Alexandra Basin Redevelopment 2

Bringing Dublin Port To 2040

Environmental Impact Assessment Report

Chapter 15 Material Assets – Traffic & Transportation

Volume 2



CALAFORT ÁTHA CLIATH
DUBLIN PORT

TETRA TECH

15 Material Assets – Traffic and Transportation

Chapter Contents

15 Material Assets – Traffic and Transportation 15-1
15.1 Introduction 15-2
15.2 Assessment Methodology 15-2
15.3 Baseline Environment 15-8
15.4 Description of Likely Significant Effects 15-14
15.5 Inter-relationships 15-18
15.6 Mitigation and Monitoring 15-18
15.7 Potential Cumulative Effects 15-18
15.8 Residual Impacts 15-19
15.9 Summary of Effects and Conclusions 15-19
15.10 Limitations of Assessment 15-21

15.1 Introduction

This Chapter of the Environmental Impact Assessment Report (EIAR) comprises an appraisal of the existing traffic and transport conditions within the ABR2 Project study area and addresses the potential effects of the ABR2 Project on traffic and transport. The assessment is based on the description of works as noted in **Chapter 5 Project Description**. Where potential adverse impacts are identified, the assessment identifies mitigation measures that will be implemented to prevent, reduce or offset potential adverse effects, or enhance potential beneficial effects where possible.

A Mobility Management Plan (MMP) has been developed to support this chapter and is included as Appendix 15-1.

15.1.1 Scope of the Assessment

The primary purpose of this EIAR chapter is to provide an assessment of the likely effects of the ABR2 Project during the construction and operational phases in relation to traffic and transport.

15.2 Assessment Methodology

This section describes the methodology which has been used in the assessment of traffic and transport, which may impact or be impacted by the ABR2 Project. The methodology and associated impact assessment had regard to the general guidance for the undertaking of an EIA, as presented in **Chapter 1 Introduction**, as well as the following specific traffic and transport guidance documents:

- Traffic and Transport Assessment Guidelines, Transport Infrastructure Ireland (TII), May 2014;
- Guidelines for Traffic Impact Assessments, Institution of Highways & Transportation (CIHT), May 1994.

The following steps have been undertaken to produce the chapter.

- Site visit.
- Review of previous ES Submissions.
- Desktop review of existing access arrangements and linkages.
- Traffic Surveys undertaken Tuesday 24th February 2026 (0700 – 1900 hours).
- Consideration of potential interactions and identification of possible impacts.
- Assessment of impacts, within the context of the receiving environment, including cumulative effects.
- Identification of measures and solutions to avoid, minimise or mitigate potential impacts.
- Assessment of residual impacts, taking account of mitigation measures.

15.2.1 Guidance and Legislation

In addition to the transport-specific guidance outlined above, there are a number of policies relevant to traffic and transport (and whilst not all are directly applicable to ABR2 Project, the policies are summarised below).

- Project Ireland 2040 – National Planning Framework
  - National Strategic Outcome 6 *(page 37 & 145)*
  - National Policy Objective 27 *(page 82)*
- Transport Strategy for the Greater Dublin Area 2022 to 2042
  - Measure INT2 – International Gateways *(page 75)*
  - Measure ROAD2 – National Roads Requirements, No. 9 *(page 171)*
  - Measure ROAD5 – Southern Port Access Route *(page 173)*
  - Measure ROAD7 – Dublin Tunnel Emergency Diversion Route *(page 175)*
  - Measure FREIGHT3 – Planning Policy and Freight *(page 199)*
  - Measure FREIGHT5 – Rail Freight *(page 200)*
- Greater Dublin Area Cycle Network Plan 2022
  - 2022 Greater Dublin Area Cycle Network Plan – Dublin City Centre *(page 3)*
- Dublin City Development Plan 2022 – 2028
  - SC7 Dublin Port *(page 115)*
  - CE35 Dublin Port *(page 199)*
  - SMTO1 Transition to More Sustainable Transport Modes *(page 236)*
  - SMT3 Integrated Transport Network *(page 239)*
  - SMT22 Key Sustainable Transport Projects *(page 253)*
  - SMT23 The Rail Network and Freight Transport *(page 253)*
  - SMT30 National Road Projects *(page 259)*
  - Employment & Economic Development *(page 447)*
  - Movement & Transport *(page 449 – 450)*
  - Existing and Future Strategic Transport and Parking Areas – shows indicative SPAR alignment *(Map J)*
  - Land Zones *(Map F)*

15.2.2 Study Area – Traffic & Transport

The Study Area for ABR2 will follow the same approach as set out for the parent ABR Project, as indicated in **Figure 15-1**. The junctions considered within this assessment are as follows:

- Junction 1 – M50 / East Wall Road / Promenade Road / Bond Road.
- Junction 2 – M50 On-slip / Promenade Road
- Junction 3 – East Wall Road (E/W) / East Wall Road (N/S).
- Junction 4 – East Wall Road (N/S) / Alexandra Road.
- Junction 5 – East Wall Road (N/S) / Sheriff Street Upper.

- Junction 6 – East Wall Road (N/S) / Former P&O Access.
- Junction 7 – East Wall Road / North Wall Quay Roundabout.

