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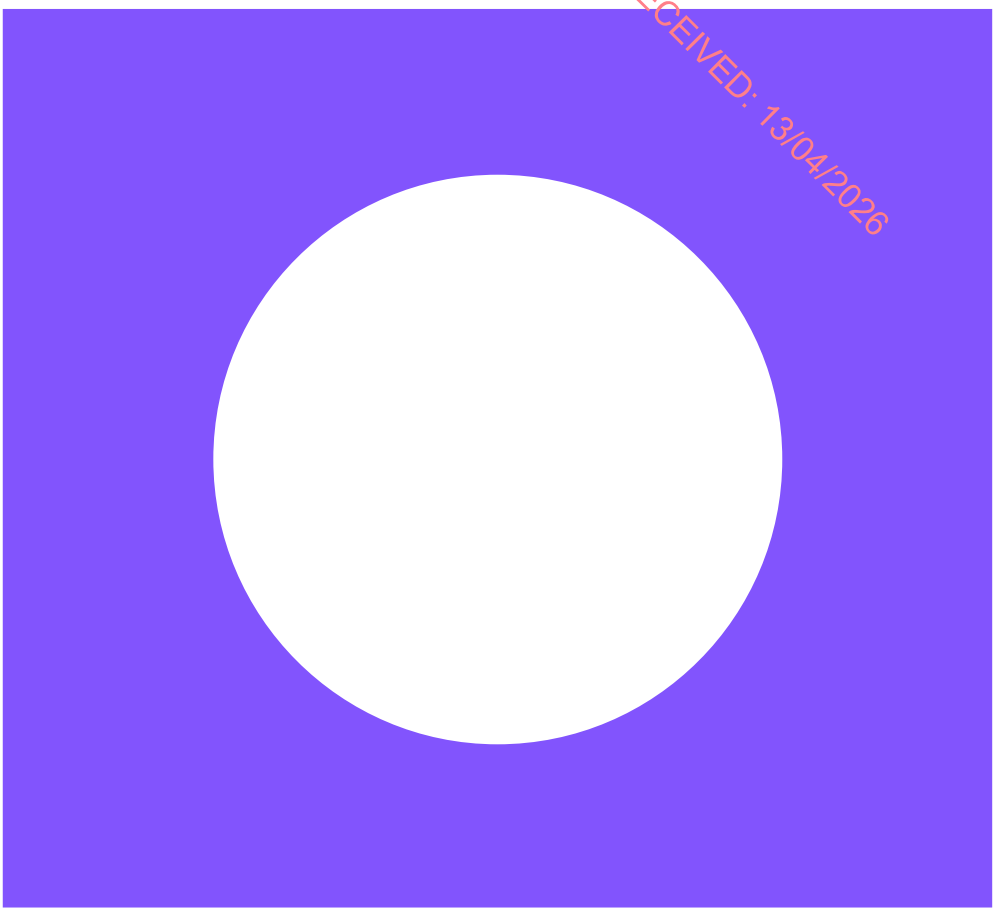

Shelburne Energy Farm Environmental Impact Assessment Report

Chapter 14 Roads, Traffic and Transportation

April 2026

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Chapter 14 Roads, Traffic and Transportation

April 2026

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14 Roads, Traffic and Transportation

14.1 Introduction

This chapter of the EIAR presents an assessment of the likely roads, traffic and transportation effects of the Proposed Project as described in Chapter 5.

This chapter sets out the existing conditions of the receiving environment and details the traffic that is likely to be generated during the construction phase of the Proposed Project, including the movements of construction materials, equipment and personnel to and from site. The assessment considers the effects upon the local, regional and national road network, and identifies measures to reduce network disruption.

Potential roads, traffic and transportation related environmental effects during the *operational* phase of the Proposed Project have also been considered. Due to the negligible volume of road traffic associated with the operation of the Proposed Project, **no significant effects** are anticipated as a result. Consistent with advice set out in Section 2 of the *Transport Infrastructure Ireland (TII) Traffic and Transport Assessment Guidelines* (May 2014)[1], a full Traffic and Transport Assessment (TTA) is therefore not warranted in respect of the operational phase.

Cumulative effects associated with committed projects which are likely to generate traffic movements on the public road sections within the Proposed Project study area at the same time as traffic generated by the Proposed Project have also been assessed.

A Workplace Travel Plan is not considered necessary in support of the Proposed Project due to the relatively low number of construction phase personnel (expected to peak at approximately 150 people a day and a daily average of 100 people) accessing the site.

14.2 Policy and Guidance

Policies and guidance documents relevant to the assessment of roads, traffic and transportation effects of the Proposed Project are set out in this section.

14.2.1 Policy

Table 14.1 provides a summary of the policies relevant this roads, traffic and transportation Chapter of the EIAR.

Table 14.1: Relevant Roads & Traffic Policies

Document Title	Source and Year	Policy Detail	Relevance to Assessment
Wexford County Council Development Plan (2022 – 2028)	Wexford County Council website, 2022	The Wexford County Development Plan 2022-28 (WCDP 22-28) sets out the strategy that will inform and guide the development of the county over the next six years. The following policies/objectives are of direct relevance: Objective CA01 – "To ensure that the spatial planning of County Wexford provides for a county that is resilient to climate change, encourages	These policies are integrally relevant to the assessment process and have been duly considered unless stated otherwise.

[1] Transport Infrastructure Ireland | Traffic and Transport Assessment Guidelines | PE-PDV 02405 (Released May 2014) available at: https://cdn.tii.ie/publications/PE-PDV-02045-01.pdf

Document Title	Source and Year	Policy Detail	Relevance to Assessment
		development along existing transport corridors, enables the decarbonisation of the county's economy and reduces the county's carbon footprint in support of national targets for climate mitigation and adaptation objectives as well as targets for greenhouse gas emissions reductions." Objective CA10 – "To implement, through the County Development Plan and future local areas plans, sustainable settlement and transportation strategies in urban and rural areas including measures to reduce energy demand in response to the likelihood of increases in energy and other costs due to long-term decline in non-renewable resources, reduce anthropogenic greenhouse gas emissions, and address the necessity of adaptation to climate change in particular, having regard to the location, layout and design of new development." Objective CA17 – "To support decarbonisation in the transport sector by facilitating initiatives that promote the use of clean generated electricity biogas, hydrogen and other non-fossil fuels for private and public transportation and provide clean energy and lower carbon fuelling and electric vehicle charging stations and infrastructure at appropriate locations including consideration of electric, hydrogen, compressed natural gas CNG)/biogas." Chapter 8 of the WCDP 2022-2028 details the Transportation Strategy for Wexford County and includes a number of relevant policies/objectives.	
Wexford County Council Local Authority Climate Action Plan 2024 - 2029	Wexford County Council website, 2024	Wexford County Council's Climate Action Plan 2024–2029 outlines a strategic framework to achieve a 51% reduction in greenhouse gas (GHG) emissions by 2030, in line with Ireland's national climate targets. Transport is a major focus area for mitigation efforts. Key actions include sustainable travel initiatives/promotion and Modal Shift.	These policies are integrally relevant to the assessment process and have been duly considered unless stated otherwise
Project Ireland 2040	Government of Ireland website, 2019	The National Development Plan 2021-2030, which makes up part of Project Ireland 2040, includes the Irish Government's strategy for sustainable mobility. Geographically the relevant area is the South-East (Southern Regional Assembly) and is composed of several National Strategic Outcomes (NSO's).	These policies are integrally relevant to the assessment process and have been duly considered unless stated otherwise

Source: Wexford County Council and Government of Ireland

14.2.2 Guidance

This assessment has been carried out in accordance with the principles contained within the following key documents:

- Guidelines on the Information to be Contained in Environmental Impact Assessment Reports, Environmental Protection Agency (EPA) (2022)
- Traffic and Transport Assessment Guidelines, Transport Infrastructure Ireland (TII) (2014)
- The Institute of Environmental Management and Assessment (IEMA) Guidelines Environmental Assessment of Traffic and Movement (2023)

- Rural Road Link Design, (DN-GEO-03031), TII Publications, TII (2017)[2]

The *IEMA Guidelines* are intended for the assessment of the effect of road traffic associated with new developments. It is common and established practice that they are applied to energy-related developments and due to the absence of local specific guidance, these guidelines are defined as suitable to assess the construction and operational phases of the Proposed Project.

A brief overview of core guidance documents used for this assessment is summarised in Table 14.2.

Table 14.2: Core Guidance Summary

Document Title	Source & Year	Guidance Summary
Guidelines on the Information to be Contained in Environmental Impact Assessment Reports	Environmental Protection Agency (EPA) (2022)	These guidelines provide advice of best practice, principles and practice of developing an EIAR. Specific reference to transport assessment includes: "Material assets can now be taken to mean built services and infrastructure. Traffic is included because in effect traffic consumes roads infrastructure." & "The provision of new access facilities (e.g. links to motorways) or the upgrading of existing facilities (e.g. road widths, bridges and junctions) carried out by other parties can give rise to significant environmental effects". The importance of a Construction Management Plan is acknowledged in this document. These are often provided to supplement the project description and to set out specific details of the construction plan. While inclusion of full details may not be practicable at pre-consent stage, it should set out the environmental envelope within which the project will be built, including working areas, hours of work, principal construction methods and phases, volumes of materials, traffic and environmental controls.
Traffic and Transport Assessment Guidelines	Transport Infrastructure Ireland (TII) (2014)	The guidelines provide guidance for scoping and developing traffic and transport assessment requirements to support development proposals. The guidelines outline the need for assessment of public transport, walking and cycling networks, rather than singularly focussing on the road network. The focus of these guidelines relates to operational traffic aspects.
The Institute of Environmental Management and Assessment Guidelines: Environmental Assessment of Traffic & Movement	The Institute of Environmental Management and Assessment (IEMA) (2023)	The guidelines provide internationally referable guidance specific to best practice in transport Environmental Impact Assessment (EIA) process and practice.
Rural Road Link Design, (DN-GEO-03031)	TII Publications (2017)	The TII document provides guidance for assessing rural road capacities.

Source: Varies by guidance document.

14.3 Methodology

14.3.1 Approach to Data Collection

A desktop study was undertaken to review likely construction traffic routes and to identify constraints and for any potentially sensitive locations i.e., locations which are likely to be more vulnerable to change in traffic flow or profile, e.g., collision clusters, high footfall areas, and/or areas in close proximity to a school.

Data sources for the desktop study include:

- Automatic Traffic Counts (ATC) commissioned by Mott MacDonald and undertaken by Idaso between 17 - 23 October 2024 and 2 – 8 December 2024

[2] Rural Road Link Design (DN-GEO-03031) 2023 is the most recent TII publication however it does not include rural road capacities therefore the 2017 revision has been referenced in this Chapter.

- Project Appraisal Guidelines for National Roads Unit 5.3 – Travel Demand Projections, October 2021, TII
- TII Traffic Count Data Portal (www.trafficdata.tii.ie)

Data relating to Personal Injury Collisions (PIC) was sought from the Road Safety Authority (RSA) website. However, it is understood that the RSA is in the process of reviewing its collision data sharing policies and procedure and therefore data cannot be shared until this review is complete[3] .

14.3.2 Approach to Impact Assessment

Predicted construction vehicle movements have been compared to baseline traffic flows to identify if there are likely to be periods where the increase in traffic volume, either all traffic or specifically heavy goods vehicle (HGV) traffic, exceed standard thresholds. Such additional traffic has potential to cause detrimental effects, for example, on driver delay, road safety or community (pedestrian delay, non-motorised user (NMU) amenity, fear and intimidation).

14.3.2.1 Significance

The *IEMA Guidelines (IEMA 2023)* infer two-fold rules that can be used to determine both the scale and extent of the assessment of road traffic as a screening process[4]:

- Rule 1 – Include highway links where traffic flows will increase by more than 30% (or the number of HGVs will increase by more than 30%).
- Rule 2 – Include highway links of high sensitivity where traffic flows have increased by 10% or more

Highway links, in this instance, refer to a section of the road network between two given points. Sensitivity is defined within the *IEMA Guidelines* as any "link or location where it is felt specific environmental or population sensitivities may occur"[5]. While this will vary depending upon the specific receptor, this could – for example – refer to highway links where there are high concentrations of locations such as hospitals, schools or tourist attractions that have the potential to be impacted by changes in traffic flows.

It is acknowledged by the *IEMA Guidelines* that daily variation can vary +/- 10%. Therefore, it is assumed that projected changes in traffic below 10% means no discernible environmental impact.

Where the predicted increase in traffic volume (whether general or HGV) falls short of these thresholds, the significance of the effects can be termed as **not significant**. This means that further assessment is not warranted. Consequently, where the predicted traffic flow increase exceeds thresholds, the effects are considered to be potentially **significant** and accordingly, are assessed in greater detail.

