

14.6.3 Operational Phase

The mitigation measures proposed for the operational phase are based on the following criteria:

- Severance
- Pedestrian, cyclist and equestrian delay.
- Pedestrian, cyclist and equestrian amenity.
- Fear and intimidation.

Driver and passenger delay

Vehicular access to the development will be via 3 no. access points, as follows: (i) from the north via Carrickmore estate, (ii), to the east via Corbally estate and (iii), to the south via Boherboy Road. The proposed development includes for pedestrian and cyclist connections and accesses to adjoining lands to the north, east and west, and includes for cycling and pedestrian routes and infrastructure throughout the development.

Dedicated infrastructure will be provided for pedestrians, cyclists and other vulnerable road users. Were possible, this infrastructure will separate vehicles from pedestrians, cyclists and other vulnerable road users reducing the possibility of a road traffic collision occurring.

Where vehicles interact with pedestrians, cyclists and other vulnerable road users it will be done in a controlled manner. To that end, the proposed development includes a number of controlled crossings such as the signal-controlled junction from the Link Street to Oldcourt Road and Bohernabreena Road. Along the Link Street, a signal-controlled crossing has also been provided, linking the southern side of the development to the northern side.

Dedicated separated cycle infrastructure is provided along the Link Street with controlled crossings provided to accommodate cycling desire lines including to adjoining developments. Cyclist will share road space in areas of low traffic volume and low speed.

A number of uncontrolled crossings are provided throughout the development for pedestrians. These uncontrolled crossings have been designed to accommodate persons with visual impairments and mobility impairments. Pedestrians are given priority across junctions from the Link Street along the cycle track.

An Outline Travel Plan has been produced for future occupants of the proposed development.

A Travel Plan can be described as a transport demand management mechanism that seeks to provide for the transportation needs of residents and visitors of the Proposed Development. The aim is to reduce demand for and use of cars by increasing the attractiveness and practicality of other modes of transport.

The Travel Plan includes measures to promote and improve the attractiveness of using public transport, cycling, walking, carsharing, flexible working or a combination of these as alternatives to drive-alone journeys to/from the development.

It should be considered as a dynamic process where a package of measures and campaigns are identified, piloted and monitored on an on-going basis.

The impact of these measures should be reviewed against a set of agreed targets, principally in relation to:

- A reduction in car journeys to and from the work site
- An increase in the number of people who share their journeys by car • A reduction in the need to travel, especially during the rush-hour periods
- Enabling residents and visitors use alternative modes of transport

A **Statement of Compliance with DMURS**, has been included as part of the planning documentation.

Central to the overall design approach is the need to ensure that pedestrians and cyclists are given the higher priority and more direct linkage than the private car. The proposed site layout and pedestrian and cycle links seek to give connectivity to the wider area to ensure that many local trips can be made using these sustainable travel modes through the provision of access to the canal tow path, which provide linkage to the surrounding area.

Vehicular access to the development shall be provided through a singular entrance and exit to the north-west of the site. Three further vehicle entrance points are located along the southern access road. Access to the site from these points shall be strictly limited to emergency services and maintenance vehicles. A new cycle lane shall run adjacent to the entrance road of the development and shall link Greenhill's Road to the north to the existing southern access road to the south. Design of the cycle infrastructure shall be based on guidance within the National Cycle Manual and DMURS for low speed and low use roads. Ample cycle parking is provided throughout the development.

The Proposed Development has been the subject to a **Stage 1/2 Road Safety Audit**. Road Safety Audit (RSA) involves the evaluation of road schemes during design and construction to identify potential hazards to all road users. All issues raised and proposed mitigation measures proposed, have been adopted within the development proposals.

14.7 Residual Effects

The assessment which forms the basis of this chapter has been wholly conservative to ensure a worst-case scenario is considered. This includes allowing for background traffic growth based on TII guidance and conservative trip generation estimates which do not fully take into consideration the full effect of the reduced car parking provision. On that basis, the assessment and the associated results are considered to represent the worst-case scenario.

14.7.1 Construction Phase

The impact of the construction stage is assessed as follows:

- During the construction phase there will be an increase in vehicle and HGV movements; however, these will be routed along the most appropriate haulage routes to minimise potential interaction with vulnerable road users and reduce disturbance to sensitive receptors.

- Construction traffic is expected to be limited during peak network hours, with most movements occurring outside commuter peaks. As a result, congestion-related impacts are expected to be negligible, and associated human health effects (e.g., from air quality or noise) are also considered negligible.

- The urban character of the surrounding road network, coupled with localised speed controls and the modest scale of additional traffic (<20% uplift), means there is expected to be no material increase in risk to pedestrians, cyclists, or other vulnerable road users.