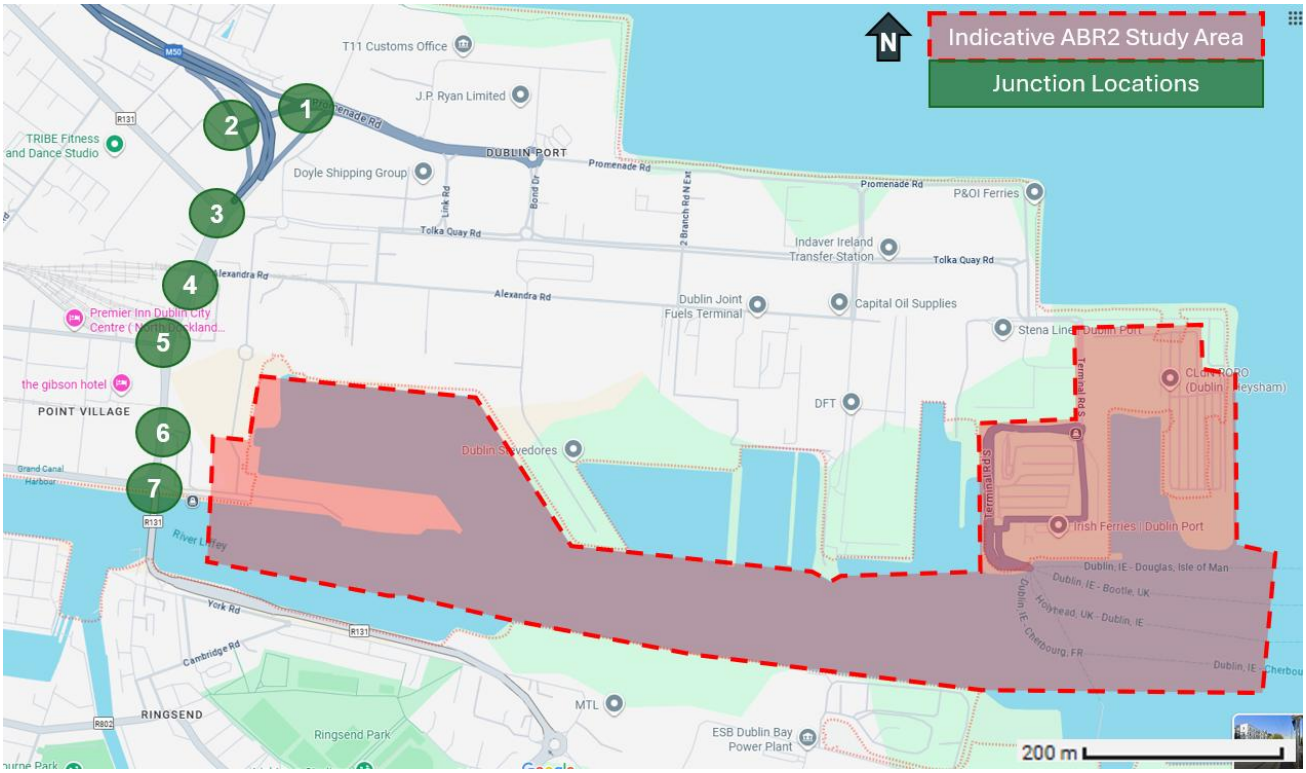


Figure 15-1: Traffic & Transport Study Area & Surveyed Junctions

15.2.3 Baseline

The baseline environment relevant to this EIAR Chapter was informed by undertaking site-specific traffic surveys on the external road network as set out above.

It is noted that the existing access to Dublin Port via Alexandra Road was closed off during the survey period due to ongoing construction work within the Port. Whilst this could be considered as a limitation to the completion of the chapter, given the Dublin City Centre HGV Cordon Map, construction vehicles will make use of the Dublin Port Tunnel and Promenade Road as the main arrival / departure route as part of this ABR2 Project.

15.2.3.1 Desktop Study

Information on the baseline environment was collected through a desktop review of existing studies and datasets. A desktop review of the existing port accesses and approach roads has been undertaken to determine those that specifically affect the operations of Dublin Port. A review of the traffic survey information submitted in support of the parent ABR Project, as well as the Strategic Transportation Study 2018, has also been undertaken to help inform this scoping exercise.

15.2.3.2 Site-specific Surveys

The location and date of the site-specific surveys have been set out in **Section 15.2.2** above. The traffic surveys were undertaken via video camera between 0700 – 1900 hours on a neutral weekday. This provides the baseline traffic volumes for consideration within this assessment.

15.2.4 Consultation

Following completion of the EIA Scoping Report, consultation was undertaken to obtain opinions regarding the ABR2 Project and its potential and scope for significant effects. Specific comments relating to traffic and transport are set out in **Table 15-1**, including where additional information in relation to issues can be found in the EIAR.

Table 15-1: ABR2 EIA Scoping Report Comments relating to Traffic & Transport

Organisation	Comment Response/Issue Raised	Response
Dublin City Council (DCC)	"DCC considers the Scoping Report to be generally comprehensive in describing the Project (works at Alexandra Basin West and Berth 52/53) and the proposed EIA methodology (desktop studies, surveys, modelling). DCC advises that the EIAR should take account of the Dublin City Development Plan 2022–2028. DCC also recommends consulting the EPA and EU EIA guidance when preparing the EIAR. DCC welcomes future consultation and participation in the planning process."	Comments from DCC noted. It is predicted that this proposal will not result in a significant traffic and transport impact upon the surrounding external road network.
Transport Infrastructure Ireland (TII)	"Highlights interactions with the M50 Dublin Tunnel and the Project, given that the developed lands will rely on the existing local road network and the M50 Dublin Tunnel for access. Recommended that appropriate consultation and coordination occur between DPC, National Transport Authority, DCC and TII, due to the changes in growth and altered transportation infrastructural circumstances around the Port, to ensure that any matters relating to the safety, efficiency and capacity of the M50 Dublin Tunnel can be addressed. Recommendation that consideration is given to documentation for the preparation of the EIAR, including National Roads policy for developments at or near national roads and consideration of the technical guidance and standards regarding developments provided by TII for national roads and light rail networks. Also recommends the EPA Guidelines of the Information to be contained in EIARs (2022) is considered with the recognition of national roads as strategic transport assets and the potential for	The impact of the ABR2 Project upon the existing local and strategic road network has been considered fully within this chapter. It is predicted that the ABR2 Project will not result in a significant impact upon the surrounding transport infrastructure. This chapter provides an analysis of the impact upon the surrounding highway network during the construction phase. The operational phase of this ABR2 Project will not have any impact upon the surrounding road network. There are no abnormal loads associated within the ABR2 Project. Cumulative Impacts have also been considered within this Chapter, although it is noted that given the predicted low volumes of hourly

Organisation	Comment Response/Issue Raised	Response
	significant impacts on the national road network and junctions connecting to national roads. Further guidance is provided regarding mitigation to be considered within the EIAR for the National road network, national road structures and Luas, providing information on a series of standards, guidance and relevant TII publications to be considered, this includes undertaking a traffic and transport assessment, if required a road safety audit, preparation of a construction traffic management plan, and regard should be given to any potential cumulative impacts. Consideration should also be given to abnormal load requirements and the capacity of roads/structures to accommodate these."	construction traffic, cumulative impacts are unlikely to result in any significant impact upon the surrounding road infrastructure.