The assessment has clearly identified transport routes which are to be used in connection with the Proposed Project. Quantitative assessments have been undertaken alongside the application of professional judgement to determine whether or not the effects are considered to be of significance. Based on the Rule 1 and 2 of the *IEMA Guidelines*, the predicted significance of the effect was determined considering both the sensitivity of the receiving environment and the magnitude of change against the baseline. As a guide to inform the assessment, but not as a substitute for professional judgement, criteria for determining the significance of traffic related

[3] Road Safety Authority (RSA)| Road Traffic Collision Data Site (Last Accessed on 19 August 2025) available at: https://www.rsa.ie/road-safety/statistics/road-traffic-collision-data

[4] IMEA Guidelines 2023 | Pg11 - para.2.16-2.21 https://www.iema.net/media/5mrmquib/iema-report-environmental-assessment-of-traffic-and-movement-rev07-july-2023.pdf

[5] eiareiar3 | Pg12 - para 2.21

effects are set out below in Table 14.3. It should be noted that the assessment considers the effects of the % increase in general traffic (HGV + Light Goods Vehicles (LGV) and cars) and also % increase in HGV traffic only based on related baseline traffic flows e.g., % increase in HGVs from existing HGV baseline flow.

The study area is predominately rural in context, featuring dispersed residential properties, and agricultural buildings and land. Therefore the 30% significance threshold has been applied in view of Rule 1 of the *IEMA Guidelines* as set out in Table 14.3.

The thresholds shown in Table 14.3 have been developed based upon the Rule 1 criteria above, as well as the consideration that Major and Moderate effects are significant in the context of *Environmental Protection Agency (EPA) Guidelines*.

Table 14.3: IEMA Guidelines – Effect Significance Matrix

Significance of Effect	Rule 1
Major (Significant)	Traffic flow change is greater than or equal to 60%
Moderate (Significant)	Traffic flow change is greater than or equal to 30% and less than 60%
Minor (Not Significant)	Traffic flow change is greater than or equal to 5% and less than 30%
None (Not Significant)	Traffic flow change is less than 5%

Source: IEMA (2023)

The guidance above does not define thresholds to determine significance associated with driver delay and accordingly, professional judgement has been applied. For driver delay, using terminology outlined for effect significance in Table 14.3, a similar approach has been used, with quantified thresholds (which have been previously and recently utilised to enable assessment of energy projects in Ireland, and importantly, accepted by reviewing authorities) defined and applied as shown in Table 14.4.

Table 14.4: Driver Delay Effect Significance Matrix

Significance of Effect	Increase in Journey Time
Major (Significant)	16 – 20 minutes
Moderate (Significant)	11 – 15 minutes
Minor (Not Significant)	6 – 10 minutes
None (Not Significant)	0 – 5 minutes

Source: Mott MacDonald

The significance of all effects under consideration are linked to the volume and daily intensity of traffic generated by the Proposed Project, therefore it is deemed appropriate to link significance criteria with the scale of the forecast traffic increase. However, the *IEMA Guidelines* state that:

"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 expect, backed-up by data or quantified information wherever possible."[6]

Therefore, professional judgement (led by good practice guidance) has also been applied in the assessment of effects so as to provide more meaningful conclusions in particular where it is not quantifiable by set rules or formulae, particularly in relation to driver delay, the assessment of

[6] IEMA Guidelines 2023 | Pg15 para 3.12

community (pedestrian delay, non-motorised user amenity) and road safety effects. Information of this nature, gathered from desktop research, where available, in addition to technical knowledge from the wider technical team, has also been used.

Furthermore, where baseline traffic flows are very low, it is possible to derive unrealistic determinations of significance when considered against purely numerical assessment criteria. For example, when traffic flow is very low, it is possible to show relatively large traffic increases and for the road to operate well below capacity. Under the numerical criteria defined above, a 60% increase in traffic volume would represent a major effect, but in reality, the effect is likely to be less significant, given the residual capacity of the road.

The following effect classifications are considered.

- Driver delay;
- Road safety; and
- Community effects (pedestrian delay, severance, NMU amenity, fear and intimidation).

The *IEMA Guidelines* also necessitate the consideration of Noise, Visual Impact, Air Pollution and Dust and Dirt associated with development generated traffic; these topics are addressed in Chapter 11: Noise and Vibration, Chapter 12 Landscape and Chapter 10: Air Quality respectively.

The predicted significance of any potential roads, traffic and transportation-related environmental effects has been determined by considering both the sensitivity of the receiving environment and the magnitude of change against the baseline.

The likely duration of an effect is also a relevant consideration and the Environmental Protection Agency have categorised duration of effects in their *2022 Guidelines*. Potentially of relevance, in respect of the Proposed Project, the categories include:

- Brief Effects = Effects lasting less than a day
- Temporary Effects = Effects lasting more than a day and less than a year
- Short-term Effects = Effects lasting between one and seven years

14.3.2.2 Sensitivity

Subject to guidelines from the IEMA, road links may be highlighted as 'specifically sensitive'. In other words, these portions of road are considered to be more vulnerable to changes in either the profile or volume of flows of traffic.

Within the context of this study and using the *IEMA Guidelines* for reference, the receptors of sensitivity have been defined in Table 14.5 for various road links using professional judgement and the *UK Design Manual for Roads and Bridges (DMRB) LA112* dated January 2020[7].

Table 14.5: IEMA Guidelines – Receptor Sensitivity

Receptor Sensitivity / Importance	Description
High	• Urban/residential roads without pedestrian/cycle facilities that are used by pedestrians
Medium	• Main vehicular route with pedestrian/cycle facilities provided in a built-up area • Congested Junctions, roads with degree of active frontage

[7] Standards for Highways | Design Manual Roads & Bridges (DMRB) | LA 112 – Population and Human Health (published January 2020, rev01) available at: https://www.standardsforhighways.co.uk/search/1e13d6ac-755e-4d60-9735-f976bf64580a

Receptor Sensitivity / Importance	Description
Low	• National roads or 'N' class roads constructed to accommodate significant HGV volumes, Strategic vehicular route, such as Regional Roads, in a rural setting with pedestrian/cycle facilities provided • Urban road with limited active frontage and pedestrian/cycle facilities provided
Negligible	• Roads with no significant settlements including new strategic national roads or motorways • Rural road with no/pedestrian cycle facilities provided

Source: UK DMRB LA112 / Mott MacDonald

14.3.2.3 Magnitude

The magnitude of change has been calculated as the proportional change in traffic flow anticipated on each public road section within the study area. This calculation compares the forecast development traffic generation against the baseline traffic during the assumed construction years. It is crucial to ensure that professional judgement is applied in tandem with the criteria stated above; particularly when considering numerical (as opposed to percentage) changes in traffic volume.

Additional qualitative criteria have also been employed when assessing magnitude, details of which are provided in Table 14.6. This methodology is of particular importance when considering community effects.

Table 14.6: Magnitude Criteria

Magnitude	Impact
High / Major (Significant)	• Where the Proposed Project could be expected to have a considerable effect (either positive or negative) on receptors
Medium / Moderate (Significant)	• Where the Proposed Project could be expected to have a noticeable effect (either positive or negative) on receptors
Low / Minor (Not Significant)	• Where the Proposed Project could be expected to result in a small, barely noticeable effect (either positive or negative) on receptors
None (Not Significant)	• Where no discernible effect is expected as a result of the Proposed Project on receptors (i.e. the effect is insignificant)

Source: Mott MacDonald

As a guide to inform the assessment, but not as a substitute for professional judgement, criteria for determining the significance of traffic-related effects are set out in Table 14.7 and are based on combining the magnitude of the effect with the receptor sensitivity.

Table 14.7: Significance Assessment Matrix

Magnitude of Change	Sensitivity of Receptor			
	High	**Medium**	**Low**	**Negligible**
High / Major (Significant)	Substantial Adverse (Significant)	Substantial Adverse (Significant)	Moderate Adverse (Significant)	Minor Adverse (Not Significant)
Medium / Moderate (Significant)	Substantial Adverse (Significant)	Moderate Adverse (Significant)	Minor Adverse (Not Significant)	Minor Adverse (Not Significant)
Low / Minor (Not Significant)	Moderate Adverse (Significant)	Minor Adverse (Not Significant)	Minor Adverse (Not Significant)	Negligible (Not Significant)
Negligible / None (Not Significant)	Minor Adverse (Not Significant)	Minor Adverse (Not Significant)	Negligible (Not Significant)	Negligible (Not Significant)

Source: Mott MacDonald

Significance is categorised as Substantial Adverse, Moderate Adverse, Minor Adverse or Negligible. Effects deemed to be Substantial Adverse or Moderate Adverse are considered to be '**Significant**' and effects that are judged to be Minor Adverse or Negligible are considered '**Not Significant**'. The same criteria also apply to positive/beneficial impacts.

14.3.2.4 Fear & Intimidation

The *IEMA Guidelines (2023)* include a methodology (set out in paragraphs 3.32 to 3.40) for assessing magnitude of change for fear and intimidation (caused by all moving objects including traffic). Table 14.8 shows the initial assessment for a road section. The score is then combined, and a level of fear and intimidation is determined from Table 14.9.

Table 14.8: Fear and Intimidation Degree of Hazard

Average Traffic Flow Over 18-Hour Day – All Vehicles/hour combined 2-way flow (a)	Total 18-hour Heavy Vehicle Flow (b)	Average Vehicle Speed (c)	Degree of Hazard Score
+1800	+3000	>40mph	30
1200-1800	2000-3000	30-40mph	20
600-1200	1000-2000	20-30mph	10
<600	<1000	<20mph	0

Source: IEMA 2023

Table 14.9: 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

Source: IEMA 2023

The magnitude of change of the effect (compared to baseline conditions) is then calculated as shown in Table 14.10.

Table 14.10: Fear and Intimidation Magnitude of Effect

Magnitude of Effect	Change in Step/Traffic Flows (AADT) from Baseline Conditions
High (Significant)	**Two step changes in level**
Medium (Significant)	**One step change in level, but with** • >400 vehicle increase in average 18 hr AV two-way all vehicle flow; and/or • >500 HV increase in total 18 hr HV flow
Low (Not Significant)	**One step change in level, with** • <400 vehicle increase in average 18 hr AV two-way all vehicle flow; and/or • <500 HV increase in total 18 hr HV flow
Negligible (Not Significant)	**No change in step changes**

Source: IEMA 2023

14.3.2.5 Traffic Forecasting Assumptions

It has been necessary to make a number of assumptions to enable the roads, traffic and transportation assessment to be undertaken. During the COVID pandemic there had been a general trend of reduced motorised traffic on the road, as more people worked from home, travelled on foot and cycled, travelled shorter distances and some shops and services had been closed. Whilst restrictions have been lifted and general trends are moving again it is become difficult to predict when 'normal' travel patterns will resume again and/or how patterns of work will change; it is considered robust and reasonable to proceed on the basis of the pre-COVID traffic growth factor applied to future baseline flows.

14.3.3 Limitations of this EIAR

Full details of construction activities are not available, at time of writing, and it has therefore been necessary to make a number of assumptions to support the roads, traffic and transportation assessment. These assumptions are detailed in Section 14.3.6.

Confirmation of the construction route(s) will be agreed with Wexford County Council (as Local Roads Authority) prior to commencement of construction.

14.4 Receiving Environment

14.4.1 Study Area

The study area for the roads, traffic and transportation chapter is effectively the public road network predominantly proposed to accommodate construction traffic generated by the Proposed Project and the construction and installation of the associated underground cabling.

The primary traffic route in the local area is the N25 which links to regional roads including the R733 and R735. The N25 spans east to west between County Cork and County Wexford.

Based on professional judgement and experience in the assessment of roads, traffic and transportation effects associated with major development projects, no significant effects are anticipated for the N25 (AADT = c.10,000[8]) and accordingly no further assessment for this road has been undertaken and reported upon in this chapter. This is due to the residual capacity and strategic nature of the road and recognising that the Proposed Project is unlikely to result in an intensification of use exceeding 30%[9] of the existing Annual Average Daily Traffic (AADT) on the N25.

Beyond the study area traffic will subdivide into smaller volumes and professional judgement therefore suggests that effects relating to roads, traffic and transportation across the wider road network beyond the study area are unlikely to be significant and therefore are not reviewed further in this chapter.

The road network included in the study area was determined on the basis of likely construction access routes and the location of physical construction works, defined in Section 14.3.1. Confirmation of route selection will be agreed with the relevant local authorities/TII.

