



# **Luas Finglas**

# **Environmental Impact Assessment Report**2024

Chapter 24: Cumulative Impacts





# **Table of Contents**

23.1	GLOSSARY OF FREQUENTLY USED TERMS	iv
SECTION 24:	Cumulative Impacts	1
24.1	Introduction	1
	24.1.1 Purpose of this Report	1
	24.1.2 Outline Scheme Description	1
24.2	Cumulative Impacts	3
	Legislation, Policy, and Guidance	
24.4	Methodology and Impacts Assessment	4
	24.4.1 Stage 1: Establishing the Long List of Other Developments	4
	24.4.2 Stage 2: Establishing the Short List of Other Developments	6
	24.4.3 Stage 3: Information Gathering	7
	24.4.4 Stage 4: Assessment	7
24.5	Potential Cumulative Impacts (Pre-Mitigation)	8
	24.5.1 Human Health	8
	24.5.2 Population	
	24.5.3 Biodiversity	12
	24.5.4 Water	
	24.5.5 Land & Soils (Soils, Geology & Hydrogeology)	
	24.5.6 Land Take	
	24.5.7 Air Quality	
	24.5.8 Climate	
	24.5.9 Noise and Vibration	
	24.5.10 Electromagnetic Compatibility Interference	
	24.5.11 Infrastructure and Utilities	
	24.5.12 Traffic and Transport	
	24.5.13 Resources and Waste Management	
	24.5.14 Cultural Heritage	
	24.5.15 Landscape and Visual Amenity	
24.6	Hub Assessment	
	24.6.1 Broombridge Hub	
	24.6.2 Finglas Village Hub	
	24.6.3 Charlestown Hub	
	Mitigation Measures	
	Residual Impacts	
	Conclusion	
	Difficulties Encountered in Compiling Information	
24.11	References	39

# **Appendices**

Appendix A24.1: Cumulative Impact Assessment Table Stage 1 & 2 Appendix A24.2: Cumulative Impact Assessment Table Stage 3 & 4





# List of Figures

# **List of Tables**

Table 24-1: Overview of the Key Features of the proposed Scheme	
Table 24-2: Summary of New Bridges of the proposed Scheme	3
Table 24-3: Tier 1-2 Classification for Other Developments (based on Advice Note Seventeen: Cumulat	tive
Effects Assessment Relevant to Nationally Significant Infrastructure Developments)	6
Table 24-4: Zone of Influence (ZoI) for Each Environmental Aspect	8
Table 24-5: Other Developments 'Screened In' for Potential Population Cumulative Impacts with	the
proposed Scheme (Pre-Mitigation)	
Table 24-6: Other Developments 'Screened In' for Potential Water Cumulative Impacts with the propos	
Scheme (Pre-Mitigation)	
Table 24-7: Other Developments 'Screened In' for Potential Land Take Cumulative Impacts with	
proposed Scheme (Pre-Mitigation)	
Table 24-8: Other Developments 'Screened In' for Potential Air Quality Cumulative Impacts with	
proposed Scheme (Pre-Mitigation)	
Table 24-9: Other Developments 'Screened In' for Potential Climate Cumulative Impacts with the propos	
Scheme (Pre-Mitigation)	
Table 24-10:Other Developments 'Screened In' for Potential Noise and Vibration Cumulative Impacts v	
the proposed Scheme (Pre-Mitigation)	20
Table 24-11: Other Developments 'Screened In' for Potential Electromagnetic Compatibility Interferen	
(Pre-Mitigation)	21
Table 24-12: Other Developments 'Screened In' for Potential Material Assets: Infrastructure & Utilit	ties
Cumulative Impacts with the proposed Scheme (Pre-Mitigation)	
Table 24-13: Other Developments 'Screened In' for Potential Traffic & Transport Cumulative Impacts v	vith
the proposed Scheme (Pre-Mitigation)	24
Table 24-14: Other Developments 'Screened In' for Potential Material Assets: Resources & Wa	
Management Cumulative Impacts with the proposed Scheme (Pre-Mitigation)	24
Table 24-15: Other Developments 'Screened In' for Potential Cultural Heritage Cumulative Impacts with	the
proposed Scheme (Pre-Mitigation)	27
Table 24-16: Other Developments 'Screened In' for Potential Landscape & Visual Amenity Cumulat	tive
Impacts with the proposed Scheme (Pre-Mitigation)	28
Table 24-17: Other developments located in the Broombridge Hub	29
Table 24-18: Other developments located in the Finglas Village Hub	32
Table 24-19: Other developments located in the Charlestown HubHub	. 34
Table 24-20: Potential Positive Significant Residual Cumulative Impacts with the proposed Scheme	36
Table 24-21: Potential Negative Significant Residual Cumulative Impacts with the proposed Scheme	





# 23.1 GLOSSARY OF FREQUENTLY USED TERMS

Acronym	Term
CBC	Core Bus Corridor
CDRWMP	Construction and Demolition Resources and Waste Management Plan
CEMP	Construction Environmental Management Plan
DCC	Dublin City Council
DoHLGH	Department of Housing, Local Government and Heritage
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EMWR	Eastern Midlands Waste Region
EPA	Environmental Protection Agency
FCC	Fingal County Council
GDA	Greater Dublin Area
GHG	Greenhouse Gas
LRT	Light Rail Transit
LRV	Light Rail Vehicle
NTA	National Transport Authority
OHLE	Overhead Line Equipment
CTMP	Construction Traffic Management Plan
RO	Railway Order
SHD	Strategic Housing Development
SWMP	Surface Water Management Plan
SID	Strategic Infrastructure Development
TII	Transport Infrastructure Ireland
Zol	Zone of Influence





# SECTION 24: CUMULATIVE IMPACTS

#### 24.1 Introduction

#### 24.1.1 Purpose of this Report

This Chapter reports on the likely significant cumulative impacts arising from the Luas Finglas Scheme (hereinafter referred to as the proposed Scheme) in combination with other existing and/or approved projects during the Construction and Operational Phases. The assessment is prepared in accordance with the requirements of Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private developments on the environment (i.e., the EIA Directive).

This Chapter should be read in conjunction with the Cumulative Impact Assessment Table Stage 1 & 2 (Volume 5 – Appendix A24.1) and the Cumulative Impact Assessment Table Stage 3 & 4 (Volume 5 – Appendix A24.2) of the Environmental Impact Assessment Report (EIAR) which includes the detailed assessment of potential cumulative impacts. Chapters 7 through to Chapter 21, and their Appendices, are also relevant in terms of the assessment of the likely significant impacts of the proposed Scheme under each of the environmental disciplines and the mitigation measures proposed. This chapter should also be read in conjunction with Chapter 23 (Interactions) which assesses the potential interactions between different environmental impacts arising from the proposed Scheme and Chapter 25 (Summary of Mitigation Measures, Monitoring & Residual Impacts) for proposed mitigation measures to ameliorate the predicted impacts.

#### 24.1.2 Outline Scheme Description

The proposed Scheme comprises a high-capacity, high-frequency light rail running from Broombridge to Charlestown, connecting Finglas and the surrounding areas with Dublin's wider public transport network by providing a reliable, and efficient public transport service to the city centre via Broombridge.

As shown in Volume 4 - Map Figure 1-1, starting from Broombridge, the proposed Scheme travels northwards, crossing the Royal Canal and the Maynooth railway line adjacent to Broome Bridge. It then runs adjacent to the east of Broombridge Road and the Dublin Industrial Estate. It then crosses the Tolka Valley Park before reaching the proposed St Helena's Stop and then proceeds northwards towards the proposed Luas Finglas Village Stop. From here, the route passes through a new corridor created within the Finglas Garda Station car park, making its eastern turn onto Mellowes Road. The route then proceeds through Mellowes Park, crossing Finglas Road, towards the proposed St Margaret's Road Stop. Thereafter, the proposed line continues along St Margaret's Road before reaching the terminus Stop proposed at Charlestown.

The proposed Scheme has been designed to interchange with existing and future elements of the transport network including interchange opportunities with bus networks at all the new Stops and with mainline rail services at Broombridge, and a Park & Ride facility to intercept traffic on the N/M2. The proposed Scheme will comprise a number of principal elements as outlined in Table 24-1 and Table 24-2. A full description of the proposed Scheme is provided in the following chapters of this EIAR:

- Chapter 1 (Introduction);
- Chapter 5 (Description of the proposed Scheme); and
- Chapter 6 (Construction Activities).