15.2.5 Assessment Criteria and Assessment of Significance

Determining the significance of effects is a process that involves defining the magnitude of the impacts and the sensitivity of the receptors. This section describes the criteria applied in this chapter to assign values to the magnitude of potential impacts and the sensitivity of the receptors. The terms used to define magnitude and sensitivity for traffic and transport are based on those set out in the Traffic and Transport Assessment Guidelines (TII) and the Guidelines for Traffic Impact Assessments (CIHT).

15.2.5.1 Magnitude Criteria

The magnitude criteria define the scale, extent and duration of impacts, ranked from negligible to high. The magnitude criteria are set out in **Table 15-2**.

Table 15-2: Magnitude Criteria - Traffic & Transport

Magnitude Criteria	Definition
High / Major	Total Loss or severe alteration to key environmental elements; permanent or long-term change.
Medium / Moderate	Loss or alteration to one or more key elements; partial change in character.
Low / Minor	Noticeable change, but character / composition of the environment remains similar.
Negligible / Imperceptible	Very limited, slight change; tolerant to or recovers from the impact

15.2.5.2 Sensitivity Criteria

The sensitivity criteria consider the ability of the surrounding environment to absorb change without suffering adverse impacts. The Sensitivity Criteria is set out in **Table 15-3**.

Table 15-3: Sensitivity Criteria - Traffic & Transport

Sensitivity	Definition
High	High importance and rarity, national scale, and limited potential for substitution. Those affected will not be able to adapt to changes and continue to maintain pre-impact status.
Medium	High or medium importance and rarity, regional scale, limited potential for substitution. Able to adapt with some difficulty and maintain pre-impact status but only with a degree of support.
Low	Low or medium importance and rarity, local scale. Those affected are able to adapt with relative ease and maintain pre-impact status.
Negligible	Very low importance and rarity, local scale. Those affected are able to adapt easily and maintain pre-impact status.

15.2.5.3 Significance of Effects

The significance of effects refers to the consequences of an impact. The significance of the effect upon traffic and transport receptors is determined by correlating the magnitude of the impact and the sensitivity of the receptor. A range of significance of effect is presented in **Table 15-4**. The final assessment of significance for each effect is based upon expert judgement of the peer-reviewed literature.

For the purposes of this assessment, any effects with a significance level of less than Minor have been concluded to be not significant in EIAR terms.

Table 15-4: Sensitivity Criteria - Traffic & Transport

Sensitivity of Receptor	Magnitude of Change				
		Negligible	Low	Medium	High
	Negligible / Imperceptible	Negligible	Negligible or Minor	Negligible or Minor	Minor
	Low / Minor	Negligible	Minor	Minor	Minor / Moderate
	Medium / Moderate	Negligible or Minor	Minor	Moderate	Moderate or Major
	High / Major	Negligible or Minor	Minor or Moderate	Moderate or Major	Major

The receptors considered within this assessment relate to the surrounding highway network and the associated impact of traffic generation associated with the construction and operational phases of the ABR2 Project. The impacts and, therefore, the magnitude of change and impacts will be considered against the threshold guidance as set out in the TTA Guidelines.

15.3 Baseline Environment

A desktop review has been undertaken in relation to the existing baseline environment within the study area / zone of influence for traffic and transport.

15.3.1 Pedestrian Facilities

Dublin Port is well served by pedestrian facilities with internal pedestrian routes connecting to the external network, providing pedestrian connectivity to existing cycle routes, bus stops (both Dublin Bus and Bus Éireann) and the Luas light rail system. Several controlled pedestrian crossing points are located on East Wall Road along the frontage of the site, ensuring safe crossing facilities for pedestrians. Existing pedestrian facilities are indicated in **Figure 15-2**.

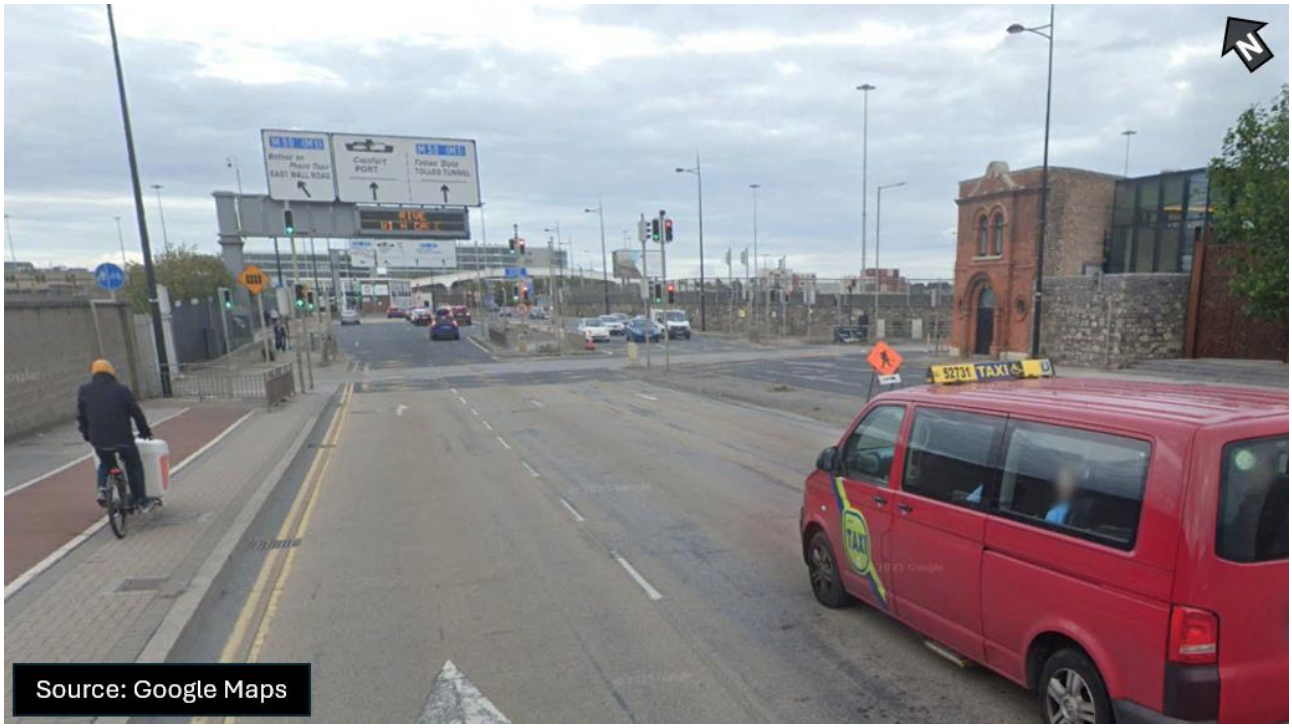


Figure 15-2: Existing Pedestrian Facilities – East Wall Road / Alexandra Road

15.3.2 Cycling Facilities

There are existing cycle facilities on East Wall Road along the frontage of Dublin Port; these existing cycling facilities connect into the wider cycling network throughout Dublin, as indicated in **Figure 15-3**. Dublinbikes has a number of stations located along North Wall Quay in close proximity to Dublin Port, as indicated in **Figure 15-4**.