The key characteristics of the defined public road sections in the study area have been appraised through desktop study and are visualised as set out in Figure 14.1 and Table 14.11. Receptor sensitivity has been outlined using the criteria detailed in Table 14.5.

[8] TII Traffic Counters (TMU N25 150.0 E, TMU N25 139.0, TMU N25 135.0 E)

[9] IEMA Guidelines see Section 14.3.3

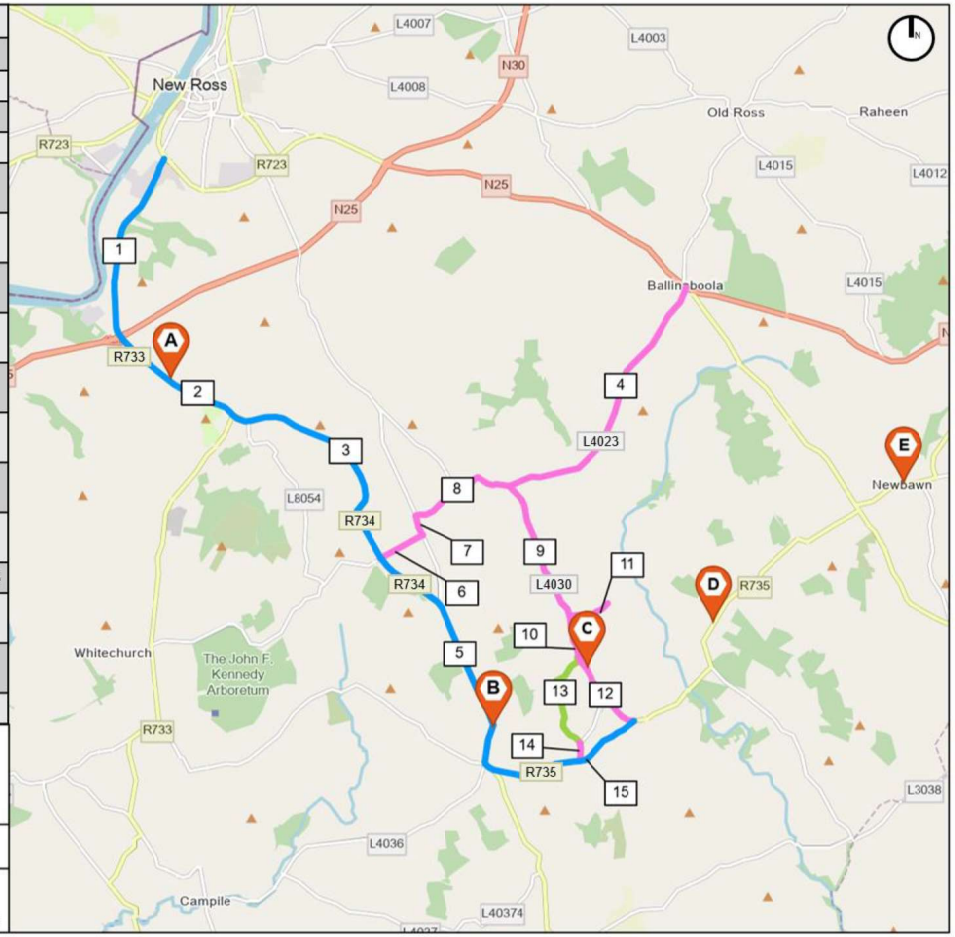
Figure 14.1: Study Route Sections with ATC Locations Plan

Route Sections	
No.	**Name**
1	R733: Between New Ross & N25 junction.
2	R733: Between N25 junction and R734 junction.
3	R734: Between R733 junction and L4023 junction.
4	L4023: Between N25 Junction & L4030 Nash junction.
5	R734: Between L4023 Tellarought junction & R735 junction.
6	L4023 Tellarought: Between R734 junction & L4021 Tellarought junction.
7	L4021 Tellarought: Between St Brigid's Terrace junction & L4023 Tellarought junction.
8	L4023 St Brigid's Terrace: Between L4021 Tellarought junction & L4030 Nash junction.
9	L4030 Nash: Between St Brigid's Terrace and L40232 Nash.
10	L4030 Nash: Between L40232 Nash & Private Road to Site B
11	L40232 Nash: Between L4030 Nash & Site C Proposed Access Entrance
12	L4029 Nash: Between Private Road to Site B & R735
13	Unclassified Road: Between L4030 Rathumney to L4030 Nash
14	L4030 Rathumney: Between Access Track 01 & R735
15	R735: Between L4029 Ballygarvan & R734.

Study Route Section - 'R' Regional Roads
Study Route Section - 'L' Local Roads
Study Route Section - Unclassified Road
ATC Locations

0 4 8km

Coordinate system: WGS 1984 Web Mercator Auxiliary Sphere;
Datum: WGS 1984
Data sources: Map data © OpenStreetMap contributors, Microsoft, Facebook, Google, Esri Community Maps contributors, Map layer by Esri



Source: Mott MacDonald

Table 14.11: Road Network and Route Profiles

Road Section		Speed Limit (kph)	Description	Receptor Sensitivity
No.	Name			
1	R733: Between New Ross & N25 junction.	60/80	Single carriageway with occasional ghost islands and laybys adjacent to the N25 and on approach to R733/R723 roundabout.at New Ross. Road surroundings predominantly rural with access to residential and agricultural properties. R733 north of N25 serves as link to New Ross. Footway provision between O'Leary International Limited to New Ross. Speed limit reduces from 80kph to 60kph on approach to the R733/R723 roundabout.	Negligible
2	R733: Between N25 junction and R734 junction.	80	Single carriageway section of c. ~2km. Road surroundings predominantly rural with access to residential and agricultural properties. Additional hardstanding adjacent to residential properties before merging with R733. No dedicated active travel provision.	Negligible
3	R734: Between R733 junction and L4023 junction.	80	Single carriageway section of c. ~3.5km. Road surroundings predominantly rural with access to residential and agricultural properties. Several sections of road narrowing east of Slaught where it is surrounded by dense treelines.	Negligible
4	L4023: Between N25 Junction & L4030 Nash junction.	50/60	Single carriageway section of c ~ 4.25km. Road surroundings predominately rural with access to residential and agricultural properties. Road flanked by treelines hedgerows, ditches and masonry walls.	Negligible
5	R734: Between L4023 Tellarought junction & R735 junction.	80	Single carriageway section of c. ~3.75km. Road surroundings predominantly rural with access to residential and agricultural properties. Road flanked by treelines and hedgerows.	Negligible
6	L4023 Tellarought: Between R734 junction & L4021 Tellarought junction.	60	Single carriageway section of c ~ 0.75km. Road surroundings predominately rural with access to residential and agricultural properties. Road flanked by earth embankments, treelines and hedgerows. No dedicated active travel provision.	Negligible
7	L4021 Tellarought: Between St Brigid's Terrace junction & L4023 Tellarought junction.	50/60	Single carriageway section of c ~ 0.75km. Road surroundings predominately rural with access to residential and agricultural properties. Road flanked by small embankments, treelines and high hedgerows. Access to Terrerath Community Centre within this section of road, where the speed limit reduces from 60kph to 50kph on approach. No dedicated active travel provision.	Negligible
8	L4023 St Brigid's Terrace: Between L4021 Tellarought junction & L4030 Nash junction.	50/60	Single carriageway section of c ~1.7km. Road surroundings predominately rural with access to residential and agricultural properties. Road flanked by small embankment, treelines and high hedgerows. Speed limit reduces from 60kph to 50kph on approach to Ban Na Cheile.	Negligible
9	L4030 Nash: Between St Brigid's Terrace and L40232 Nash.	50/60	Single track section of c ~2.2km. Road surroundings predominately rural with access to residential and agricultural properties. Road flanked by treelines and high hedgerows. Speed limit reduces from 60kph to 50kph on approach to Ban Na Cheile. No dedicated active travel provision.	Negligible
10	L4030 Nash: Between L40232 Nash & Private Road to Site B	60	Single track section of c ~0.6km. Road surroundings predominately rural with access to residential and agricultural properties. Road flanked by dense treelines and high hedgerows, where the ground clearance may reduce within areas of dense treelines. No dedicated active travel provision.	Negligible

Road Section		Speed Limit (kph)	Description	Receptor Sensitivity
No.	Name			
11	L40232 Nash: Between L4030 Nash & Site C Proposed Access Entrance	60	Single track section of c ~0.6km. Road surroundings predominately rural with access to residential and agricultural properties. Road flanked by high hedgerows or occasional young or mature tree.	Negligible
12	L4029 Nash: Between Private Road to Site B & R735	60	Single track section of c ~ 1.3km. Road surroundings predominately rural with access to residential and agricultural properties. Road flanked by dense treelines and high hedgerows. No dedicated active travel provision.	Negligible
13	Unclassified Road: Between L4030 Rathumney to L4030 Nash (referred to as L-81411-1)	60	Narrow access track section of c ~1.6km. Road surroundings predominately rural with access to residential and agricultural properties. Various sections of track undulation, where it is flanked by dense treeline, hedgerows and overgrown vegetation.	Negligible
14	L4030 Rathumney: Between Unclassified Road & R735 (referred to as L-8141-1)	50	Single carriageway section of c. ~0.25km. Road surroundings predominately rural with access to residential, agricultural properties and educational establishment. Road flanked by masonry walls, treelines and hedgerows. Access to Gusserane National School within this section of road, where the speed limit reduces from 80kph to 50kph on approach. Footway provision provided on approach to Gusserane National School.	Low
15	R735: Between L4029 Ballygarvan & R734.	50/80	Single carriageway section of c. ~3.5km. Road surroundings predominantly rural with access to residential and agricultural properties on approach to Gusserane with predominant hedgerows either side of edge of road. Speed limit reduces from 80kph to 50kph within Gusserane. No dedicated active travel provision.	Negligible

Source: Mott MacDonald

14.4.1.1 Existing Traffic Flows

Table 14.12 details the existing traffic flows and capacities on the routes within the study area considered in the assessment.

Existing traffic flows and HGV composition data has been derived from traffic surveys undertaken on roads within or within close vicinity to the study area.

Theoretical capacities for a variety of road types have been determined through a review of TII Publications, *'Rural Road Link Design' (2017).* These capacities are quoted as Average Annual Daily Traffic (AADT).

'*Rural Road Link Design' (2017)* does not provide capacities for rural roads with a typical carriageway width of less than six metres. Based on professional judgement and experience in assessment of roads, traffic and transportation effects it has been assumed that single track roads would have a capacity of c.1250 vehicles AADT (two-way) and narrow access tracks would have a capacity of c.625 vehicles AADT (two way).

Table 14.12: Route Capacities and Existing Traffic Count Data

Road Section	Road Capacity (AADT)	Existing AADT (two way) All Vehicles	Existing HGV proportion
R733: Between New Ross & N25 junction.	8600	7420*	10%
R733: Between N25 junction and R734 junction.	8600	5538	5%
R734: Between R733 junction and L4023 junction.	8600	3890*	6%
L4023: Between N25 Junction & L4030 Nash junction.	5000	1180*	5%
R734: Between L4023 Tellarought junction & R735 junction.	8600	2233	7%
L4023 Tellarought: Between R734 junction & L4021 Tellarought junction.	5000	530*	9%
L4021 Tellarought: Between St Brigid's Terrace junction & L4023 Tellarought junction.	5000	530*	9%
L4023 St Brigid's Terrace: Between L4021 Tellarought junction & L4030 Nash junction.	5000	530*	9%
L4030 Nash: Between St Brigid's Terrace and L40232 Nash.	1250	310*	6%
L4030 Nash: Between L40232 Nash & Private Road to Site B	1250	313	6%
L40232 Nash: Between L4030 Nash & Site C Proposed Access Entrance	1250	80*	6%
L4029 Nash: Between Private Road to Site B & R735	1250	160	6%
Unclassified Road: Between L4030 Rathumney to L4030 Nash	625	10*	10%
L4030 Rathumney: Between Unclassified Road & R735	5000	160*	6%
R735: Between L4029 Ballygarvan & R734.	8600	530*	9%

Source: Mott MacDonald, Idaso, TII, * = derived/estimated from nearby Idaso or TII counters

14.4.2 Walking and Cycling

Walking infrastructure is limited in the study area. There is no dedicated cycle infrastructure in the study area.

Footway in the study area is present at the following locations:

- R733 between New Ross and the N25 on both sides of the carriageway adjacent to industrial development.
- L4030 within the settlement of Gusserane on the east side of the carriageway.
- L4023 within the settlement of Ban Na Cheile on the north side of the carriageway.
- L4023 within the village of Ballinaboola close to the junction with the N25.