Table 24-1: Overview of the Key Features of the proposed Scheme

Scheme Key Features	Outline Description		
Permanent Scheme Elements			
Light Rail track	3.9 km extension to the Luas Green Line track from Broombridge to Finglas (2.8km of grass track, 700m of embedded track and 360m of structure track)		
Depot Stabling facility	A new stabling facility (with stabling for eight additional LRVs) will be located just south of the existing Broombridge terminus, as an extension of the Hamilton depot area.		
Luas Stops	Four Stops located at: St Helena's, Finglas Village, St Margaret's Road, and Charlestown to maximise access from the catchment area including the recently re-zoned Jamestown Industrial Estate.		
Main structures	Two new Light Rail Transit (LRT) bridges will be constructed as part of the proposed Scheme: a bridge over the River Tolka within the Tolka Valley Park and a bridge over the Royal Canal and the Iarnród Éireann (IÉ) railway line at Broombridge.		
	A number of existing non-residential buildings shall be demolished to facilitate the proposed Scheme. In addition, the existing overbridge at Mellowes Park will be demolished.		
At grade signalised junctions	10 at grade signalised junctions will be created at: Lagan Road, Ballyboggan Road, Tolka Valley Road, St. Helena's Road, Wellmount Road, Cappagh Road, Mellowes Road, North Road (N2), McKee Avenue, Jamestown Business Park entrance. Note: The junction at Charlestown will be reconfigured but does not have a LRT crossing.		
Uncontrolled crossings	13 at grade uncontrolled crossings (11 pedestrian / cycle crossings and two local accesses located at: Tolka Valley Park, St Helena's, Farnham pitches, Patrickswell Place, Cardiff Castle Road, Mellowes Park, St Margarets Road, and ESB Networks.		
Cycle facilities	Cycle lanes are a core part of the proposed Scheme in order to facilitate multimodal "cycle-LRT trips". Approximately 3km of segregated cycle lanes and 100m of non-segregated cycle lanes along the route. Covered cycle storage facilities will be provided at Broombridge Terminus, Finglas Village Stop and St Margaret's Stop and within the Park & Ride facility. "Sheffield" type cycle stands will be provided at all stop locations.		
Power substations	Two new traction power substations for the proposed Scheme will be located near Finglas Village Stop behind the existing Fire Station, and near the N2 junction before St Margaret's Road Stop where the current spiral access ramp to the pedestrian overbridge is located.  A third substation is required for the Park & Ride facility.		
Park & Ride facility	A new Park & Ride facility, with e-charging substation, located just off the M50 at St Margaret's Stop will be provided with provision for 350 parking spaces and secure cycle storage. The building will feature photovoltaic (PV) panel roofing and is the location for an additional radio antenna. This strategic Park & Ride connecting the N2/M50 to the city centre will increase the catchment area of the proposed Scheme.		
Temporary Scheme Elements			
Construction compounds	There will be three principal construction compounds, two located west of Broombridge Road and one located at the northern extents of Mellowes Park. In addition, there are other secondary site compound locations for small works/storage. Details can be found in Chapter 6 (Construction Activities) of this EIAR.		





Identity	Location	Description
Royal Canal and Rail Bridge	Approximately 10m east of the existing Broome Bridge and then continuing north, parallel with Broombridge Road on its east side	The proposed bridge is an eight-span structure consisting of two main parts: a variable depth weathering steel composite box girder followed by a constant depth solid concrete slab. The bridge has the following span arrangement: 35 + 47.5 + 30 + 17 + 3x22 + 17m. Steel superstructure extends over the first three spans. The bridge deck is continuous over the full length of 212.5m and has solid approach ramps at both ends.
Tolka Valley Park Bridge	Approximately 30m west of the existing Finglaswood Bridge	A three-span structure with buried end spans, thus appearing as a single span bridge. End spans as well as part of the main span consist of post-tensioned concrete variable depth girder, the central section of the main span is a suspended weathering steel composite box girder. The overall length of the bridge is 65m with spans 10m, 45m, 10m.

## 24.2 Cumulative Impacts

The cumulative impact of a development refers to the way in which an environmental resource may be subject to a particular type of impact from more than one proposed development. The impacts from multiple developments may overlap or act in combination at a particular location or upon a particular resource, thereby leading to more significant environmental impacts than if the impacts were considered in isolation.

The European Commission (EC) Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions provide the following definition of cumulative impacts:

'Impacts that result from the incremental changes caused by other past, present or reasonably foreseeable actions together with the project.' (European Commission, 1999).

Section 39(2) of the Transport (Railway Infrastructure) Act 2001, as amended by the European Union (EU) (Railway Orders) (Environmental Impact Assessment) (Amendment) Regulations 2021 requires that the applicant shall ensure that:

"...an environmental impact assessment report, in addition to and by way of explanation or amplification of the specified information referred to in subsection (1), contains any additional information specified in Annex IV to the EIA Directive relevant to the specific characteristics of the particular railway works, or type of railway works, proposed and to the environmental features likely to be affected".

Annex IV of the EIA Directive (2011/92/EU as amended by 2014/52/EU) requires that an EIAR shall contain:

'Description of the likely significant effects of the project on the environment resulting from...the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources.'

This EIAR goes further than these requirements and, in addition to its consideration and assessment of the likely significant cumulative impacts of other existing and/or approved projects with the proposed Scheme. The EIAR also considers and assesses the likely significant cumulative impacts arising from plans, from other projects for which an application for development consent has been made to the relevant local authority or to An Bord Pleanála which has not yet been determined, and from other major developments that are currently subject to the pre-planning application and preliminary design phases where they have the potential to have likely significant cumulative impacts with the proposed Scheme. The EIAR also considers development plan land zoning in so far as possible.





## 24.3 Legislation, Policy, and Guidance

This chapter has been prepared in accordance with the EIA Directive and the Transport (Railway Infrastructure) Act, 2001 (as amended). It also references the following guidance documents:

- Draft Advice Notes for Preparing Environmental Impact Statements (EPA, 2015);
- Environmental Impact Assessment of Projects. Guidance on the preparation of the Environmental Impact Assessment Report (European Union, 2017c);
- Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions (European Commission, 1999);
- Guidelines for Planning Authorities and An Bord Pleanála (hereafter referred to as the Board) on carrying out Environmental Impact Assessment. Department of Housing, Local Government and Heritage (DoHLGH, 2018); and
- Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, 2022).

## 24.4 Methodology and Impacts Assessment

### 24.4.1 Stage 1: Establishing the Long List of Other Developments

The first stage in determining cumulative impacts comprised the identification of a long list of other developments which may have the potential to overlap with the proposed Scheme based on available information.

This involved a desk study of planning applications, development plan documents, relevant development frameworks and any other available sources to identify other developments within a defined Zone of Influence (ZoI) which may have the potential to interact with the proposed Scheme.

This assessment uses the source-pathway-receptor (S-P-R) model as outlined in guidance (OPR, 2021). Using the source-pathway-receptor model allows for the potential significant effects to be eliminated if no viable source, pathway, or receptor is present.

The S-P-R method involves examining the construction methods or project description to identify sources of impact. This examination helps generate a zone of influence (ZoI) for the project, based on the size, scale, and nature of the work involved. Additionally, the pathways for impact are analysed to determine if a functional pathway exists. In some cases, sensitive receptors may also influence the determination of the zone of influence.

For the purpose of the proposed Scheme, the categories for other developments within the ZoI included in the cumulative impact assessment are as follows:

- Any approved and still implementable planning applications backdated approximately 10 years from the time the planning search was undertaken (it was reasonably assumed that applications dated further than 10 years from the search date would have either been completed or are no longer likely to proceed) with the potential for cumulative impacts with the proposed Scheme;
- Any other major developments (such as projects from various sectors including energy, utilities, and transport) that are currently subject to the pre-planning application and preliminary design phases with the potential for cumulative impacts with the proposed Scheme; and
- Applications for development consent which have been made to the relevant local authority or to An Bord Pleanála and which have not yet been determined.

Developments or development plan zoning, whose impacts could foreseeably overlap with the construction or operation of the proposed Scheme, or where construction impacts may be consecutive but cumulative, were also included in the final list. If a development has been granted permission and was deemed to be completed, then this would be considered part of the baseline. For the full list of developments refer to





Volume 5 - Appendix A24.1 (Stage 1 & 2 Cumulative Assessment). The most recent search for developments considered in this EIAR was undertaken on 30<sup>th</sup> June 2024.