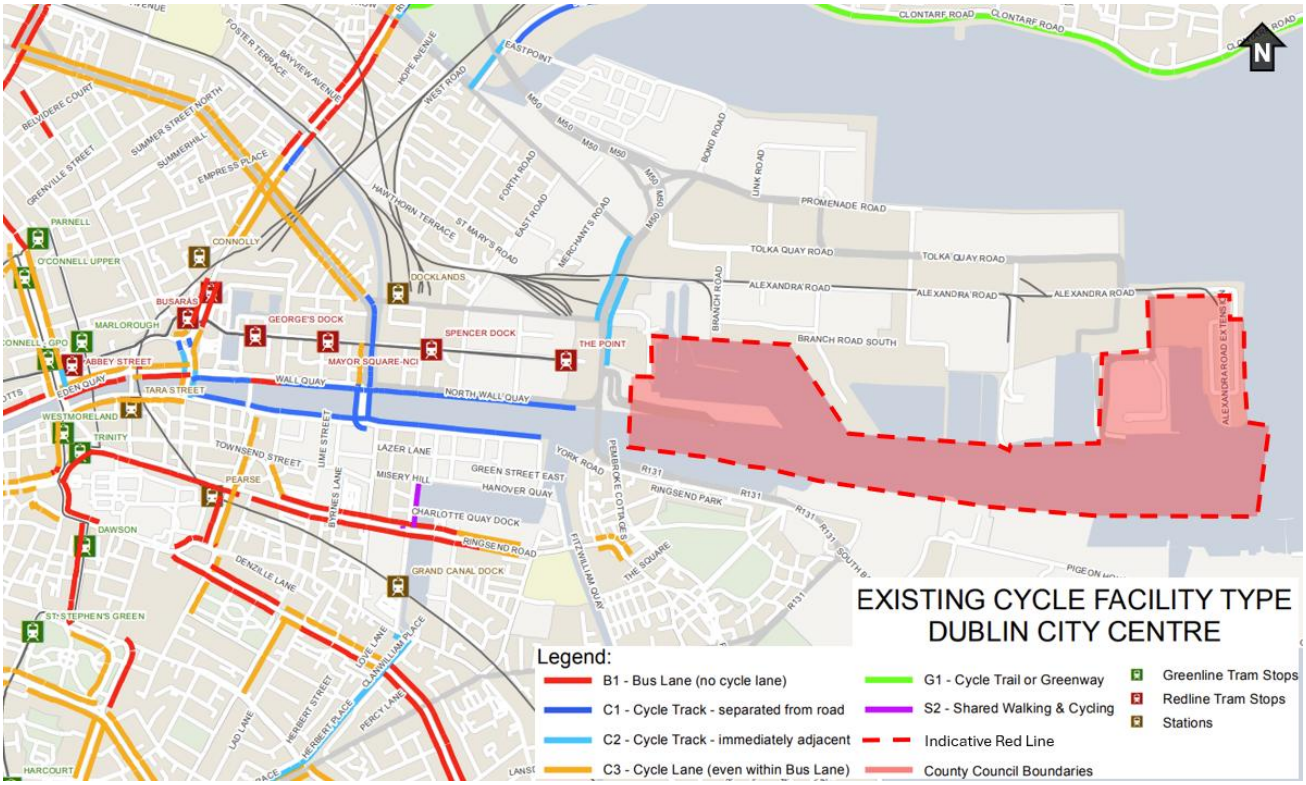


Figure 15-3: Existing Cycling Facilities – Dublin (Dublin Port Area)



Figure 15-4: Dublin Bikes – Dublin (Dublin Port Area)

15.3.3 Public Transport Facilities

There are both Dublin Bus & Bus Eireann stops located within walking distance of Dublin Port (with the controlled pedestrian crossings ensuring safety for pedestrians), as indicated in **Figure 15-5**. Dublin Port is also located near the Luas system (as indicated in **Figure 15-6**). The main source of public transport to / from Dublin Port

and therefore the ABR2 Project is either Dublin Bus or the Luas, and therefore workers associated with ABR2 could travel to / from the site via public transport as a mode of transport.