14.4.3 Public Transport

14.4.3.1 Bus

Six bus services utilise sections of the road network in the study area. Table 14.13 summarises the local services and their associated frequencies.

Table 14.13: Local Bus Routes

Route No.	Operator	Route	Weekday Frequency	Weekend Frequency
370	Bus Eireann	Waterford – Rosslare via New Ross & Wellington Bridge	Four services per day in both directions	Four services per day in both directions
371	Bus Eireann	New Ross to Wexford via Adamstown	One loop service on a Friday afternoon.	None
373	Bus Eireann	New Ros to Wexford via Fethard	One service on a Tuesday morning and afternoon.	None
388	TFI Local Link	Duncormick to Wexford	Ten-eleven services per day in both directions	Same as weekday
392	TFI Local Link	Wellington Bridge to New Ross	Six services per day in either direction. Additional evening service on Friday.	Six services per day in either direction. Additional evening service on Saturday.
399	TFI Local Link	Hook Head – New Ross	Four-Five services per day in either direction. Additional two evening services on Friday	Four-Five services per day in either direction. Additional two evening services on Saturday

Source: bustimes.org, transportforireland.ie, busireann.ie, locallinkwexford.ie

14.4.4 Rail

The closest rail station to the Proposed Project site is Waterford (Plunkett) Station, located 28km away. The station provides approximately hourly services on the Dublin (Heuston) line and additional services on the Clonmel – Limerick Junction line.

14.4.5 Collision Data

No quantitative assessment of road safety was undertaken as recorded as Personal Injury Collision (PIC) data was unavailable at the time of assessment.[10]

[10] Road safety data on Road Safety Authority (RSA) website (https://www.rsa.ie/road-safety/statistics/road-traffic-collision-data) accessed on 28 August 2025.

14.5 Likely Significant Effects

14.5.1 Do Nothing

In the event that the Proposed Project does not proceed, traffic and transport in the area will not be impacted.

14.5.2 Construction Phase

Subject to planning approval, construction of the Proposed Project is scheduled to begin in 2027 and is expected to take approximately 21 to 23 months to complete. The intensity of traffic will vary over the course of the construction phase. An indicative construction programme is provided in Section 5.7.5, Chapter 5 of this EIAR.

14.5.3 Working Hours

Construction phase works will take place between the hours of 07:00 to 19:00 (Monday to Friday) and 08:00 to 14:00 (Saturday) subject to agreement with Wexford County Council.

However, there may be instances where extended hours / days are required and should working outside these defined hours / days be necessary, prior agreement with relevant statutory authorities will be sought. The requirement for notification and liaison with any other relevant parties will also be agreed during these discussions with the relevant statutory authorities.

14.5.4 Construction Compounds

Temporary construction compounds are proposed in each Array Area (A, B and C). The main temporary construction compound and laydown area will be located in Array Area A and will include the construction personnel parking area. This temporary construction compound will be utilised during all stages of the construction programme for the Proposed Project.

Further detail regarding construction compounds is provided in Chapter 5 of this EIAR.

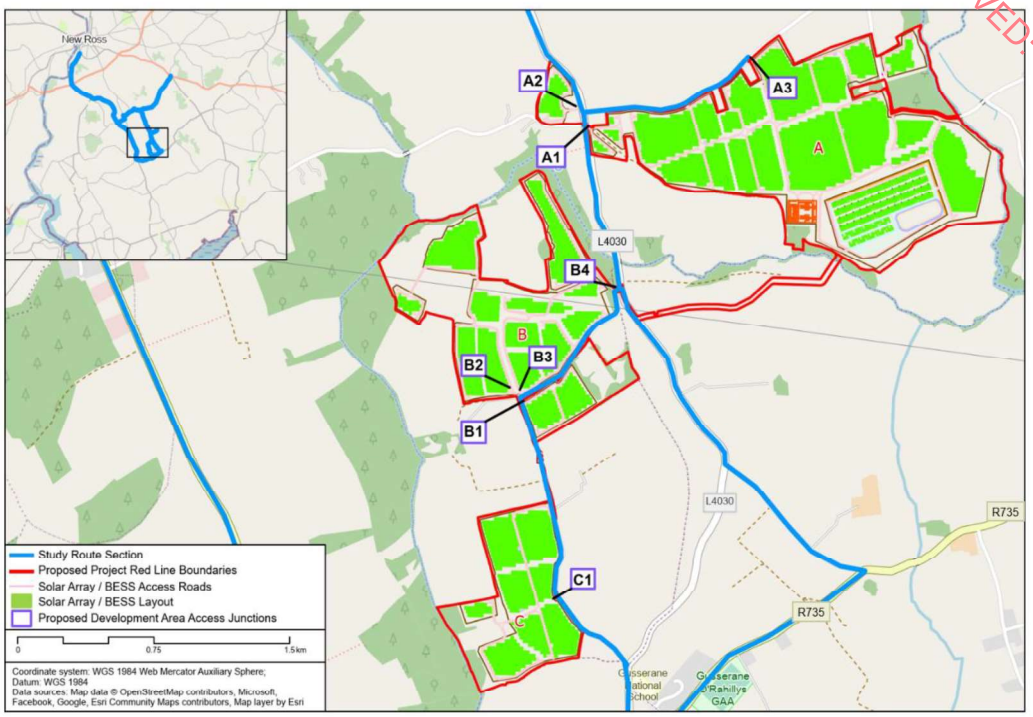
14.5.5 Construction Access

Construction traffic will access the Proposed Project site via the local road network. The main construction access for the Proposed Project will be located in Array Area A and will be access via the L40232.

Array Area B will be assessed from the L4030 and the unclassified road (refer to as L-81411-1) between L4030 Rathumney to L4030 Nash and Array Area C will be assessed solely from the unclassified road between L4030 Rathumney to L4030 Nash (referred to as L-81411-1).

Construction accesses are shown in Figure 14.2.

Figure 14.2: Construction Access



Source: Mott MacDonald, ESRI (see figure for data sources)

Delivery vehicles accessing Array Area C would only do so to/from the north due to the radius of Array Area C access.

Site entrances will have a minimum width of 4.50m with 12.50m turning radius provided to account for HGVs entering the site.

14.5.6 Construction Personnel

As detailed in Chapter 5, the number of construction personnel required during the construction phase is expected to peak at approximately 150 persons.

It has been assumed that construction personnel will travel to site using private passenger vehicles (in some cases accommodating more than one occupant).

A vehicle occupancy rate of 1.25 is assumed and in the robust-case scenario this would equate to a peak daily number of 120 vehicles (240 two-way movements per day) for the construction phase.

Adequate car parking for contractors' vehicles will be provided within temporary contractor's compound in Array Area A.

14.5.7 Cabling and Joint Bays

14.5.7.1 Grid Connection

The proposed grid connection will be established via two 220kV underground cables (UGCs), which link the GIS building to the existing Great Island–Lodgewood 220kV overhead transmission circuit.

The cable route within the Project site will route along access tracks. On the local road network, the cable route will follow the L40232 and the L4030. The final section of each 220kV cable will be above ground, as each cable will connect to a proposed Line Cable Interface Mast, which allows each circuit to connect to the existing Great Island-Lodgewood 220kV overhead transmission circuit providing a "looped-in connection".

Each 220kV circuit will include four joint bays, and each joint bay will be accompanied by a communication chamber and a link box. The joint bays will be c.8m in length.

Exact joint bay locations are to be confirmed however there are expected to be two joint bays on the L0424, four joint bays on the L4030 and two joint bays on the access tracks within the Project site boundary.

14.5.7.2 Array Cabling

Where crossing roads or other services medium voltage underground array cables from the transformer centres to the proposed substation will be installed in ducts covered in concrete.

There are two parcels of land which comprise part of the overall Array Area A, but which are divided from the main Array Area A by public roads, namely the north-westerly parcel, referred to as parcel 1 in planning drawing titled Overall Site Location Map (drawing number 229101268-MMD-00-XX-DR-E-0100) is separated by the L4030. Parcel 9 to the east is separated from the main Array Area A by the L80591.

Cabling for Array Area B and C will be required to be constructed within the public road, Unclassified Road and L4030, on its route to the proposed 220kV substation compound.

14.5.7.3 Cabling and Joint Bays Summary

Cabling and joint bay works on the L4030 and L40232 as well as cabling between the array areas on the L4030, L80591 and the L81411-1 will require road closures. These are detailed in Section 14.5.10.

Further information regarding the 220kV cable connection and associated joint bays is included in Chapter 5, Section 5.6.3. Further information for array cabling is included in Chapter 5, Section 5.4.3.

14.5.8 Construction Traffic

14.5.8.1 Heavy Good Vehicles (HGV) Volumes

HGV movements have been estimated based on the required on-site works including civils works to prepare the site for construction activities, laying of cabling routes, delivering of components, construction materials and plant. The daily HGV movements will vary across the construction programme, for the purposes of undertaking the assessment of likely significant effects, the worse-case level of daily construction movements has been assumed. This equates to 26 HGVs accessing the site over a 12-hour period (07:00 to 19:00), which would generate an additional 52 HGV movements on the road network accounting for two-way trips. This peak level of HGV movements is only expected to occur for approximately 1.5 months of the total construction period. The forecast average daily HGVs across the construction phase is 14 HGVs (28 two-way HGV movements).

14.5.8.2 Private Vehicles

As described for HGV movements above, the private car and light goods vehicle (LGV) movements associated with transporting construction workers to and from the site during the construction phase has been based on the required construction activities and sequencing of

the construction programme. These private vehicle trips will vary across the construction phase, however, the period of most intensive site activity has been used in the assessment of likely significant effects, to provide a worst-case forecast. This is forecast to equate to 120 car or LGVs accessing the site over a 12-hour period (07:00 to 19:00), which would generate an additional 240 movements on the road network accounting for two-way trips. The forecast average daily car/LGVs across the construction phase is forecast to be less than 80 vehicles (160 two-way car/LGV movements).

14.5.8.3 All Vehicles

A summary of the construction traffic generated at each construction phase and the worst-case for assessment is shown in Table 14.14.

Table 14.14: Construction Traffic Summary

Construction Phase	**Vehicle Movements (2-way)**		
	Cars/LGVs	HGVs	All Traffic
Civils Works – Access Roads	160	**52**	166
Civils Works – Drainage, cabling and foundations	160	44	186
Installation Works	**240**	32	370
Worst-case for assessment	**240**	**52**	**292**

Source: Mott MacDonald

At time of writing, the origin of construction vehicle trips is not confirmed. It is expected that HGVs will arrive via strategic road network from the following principal directions:

- New Ross
- Wexford
- N25 (west)
- N30 (north-east)

Car/LGV movements are expected to have more dispersed origins and the following origin directions are expected:

- New Ross
- Wexford
- N25 (west)
- N30 (north-east)
- Local settlements to south of the Proposed Project site.

The following vehicle trip distributions have been assumed:

HGV Traffic

- 30% to/from New Ross direction
- 30% to/from Wexford direction
- 30% to/from N25 (west) direction
- 10% to/from N30 (north-east) direction

Cars/LGV Traffic

- 30% to/from New Ross direction.
- 30% to/from Wexford direction.

- 30% to/from N25 (west) direction.
- 10% to/from N30 (north-east) direction.
- 5% to/from local settlements to south of the Proposed Project site.

Due to the reduced road capacity on Unclassified Road (Between L4030 Rathumney to L4030 Nash) all car/LGVs will be routed to site Array Area A and construction personnel will be transported to site Array Areas B and C by mini-bus at the start and end of shift periods to minimise the number of additional vehicle trips of Unclassified Road.

14.5.8.4 Abnormal Indivisible Loads

It is anticipated that there will be one abnormal load delivery (for the proposed AIS transformer) during the construction phase of Proposed Project works.

Vehicles transporting an abnormal load must adhere to the maximum weight limits set down by Road Traffic (Construction and Use of Vehicles) Regulations 2003, S.I. 5 of 2003 and the maximum height limit set down in Road Traffic (Construction and Use of Vehicles) (Amendment) Regulations 2008, S.I.366 of 2008. If any of these thresholds are exceeded, then the load is considered abnormal.

Haulage will be scheduled, as far is reasonably practicable; to occur outside of peak traffic times and the Contractor may be required to arrange a special escort with An Garda Siochana, depending on the size of the loads. Appropriate permits for designated haul routes will be sought and agreed with the Local Authorities during the detailed design phase.

14.5.9 Road Closures

Road sections which are anticipated to require temporary closure due to construction works are described in this section. Similar mitigation would be adopted if any other road sections not described in this section, are identified following further assessment to require temporary road/lane closures.

It has been assumed that around 30-50m of cabling works on road would be completed in a day with an average of 40m per day and that civil works for installing a joint bay on a carriageway would be around eight days per carriageway.