Figure 24-1: Short-Listing Process for Local Authority Planning Applications

#### 24.4.1.1 Sources for Identification of other developments

Potentially relevant other developments considered include proposed developments and development plan land allocations registered in the planning system or form part of land allocations within Development Plans. The identification of developments for the long list considered the following sources:

- An Bord Pleanála website for details of Strategic Infrastructure Developments (SIDs) and Strategic Housing Developments (SHDs);
- Local Authority websites and the development plans for Dublin City and Fingal for details of allocations and areas for regeneration;
- National Planning Application Database for downloadable list of planning applications sent from Local Authorities:
- Projects being planned by the National Transport Authority (the NTA website, provides detail) as part of other major transport projects and programmes in accordance with the Transport Strategy for the Greater Dublin Area 2022 – 2042;
- Project Ireland 2040, which combines the National Development Plan and National Planning Framework. (gov.ie – Project Ireland 2040 (http://www.gov.ie) and its interactive mapper;
- Transport Infrastructure Ireland website to identify major transport projects and programmes (such as National Roads and Greenways);
- The EIA Portal maintained by the Department of Housing, Planning and Local Government for applications for development consent accompanied by an EIAR;
- Uisce Éireann's website, which includes a page on its projects (https://www.water.ie/projects/); and
- Irish Rail website, which includes the DART+ Projects.

All planning application data provided by each local authority input the national Data.Gov.ie database (<a href="https://data.gov.ie/dataset/national-planning-applications">https://data.gov.ie/dataset/national-planning-applications</a>). This dataset was used to identify planning applications within a search area of the proposed Scheme. The dataset included planning applications of various scales, most of which were for small-scale applications such as domestic residential modifications.

#### **Local Authority Planning Applications**

A long list of other developments that are pending as well as developments which have been approved by the Local Authorities was generated using an ArcGIS online database "National Planning Applications" which is published by the Department of Housing, Local Government and Heritage. This database is updated weekly. This long list was divided between the appropriate Local Authorities of Dublin:

- Dublin City Council (DCC); and
- Fingal County Council (FCC).

Developments which were identified as having been refused, were not included in the assessment.





#### **Major Developments**

The Guidance for Planning Authorities on Appropriate Assessments (Department of Environment, Heritage, and Local Government, 2009) recommends a study area of 15 km is applied (to be developed on case-by-case basis bearing in mind the precautionary principle).

Therefore, a long list of other major developments, including SIDs and SHDs that have approved planning permission by the Board and major projects that are in pre-planning phases within the ZoI of the proposed Scheme boundary was developed using the Board website and the NTA and Transport Strategy for the Greater Dublin Area (GDA) 2022-2042 (NTA, 2022).

#### 24.4.1.2 Assignment of Tiers

A 'Tier' (1 or 2) was assigned to each of the other developments to indicate the level of certainty associated with its implementation, as detailed in Table 24-3. While the tiers provide an indication of the level of information available on which to base an assessment, the status of planning applications changes through time. The Stage 1 & 2 Cumulative Assessment (See Volume 5 - Appendix A24.1) provides an indication of the tier of each of the 402 developments at the time of assessment, but some would have subsequently changed and further information on those developments may now be available, which wasn't available at the time of assessment.

Table 24-3: Tier 1-2 Classification for Other Developments (based on Advice Note Seventeen: Cumulative Effects Assessment Relevant to Nationally Significant Infrastructure Developments)

	Under construction	
Tier 1	Permitted application(s) but not yet implemented	Decreasing level of detail likely to be
	Submitted application(s) but not yet determined	available
Tier 2	Identified in the relevant Development Plan and Strategies (and emerging Development Plans, with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited.	
	Identified in other plans and programmes (as appropriate) which set the framework for future development consents/approvals, where such development is reasonably likely to come forward.	+

The outcome of Stage 1 was a long list of 402 developments for review (and amendment if required) and consideration at Stage 2 of the assessment being the establishment of the short list of developments. The long list of other developments is provided in Volume 5 - Appendix A24.1 of the EIAR.

#### 24.4.2 Stage 2: Establishing the Short List of Other Developments

Inclusion or exclusion threshold criteria were applied to the list of 402 other developments from Stage 1 to determine whether they had any potential to give rise to likely significant cumulative impacts with respect to the following:

- Temporal Scope Is there any overlap and potential for interaction due to the timing of construction, operation, and decommissioning phases of the 'other development'; and
- Scale and Nature Due to the scale and nature of the developments, are they likely to interact with the proposed Scheme to result in a likely significant cumulative impacts and EIA screening thresholds were considered in determining issues of scale (European Union, 2017c).

The decision was made to retain the 15km radius within the ZoI only for larger scale developments with Environmental Impact Assessment (EIA) screenings. The broader radius accounts for the potential for cumulative impacts to occur over a wider area with such developments. After reviewing planning applications submitted to Dublin City Council and Fingal County Council, it was determined that most developments seeking planning permission through local authorities, rather than through the Board, are unlikely to cause noticeable impacts beyond 1km from the development's site. Therefore, the larger 15km





radius was reserved for identifying major developments subject to EIA Screenings, ensuring a proportional approach to assessing potential impacts.

Professional judgement was used in applying these threshold criteria, and larger projects outside the 15 km radius were occasionally included. Likewise, the use of EIA screening thresholds was only a guide, and some projects which are below thresholds yet relatively close to the proposed Scheme and still of a scale to be noticeable in the local context were shortlisted.

The identification and shortlisting process is documented in Volume 5 - Appendix A24.1 of the EIAR. The reasons for excluding any development from further consideration are recorded. Where other developments with the potential to give rise to likely significant cumulative impacts were identified, these were taken forward to Stage 3.

## 24.4.3 Stage 3: Information Gathering

During Stage 3 of the shortlisting process, an additional refinement was undertaken to narrow down the list of developments to those likely to have potential impacts. The final filtration step involved assessing developments based on their proximity to the proposed Scheme, guided by professional judgement. Specifically, all developments within a 1km radius, housing developments within a 1.5km radius, and major projects such as Strategic Housing Developments (SHD) and Strategic Infrastructure Developments (SID) within a 10km radius were included in this assessment.

For the shortlisted developments, sufficiently detailed information was compiled to inform the Stage 4 assessment. This included information such as:

- Proposed design and location of the development;
- Proposed programme of construction, operation, and decommissioning (if relevant); and
- Environmental assessments, if available, that set out baseline data and effects arising from the development.

The relevant information was sourced from the websites of relevant local planning authorities and through general internet searches and Luas Team knowledge.

Forty-three 'other developments' were screened in at this stage. The shortlisted projects are listed in Volume 5 – Appendix A24.2 of this EIAR.

#### 24.4.4 Stage 4: Assessment

The likely significant cumulative impacts of the proposed Scheme with each of the 43 'other developments' were assessed to a level of detail appropriate with the information that was available at the time of assessment. Where information regarding proposed other developments was limited, these gaps were acknowledged within the assessment and the associated uncertainty in these cases is documented.

There are no prescriptive techniques used in the evaluation of the significance of cumulative impacts. Professional judgement and consideration of standards, guidelines and environmental carrying capacities have been applied to determine whether in-combination impacts give rise to additional levels of significance. The European Commission and EPA guidelines referenced above were considered.

The significance criteria used to assess likely cumulative impacts considered the capacity of environmental resources and receptors to accommodate changes that are likely to occur. These include:

- The duration of impact (i.e. would it be temporary or permanent):
- The extent of impact (e.g. its geographical area);
- The type of impact (e.g. whether additive (i.e. the loss of two pieces of hay meadows of 1 hectare (ha), resulting in 2ha cumulative hay meadow loss)) or synergistic (i.e. two discharges combine to have an effect on a species not affected by discharges in isolation);
- The frequency of the impact;





- The 'value' and resilience of the receptor affected; and
- The likely success of mitigation.

#### 24.4.4.1 Zones of Influence

The Zone of Influence (ZoI) for each environmental aspect of the EIAR is based on professional judgement regarding the probable extent of impacts on key receptors. This determination may vary depending on the sensitivity of different study features to environmental alterations. While the primary ZoIs will generally fall within a specified radius of the proposed Scheme, it is acknowledged that certain potential effects might extend beyond this radius. Such effects will be duly considered if they are deemed relevant by the specialist conducting the assessment. A comprehensive list of ZoIs and their corresponding environmental aspect can be found in Table 24-4 below.