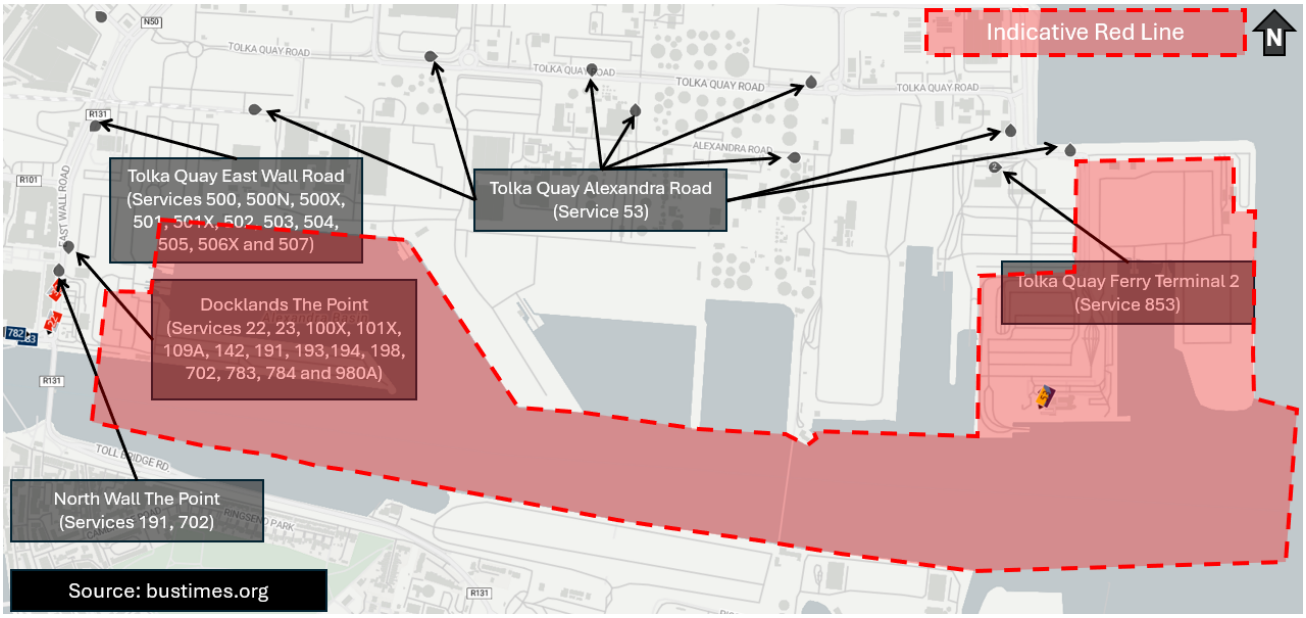


Figure 15-5: Public Transport Services – Dublin (Dublin Port Area)

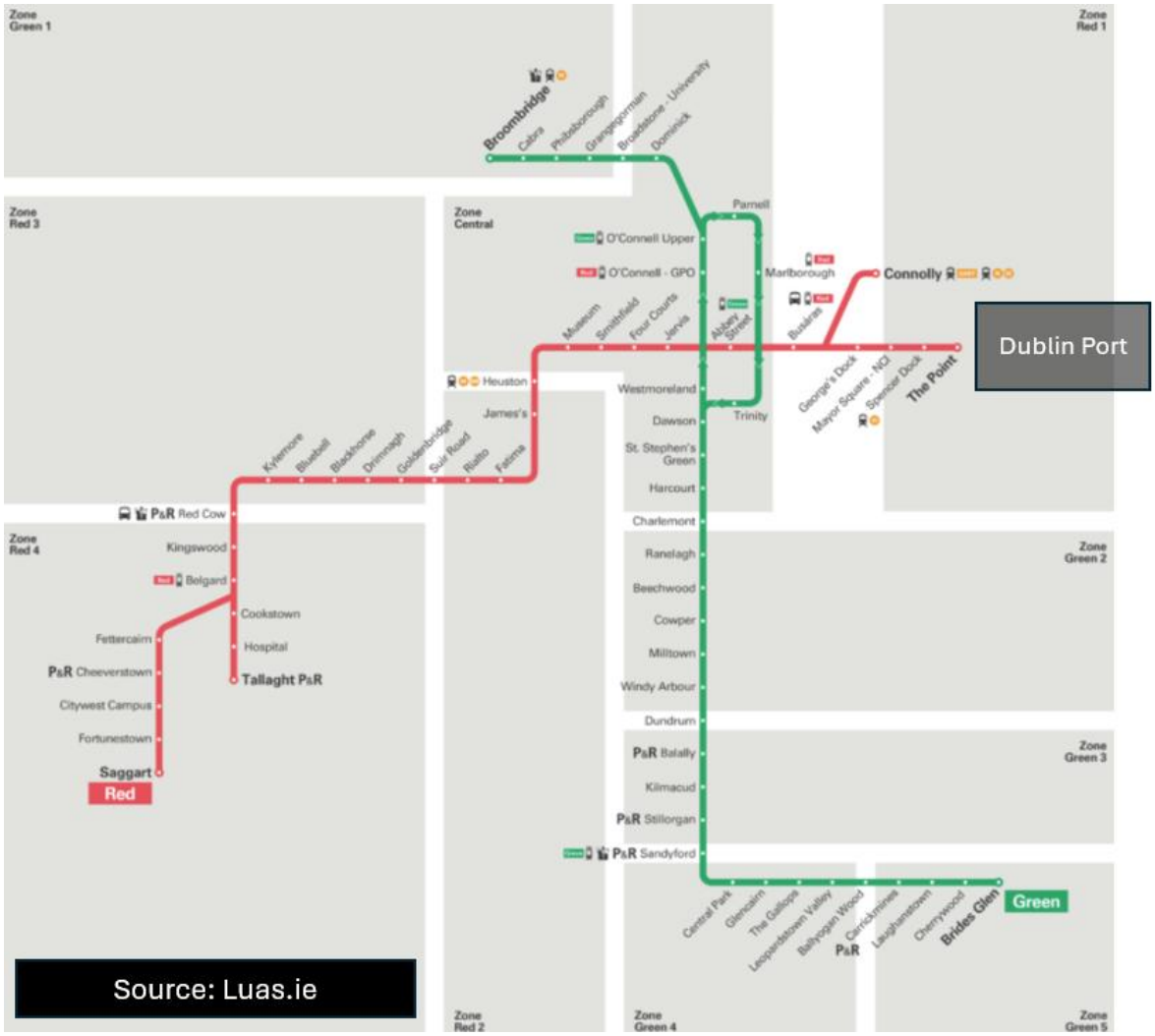


Figure 15-6: Public Transport Services - Luas – Dublin (Dublin Port Area)

15.3.4 Private Vehicle Facilities

There are currently three main approach roads serving Dublin Port and therefore the ABR2 Project, including Promenade Road (which provides direct access to / from Dublin Port Tunnel), Alexandra Road and Terminal 3 Access (former P&O Access).

East Wall Road comprises three lanes from North Quay Wall, widening to four lanes at the approach to Sheriff Street Upper, six lanes from Sheriff Street Upper to Alexandra Road, with an additional lane north of Alexandra Road.

Dublin Port Tunnel carries the majority of traffic to and from the Port. Dublin Port Tunnel links Dublin Port to the M50 via the M1.

It is also noted that as part of the wider Masterplan for Dublin Port, there are proposed changes to the existing access arrangements; however, these changes have not been implemented as yet and are unlikely to impact upon the ABR2 Project.

15.3.4.1 Existing Traffic Flows

The junctions surveyed as part of this assessment are indicated in **Figure 15-1** above, these surveys were undertaken between 0700 – 1900 hours and identified the peak hour period (greatest volume of traffic on the network) as 0945 – 1045 as indicated in **Figure 15-7**.