Indicative diversion routes have been assessed assuming that HGVs could safely navigate the narrow local roads. The routes have used the widest road available.

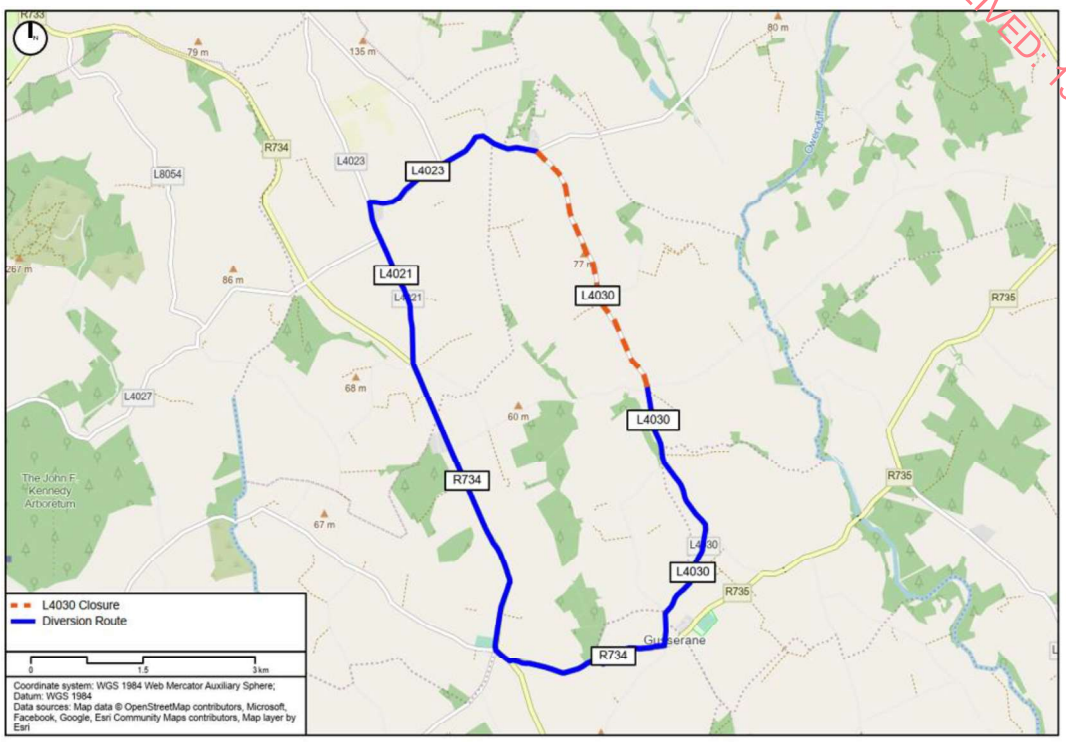
14.5.9.1 L4030 Road Closures

The L4030 between the L40232 and the L4023 will be locally closed (with a rolling road closure) to through traffic for a period unlikely to exceed seven weeks during the civil works (cabling works for the grid connection). It would remain open for local or emergency access. The L4030 may be subject to a shorter duration closure for array cabling works (less than one week) and for electrical works. Some level of driver delay and inconvenience will arise as a result of the road closure of the L4030.

Figure 14.3 shows planned diversion routes due to the temporary closure of the L4030. Whilst it is assumed some vehicles may use this diversion route it is likely that many drivers will utilise other routes.

The additional length of the diversion route would be up to 7.1km and would add approximately eight minutes travel time onto journeys previously utilising the temporarily closed section of the L4030.

Figure 14.3: L4030 Diversion Route (Both Directions)



Source: Mott MacDonald, ESRI (see figure for data sources)

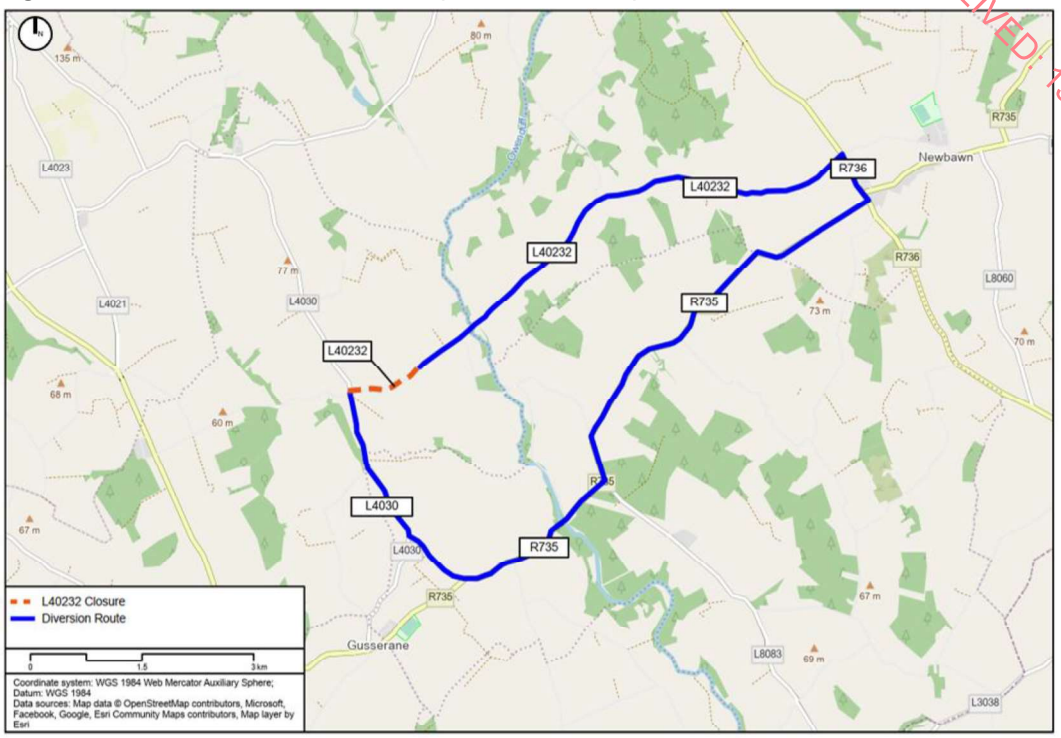
14.5.9.2 L40232 Road Closure

The L40232 between the L4030 and Array Area A access will be locally closed (with a rolling road closure) to through traffic for a period unlikely to exceed three weeks during the civil works (cabling works for the grid connection). It would remain open for local or emergency access. The L40232 (between the L4030 and Array Area A access) may be subject to a shorter duration closure during the electrical works. Some level of driver delay and inconvenience will arise as a result of the road closure of the L40232 (between the L4030 and Array Area A access).

Figure 14.4 shows planned diversion routes due to the temporary closure of the L40232 (between the L4030 and Array Area A access). Whilst it is assumed some vehicles may use this diversion route it is likely that many drivers will utilise other routes.

The additional length of the diversion route would be up to 11km and would add approximately thirteen minutes travel time onto journeys previously utilising the L40232 (between the L4030 and Array Area A access).

Figure 14.4: L40232 Diversion Route (Both Directions)



Source: Mott MacDonald, ESRI (see figure for data sources)

14.5.9.3 L80591 Road Closure

The L80591 is approximately 3m wide and experiences very low levels of traffic (likely to be fewer than 50 movements per day). This road will be subject to cabling works linking areas in Array Area A across the L80591 carriageway width. These works will likely be undertaken in less than one day.

In order that the L80591 can continue to accommodate local vehicular access, local traffic management arrangements will be implemented as necessary (e.g., temporary steel plates may be placed over open excavations).

14.5.9.4 Unclassified Road Closure

The Unclassified Road (L-81411-1) is approximately 3m wide and experiences very low levels of traffic (likely to be fewer than 20 movements per day). This road will be subject to cabling works linking Array Areas B and C. These works will likely be undertaken in less than five days.

In order that the L-81411-1 can continue to accommodate local vehicular access, local traffic management arrangements will be implemented as necessary (e.g., temporary steel plates may be placed over open excavations).

14.5.10 Future Baseline Traffic Flow

The *Project Appraisal Guidelines for National Roads Unit 5.3, TII, October 2021*[11] has been referenced to predict road network traffic flows in the absence of the Proposed Project.

In line with the guidance, a 'central' traffic growth factor for County Wexford has been applied to the 2025 traffic flows for each road section. Table 14.15 summarises future year traffic growth scenarios without the Proposed Project.

Table 14.15: Future Year Scenario Growth Rates

Future Year Scenario	Growth Rate from 2025	
	LGV/Cars	HGV
2027	1.0136	1.0422
2028	1.0204	1.0633

Source: TII | Project Appraisal Guidelines for National Roads Unit 5.3 – Travel Demand Projections Table 6.1: Link-Based Growth Rates: Metropolitan Area Annual Growth Rates

Table 14.16 lists forecast future baseline traffic flows factored upwards in accordance with the growth rates indicated in Table 14.15.

[11] TII | Project Appraisal Guidelines for National Roads Unit 5.3 – Travel Demand Projections (PE-PAG-02017) (Published October 2021) available at: https://cdn.tii.ie/publications/PE-PAG-02017-03.pdf

Table 14.16: Future Baseline Traffic Flow Data

Road Section	2027 Average Daily Traffic Flow		2028 Average Daily Traffic Flow	
	All Vehicles (Two-Way Flow)	HGV Only (Two-Way Flow)	All Vehicles (Two-Way Flow)	HGV Only (Two-Way Flow)
R733: Between New Ross & N25 junction.	7542	771	7603	787
R733: Between N25 junction and R734 junction.	5622	302	5663	308
R734: Between R733 junction and L4023 junction.	3949	229	3979	234
L4023: Between N25 Junction & L4030 Nash junction.	1198	63	1207	64
R734: Between L4023 Tellarought junction & R735 junction.	2267	166	2285	169
L4023 Tellarought: Between R734 junction & L4021 Tellarought junction.	539	52	543	53
L4021 Tellarought: Between St Brigid's Terrace junction & L4023 Tellarought junction.	539	52	543	53
L4023 St Brigid's Terrace: Between L4021 Tellarought junction & L4030 Nash junction.	539	52	543	53
L4030 Nash: Between St Brigid's Terrace and L40232 Nash.	315	21	317	21
L4030 Nash: Between L40232 Nash & Private Road to Site B	318	20	320	20
L40232 Nash: Between L4030 Nash & Site A Proposed Access Entrance	81	5	82	5
L4029 Nash: Between Private Road to Site B & R735	162	10	164	11
Unclassified Road: Between L4030 Rathumney to L4030 Nash	10	1	10	1
L4030 Rathumney: Between Unclassified Road & R735	162	10	164	11
R735: Between L4029 Ballygarvan & R734.	539	52	543	53
R733: Between New Ross & N25 junction.	7542	771	7603	787

Source: Mott MacDonald. TII,

14.5.11 Assessment of Effects of Construction Phase

The peak movement of construction vehicles is scheduled in year 2027 which is associated with the access road construction during the solar PV civil works stage. This construction stage has therefore been assessed for construction effects on the public road network.

Possible effects associated with the construction works are:

- Driver delay;
- Road safety; and
- Community effects (pedestrian delay, severance, non-motorised users (NMU) amenity, fear and intimidation).

These effects have potential to be caused due to an increased volume of traffic on the construction vehicle routes, however as these vehicle movements will occur during construction operations only, they are categorised to be short term effects, given the construction duration is between one and seven years (estimated to be up to 23 months).

Table 14.17 outlines the change in traffic volume on the public road network within the study area in 2027 and assesses the aligned effect significance in terms of the IEMA thresholds. It should be noted that the effect significance set out below is based purely on the degree of change therefore requires professional judgement (led by good practice guidance) in order to provide meaningful conclusions.

Where baseline traffic flows are low, it is possible to derive unrealistic determinations of significance when considered against purely numerical assessment criteria and it is possible to show relatively large traffic increases yet for the road to operate well below capacity. For example, using the numerical criteria defined in Table 14.3, anything above a 60% increase in traffic volume would represent a major effect, but in reality, the effect is likely to be less significant, given the residual capacity of the road.