Table 24-4: Zone of Influence (ZoI) for Each Environmental Aspect

Chapter	Study Area
Human Health	500m
Population	1km
Biodiversity	3km
Water	500m
Land & Soils	250m
Land Take	entire length of the proposed Scheme
Air Quality	350m
Climate	350m
Noise & Vibration	300m
Electro Magnetic Compatibility & Interference	100m
Infrastructure & Utilities	within work areas within the proposed Scheme
Traffic & Transport	2km
Waste Management	Eastern-Midlands Waste Region
Cultural Heritage	250m
Landscape	2km

The full results and detail of the assessments are documented in Volume 5 - Appendix A24.2 (Cumulative Impact Assessment Table Stage 3 & 4) of the EIAR. A summary of the 43 other developments that were screened in for consideration of potential likely significant cumulative impacts with the proposed Scheme are detailed in section 24.5 for each environmental aspect, correlating with the EIAR Chapters. Section 24.5 also presents the assessment of likely significant cumulative impacts identified on a topic-by-topic basis. Volume 4 – Map Figure 24-1 details the major developments that were screened in for consideration of likely significant potential cumulative impacts.

# 24.5 Potential Cumulative Impacts (Pre-Mitigation)

This section provides a topic-by-topic assessment of likely significant cumulative impacts of the proposed Scheme in combination with other developments. The full impact assessment is located in Volume 5 - Appendix A24.2.

#### 24.5.1 Human Health

The list of 43 other developments has been reviewed and assessed in relation to likely significant cumulative impacts relevant to Human Health. All 43 other developments were screened out during the Construction and Operational Phases. Following consideration and assessment by the relevant experts it was determined





that due to their distance from the proposed Scheme, their scale, and nature, they would not result in any likely significant cumulative impacts on Human Health with the proposed Scheme, as set out in Volume 5 - Appendix A24.2.

#### 24.5.2 Population

The list of 43 other developments has been reviewed and assessed in relation to likely significant cumulative impacts relevant to Population. A total of 17 of these other developments were screened out during the Construction and Operational Phases. Following consideration and assessment by the relevant experts it was determined that due to their distance from the proposed Scheme, their scale, and nature, they would not result in any likely significant cumulative impacts on Population with the proposed Scheme, as set out in Volume 5 - Appendix A24.2.

A total of 26 of the 'other developments' were screened in for potential likely significant cumulative impacts on Population with the proposed Scheme prior to the implementation of any mitigation measures. These are listed in Table 24-5.

Table 24-5: Other Developments 'Screened In' for Potential Population Cumulative Impacts with the proposed Scheme (Pre-Mitigation)

Other Development Developer / Name	Short Description	Luas Finglas Phase
Prime GP Limited	The proposed development will consist of the demolition of a c. 1,732m² part single storey part two-storey office building. Permission is also sought for all ancillary site services and landscape works	Construction
Puddenhill Property Limited Charlestown Development	590 apartments, a creche and all associated site works.	Construction / Operational
Metrolink	A high-capacity, high-frequency, metro railway, with 16 new stations running from Swords to Charlemont. The alignment will link Dublin Airport, Irish Rail, DART, Dublin Bus and Luas services and create a fully integrated public transport network for the GDA.	Construction / Operational
DART+ Programme West	DART upgrade programme will serve all existing stations along the railway corridor between Maynooth Station and M3 Parkway Station to Connolly Station and to the proposed Spencer Dock Station using electrical power, which has a lower carbon footprint than the current diesel trains.	Construction / Operational
DART+ Programme Southwest	DART improvement project will provide a sustainable, electrified and more frequent rail service between Hazelhatch / Celbridge station and Dublin City Centre, whilst also increasing capacity and reducing journey times for non-electrified InterCity and Commuter services.	Construction / Operational
DART+ Tunnel Element (Kildare Line to Northern Line	DART upgrade programme will serve Kildare Line to Northern Line	Construction / Operational
Dublin BusConnects Core Bus Corridor (CBC) 02 Swords to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced	Construction / Operational





Other Development Developer / Name	Short Description	Luas Finglas Phase
	bus priority measures for existing (both public and private) for the community of Swords.	
Dublin BusConnects CBC 03 Ballymun - Finglas	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the Ballymun and Finglas communities.	Construction / Operational
Dublin BusConnects CBC 05 Blanchardstown to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Blanchardstown.	Construction / Operational
Dublin BusConnects Clongriffin to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Clongriffin.	Construction / Operation
Proposed development of a multi- modal transport scheme along a section of the N3 between the M50 and Clonee	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) and all future services who will use the corridor.	Construction / Operational
Irish Water Greater Dublin Drainage (GDD)	A new wastewater treatment plant, sludge hub centre, orbital sewer, outfall pipeline and regional biosolids storage facility.	Construction
Environment & Transportation Department Royal Canal Greenway	The proposed works shall comprise the construction of c. 4.3km of cycle and pedestrian route from Phibsborough Road, Dublin 7 - Cross Guns Bridge to Ashtown, Dublin 15 along the northern towpath. The works traverse Broome Bridge (Protected Structure) and H.S. Reilly's Bridge (Protected Structure). A Toucan (pedestrian and cycle) crossing is proposed at Broombridge Road/ Broome Bridge.	Construction / Operational
Dublin City Council Jamestown Master Plan	Development Plan for 43 hectares of Jamestown Industrial Estate lands at Jamestown Road, St Margaret's Road / McKee Avenue, Finglas, Dublin 11. The Masterplan sets out the details to inform the sustainable and sequential regeneration and development of the lands.	Construction / Operational
Dublin City Council Ballyboggan Local Action Plan	Development Plan to enable the compact and sustainable mixed-use regeneration and redevelopment of the area.	Construction / Operational





Other Development Developer / Name	Short Description	Luas Finglas Phase
Hughes Planning & Development Consultants Manhattan Peanuts	Proposed extension to the existing food production and warehouse building at Manhattan Peanuts Ltd comprising an additional floor area of 1,913m <sup>2</sup> and associated external amendments.	Construction
Energia Solar Holdings Ltd	110kV Air Insulated Switchgear (AIS) tail-fed substation compound, combined with a 110kV underground cable connection to Finglas	Construction
Patrick Goslin & Sons Limited	Demolition of existing structures and construction of a mixed commercial / residential development of 64 units in three blocks.	Construction / Operational
Dublin Central GP Limited	Protected Structures: A mixed-use development and associated site works at a site, 'Dublin Central - Site 2.	Construction
Dublin Central GP Limited	Protected Structure: Refurbishment and reuse of commercial building to include restaurant, apartments, gym, pedestrian link and associated site work.	Construction
Universal Developers LLC	Construction of data centre and associated site works.	Construction
O'Cualann Cohousing Alliance CLG	Construction of 32 houses, two sheltered housing units, single storey creche and all associated site works.	Construction
Melvin Properties Limited	Construction of an eco-self-storage facility comprising 300 storage containers and all associated site works.	Construction
Kilshane Energy Ltd.	Demolition of buildings, road improvement works and construction of gas turbine power generation station with all associated site works.	Construction
DAA plc	Development on four sites located entirely within lands in the ownership of Dublin Airport, consisting of the construction of a subterranean Underpass of Runway 16/34 and all associated and ancillary works.	Construction
EirGrid Powering Up Dublin programme	Project installing over 50km of electrical cables across the city to strengthen key electricity infrastructure in Dublin Finglas Co. Dublin	Construction

#### 24.5.2.1 Construction Phase

All 26 'other developments' screened for potential cumulative impacts on Population pertain exclusively to the Construction Phase, assuming construction activities coincide with those of the proposed Scheme. Cumulative impacts may arise due to additional construction traffic having negative severance and journey amenity impact together with an impact on residential amenity. A Construction Traffic Management Plan (CTMP) has been prepared to demonstrate the manner in which the interface between the public and construction-related traffic will be managed and how vehicular movement will be controlled. The CTMP is presented in Volume 5 – A6.2 of this EIAR. The purpose of this CTMP is to demonstrate that the residual impacts to public road network during the Construction Phase of the proposed Scheme, which have been





identified in the application documentation, will be minimised and that transport related activities are carried out as safely as possible and with the minimum disruption to other road users. This plan must be finalised and implemented by the PSCS / Contractor prior to commencing the works and should not be implemented until it has been assessed and developed by the PSCS. The PSCS shall co-ordinate the implementation of the developed Traffic Management Plan during construction of the works. The Works Requirements will require the implementation of all the applicable mitigation measures identified in the EIAR and any additional measures required pursuant to conditions imposed by An Bord Pleanála in the CTMP. If the construction periods overlap, additional consultations will be necessary to prevent any unintended cumulative impacts. However, with the standard mitigation measures outlined in Chapter 8 (Population) of this EIAR, the cumulative impact is expected to be Not Significant.