The impact of the proposed development during construction will be managed by the measures set out in the Construction Traffic Management Plan (CTMP). These measures include defined access routes, on-site parking for construction workers, and restrictions on delivery hours to avoid local school and commuter peaks.

In accordance with the IEMA Environmental Assessment for Road Traffic (2023), projected changes in traffic flows of less than 30% are unlikely to result in perceptible environmental effects, while increases of less than 10% in sensitive areas are considered to have no discernible environmental effect. Given that the assessed uplift in construction traffic is below 20%, the resulting environmental effects are therefore imperceptible to slight, short-term, and not significant in EIA terms.

The increased traffic as a result of the construction phase is therefore minimal and will have a negligible impact on local network performance and road safety. The associated impact on human beings is limited and temporary. The enhanced pedestrian and cycle permeability delivered by the scheme, once complete, will contribute positively to sustainable mobility and active travel.

The potential for increased accidents is considered low, given the minor scale of traffic change and the controls set out in the CTMP.

Residual Effects

No additional mitigation is required beyond the embedded measures within the CTMP. The residual construction-phase effects are assessed as:

- Temporary, imperceptible, adverse effects on pedestrian severance, delay, amenity, fear and intimidation — not significant in EIA terms;
- Temporary, imperceptible, adverse effects on driver delay — not significant in EIA terms; and
- Temporary, imperceptible, adverse effects on accidents and road safety — not significant in EIA terms.

14.7.2 Operational Phase

It is considered that the impact of the operational phase of the Proposed Development on traffic and transport will be likely, neutral to slight, adverse, and long-term in nature.

The assessment of the cumulative scenario (“Do Maximum”) has considered the combined effect of other permitted or proposed developments within the wider Citywest / Fortunestown area that may contribute additional traffic to the local network. Based on the traffic modelling results, no link or junction within the study area is forecast to experience an uplift in traffic flows exceeding 10 percent as a result of cumulative development.

Given the high quality of the local road network and the modest increase in traffic volumes, the impact on road safety is considered negligible, and there are no predicted perceptible changes in journey times or travel conditions for any transport mode.

In accordance with the IEMA Environmental Assessment for Road Traffic (2023), projected changes in traffic flows of less than 30 percent are unlikely to result in perceptible environmental effects, while changes of less than 10 percent, even in sensitive areas, are regarded as not discernible. On this basis, the cumulative operational effects of the Proposed Development are assessed as imperceptible to slight, long-term, adverse, and not significant in EIA terms.

No additional mitigation is required beyond that already embedded in the design and management of the scheme. The residual operational-phase effects remain as reported in the assessment of effects section:

- Imperceptible, adverse effects on pedestrian severance, delay, amenity, fear and intimidation — not significant in EIA terms;
- Imperceptible, adverse effects on driver delay — not significant in EIA terms; and
- Imperceptible, adverse effects on accidents and road safety — not significant in EIA terms.

All operational impacts are long-term in duration and will persist while the development remains occupied, although they would be reversible should the site cease operation.

14.7.3 "Worst Case" Scenario

The greatest environmental change will generally be when the project traffic is at the largest proportion of the total flow. Therefore, as part of this environmental assessment and assessment was undertaken at the peak of construction and at the year of opening of the project, when the development is expected to be fully occupied.

It is therefore considered that the "Worst Case" Scenario has been assessed for both the Construction Phase and Operational Phase.

14.7.4 Residual Impacts

Table 17.18 4 provides a tabulated summary of the outcomes of the Transport and Accessibility assessment of the proposed development. Where significant positive effects are likely these are highlighted in bold **green** and where significant negative effects are predicted these are highlighted in bold **red**.

*Table **Error! No text of specified style in document.**-17 Summary of the Potential Impacts*

Summary of the Potential Impacts				
Receptor	**Description of Residual Effect**	**Additional Mitigation**	**Scale and Significance of Residual Effect**	**Nature of Residual**
Construction Stage				

Pedestrians	Change in pedestrian severance, delay, amenity, fear and intimidation	None	Imperceptible	Negative, likely, direct, reversible, short term and temporary.
Road users	Change in Driver delay	None	Imperceptible	Negative, likely, direct, reversible, short term and temporary.
Road users, pedestrians and cyclists	Change in road safety	None	Imperceptible	Negative, likely, direct, reversible, short term and temporary.
Operational Stage				
Pedestrians	Change in pedestrian severance, delay, amenity, fear and intimidation	None	Imperceptible	Negative, likely, direct, reversible, long term and permanent.
Road users	Change in Driver delay	None	Imperceptible	Negative, likely, direct, reversible, long term and permanent.
Road users, pedestrians and cyclists	Change in road safety	None	Imperceptible	Negative, likely, direct, reversible, long term and permanent.