Table 14.17: IEMA Threshold Assessment Summary

Road Section	Capacity (AADT)	Baseline 2027 AADT – All Vehicles (Two-Way Flow)	Baseline 2027 AADT – HGV (Two-Way Flow)	Peak Daily Additional Movements – All Vehicles	% Increase – All Vehicles	Peak Daily Additional Movements – HGVs	% Increase – HGVs	Effect Significance of Increase – All Vehicles	Effect Significance of Increase – HGVs
R733: Between New Ross & N25 junction.	8600	7542	771	76	1.0%	16	2.1%	None (Not Significant)	None (Not Significant)
R733: Between N25 junction and R734 junction.	8600	5622	302	163	2.9%	31	10.3%	None (Not Significant)	Minor (Not Significant)
R734: Between R733 junction and L4023 junction.	8600	3949	229	163	4.1%	31	13.5%	None (Not Significant)	Minor (Not Significant)
L4023: Between N25 Junction & L4030 Nash junction.	5000	1198	63	122	10.2%	26	41.3%	Minor (Not Significant)	Moderate (Significant)
R734: Between L4023 Tellarought junction & R735 junction.	8600	2267	166	0	0.0%	0	0.0%	None (Not Significant)	None (Not Significant)
L4023 Tellarought: Between R734 junction & L4021 Tellarought junction.	5000	539	52	163	30.2%	31	59.6%	Moderate (Significant)	Moderate (Significant)
L4021 Tellarought: Between St Brigid's Terrace junction & L4023 Tellarought junction.	5000	539	52	163	30.2%	31	59.6%	Moderate (Significant)	Moderate (Significant)
L4023 St Brigid's Terrace: Between L4021 Tellarought junction & L4030 Nash junction.	5000	539	52	163	30.2%	31	59.6%	Moderate (Significant)	Moderate (Significant)
L4030 Nash: Between St Brigid's Terrace and L40232 Nash.	1250	315	21	292	92.7%	52	247.6%	Major (Significant)	Major (Significant)
L4030 Nash: Between L40232 Nash & Private Road to Site B	1250	318	20	292	91.8%	52	260.0%	Major (Significant)	Major (Significant)
L40232 Nash: Between L4030 Nash & Site C Proposed Access Entrance	1250	81	5	316	390.1%	52	1040.0%	Major (Significant)	Major (Significant)
L4029 Nash: Between Private Road to Site B & R735	1250	162	10	12	7.4%	0	0.0%	Minor (Not Significant)	None (Not Significant)
Unclassified Road: Between L4030 Rathumney to L4030 Nash	625	10	1	76	760.0%	52	5200.0%	Major (Significant)	Major (Significant)
L4030 Rathumney: Between Unclassified Road & R735	5000	162	10	12	7.4%	0	0.0%	Minor (Not Significant)	None (Not Significant)
R735: Between L4029 Ballygarvan & R734.	8600	539	52	12	2.2%	0	0.0%	None (Not Significant)	None (Not Significant)

Source: Mott MacDonald. IEMA, TII,

14.5.11.1 Driver Delay

The road sections in the study area where the significance threshold has been met or to be exceeded are:

- L4023: Between N25 Junction & L4030 Nash junction.
- L4023 Tellarought: Between R734 junction & L4021 Tellarought junction.
- L4021 Tellarought: Between St Brigid's Terrace junction & L4023 Tellarought junction.
- L4023 St Brigid's Terrace: Between L4021 Tellarought junction & L4030 Nash junction.
- L4030 Nash: Between St Brigid's Terrace and L40232 Nash.
- L4030 Nash: Between L40232 Nash & Private Road to Site B
- L40232 Nash: Between L4030 Nash & Site C Proposed Access Entrance
- Unclassified Road: Between L4030 Rathumney to L4030 Nash

These road sections all feature low existing traffic volumes and as such show a relatively large proportional increase which would represent a significant effect. Section 3.20 of the *IEMA Guidelines (2023)* states that driver delay is only likely to be significant when traffic on the network surrounding the development is at, or close to capacity. All road sections and adjoining roads operate below capacity. Therefore, the impact of the Proposed Project on driver delay at the above road sections is assessed to be at worst minor and therefore **not significant** in terms of the *EPA Guidelines (2022).*

Driver journey times will be affected due to the temporary rolling road closures of L4030, L40232 and Unclassified Road and diversion routes will be required. Driver journey times would also be affected by a temporary road closure on L80591.

Driver delay resultant from road closures is summarised in Table 14.18.

Table 14.18: Driver Delay Resultant from Road Closures

Road Closure	Approximate Driver Delay
Grid Connection	
L4030 between the L40232 and the L4023	8 minutes
L40232 between the L4030 and Array Area A access	13 minutes
Array Connection	
L80591	8 minutes
L4030 - Array A Link	12 minutes
L4030 - Array A to Array B Link	4 minutes

Source: Mott MacDonald

For road closures it is assessed that at worst, any of the lane closures would typically add a maximum of thirteen minutes onto journeys utilising each affected road section.

Using the methodology outlined in Section 14.3 and Table 14.4 unmitigated, the driver delay effect significance would be classified at worst **moderate** and therefore **significant** in terms of the *EPA Guidelines (2022).*

14.5.11.2 Road Safety

Road collision data for the study area was not available at the time of assessment. An increase in traffic volume is generally associated with a higher risk of road traffic collisions due to more frequent interactions between vehicles, reduced spacing, and increased congestion, all of which can contribute to unsafe driving conditions. However, in this instance, the projected increase in traffic volumes is minimal. As a result, the corresponding rise in collision risk is considered

negligible and unlikely to have a significant impact on overall road safety. This assessment reflects both the scale of the traffic change and the capacity of the existing road network to accommodate it without compromising safety.

Accordingly, based on professional judgement and experience in the assessment of Road and Traffic impacts relation to major development projects, the impact to road safety is considered to be at worst **minor** and therefore **not significant** within the context of the *EPA Guidelines (2022).*

14.5.11.3 Community Effects (Severance, Pedestrian Dela, NMU Amenity, Fear and Intimidation)

Severance

The *IEMA Guidelines (2023)* define severance as 'the perceived division that can occur within a community when it becomes separated by major transport infrastructure'. Severance may result from a road carrying large traffic flows or a physical barrier created by the road itself, and the *IEMA Guidelines (2023)* suggest that consideration is given to the severity of existing severance and how this might be exacerbated by proposed construction traffic generated by a development.

Although the study area does feature routes which could be considered as 'major traffic arteries', as shown in Table 14.17, the roads within the study area will continue to operate notably below theoretical capacity, even with the addition of traffic generated during construction of the Proposed Project. Severance should not occur when there is such a notable level of residual road capacity.

Pedestrian Delay

For similar reasoning, pedestrian delay is not considered to be an existing problem on any of the road sections within Proposed Project study area, nor one that shall be created by the addition of proposed construction traffic to these routes.

NMU Amenity

Non-motorised user (NMU) amenity is broadly defined by the *IEMA Guidelines (2023)* as the 'relative pleasantness of a journey'. The *IEMA Guidelines* (2023) suggest that 'a tentative threshold for judging the significance of changes in pedestrian amenity would be where traffic flows (or its HGV component) are halved or doubled.

The construction of the Proposed Project is predicted to generate increased HGV flows on the roads within the study area, with up to 52 HGV movements per day occurring during the peak construction period (an increase of up to c. 5200% for HGVs on the Unclassified Road: Between L4030 Rathumney to L4030 Nash in year 2027).

On this basis unmitigated, the significance of the effect on NMU amenity, is considered to be at worst **major** and accordingly considered to be **significant** in terms of the *EPA Guidelines (2022).*

Fear and Intimidation

As referenced in Section 14.3, the *IEMA Guidelines (2023)* sets out a methodology for assessing magnitude of change for fear and intimidation (caused by all moving objects including traffic).

Fear and intimidation have been assessed for the peak level of construction traffic in year 2027. Table 14.19 shows the 2027 future baseline assessment and Table 14.20 shows the "with

construction traffic" assessment with a reference to the fear and intimidation magnitude of impact.

Table 14.19: Fear and Intimidation Assessment – 2027 Future Baseline

Road Section	Average Traffic Flow (18 hours) – All Vehicles (Two-way Flow) [DEGREE OF HAZARD SCORE]	HGVs (24 hours) – (Two-way Flow) [DEGREE OF HAZARD SCORE]	Average Vehicle Speed (kph)* [DEGREE OF HAZARD SCORE]	Total Degree of Hazard Score	Level of Fear and Intimidation
R733: Between New Ross & N25 junction.	7390 [30]	761 [0]	80 [30]	60	Great
R733: Between N25 junction and R734 junction.	5504 [30]	302 [0]	80 [30]	60	Great
R734: Between R733 junction and L4023 junction.	3858 [30]	229 [0]	80 [30]	60	Great
L4023: Between N25 Junction & L4030 Nash junction.	1167 [10]	63 [0]	60 [20]	30	Moderate
R734: Between L4023 Tellarought junction & R735 junction.	2222 [30]	166 [0]	80 [30]	60	Great
L4023 Tellarought: Between R734 junction & L4021 Tellarought junction.	529 [0]	52 [0]	60 [20]	20	Small
L4021 Tellarought: Between St Brigid's Terrace junction & L4023 Tellarought junction.	529 [0]	52 [0]	60 [20]	20	Small
L4023 St Brigid's Terrace: Between L4021 Tellarought junction & L4030 Nash junction.	529 [0]	52 [0]	60 [20]	20	Small
L4030 Nash: Between St Brigid's Terrace and L40232 Nash.	315 [0]	21 [0]	60 [20]	20	Small

Road Section	Average Traffic Flow (18 hours) – All Vehicles (Two-way Flow) [DEGREE OF HAZARD SCORE]	HGVs (24 hours) – (Two-way Flow) [DEGREE OF HAZARD SCORE]	Average Vehicle Speed (kph)* [DEGREE OF HAZARD SCORE]	Total Degree of Hazard Score	Level of Fear and Intimidation
L4030 Nash: Between L40232 Nash & Private Road to Site B	311 [0]	20 [0]	60 [20]	20	Small
L40232 Nash: Between L4030 Nash & Site C Proposed Access Entrance	81 [0]	5 [0]	60 [20]	20	Small
L4029 Nash: Between Private Road to Site B & R735	162 [0]	10 [0]	60 [20]	20	Small
Unclassified Road: Between L4030 Rathumney to L4030 Nash	10 [0]	1 [0]	60 [20]	20	Small
L4030 Rathumney: Between Unclassified Road & R735	162 [0]	10 [0]	50 [20]	20	Small
R735: Between L4029 Ballygarvan & R734.	529 [0]	52 [0]	80 [30]	30	Moderate

Source: IEMA, Mott MacDonald, TII. * Where no average speed data is available, the signed speed limit has been used. Where the speed limit varies along a road section the worst-case speed limit has been used.

Table 14.20: Fear and Intimidation Assessment – 2027 "With Proposed Project Construction Traffic"

Road Section	Average Traffic Flow (18 hours) – All Vehicles (Two-way Flow) [DEGREE OF HAZARD SCORE]	HGVs (24 hours) – (Two-way Flow) [DEGREE OF HAZARD SCORE]	Average Vehicle Speed (kph)* [DEGREE OF HAZARD SCORE]	Total Degree of Hazard Score	Level of Fear and Intimidation	Fear and Intimidation Magnitude of Impact
R733: Between New Ross & N25 junction.	7466 [30]	777 [0]	80 [30]	60	Great	Negligible
R733: Between N25 junction and R734 junction.	5667 [30]	333 [0]	80 [30]	60	Great	Negligible
R734: Between R733 junction and L4023 junction.	4021 [30]	260 [0]	80 [30]	60	Great	Negligible
L4023: Between N25 Junction & L4030 Nash junction.	1289 [20]	89 [0]	60 [20]	40	Moderate	Negligible
R734: Between L4023 Tellarought junction & R735 junction.	2222 [30]	166 [0]	80 [30]	60	Great	Negligible
L4023 Tellarought: Between R734 junction & L4021 Tellarought junction.	692 [10]	83 [0]	60 [20]	30	Moderate	Low (not significant)
L4021 Tellarought: Between St Brigid's Terrace junction & L4023 Tellarought junction.	692 [10]	83 [0]	60 [20]	30	Moderate	Low (not significant)
L4023 St Brigid's Terrace: Between L4021 Tellarought	692 [10]	83 [0]	60 [20]	30	Moderate	Low (not significant)

Road Section	Average Traffic Flow (18 hours) – All Vehicles (Two-way Flow) [DEGREE OF HAZARD SCORE]	HGVs (24 hours) – (Two-way Flow) [DEGREE OF HAZARD SCORE]	Average Vehicle Speed (kph)* [DEGREE OF HAZARD SCORE]	Total Degree of Hazard Score	Level of Fear and Intimidation	Fear and Intimidation Magnitude of Impact
junction & L4030 Nash junction.						
L4030 Nash: Between St Brigid's Terrace and L40232 Nash.	607 [10]	73 [0]	60 [20]	30	Moderate	Low (not significant)
L4030 Nash: Between L40232 Nash & Private Road to Site B	603 [10]	72 [0]	60 [20]	30	Moderate	Low (not significant)
L40232 Nash: Between L4030 Nash & Site C Proposed Access Entrance	397 [0]	57 [0]	60 [20]	20	Small	Negligible
L4029 Nash: Between Private Road to Site B & R735	174 [0]	10 [0]	60 [20]	20	Small	Negligible
Unclassified Road: Between L4030 Rathumney to L4030 Nash	86 [0]	53 [0]	60 [20]	20	Small	Negligible
L4030 Rathumney: Between Unclassified Road & R735	174 [0]	10 [0]	50 [20]	20	Small	Negligible
R735: Between L4029 Ballygarvan & R734.	541 [0]	52 [0]	80 [30]	30	Moderate	Negligible

Source: IEMA, Mott MacDonald, TII. * Where no average speed data is available, the signed speed limit has been used. Where the speed limit varies along a road section the worst-case speed limit has been used.