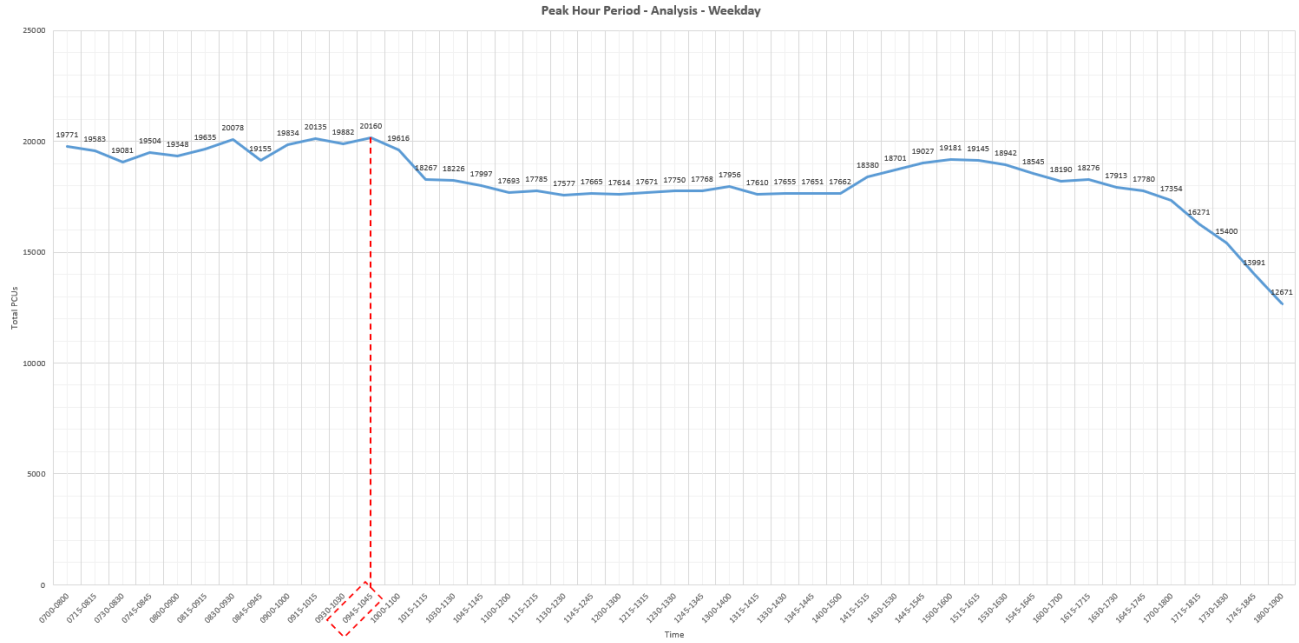


Figure 15-7: Existing Traffic Volumes

The key traffic volumes at a number of locations, as indicated in **Figure 15-8** below, on the surrounding road network, have been considered, and the traffic volumes (in Passenger Car Units, PCUs) are presented in **Table 15-5**.

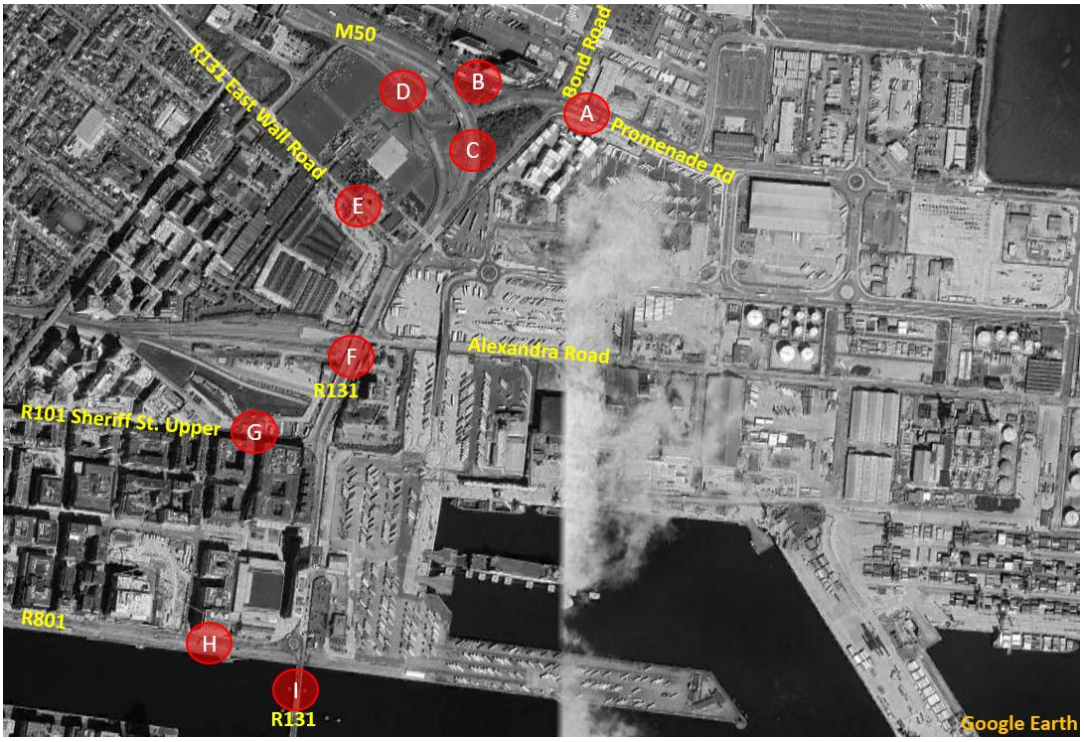


Figure 15-8: Existing Traffic Volumes – Key Locations

Table 15-5: Traffic Volumes – Key Nodes (Passenger Car Units)

Nodes	0945-1045	1630-1730	0700-1900	Average Hourly Flow
A – Promenade Road	1717	1570	20422	1702
B – M50 Off Slip (to Promenade Road)	697	410	7531	628
C – M50 Off Slip (to R131)	1255	629	11228	936
D – M50 On Slip (to Dublin Port Tunnel)	610	699	8085	674
E – R131 East Wall Road	758	819	9170	764
F – R131	2749	2455	28441	2307
G – R101 Sheriff St Upper	410	388	4726	394
H – R801	748	822	8679	723
I – R131 Tom Clarke Bridge	1845	1630	19256	1605

Table 15-5 above indicates the existing surveyed traffic volumes recorded in 2026 (in PCUs) on the key nodes, which link Dublin Port with the surrounding local and strategic road network. Construction traffic will arrive and depart throughout the day and therefore, the average hourly flow has also been calculated.