#### 24.5.2.2 Operational Phase

Fourteen 'other developments', outlined in Table 24-5, were identified as having the potential to yield significant Positive cumulative impacts when integrated with the proposed Scheme. Among these developments are pivotal transportation and housing initiatives such as BusConnects, Metrolink, and the Jamestown Master Plan. These projects not only seek to enhance transportation infrastructure but also aim to elevate residential amenities by fostering greater connectivity in the community.

#### 24.5.3 Biodiversity

The list of 43 'other developments' has been reviewed and assessed in relation to cumulative impacts relevant to Biodiversity. All 43 'other developments' were screened out during the Construction and Operational Phases, due to their distance, scale, and nature.

The developments are located far enough from the proposed Scheme site that their Biodiversity Zols do not overlap. This spatial separation ensures that any potential disturbances to local ecosystems are isolated and do not combine to create any cumulative effects. The developments are relatively small in size, from a Biodiversity perspective, and smaller projects typically have a lesser environmental footprint, meaning their impacts on Biodiversity are negligible and will not contribute to cumulative effects when considered alongside the proposed Scheme. The activities associated with the 43 developments are such that they do not significantly threaten Biodiversity. This could include factors like low-intensity land use, minimal habitat disruption, or operations that do not produce significant pollution or habitat fragmentation. By considering these factors—distance, scale, and nature of activities—the assessment confidently concluded that there would be no significant cumulative impacts on Biodiversity during both the Construction and Operational Phases of the proposed Scheme.

#### 24.5.4 Water

The list of 43 'other developments' has been reviewed and assessed in relation to likely significant cumulative impacts relevant to Water. A total of 33 of these 'other developments' were screened out during the Construction and Operational Phases. Following consideration and assessment by the relevant experts it was determined that due to their distance from the proposed Scheme, their scale, and nature, they would not result in any likely significant cumulative impacts on Water with the proposed Scheme, as set out in Volume 5 - Appendix A24.2.

A total of 10 of the 'other developments' were screened in for potential likely significant cumulative impacts on Water with the proposed Scheme, prior to the implementation of any mitigation measures. These developments are listed in Table 24-6.





Table 24-6: Other Developments 'Screened In' for Potential Water Cumulative Impacts with the proposed Scheme (Pre-Mitigation)

Other Development Developer / Name	Short Description	Luas Finglas Phase
Prime GP Limited	The proposed development will consist of the demolition of a c. 1,732m² part single storey part two-storey office building. Permission is also sought for all ancillary site services and landscape works	Construction
Puddenhill Property Limited Charlestown Development	590 apartments, a creche and all associated site works.	Construction
DART+ Programme West	DART upgrade programme will serve all existing stations along the railway corridor between Maynooth Station and M3 Parkway Station to Connolly Station and to the proposed Spencer Dock Station using electrical power, which has a lower carbon footprint than the current diesel trains.	Construction
Dublin BusConnects CBC 05 Blanchardstown to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Blanchardstown.	Construction
Environment & Transportation Department Royal Canal Greenway	The proposed works shall comprise the construction of c. 4.3km of cycle and pedestrian route from Phibsborough Road, Dublin 7 - Cross Guns Bridge to Ashtown, Dublin 15 along the northern towpath. The works traverse Broome Bridge (Protected Structure) and H.S. Reilly's Bridge (Protected Structure). A Toucan (pedestrian and cycle) crossing is proposed at Broombridge Road / Broome Bridge.	Construction
Dublin City Council Ballyboggan Local Action Plan	Development Plan to enable the compact and sustainable mixed-use regeneration and redevelopment of the area.	Construction
Hughes Planning & Development Consultants Manhattan Peanuts	Proposed extension to the existing food production and warehouse building at Manhattan Peanuts Ltd. comprising an additional floor area of 1,913m <sup>2</sup> and associated external amendments.	Construction
Energia Solar Holdings Ltd	110kV Air Insulated Switchgear (AIS) tail-fed substation compound, combined with a 110kV underground cable connection to Finglas	Construction
Melvin Properties Limited	Construction of an eco-self-storage facility comprising 300 storage containers and all associated site works.	Construction
EirGrid Powering Up Dublin programme	Project installing over 50km of electrical cables across the city to strengthen key electricity infrastructure in Dublin Finglas Co. Dublin	Construction

#### 24.5.4.1 Construction Phase

All of the 10 'other developments' screened in for the potential cumulative impacts on Water relate to the Construction Phase if construction works were to take place at the same time as the proposed Scheme. During the Constructions Phase, there will be a Construction Environmental Management Plan (CEMP) and a Surface Water Management Plan (SWMP) for each development, i.e. the proposed Scheme and the 10 other developments. If both developments proceed at the same time, the individuals involved in ensuring the requirements of the CEMP and the SWMP for both projects, shall consult to coordinate their plans and





address any potential conflicts. The standard mitigations included for the proposed Scheme (refer to Chapter 10 (Water) of this EIAR), will ensure that cumulative impacts will be Not Significant.

#### 24.5.4.2 Operational Phase

There were no developments which were screened in for potential operational Water cumulative impacts. Operational mitigation measures have been built into the design of the proposed Scheme and are outlined in Chapter 10 (Water) of this EIAR. The proposed SuDS measures has been designed to mimic natural drainage and will provide a range of environmental benefit, encouraging infiltration, attenuation, and passive treatment.

During the Operational Phase of the proposed Scheme, a number of different agencies will carry out maintenance of SuDS features in accordance with their respective management procedures. No additional mitigation measures are required.

#### 24.5.5 Land & Soils (Soils, Geology & Hydrogeology)

The list of 43 'other developments' has been reviewed and assessed in relation to likely significant cumulative impacts relevant to Land & Soil. All 43 of these 'other developments' were screened out during the Construction and Operational Phases. Following consideration and assessment by the relevant experts it was determined that due to their distance from the proposed Scheme, their scale, and nature, they would not result in any likely significant cumulative impacts on Land & Soil with the proposed Scheme, as set out in Volume 5 - Appendix A24.2.

#### 24.5.6 Land Take

The list of 43 'other developments' has been reviewed and assessed in relation to likely significant cumulative impacts relevant to Land Take. A total of 40 of these 'other developments' were screened out during the Construction and Operational Phases. Following consideration and assessment by the relevant experts it was determined that due to their distance from the proposed Scheme, their scale, and nature, they would not result in any likely significant cumulative impacts on Land Take with the proposed Scheme, as set out in Volume 5 - Appendix A24.2.

A total of three of the 'other developments' were screened in for potential likely significant cumulative impacts with the proposed Scheme, prior to the implementation of any mitigation measures. These developments are listed in Table 24-7.

Only developments where there is an overlap in either temporary or permanent land take boundaries have been considered for the assessment of likely significant cumulative effects on land take.

Table 24-7: Other Developments 'Screened In' for Potential Land Take Cumulative Impacts with the proposed Scheme (Pre-Mitigation)

Other Development Developer / Name	Short Description	Luas Finglas Phase
DART+ Programme West	DART upgrade programme will serve all existing stations along the railway corridor between Maynooth Station and M3 Parkway Station to Connolly Station and to the proposed Spencer Dock Station using electrical power, which has a lower carbon footprint than the current diesel trains.	Construction
Environment & Transportation Department Royal Canal Greenway	The proposed works shall comprise the construction of c. 4.3km of cycle and pedestrian route from Phibsborough Road, Dublin 7 - Cross Guns Bridge to Ashtown, Dublin 15 along the northern towpath. The works traverse Broome Bridge (Protected Structure) and H.S. Reilly's Bridge (Protected Structure). A Toucan	Construction





Other Development Developer / Name	Short Description	Luas Finglas Phase
	(pedestrian and cycle) crossing is proposed at Broombridge Road/ Broome Bridge.	
Hughes Planning & Development Consultants	Proposed extension to the existing food production and warehouse building at Manhattan Peanuts Ltd comprising an additional floor area of 1,913m². and associated external amendments.	Construction

#### 24.5.6.1 Construction Phase

All three of the 'other developments' screened in for potential cumulative impacts, as listed in Table 24-7, relate to potential land take clashes, if the Construction Phase of the proposed Scheme were to overlap with any of these 'other developments'.