As shown in Table 14.19 and Table 14.20, the magnitude of impact is negligible (no change) with reference to *IEMA Guidelines (2023)* on all road sections except the L4023 (between N25 Junction & L4030 Nash junction). On the L4023 (between N25 Junction & L4030 Nash junction) the magnitude of the impact is assessed to be low. As set out in Table 14.20 the sensitivity of the receptor is assessed to be 'negligible'. Based on the significance assessment matrix presented in Table 14.7, the short-term effect on fear and intimidation of the Proposed Project is considered to be **negligible** and accordingly **not significant** in terms of the *EPA Guidelines (2022).*

Community Effects Summary

Overall, based on professional judgement, unmitigated the construction traffic generated by proposed scheme study area could at worst have a **major** effect upon community receptors and is therefore **significant** in the context of the *EPA Guidelines (2022).*

14.5.11.4 Summary of Effects

A summary of the assessment the construction effects are shown in Table 14.21.

Table 14.21: Summary of Effects

Effect	Significance
Driver Delay	**Moderate (Significant)**
Road Safety	Minor (Not Significant)
Community Effects	**Major (Significant)**

Source: Mott MacDonald, IEMA Guidelines, EPA Guidelines

14.5.12 Operation and Maintenance Phase

Vehicle movements during the operational phase of the Proposed Project will primarily involve inspection, monitoring, and routine maintenance. These visits are expected to occur approximately once a week, typically using LGVs only. Given the low frequency of these vehicle movements, it is unlikely that the operation of the Proposed Project will significantly impact the road network.

The Project is not intended to attract visitors, so no additional trips are anticipated beyond regular maintenance. Consequently, the effect of operational and maintenance traffic is expected to be **negligible** and has been excluded from further assessment.

14.5.13 Decommissioning Phase

Subject to the granting of statutory approval, the Shelburne Energy Farm and grid connections will form part of the national electrical grid infrastructure. The design life of the PV Solar Farm and BESS is 30 years and 20 years respectively, where the planning permission for the operational life span of the Proposed Project overall is 40 years No detailed information is available to complete an assessment for the decommissioning. However, the impacts stated for the construction phase should be referred to for the decommissioning phase. Therefore, the impact of the decommissioning phase on Roads, Traffic and Transportation would be aligned with that of the construction phase.

The Shelburne Energy Farm is to be decommissioned in line with the Decommissioning and Land Restoration Plan, contained in Appendix 3.1, Volume 3 of this EIAR.

It is expected that the 220kV Grid Connection will remain a permanent part of the national electricity transmission network and will be refurbished and / or redeveloped as required rather than be decommissioned.

14.6 Cumulative Effects

A number of other proposed developments, some of which are committed in terms of planning, are located close to the Proposed Project. These developments are listed in Table 14.22 with associated commentary regarding their inclusion in the cumulative assessment.

Table 14.22: Other Development (with potential for cumulative traffic and transportation effects)

Planning Authority	Ref.	Development Description	Address	Grant Date	Approx. Distance (km)	Developer	Traffic Management Plan (TMP) Produced?	Included in Cumulative Assessment?	Justification
Wexford County Council	20220900	Permission for a 10-Permission for a 10-year planning permission for development which will consist of the construction of a solar PV farm	Ballygowny, Killesk	28/09/2022	5km	Ballygowny Solar Farm Limited	Yes (Construction Traffic Data within Environmental Report)	Yes	Project is in close proximity to the Proposed Project and/or affected roads within study area.
Wexford County Council	20241230	Permission for works to uprate the existing Great Island - Kellis 220kV overhead line (OHL).	Townlands of Greatisland, Aclamon, Lacken, Ballywilliam and others	24/03/2025	8km	EirGrid PLC	Yes (Construction Traffic Data within PECR)	Yes	Project is in close proximity to the Proposed Project and/or affected roads within study area. It is noted the construction periods are likely not to overlap pending on the ability of the developer to undertake the proposed works in March-October 2025 or March-October 2026.
Wexford County Council	20250414	Permission for development which will consist of a 10 year permission for the construction of an energy storage facility.	Rosspile, Clongeen	02/07/2025	11km	Leefarns Limited	Not included in application documents.	Yes	Project is in close proximity to the Proposed Project and/or affected roads within study area.

Source: Wexford County Council Planning Application Database

Table 14.23 outlines the cumulative change in traffic volume on the public road network within the study area in 2027, considering traffic generated by both the Proposed Project as well as the additional developments outlined above.

The aligned effect significance, in terms of the IEMA thresholds, has been provided using the process set out in Table 14.3.

It should be noted that the effect significance set out in the table below is based purely on the degree of change as described in Table 14.3 and therefore requires professional judgement (led by good practice guidance) in order to provide meaningful conclusions; particularly in relation to the assessment of community (pedestrian delay, pedestrian amenity / fear and intimidation) and road safety.

Where baseline traffic flows are low, it is possible to derive unrealistic determinations of significance when considered against purely numerical assessment criteria. It is possible to show relatively large traffic increases yet for the road to operate well below capacity. Under the numerical criteria defined above, anything above a 60% increase in traffic volume would represent a major effect, but in reality, the effect is likely to be less significant, given the residual capacity of the road.

Further commentary on each of the potential impacts is provided in Section 14.5.11.1 to 14.5.11.3.

Table 14.23: The Proposed Project and Cumulative Development

Road Section	Road Capacity (AADT)	Cumulative Development Additional Vehicle Movements During Construction Period (Two-way)	% Increase – All Vehicles	Cumulative Development Additional HGV Movements During Construction Period (Two-way)	% Increase – HGVs	Proposed Project + Cumulative Development Additional Vehicle Movements During Proposed Project Peak Construction Period (Two-way)	% Increase – All Vehicles	Proposed Project + Cumulative Development Additional HGV Movements During Proposed Project Peak Construction Period (Two-way)	% Increase – HGVs	Effect Significance of Increase – All Vehicles	Effect Significant of Increase – HGVs
R733: Between New Ross & N25 junction.	8600	116	2%	16	2%	192	3%	32	4%	None (Not Significant)	None (Not Significant)
R733: Between N25 junction and R734 junction.	8600	116	2%	16	5%	279	5%	47	16%	None (Not Significant)	Minor (Not Significant)
R734: Between R733 junction and L4023 junction.	8600	116	3%	16	7%	279	7%	47	21%	Minor (Not Significant)	Minor (Not Significant)
L4023: Between N25 Junction & L4030 Nash junction.	5000	0	0%	0	0%	122	10%	26	41%	Minor (Not Significant)	Moderate (Significant)
R734: Between L4023 Tellarought junction & R735 junction.	8600	116	5%	16	10%	116	5%	16	10%	Minor (Not Significant)	Minor (Not Significant)
L4023 Tellarought: Between R734 junction & L4021 Tellarought junction.	5000	52	10%	12	23%	215	40%	43	83%	Moderate (Significant)	Major (Significant)
L4021 Tellarought: Between St Brigid's Terrace junction & L4023 Tellarought junction.	5000	0	0%	0	0%	163	30%	31	60%	Moderate (Significant)	Moderate (Significant)
L4023 St Brigid's Terrace: Between L4021 Tellarought junction & L4030 Nash junction.	5000	52	10%	12	23%	215	40%	43	83%	Moderate (Significant)	Major (Significant)
L4030 Nash: Between St Brigid's Terrace and L40232 Nash.	1250	0	0%	0	0%	292	93%	52	248%	Major (Significant)	Major (Significant)
L4030 Nash: Between L40232 Nash & Private Road to Site B	1250	0	0%	0	0%	292	92%	52	260%	Major (Significant)	Major (Significant)
L40232 Nash: Between L4030 Nash & Site C Proposed Access Entrance	1250	0	0%	0	0%	316	390%	52	1040%	Major (Significant)	Major (Significant)
L4029 Nash: Between Private Road to Site B & R735	1250	0	0%	0	0%	12	7%	0	0%	Minor (Not Significant)	None (Not Significant)
Unclassified Road: Between L4030 Rathumney to L4030 Nash	625	0	0%	0	0%	76	760%	52	5200%	Major (Significant)	Major (Significant)
L4030 Rathumney: Between Unclassified Road & R735	5000	0	0%	0	0%	12	7%	0	0%	Minor (Not Significant)	None (Not Significant)
R735: Between L4029 Ballygarvan & R734.	8600	0	0%	0	0%	12	2%	0	0%	None (Not Significant)	None (Not Significant)

Source: Varies by Development

14.6.1 Driver Delay

The road sections in the study area where the significance threshold has been met or to be exceeded are:

- L4023: Between N25 Junction & L4030 Nash junction.
- L4023 Tellarought: Between R734 junction & L4021 Tellarought junction.
- L4021 Tellarought: Between St Brigid's Terrace junction & L4023 Tellarought junction.
- L4023 St Brigid's Terrace: Between L4021 Tellarought junction & L4030 Nash junction.
- L4030 Nash: Between St Brigid's Terrace and L40232 Nash.
- L4030 Nash: Between L40232 Nash & Private Road to Site B
- L40232 Nash: Between L4030 Nash & Site C Proposed Access Entrance
- Unclassified Road: Between L4030 Rathumney to L4030 Nash

These road sections all feature low existing traffic volumes and as such show a relatively large proportional increase which would represent a significant effect. Section 3.20 of the *IEMA Guidelines (2023)* states that driver delay is only likely to be significant when traffic on the network surrounding the development is at, or close to capacity. All road sections and adjoining roads operate below capacity. Therefore, the impact of the Proposed Project on driver delay at the above road sections is assessed to be at worst **minor** and therefore **not significant** in terms of the *EPA Guidelines (2022).*

As described in Section 14.5.11.1 due to road closures associated with the Proposed Project unmitigated, the driver delay effect significance would be classified at worst **moderate** and therefore **significant** in terms of the *EPA Guidelines (2022).*

14.6.2 Road Safety

The projected increase in traffic volumes is minimal. As a result, the corresponding rise in collision risk is considered negligible and unlikely to have a significant impact on overall road safety. This assessment reflects both the scale of the traffic change and the capacity of the existing road network to accommodate it without compromising safety.

Accordingly, based on professional judgement and experience in the assessment of Road and Traffic impacts relation to major development projects, the impact to road safety of the traffic generated during construction of the Proposed Project coinciding with the construction phases of other developments is considered to be at worst **minor** and therefore **not significant** within the context of the *EPA Guidelines (2022).*

14.6.3 Community Effects (Severance, Pedestrian Delay, NMU Amenity, Fear and Intimidation)

Severance

As shown in Table 14.23, the roads within the study area will continue to operate notably below theoretical capacity, even with the traffic generated during construction of the Proposed Project coincides with the construction phases of other developments. Severance should not occur when there is such a notable level of residual road capacity.

Pedestrian Delay

For similar reasoning, pedestrian delay is not considered to be an existing problem on any of the road sections within the study area, nor one that shall be created by the addition of the traffic generated during construction of the Proposed Project together with the construction phases of other developments.

NMU Amenity

Non-motorised user (NMU) amenity is broadly defined by the *IEMA Guidelines (2023)* as the 'relative pleasantness of a journey'. The *IEMA Guidelines (2023)* suggest that 'a tentative threshold for judging the significance of changes in pedestrian amenity would be where traffic flows (or its HGV component) are halved or doubled.

The construction of the Proposed Project together with the construction phases of other developments is predicted to generate increased HGV flows on the roads within the study area, with up to 52 HGV movements per day occurring during the peak construction period.

On this basis unmitigated, the significance of the effect on NMU amenity, is considered to be at worst **major** and accordingly considered to be **significan**t in terms of the *EPA Guidelines (2022).*

Fear and Intimidation

Table 14.24 shows the 2027 future baseline assessment and Table 14.25 shows the "with construction traffic (Proposed Project and Other Developments)" assessment with a reference to the fear and intimidation magnitude of impact.