15.3.5 Future Baseline Scenario

The future baseline scenario, i.e. without the implementation of the ABR2 Project, will result in those developments within planning permission progressing alongside the projected growth of Dublin Port. There are different growth factors applicable to traffic within Dublin, and these are discussed in greater detail below.

15.3.5.1 Traffic Growth for Non-Port Traffic

Growth rates for non-port traffic have been extracted from TII's Project Appraisal Guidance (PAG) for National Roads Unit 5.3 – Travel Demand Projections (October 2021). Table 6.1 of the PAG guidelines sets out the criteria for projecting growth for non-port traffic. An extract from the PAG guidelines for the proposed development within the Dublin Metropolitan Area is indicated in **Figure 15-9**.

Table 6.1 Link-Based Growth Rates: Metropolitan Area Annual Growth Rates

Metropolitan Area	Low Sensitivity Growth Rates						Central Growth Rates						High Sensitivity Growth Rates					
	2016-2030		2030-2040		2040-2050		2016-2030		2030-2040		2040-2050		2016-2030		2030-2040		2040-2050	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
Dublin	1.0146	1.0280	1.0034	1.0116	1.0028	1.0144	1.0162	1.0295	1.0051	1.0136	1.0044	1.0162	1.0191	1.0328	1.0087	1.0172	1.0093	1.0256

Figure 15-9: PAG Table 6.1 Link-Based Growth Rates – Metropolitan Area Annual Growth Rates

Based on the high sensitivity growth rates (which would represent the most robust assessment of non-port traffic) the average growth rate per year for all vehicles is 2.595% (2016 – 2030), 1.295% (2030 – 2040) and 1.745% (2040 – 2050). This assumes a 50% / 50% split between Light Vehicles (LV) and Heavy Vehicles (HV) therefore representing a further robustness of any further year analysis.

15.3.5.2 Traffic Growth on the Dublin Port North Estate

The North Port Estate had a throughput of 32.57 million tonnes in 2023 and by 2040, it is expected to have a throughput of 56.10 million tonnes, which equates to a growth rate of 1.722 for the traffic growth in the North Port Estate between 2023 and 2040 (this would equate to an average growth of 3.24% per year). It is noted that the growth within the North Estate will be based on the parent ABR and ABR2 Projects constructed and operational.

15.4 Description of Likely Significant Effects

15.4.1 Assessment of Construction Effects

As set out in **Chapter 5 Project Description**, the majority of materials dredged will be treated and reused within Dublin Port for the infilling of the basin at Berths 52/53. However, there will be a volume of material imported and exported from the site via the existing road network, and it is this material that will generate construction vehicles on the surrounding road network. This is set out in greater detail below.

15.4.1.1 Import of Material

The import of material has been assessed on a project design envelope approach with a scenario considering the shortest construction period (6 months) and also a shorter daily duration of operation (10 no. hours) than what may occur on site. The process for the import of materials is set out below;

- The vast majority of identified imports are for surcharge material for future use as capping in advance of paving.
- It is expected that placement of surcharge will commence in Q4 2030 and run to Q2 2031 (over a 6–9-month period). There is not a significant area for stockpiling imported material, and therefore imports cannot start any earlier than Q4 2030.
- Therefore, assuming 20no. working days per month;
    - 6no. months 120no. working days.
    - 9no. months 180no. working days.

- For the purposes of this analysis, it is assumed that typical construction vehicles can carry 15.83m^3 of material.
- Imported Material **54,500m^3** over 120no. working days (worst case scenario)
    - 54,500m^3 / 120no. working days = 454.2m^3 per day (imported to site).
    - 454.2m^3 / 15.83m^3 (per vehicle) = 28.7 (29) no. average vehicles per day to site.
    - Assume 10no. hour working day = (28.7 / 10) 2.87 (3) no. average vehicles per hour to site filled with imported material and 3no. average vehicles per hour leaving site empty.

Therefore, the import of material generates on average (based on 120 no. working days and 10 no. hours working day).

- Average Daily Arrivals to Site (full of material) 28.7 (29).
- Average Daily Departures from Site (empty) 28.7 (29)
- Average hourly Arrivals to Site (full of material) 2.87 (3).
- Average Daily Departures from Site (empty) 2.87 (3)

15.4.1.2 Export of Material

The process for the export of materials is set out below;

- It is estimated that up to **60,085m^3** will be exported from site. The source material will be:
    - Dredged at a rate of up to 4,000m^3/day.
    - Subjected to soil washing and treatment, determined by the rate of dredging.
    - There will be storage on site, providing some buffer, meaning that washed material may not be removed at the rate that it is dredged.

  - The various areas and depths of the dredge suitable for soil washing will not be accessible in quick succession.
- For the purposes of the assessment, it is assumed that the maximum volume of material to be exported per day is **800m^3**.
- As within the imported material, for the purposes of this analysis, it is assumed that typical construction vehicles can carry 15.83m^3 of material.
- Exported Material **800m^3** per day (worst case scenario)
  - 800m^3 / 15.83m^3 (per vehicle) = 50.5 (51) no. average vehicles per day to site.
- Assume 10no. hour working day = (50.5 / 10) 5.05 (5) no. average vehicles per hour to site empty and 5no. average vehicles per hour leaving site full of exported material.

Therefore, the export of material (per day) generates, on average.

- Average Daily Arrivals to Site (empty) 50.5 (51).
- Average Daily Departures from Site (full of material) 50.5 (51)
- Average hourly Arrivals to Site (empty) 5.05 (5).
- Average Daily Departures from Site (full of material) 5.05 (5)

15.4.1.3 Total Construction Vehicles (Import & Export)

Based on the information presented above, the average hourly construction traffic volumes are set out below:

- Average Daily Arrivals to Site 79.2 (79).
- Average Daily Departures from Site 79.2 (79)
- Average hourly Arrivals to Site 7.92 (8).
- Average Daily Departures from Site 7.92 (8)

This analysis assumes that both the import and export of material occur at the same time (representing a worst-case assessment).

15.4.1.4 Impact of Construction Traffic

It is predicted that most of the construction traffic will use Promenade Road as the main arrival / departure route from Dublin Port and will use the Dublin Port Tunnel to access the wider road network.