An integrated approach has also been taken in the design of the proposed Scheme with its interfaces with the DART+ Programme to ensure that all feasible measures are taken to reduce the potential for negative cumulative impacts during the construction of this other development and operation of the proposed Scheme. Due to the Royal Canal Greenway being in preliminary stages of development at the time of the authoring of this EIAR, this same approach could not be taken. In the case of the Manhattan Peanuts Ltd. extension, coordination will commence with DCC and the landowner regarding the two projects at the Construction Phase of the proposed Scheme.

#### 24.5.6.2 Operational Phase

No developments were screened in for the potential for cumulative Land Take impacts during the Operational Phase of the proposed Scheme. This is due to other major developments such as BusConnects and DART+ West having been accommodated within the proposed Scheme alignment design.

#### 24.5.7 Air Quality

The list of 43 'other developments' has been reviewed and assessed in relation to likely significant cumulative impacts relevant to Air Quality. A total of 25 of these 'other developments' were screened out during the Construction and Operational Phases. Following consideration and assessment by the relevant experts, it was determined that due to their distance from the proposed Scheme, their scale, and nature, they would not result in any likely significant cumulative impacts on Air Quality with the proposed Scheme, as set out in Volume 5 - Appendix A24.2.

A total of 18 'other developments' were screened in for potential likely significant cumulative impacts with the proposed Scheme, prior to the implementation of any mitigation measures. These developments are listed in Table 24-8.

Table 24-8: Other Developments 'Screened In' for Potential Air Quality Cumulative Impacts with the proposed Scheme (Pre-Mitigation)

Other Development Developer / Name	Short Description	Other Development Developer / Name
Metrolink	A high-capacity, high-frequency, metro railway, with 16 new stations running from Swords to Charlemont. The alignment will link Dublin Airport, Irish Rail, DART, Dublin Bus and Luas services and create a fully integrated public transport network for the GDA.	Operational
DART+ Programme West	DART upgrade programme will serve all existing stations along the railway corridor between Maynooth Station and M3 Parkway Station to Connolly Station and to the proposed Spencer Dock Station using electrical power, which has a lower carbon footprint than the current diesel trains.	Operational





Other Development Developer / Name	Short Description	Other Development Developer / Name
DART+ Programme Southwest	DART improvement project will provide a sustainable, electrified and more frequent rail service between Hazelhatch / Celbridge station and Dublin City Centre, whilst also increasing capacity and reducing journey times for non-electrified InterCity and Commuter services.	Operational
DART+ Tunnel Element (Kildare Line to Northern Line	DART upgrade programme will serve Kildare Line to Northern Line	Operational
Dublin BusConnects CBC 02 Swords to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Swords.	Operational
Dublin BusConnects CBC 03 Ballymun - Finglas	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the Ballymun and Finglas communities.	Operational
Dublin BusConnects CBC 05 Blanchardstown to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Blanchardstown.	Operational
Dublin BusConnects Clongriffin to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Clongriffin.	Operational
Dublin BusConnects CBC 06 Lucan to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Lucan.	Operational
Dublin BusConnects CBC 07 Liffey Valley to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Liffey Valley.	Operational
Dublin BusConnects CBC 0809 Tallaght- Clondalkin	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the communities of Tallaght and Clondalkin.	Operational
Dublin BusConnects CBC 1012 Templeogue- Rathfarnham	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the communities of Rathfarnham and Templeogue.	Operational
Dublin BusConnects CBC 11 Kimmage to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Kimmage.	Operational





Other Development Developer / Name	Short Description	Other Development Developer / Name
Dublin BusConnects CBC 13 Bray to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Bray.	Operational
Dublin BusConnects CBC 14/15 Blackrock/Belfield	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Blackrock/Belfield.	Operational
Dublin BusConnects CBC 16 Ringsend to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Ringsend.	Operational
Proposed development of a multi-modal transport scheme along a section of the N3 between the M50 and Clonee	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) and all future services who will use the corridor.	Operational
Environment & Transportation Department Royal Canal Greenway	The proposed works shall comprise the construction of c. 4.3km of cycle and pedestrian route from Phibsborough Road, Dublin 7 - Cross Guns Bridge to Ashtown, Dublin 15 along the northern towpath. The works traverse Broome Bridge (Protected Structure) and H.S. Reilly's Bridge (Protected Structure). A Toucan (pedestrian and cycle) crossing is proposed at Broombridge Road/ Broome Bridge.	Operational

#### 24.5.7.1 Construction Phase

None of the 'other developments' listed for Construction Phase impacts in Table 24-8 were screened in for the potential likely significant cumulative dust impacts that could arise if their Construction Phase occurred at the same time as the Construction Phase for the proposed Scheme. Given that standard dust mitigation measures will be implemented for each of the 'other developments', including as appropriate the preparation of Dust Mitigation plans, and given that a dust mitigation plan has been prepared and will be implemented for the proposed Scheme incorporating the necessary mitigation measures in respect of dust impacts, the conclusion was that cumulatively there will be no likely significant cumulative dust impacts between any of the 'other developments' and the proposed Scheme.

The distance between certain 'other developments', and the proposed Scheme is substantial, to the extent that the likelihood of significant cumulative dust impacts is not a concern. As a result, any potential dust impacts generated by construction actives are expected to be localized to their respective sites and unlikely to have a notable cumulative effect on the proposed Scheme area.

Likewise, none of the 'other developments' listed for Construction Phase impacts in Table 24-8 were screened in for potential increases in traffic emissions in the local area during the Construction Phase. This is because the developments are typical of baseline trends regarding the potential to generate greenhouse gas (GHG) emissions, accounted for in GHG emissions targets and traffic modelling which underpin the assessment set out in Chapter 14 (Climate) of this EIAR.

#### 24.5.7.2 Operational Phase

Seventeen of 'other developments', as listed in Table 24-8, were screened in for potential Positive cumulative impacts with the proposed Scheme. These were all transport projects, including BusConnects, DART+ Programme and Metrolink as these developments also aim to improve the public transport network





by making it more connected, which would have the potential to reduce private vehicles dependence and an associated reduction in greenhouse gas emissions.

Sixteen of the 'other developments' are public transport schemes, whereas the seventeenth development (multi-modal transport scheme along a section of the N3 between the M50 and Clonee) pertains to private car transport. The development of a multi-modal transport scheme along a section of the N3 between the M50 and Clonee has the potential to reduce private car emissions through reduced congestion, which could lead to an overall reduction in GHG emissions from transport and, therefore, lead to a potential positive impact on air quality.

#### 24.5.8 Climate

A total of 18 'other developments' were screened in for potential cumulative impacts with the proposed Scheme, prior to the implementation of any mitigation measures. The climate assessment has identified the major transport projects as those with the potential for cumulative significant impacts on GHG emissions. These developments are listed in Table 24-9.

Table 24-9: Other Developments 'Screened In' for Potential Climate Cumulative Impacts with the proposed Scheme (Pre-Mitigation)

Other Development Developer / Name	Short Description	Luas Finglas Phase
Metrolink	A high-capacity, high-frequency, metro railway, with 16 new stations running from Swords to Charlemont. The alignment will link Dublin Airport, Irish Rail, DART, Dublin Bus and Luas services and create a fully integrated public transport network for the Greater Dublin Area (GDA).	Operational
DART+ Programme West	DART upgrade programme will serve all existing stations along the railway corridor between Maynooth Station and M3 Parkway Station to Connolly Station and to the proposed Spencer Dock Station using electrical power, which has a lower carbon footprint than the current diesel trains.	Operational
DART+ Programme Southwest	DART improvement project will provide a sustainable, electrified and more frequent rail service between Hazelhatch / Celbridge station and Dublin City Centre, whilst also increasing capacity and reducing journey times for non-electrified InterCity and Commuter services.	Operational
DART+ Tunnel Element (Kildare Line to Northern Line	DART upgrade programme will serve Kildare Line to Northern Line.	Operational
Dublin BusConnects CBC 02 Swords to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Swords.	Operational
Dublin BusConnects CBC 03 Ballymun - Finglas	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the Ballymun and Finglas communities.	Operational
Dublin BusConnects CBC 05 Blanchardstown to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Blanchardstown.	Operational





Other Development Developer / Name	Short Description	Luas Finglas Phase
Dublin BusConnects Clongriffin to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Clongriffin.	Operational
Dublin BusConnects CBC 06 Lucan to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Lucan.	Operational
Dublin BusConnects CBC 07 Liffey Valley to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Liffey Valley.	Operational
Dublin BusConnects CBC 0809 Tallaght- Clondalkin	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the communities of Tallaght and Clondalkin.	Operational
Dublin BusConnects CBC 1012 Templeogue- Rathfarnham	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the communities of Rathfarnham and Templeogue.	Operational
Dublin BusConnects CBC 11 Kimmage to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Kimmage.	Operational
Dublin BusConnects CBC 13 Bray to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Bray.	Operational
Dublin BusConnects CBC 14/15 Blackrock/Belfield	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Blackrock/Belfield.	Operational
Dublin BusConnects CBC 16 Ringsend to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Ringsend.	Operational
Proposed development of a multi-modal transport scheme along a section of the N3 between the M50 and Clonee	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) and all future services who will use the corridor.	Operational
Environment & Transportation Department Royal Canal Greenway	The proposed works shall comprise the construction of c. 4.3km of cycle and pedestrian route from Phibsborough Road, Dublin 7 - Cross Guns Bridge to Ashtown, Dublin 15	Operational





Other Development Developer / Name	Short Description	Luas Finglas Phase
	along the northern towpath. The works traverse Broome Bridge (Protected Structure) and H.S. Reilly's Bridge (Protected Structure). A Toucan (pedestrian and cycle) crossing is proposed at Broombridge Road/ Broome Bridge.	