14.8 Monitoring

14.8.1 Construction Phase

The proposed construction material haul routes will be monitored throughout the construction phase to identify any potential damage arising from construction traffic.

To ensure effective monitoring, the Main Contractor, in conjunction with South Dublin County Council, will undertake the following measures:

- Pre-construction condition surveys:
  Additional inspections and reviews of the designated haul routes will be undertaken at least one month prior to commencement of construction to record the existing condition of these roads.

- Baseline documentation:
  Surveys will include, as a minimum, video footage and photographic records confirming the condition of the carriageway surface, boundary treatments, and any overhead services along the haul routes. Visual inspections and photographic surveys will also be undertaken of bridges and culverts along the haul roads.

- Pavement condition assessment:
  Where requested by the Local Authority, a pavement condition survey will be undertaken to establish the baseline structural condition of the haul routes prior to commencement of works.

- Ongoing monitoring and maintenance:
  Throughout the construction phase, regular visual inspections will be carried out to identify any deterioration or damage caused by construction traffic. Where such damage occurs, the Local Authority will be notified, and repairs will be arranged promptly to restore the road to an acceptable standard and minimise disruption.

- Post-construction surveys:
  Upon completion of the construction phase, the pre-construction condition surveys will be repeated and a comparative assessment undertaken. Where deterioration attributable to construction traffic is identified, appropriate remedial works will be carried out by the Contractor to the satisfaction of the Local Authority.

14.8.2 Operational Phase

Given the nature of the Proposed Development as a residential scheme, no specific traffic monitoring is required during the operational phase beyond that undertaken as part of standard local authority network management and maintenance programmes.

However, any future review of mobility management performance or Travel Plan implementation may include monitoring of mode share, car parking utilisation, and uptake of sustainable transport modes to ensure continued compliance with the National Sustainable Mobility Policy (2022) and DMURS principles.

14.9 Interactions

The design team has engaged collaboratively throughout the design process to ensure that the Proposed Development adopts a sustainable, integrated approach that minimises environmental impacts and optimises multimodal connectivity.

Noise & Vibration
During the construction phase, a temporary, short-term increase in noise and vibration levels may occur due to construction traffic. These effects will be slight, adverse, and not significant in EIA terms. The impact of the operational phase on traffic and transport is assessed as neutral to slight, long-term, and not significant.

Air Quality
Post-construction, development traffic will contribute marginally to local traffic volumes. Given that no link exceeds a 10% uplift, the resulting impact on air quality is expected to be imperceptible to slight, long-term, and not significant.

Population
The development will be implemented in accordance with the Preliminary Construction Management Plan (PCMP) to minimise disruption to local residents during construction. During operation, the scheme's high permeability and high-quality pedestrian and cycle facilities will promote active travel, improve access to public transport, and support healthier lifestyles, consistent with Smarter Travel (2009) and the National Sustainable Mobility Policy (2022).

Land and Soil
During construction, any import or export of materials (associated with excavation or infilling works) will result in a minor, short-term increase in HGV traffic. As outlined in the PCMP, appropriate traffic management measures will be implemented to minimise these effects. The overall impact on land and soil-related traffic movements is assessed as temporary, slight, and not significant in EIA terms.

14.10 Difficulties Encountered When Compiling

There were no difficulties encountered when preparing this chapter.

14.11 References

The assessment presented in this chapter has been informed by the following chapters and technical appendices:

- EIAR Chapter 1Introduction and Methodology
- EIAR Chapter 2 Policy & Legislation

- EIAR Chapter 4 Project Description
- Appendix 14.1: Site Location
- Appendix 14.2: Survey Data
- Appendix 14.3: AADT – Development Impact
- Appendix 14.4: AADT - Cumulative Impact Environmental Protection Agency (EPA) Guidelines on the Information to Be Contained in the EIAR (2022);
- IEMA Impact Assessment Guide to Delivering Quality Development (2016);
- Transport Infrastructure Ireland (TII) Traffic and Transportation Assessment Guidelines (2014);
- 'Traffic Management Guidelines' Dublin Transportation Office & Department of the Environment and Local Government (May 2003);
- 'Guidelines for Traffic Impact Assessments' The Institution of Highways and Transportation (1994);
- National Roads Unit 16.1 - Expansion Factors for Short Period Traffic Counts (PE-PAG-02039) (October 2016) - TII; and
- The Route to Sustainable Commuting NTA (2001).

This chapter of the EIAR has been drafted based on the following legislation, policies and published guidance:

- National Legislation:
  - National Planning Framework (NPF) 2019
- Regional Policy:
- South Dublin County Development Plan 2022-2028

National guidance and industry standards:

- IEMA Environmental Assessment for Road Traffic, 2023
- Environmental Protection Agency (EPA) Guidelines on the Information to Be Contained in the EIAR (2022)