The volume of construction traffic (import & export) is an average of 15.8 no. total trips per hour (as set out above). This volume of construction traffic has been analysed against the average hourly traffic flows at the key nodes, and this percentage analysis is indicated in **Table 15-6** below. To ensure a robust analysis the volume of construction traffic has been assessed against each key node link.

Table 15-6: Construction Traffic Percentage Impact Analysis

Nodes	Average Hourly Flow	Construction Traffic (Hourly)	% Impact
A – Promenade Road	1702	15.8	0.93%
B – M50 Off Slip (to Promenade Road)	628	7.92	1.26%
C – M50 Off Slip (to R131)	936	15.8	1.69%
D – M50 On Slip (to Dublin Port Tunnel)	674	7.92	1.18%
E – R131 East Wall Road	764	15.8	2.07%
F – R131	2307	15.8	0.67%
G – R101 Sheriff St Upper	394	15.8	4.02%
H – R801	723	15.8	2.19%
I – R131 Tom Clarke Bridge	1605	15.8	0.99%

As indicated in **Table 15-6** above, the percentage impact upon each key node is less than 5%, which is the percentage identified as intensification. The percentage impacts set out in **Table 15-6** cannot be realised on the surrounding road network, as all average hourly construction traffic cannot arrive & depart via each of the links identified above.

The main approach routes are predicted to be Promenade Road (0.93%), M50 off slip to Promenade Road (1.26%), and M50 on slip to Promenade Road (1.18%). Therefore, the proposed construction traffic will have an insignificant impact upon the surrounding highway network.

It should also be noted that the analysis presented above is worst case, as it has been based on 2026 surveyed traffic flows and does not include for any associated growth (within or outside of the Port) and other committed developments which would only result in a reduced percentage impact upon the surrounding road network.

The assessment indicates the limited impact of the construction vehicles upon the surrounding road network (even with the worst-case assessment of assuming total construction vehicles use each route considered above). The assessment does not predict any significant impacts on East Wall Road, and the impact upon Tom Clarke Bridge (which provides access to the southern port lands) is less than 1% and therefore an insignificant impact upon the southern port road network.

15.4.2 Assessment of Operational Effects

There will be no operational impacts of the ABR2 Project upon the surrounding highway network. The ABR2 Project does not result in the generation of traffic during the operational phase.

15.5 Inter-relationships

Effects on traffic and transport also have the potential to have secondary effects on other receptors, which are considered in relevant topic-specific chapters. These receptors and effects are:

- Air Quality (**Chapter 10 Air Quality**)

  - Impact upon Air Quality due to emissions from construction vehicles during construction period; and

  - No impact during operational phase.

- Noise (**Chapter 12 Terrestrial Noise and Vibration**)

  - Increased levels of noise from construction vehicles during construction period; and

  - No impact during operational phase.

15.6 Mitigation and Monitoring

15.6.1 Mitigation

A Mobility Management Plan (MMP) has been drafted and is included within the draft CEMP. In addition, a Construction Traffic Management Plan (CTMP) will be submitted and agreed prior to commencement of the ABR2 Project. However, as indicated above, construction traffic is unlikely to have any significant impact upon the surrounding highway network.

15.6.2 Monitoring

The Construction Traffic Management Plan will set out the strategy, policies, procedures and methodology for monitoring during the construction phase of the ABR2 Project. It will be agreed directly with the highway authority prior to commencement of the works on the ABR2 Project.

15.7 Potential Cumulative Effects

Chapter 21 Cumulative Effects and Environmental Interactions outlines the methodology used to complete the assessment of cumulative effects, which may arise from adjacent or nearby development, together with those predicted for the ABR2 Project. The projects which have been considered within the assessment of cumulative effects are outlined in **Chapter 21 Cumulative Effects and Environmental Interactions**.

There are several projects identified as cumulative developments and, therefore, could result in cumulative impacts upon the surrounding highway network. The projects identified are within Dublin Port lands and will be subject to Construction Traffic Management Plans and associated management of resources within the Port.

The projects considered within the cumulative effects assessment are as follows:

- Application 3176/19.
- Application 3314/18.
- Application 3859/19.
- Application 4353/22.

As referenced above, this ABR2 Project results in a small volume of hourly traffic within Dublin Port, and therefore at this stage, it is considered that there are no potential cumulative effects arising from adjacent or nearby development, together with those predicted for the ABR2 Project.

15.8 Residual Impacts

In circumstances where the mitigation measures are fully implemented during the construction and operational phases, as outlined in **Section 15.6**, the Residual Effects of the ABR2 Project on traffic and transport would consist of insignificant impacts upon the surrounding road network. The ABR2 Project is predicted to generate low volumes of average hourly construction traffic, even based on the robust analysis presented above, and therefore, no significant impact during construction or operational phases.

15.9 Summary of Effects and Conclusions

A summary of the impact assessment is provided in **Table 15-7**. As indicated above, the predicted average hourly traffic volumes associated with the ABR2 Project (based on the most robust analysis) are low and therefore results in an insignificant / negligible impact upon the surrounding road network.

Table 15-7: Summary of Effects relating to Traffic & Transport

Potential Effect and Receptor	Phase[1]		Magnitude of Effects	Sensitivity of Receptor	Significance of Effect	Significant/Not Significant	Mitigation Measures	Residual Effects
	C	O						
Impact upon the External Road Network due to dredging within Alexandra Basin West	✓		C: Low	C: Negligible	C: Negligible	C: Not Significant	Construction Traffic Management Plan	N/A
		✓	O: Negligible	O: Negligible	O: Negligible	O: Not Significant		N/A
Impact upon External Road Network due to Infilling of Berths 52/53	✓		C: Low	C: Negligible	C: Negligible	C: Not Significant	Construction Traffic Management Plan	N/A
		✓	O: Negligible	O: Negligible	O: Negligible	O: Not Significant		N/A

[1] C: Construction Phase; O: Operational Phase

15.10 Limitations of Assessment

As referenced above, Alexandra Road was closed to through traffic when the traffic surveys were undertaken. However, as Promenade Road / M50 Dublin Port Tunnel is predicted to be the main arrival / departure route for construction related traffic, this is unlikely to result in a significant limitation of the assessment undertaken within this assessment.

There are no other known limitations to the assessment undertaken within this Chapter.