#### 24.5.8.1 Construction Phase

None of the 'other developments' were likely to result in a cumulative impact in relation to climate during the Construction Phase of the proposed Scheme. This is because the developments are typical of baseline trends regarding the potential to generate greenhouse gas (GHG) emissions, accounted for in GHG emissions targets and traffic modelling which underpin the assessment set out in Chapter 14 (Climate) of this EIAR.

#### 24.5.8.2 Operational Phase

Of the 'other developments', 17 were screened in for the potential for improvements in connected public transport infrastructure during their Operational Phase occurring alongside the Operational Phase of the proposed Scheme, which could reduce private car dependency and lead to an associated reduction in greenhouse gas emissions. These include BusConnects, DART+ Programme and Metrolink.

One of the 'other developments' was screened in for the potential for improvements in connected public transport infrastructure as a result of the Operational Phase of the proposed Scheme. This has the potential to reduce private car emissions through reduced congestion, which could lead to an overall reduction in greenhouse gas emissions from transport. The proposed development in question is a multi-modal transport scheme along a section of the N3 between the M50 and Clonee.

#### 24.5.9 Noise and Vibration

The list of 43 'other developments' has been reviewed and assessed in relation to likely significant cumulative impacts relevant to Noise and Vibration. A total of 37 of these 'other developments' were screened out during the Construction and Operational Phases. Following consideration and assessment by the relevant experts it was determined that due to their distance from the proposed Scheme, their scale, and nature, they would not result in any likely significant cumulative impacts on Noise and Vibration with the proposed Scheme, as set out in Volume 5 - Appendix A24.2.

A total of six 'other developments' were screened in for potential cumulative impacts with the proposed Scheme, prior to the implementation of any mitigation measures. These 'other developments' are listed in Table 24-10.

Table 24-10:Other Developments 'Screened In' for Potential Noise and Vibration Cumulative Impacts with the proposed Scheme (Pre-Mitigation)

Other Development Developer / Name	Short Description	Luas Finglas Phase
DART+ Programme West	DART upgrade programme will serve all existing stations along the railway corridor between Maynooth Station and M3 Parkway Station to Connolly Station and to the proposed Spencer Dock Station using electrical power, which has a lower carbon footprint than the current diesel trains.	Construction
Environment & Transportation Department Royal Canal Greenway	The proposed works shall comprise the construction of c. 4.3km of cycle and pedestrian route from Phibsborough Road, Dublin 7 - Cross Guns Bridge to Ashtown, Dublin 15 along the northern towpath. The works traverse Broome Bridge (Protected Structure) and H.S. Reilly's Bridge	Construction





Other Development Developer / Name	Short Description	Luas Finglas Phase
	(Protected Structure). A Toucan (pedestrian and cycle) crossing is proposed at Broombridge Road/ Broome Bridge.	
Dublin City Council Jamestown Master Plan	Development Plan for 43 hectares of Jamestown Industrial Estate lands at Jamestown Road, St Margaret's Road / McKee Avenue, Finglas, Dublin 11. The Masterplan sets out the details to inform the sustainable and sequential regeneration and development of the lands.	Construction
Dublin City Council Ballyboggan Local Action Plan	Development Plan to enable the compact and sustainable mixed-use regeneration and redevelopment of the area.	Construction
Hughes Planning & Development Consultants Manhattan Peanuts	Proposed extension to the existing food production and warehouse building at Manhattan Peanuts Ltd. comprising an additional floor area of 1,913m <sup>2</sup> and associated external amendments.	Construction
EirGrid Powering Up Dublin programme	Project installing over 50km of electrical cables across the city to strengthen key electricity infrastructure in Dublin Finglas Co. Dublin.	Construction

#### 24.5.9.1 Construction Phase

All six of the 'other developments' were screened in for potential cumulative noise impacts if construction and foundation works were to take place at the same time as the Construction phase of the proposed Scheme in these areas. The risk is greatest when construction works occur near one another. However, additional mitigation is not required beyond what is already specified in Chapter 15 (Noise and Vibration) of this EIAR, and no significant impacts are predicted.

#### 24.5.9.2 Operational Phase

There were no developments which were screened in for potential operational noise cumulative impacts. This is due to the low noise of LRT operation. Noise and Vibration levels due to operation of LRT are expected to comply with relevant trigger levels along the proposed Scheme alignment.

#### 24.5.10 Electromagnetic Compatibility Interference

The list of 43 'other developments' has been reviewed and assessed in relation to likely significant cumulative impacts relevant to electromagnetic interference. A total of 40 of these 'other developments' were screened out during the Construction and Operational Phases. Following consideration and assessment by the relevant experts it was determined that due to their distance from the proposed Scheme, their scale, and nature, they would not result in any likely significant cumulative impacts on electromagnetic interference with the proposed Scheme, as set out in Volume 5 - Appendix A24.2.

Three developments were screened in for potential likely significant cumulative impacts with the proposed Scheme, prior to the implementation of any mitigation measures. These developments are listed in Table 24-11.

Table 24-11: Other Developments 'Screened In' for Potential Electromagnetic Compatibility Interference (Pre-Mitigation)

Other Development Developer / Name	Short Description	Luas Finglas Phase
DART+ Programme West	DART upgrade programme will serve all existing stations along the railway corridor between Maynooth Station and M3 Parkway Station to Connolly Station and to the proposed Spencer Dock Station using electrical power,	Construction/Operational





Other Development Developer / Name	Short Description	Luas Finglas Phase
	which has a lower carbon footprint than the current diesel trains.	
DART+ Programme Southwest	DART improvement project will provide a sustainable, electrified and more frequent rail service between Hazelhatch / Celbridge station and Dublin City Centre, whilst also increasing capacity and reducing journey times for non-electrified InterCity and Commuter services.	Construction/Operational
EirGrid Powering Up Dublin programme	Project installing over 50km of electrical cables across the city to strengthen key electricity infrastructure in Dublin Finglas Co. Dublin	Construction

#### 24.5.10.1 Construction Phase

The proposed Scheme will have an imperceptible impact in relation to electromagnetic interference during the Construction Phase (refer to Chapter 16 (Electromagnetic Compatibility & Interference) of this EIAR) which is typical of any large construction project and therefore there are no likely significant cumulative impacts with 'other developments'.

#### 24.5.10.2 Operational Phase

All three of the 'other developments' were screened in for potential electromagnetic interference impacts during the Operational Phase of the proposed developments in these areas. This is due to potential Electrical Board and EMC issues between projects where the Overhead Line Equipment (OHLE) from the LRT could interfere with other systems. This will require liaison with the project teams to understand details of electrification systems and interfaces with the proposed Scheme. However, likely significant cumulative impacts on electromagnetic interference are not expected to occur.

#### 24.5.11 Infrastructure and Utilities

The list of 43 'other developments' has been reviewed and assessed in relation to likely significant cumulative impacts relevant to Infrastructure and Utilities. A total of 38 of these 'other developments' were screened out during the Construction and Operational Phases. Following consideration and assessment by the relevant experts, it was determined that due to their distance from the proposed Scheme, their scale, and nature, they would not result in any likely significant cumulative impacts on Infrastructure and Utilities with the proposed Scheme, as set out in Volume 5 - Appendix A24.2.