Table 14.24: Fear and Intimidation Assessment – 2027 Future Baseline

Road Section	Average Traffic Flow (18 hours) – All Vehicles (Two-way Flow) [DEGREE OF HAZARD SCORE]	HGVs (24 hours) – (Two-way Flow) [DEGREE OF HAZARD SCORE]	Average Vehicle Speed* [DEGREE OF HAZARD SCORE]	Total Degree of Hazard Score	Level of Fear and Intimidation
R733: Between New Ross & N25 junction.	7390 [30]	761 [0]	80 [30]	60	Great
R733: Between N25 junction and R734 junction.	5504 [30]	302 [0]	80 [30]	60	Great
R734: Between R733 junction and L4023 junction.	3858 [30]	229 [0]	80 [30]	60	Great
L4023: Between N25 Junction & L4030 Nash junction.	1167 [10]	63 [0]	60 [20]	30	Moderate
R734: Between L4023 Tellarought junction & R735 junction.	2222 [30]	166 [0]	80 [30]	60	Great
L4023 Tellarought: Between R734 junction & L4021 Tellarought junction.	529 [0]	52 [0]	60 [20]	20	Small
L4021 Tellarought: Between St Brigid's Terrace junction & L4023 Tellarought junction.	529 [0]	52 [0]	60 [20]	20	Small
L4023 St Brigid's Terrace: Between L4021 Tellarought junction & L4030 Nash junction.	529 [0]	52 [0]	60 [20]	20	Small
L4030 Nash: Between St Brigid's Terrace and L40232 Nash.	315 [0]	21 [0]	60 [20]	20	Small

Road Section	Average Traffic Flow (18 hours) – All Vehicles (Two-way Flow) [DEGREE OF HAZARD SCORE]	HGVs (24 hours) – (Two-way Flow) [DEGREE OF HAZARD SCORE]	Average Vehicle Speed* [DEGREE OF HAZARD SCORE]	Total Degree of Hazard Score	Level of Fear and Intimidation
L4030 Nash: Between L40232 Nash & Private Road to Site B	311 [0]	20 [0]	60 [20]	20	Small
L40232 Nash: Between L4030 Nash & Site C Proposed Access Entrance	81 [0]	5 [0]	60 [20]	20	Small
L4029 Nash: Between Private Road to Site B & R735	162 [0]	10 [0]	60 [20]	20	Small
Unclassified Road: Between L4030 Rathumney to L4030 Nash	10 [0]	1 [0]	60 [20]	20	Small
L4030 Rathumney: Between Unclassified Road & R735	162 [0]	10 [0]	50 [20]	20	Small
R735: Between L4029 Ballygarvan & R734.	529 [0]	52 [0]	80 [30]	30	Moderate

Source: IEMA, Mott MacDonald, TII. * Where no average speed data is available, the signed speed limit has been used. Where the speed limit varies along a road section the worst-case speed limit has been used.

Table 14.25: Fear and Intimidation Assessment – 2027 "With Construction Traffic (Proposed Project and Other Developments)"

Road Section	Average Traffic Flow (18 hours) – All Vehicles (Two-way Flow) [DEGREE OF HAZARD SCORE]	HGVs (24 hours) – (Two-way Flow) [DEGREE OF HAZARD SCORE]	Average Vehicle Speed (kph)* [DEGREE OF HAZARD SCORE]	Total Degree of Hazard Score	Level of Fear and Intimidation	Fear and Intimidation Magnitude of Impact
R733: Between New Ross & N25 junction.	7582 [30]	793 [0]	80 [30]	60	Great	Negligible
R733: Between N25 junction and R734 junction.	5783 [30]	349 [0]	80 [30]	60	Great	Negligible
R734: Between R733 junction and L4023 junction.	4137 [30]	276 [0]	80 [30]	60	Great	Negligible
L4023: Between N25 Junction & L4030 Nash junction.	1289 [20]	89 [0]	60 [20]	40	Moderate	Negligible
R734: Between L4023 Tellarought junction & R735 junction.	2338 [30]	182 [0]	80 [30]	60	Great	Negligible
L4023 Tellarought: Between R734 junction & L4021 Tellarought junction.	744 [10]	95 [0]	60 [20]	30	Moderate	Low (not significant)
L4021 Tellarought: Between St Brigid's Terrace junction & L4023 Tellarought junction.	692 [10]	83 [0]	60 [20]	30	Moderate	Low (not significant)
L4023 St Brigid's Terrace: Between L4021 Tellarought junction & L4030 Nash junction.	744 [10]	95 [0]	60 [20]	30	Moderate	Low (not significant)

Road Section	Average Traffic Flow (18 hours) – All Vehicles (Two-way Flow) [DEGREE OF HAZARD SCORE]	HGVs (24 hours) – (Two-way Flow) [DEGREE OF HAZARD SCORE]	Average Vehicle Speed (kph)* [DEGREE OF HAZARD SCORE]	Total Degree of Hazard Score	Level of Fear and Intimidation	Fear and Intimidation Magnitude of Impact
L4030 Nash: Between St Brigid's Terrace and L40232 Nash.	607 [10]	73 [0]	60 [20]	30	Moderate	Low (not significant)
L4030 Nash: Between L40232 Nash & Private Road to Site B	603 [10]	72 [0]	60 [20]	30	Moderate	Low (not significant)
L40232 Nash: Between L4030 Nash & Site C Proposed Access Entrance	397 [0]	57 [0]	60 [20]	20	Small	Negligible
L4029 Nash: Between Private Road to Site B & R735	174 [0]	10 [0]	60 [20]	20	Small	Negligible
Unclassified Road: Between L4030 Rathumney to L4030 Nash	86 [0]	53 [0]	60 [20]	20	Small	Negligible
L4030 Rathumney: Between Unclassified Road & R735	174 [0]	10 [0]	50 [20]	20	Small	Negligible
R735: Between L4029 Ballygarvan & R734.	541 [0]	52 [0]	80 [30]	30	Moderate	Negligible

Source: IEMA, Mott MacDonald, TII. * Where no average speed data is available, the signed speed limit has been used. Where the speed limit varies along a road section the worst-case speed limit has been used.

As shown in Table 14.24 and Table 14.25 the magnitude of impact is negligible (no change) with reference to *IEMA Guidelines (2023)* on all road sections except the L4023 (between N25 Junction & L4030 Nash junction). On the L4023 (between N25 Junction & L4030 Nash junction) the magnitude of the impact is assessed to be low. As set out in Table 14.11 the sensitivity of the receptor is assessed to be negligible. Based on the significance assessment matrix presented in Table 14.7, the short-term effect on fear and intimidation of the Proposed Project combined with the construction phases of other developments is considered to be **negligible** and accordingly **not significant** in terms of the *EPA Guidelines (2022).*

Community Effects Summary

Overall, based on professional judgement, if the construction traffic generated by Proposed Project coincides with the construction phases of other developments unmitigated, there will at worst be a **major** effect upon community receptors and is therefore **significant** in the context of the *EPA Guidelines (2022).*

14.6.3.1 Summary of Cumulative Effects

A summary of the assessment the construction effects are shown in Table 14.26.

Table 14.26: Summary of Cumulative Effects

Effect	Significance
Driver Delay	**Moderate (Significant)**
Road Safety	Minor (Not Significant)
Community Effects	**Major (Significant)**

Source: Mott MacDonald, IEMA Guidelines, EPA Guidelines

14.7 Mitigation and Monitoring Measures

The temporary effects of construction, regardless of the assessed level of significance, will be mitigated through adoption of a Construction Traffic Management Plan (CTMP).

The general purpose of a CTMP is optimise the efficiency and safety of all traffic activities generated by the Proposed Project and thus maintain suitable amenity and safety for local communities and other roads users.

A summary of key CTMP mitigation elements follows and the CTMP is provided in full form in the CEMP which is included in the application documentation:

- The appointed contractor will agree temporary traffic management measures then adopt and monitor an appropriate way of working in consultation with Wexford County Council, the appointed contractor, TII and/or their Agents and An Garda Síochána as appropriate.
- The CTMP has been developed for the purposes of this assessment and will be further developed as necessary in consultation with Wexford County Council and the Gardai prior to construction commencing. The CTMP will document measures to promote the efficient transportation of components and materials to site, whilst reducing congestion and disruption which might impact negatively on local communities or general traffic and in particular the emergency services. The CTMP is a 'live' document and will be developed accordingly, within the parameters assessed in this EIAR.
- During the construction phase, signage will be installed to warn road and recreational route users to the presence of the works access and the associated likely presence of large or slow-moving construction traffic.
- Car sharing will be promoted to construction personnel by the contractor during the induction process.

- To reduce the potential for debris being deposited onto the local road network in the construction site accesses and road sections of cable construction, the appointed contractor will ensure that public roads and footways are cleaned and swept during and after the works. This cleansing regime (to be agreed) will minimise the amount of deleterious material deposited on the road surface and the appointed contractor will ensure that the nearest public road will be kept clear of debris by monitoring and then utilising a road sweeper where necessary.
- The appointed contractor could employ a number of sub-contractors, and all will fall under the umbrella of the CTMP and will have an obligation to adhere to the Plan; this obligation will form part of the procurement process and will be written into any contract of employment.
- Compliance will be monitored by the Project Manager, on behalf of the appointed contractor, via spot checks to ensure that vehicles follow the measures set out in the CTMP and recording of any complaints. The appointed contractor will be required to stipulate that all contractors disseminate these rules to their sub-contractors.
- In liaison with ESBN, the appointed contractors will maintain close liaison with local community representatives, landowners and statutory consultees throughout the construction period. This will include circulation of information about ongoing activities; particularly those that could potentially cause disturbance, including due to traffic.
- The appointed contractor will nominate a person to be responsible for the co-ordination of all elements of roads, traffic and transportation during the construction process (Liaison Officer). This person will liaise with the local community so that the community has a direct point of contact within the developer organisation who they could contact for information purposes or to discuss matters pertaining to traffic management or site operation.
- If the construction phase of any notably sized development(s) appears likely to overlap with the Proposed Project, the appointed contractor will seek to liaise with the appropriate developer organisation regarding the scheduling of deliveries to identify potential means of reducing the effects of combined construction.
- Prior to commencement of construction, and during the construction phase, engagement with the proponents of other developments will continue and where there is potential for works to be carried out in parallel, appropriate mitigation measures will be implemented including the scheduling of works and regular liaison meetings between project teams to ensure that plans are co-ordinated and impacts on traffic are minimised. The specific detail will be developed by the appointed contractor within the parameters assessed in this EIAR.

14.8 Residual Effects

The assessment of post-mitigation effects has been undertaken on the assumption that key measures set out in the CTMP will be developed as appropriate by the appointed contractor and be implemented during the Proposed Project construction phase.

In the context of the *IEMA Guidelines (2023)* and *EPA Guidelines (2022)* there are **no significant** residual roads, traffic and transportation effects predicted during the construction phase following incorporation of measures described within the CTMP; see Appendix B of the CEMP which accompanies the EIAR.

A summary of the residual effects is in.

Table 14.27.

Table 14.27: Summary of Residual Effects tab

	Significance	
Effect	**Before Mitigation**	**Post Mitigation**
Proposed Project		
Driver Delay	**Moderate (Significant)**	Minor (Not Significant)
Road Safety	Minor (Not Significant)	Minor (Not Significant)
Community Effects	**Major (Significant)**	Minor (Not Significant)
Proposed Project + Cumulative Development		
Driver Delay	**Moderate (Significant)**	Minor (Not Significant)
Road Safety	Minor (Not Significant)	Minor (Not Significant)
Community Effects	**Major (Significant)**	Minor (Not Significant)

Source: Mott MacDonald, IEMA Guidelines, EPA Guidelines (2022)

14.9 References

Guidelines on the Information to be Contained in Environmental Impact Reports, Environmental Protection Agency (EPA) (2022).

The Institute of Sustainability and Environmental Professionals (ISEP) Guidelines: Environmental Assessment of Traffic and Movement (2023).

Project Appraisal Guidelines for National Roads Unit 5.3 – Travel Demand Projections, Transport Infrastructure Ireland (TII) (2021).

Road Traffic (Construction and Use of Vehicles) Regulations 2003, S.I. 5 of 2003.

Road Traffic (Construction and Use of Vehicles) (Amendment) Regulations 2008, S.I.366 of 2008.

Rural Road Link Design, (DN-GEO-03031), TII Publications, TII (2017).

Traffic and Transport Assessment Guidelines, Transport Infrastructure Ireland (TII) (2014).

UK Design Manual for Roads and Bridges (DMRB) LA112 Population and Human Health (2020).