A total of five 'other developments' were screened in for potential likely significant cumulative impacts with the proposed Scheme, prior to the implementation of any mitigation measures. These 'other developments' are listed in Table 24-12.

Table 24-12: Other Developments 'Screened In' for Potential Material Assets: Infrastructure & Utilities Cumulative Impacts with the proposed Scheme (Pre-Mitigation)

Other Development Developer / Name	Short Description	Luas Finglas Phase
DART+ Programme West	DART upgrade programme will serve all existing stations along the railway corridor between Maynooth Station and M3 Parkway Station to Connolly Station and to the proposed Spencer Dock Station using electrical power, which has a lower carbon footprint than the current diesel trains.	Construction
Dublin BusConnects CBC 03 Ballymun - Finglas	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the Ballymun and Finglas communities.	Construction





Other Development Developer / Name	Short Description	Luas Finglas Phase
Hughes Planning & Development Consultants Manhattan Peanuts	Proposed extension to the existing food production and warehouse building at Manhattan Peanuts Ltd. comprising an additional floor area of 1,913m <sup>2</sup> and associated external amendments.	Construction
EirGrid Powering Up Dublin programme	Project installing over 50km of electrical cables across the city to strengthen key electricity infrastructure in Dublin Finglas Co. Dublin	Construction
Energia Solar Holdings Ltd Air Insulated Switchgear (AIS)	10kV Air Insulated Switchgear (AIS) tail-fed substation compound, combined with a 110kV underground cable connection to Finglas	Construction

#### 24.5.11.1 Construction Phase

All of the five 'other developments' screened in for the potential; cumulative impacts on Infrastructure and Utilities relate to the Construction Phase, if construction works were to take place at the same time as the proposed Scheme. Cumulative impacts may arise where utility diversions or new connections are required for both the other development and the proposed Scheme. Where the construction periods overlap, further consultations will be required to prevent unintended cumulative impacts. However, with the standard mitigation included for the proposed Scheme (refer to Chapter 17 (Material Assets: Infrastructure & Utilities)), the cumulative impact will be Not Significant. In addition, considering the mitigation measures already incorporated into the proposed Scheme as set out in Chapter 6 (Construction Activities) of this EIAR, and along with the standard type of mitigation measures that will be included in the 26 other schemes as well, there will be no likely significant cumulative impacts.

#### 24.5.11.2 Operational Phase

There were no developments which were screened in for potential operational Infrastructure and Utilities cumulative impacts. The proposed Scheme has been designed to integrate with Metrolink, BusConnects, and the DART+ Programme, such as through the preparation of bus interchanges near Stops and the height adjustment of the Broombridge LRT bridge to allow for DART passage. These measures will serve to enhance the positive cumulative impact of the proposed Scheme and these other projects in terms of access to sustainable transport.

#### 24.5.12 Traffic and Transport

The list of 43 'other developments' has been reviewed and assessed in relation to cumulative impacts relevant to Traffic and Transport. A total of 42 'other developments' were screened out during the Construction and Operational Phases, due to their inclusion in traffic models or nature. All modelling has been undertaken with background growth from reasonably foreseeable projects in line with regional growth projections. It is understood that the developments mentioned in the cumulative impact list are included in the forecast growth predictions, and as such, have been captured in the main traffic impacts assessment in Chapter 18 (Material Assets: Traffic and Transport) of this EIAR. Likewise, proposed transportation projects that will directly impact the proposed Scheme have been included in the transport modelling. This includes BusConnects (CBCs and Services), DART+ West and MetroLink. Therefore, the cumulative impacts of these schemes have already been assessed as part of the main traffic impacts assessment in Chapter 18 (Material Assets: Traffic and Transport).

One of the 'other developments' was screened in for consideration of potential likely significant cumulative impacts with the proposed Scheme during the Construction Phase of the proposed Scheme. This 'other development' is listed in Table 24-13.





Table 24-13: Other Developments 'Screened In' for Potential Traffic & Transport Cumulative Impacts with the proposed Scheme (Pre-Mitigation)

Other Development Developer / Name	Short Description	Luas Finglas Phase
Dublin BusConnects CBC 03 Ballymun - Finglas	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the Ballymun and Finglas communities.	Construction

#### 24.5.12.1 Construction Phase

One 'other development' was screened in for potential cumulative Traffic and Transport impacts if construction works were to take place at the same time as the Construction Phase of the proposed Scheme. To mitigate potential impacts, liaison will be required between the NTA, TII and the appointed Contractors to ensure that there is coordination between projects so as to avoid significant cumulative impacts. This will ensure that construction access locations remain unobstructed by the proposed Scheme works and that any additional construction traffic mitigation measures required to deal with cumulative impacts are managed appropriately. However, given the mitigation measures already incorporated into the proposed Scheme as set out in Chapter 6 (Construction Activities) of this EIAR, and given the standard type of mitigation measures that will be included in the 26 other schemes as well, there will be no likely significant cumulative impacts.

#### 24.5.12.2 Operational Phase

There were no developments which were screened in for potential operational Traffic and Transport cumulative impacts. The proposed Scheme will have a Positive cumulative impact on traffic levels in the GDA and on the provision of more sustainable transport options during the Operational Phase. The cumulative impacts associated with operation of other major transport projects were assessed quantitatively within the traffic modelling scenarios. These are detailed in Chapter 18 (Material Assets: Traffic and Transport) and Volume 5 – Appendix A6.2 of the EIAR.

#### 24.5.13 Resources and Waste Management

The list of 43 'other developments' has been reviewed and assessed in relation to likely significant cumulative impacts relevant to Resources and Waste Management. A total of 25 of these 'other developments' were screened out during the Construction and Operational Phases. Following consideration and assessment by the relevant experts it was determined that due to their distance from the proposed Scheme, their scale, and nature, they would not result in any likely significant cumulative impacts on Infrastructure and Utilities with the proposed Scheme, as set out in Appendix Volume 5 - A24.2.

A total of 18 of these 'other developments' were screened in for potential likely significant cumulative impacts with the proposed Scheme, prior to the implementation of any mitigation measures. These 'other developments' are listed in Table 24-14.

Table 24-14: Other Developments 'Screened In' for Potential Material Assets: Resources & Waste Management Cumulative Impacts with the proposed Scheme (Pre-Mitigation)

Other Development Developer / Name	Short Description	Luas Finglas Phase
Prime GP Limited	The proposed development will consist of the demolition of a c. 1,732m² part single storey part two-storey office building. Permission is also sought for all ancillary site services and landscape works.	Construction





Other Development Developer / Name	Short Description	Luas Finglas Phase
Puddenhill Property Limited Charlestown Development Project	590 apartments, a creche and all associated site works.	Construction
Metrolink	A high-capacity, high-frequency, metro railway, with 16 new stations running from Swords to Charlemont. The alignment will link Dublin Airport, Irish Rail, DART, Dublin Bus and Luas services and create a fully integrated public transport network for the Greater Dublin Area (GDA).	Construction
DART+ Programme West	DART upgrade programme will serve all existing stations along the railway corridor between Maynooth Station and M3 Parkway Station to Connolly Station and to the proposed Spencer Dock Station using electrical power, which has a lower carbon footprint than the current diesel trains.	Construction
DART+ Programme Southwest	DART improvement project will provide a sustainable, electrified and more frequent rail service between Hazelhatch / Celbridge station and Dublin City Centre, whilst also increasing capacity and reducing journey times for non-electrified InterCity and Commuter services.	Construction
DART+ Tunnel Element (Kildare Line to Northern Line	DART upgrade programme will serve Kildare Line to Northern Line.	Construction
Dublin BusConnects CBC 03 Ballymun - Finglas	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the Ballymun and Finglas communities.	Construction
Dublin BusConnects CBC 05 Blanchardstown to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Blanchardstown.	Construction
Dublin BusConnects CBC 11 Kimmage to City Centre	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the community of Kimmage.	Construction
Proposed development of a multi-modal transport scheme along a section of the N3 between the M50 and Clonee	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) and all future services who will use the corridor.	Construction
Environment & Transportation Department Royal Canal Greenway	The proposed works shall comprise the construction of c. 4.3km of cycle and pedestrian route from Phibsborough Road, Dublin 7 - Cross Guns Bridge to Ashtown, Dublin 15 along the northern towpath. The works traverse Broome Bridge (Protected Structure) and H.S. Reilly's Bridge (Protected Structure). A	Construction





Other Development Developer / Name	Short Description	Luas Finglas Phase
	Toucan (pedestrian and cycle) crossing is proposed at Broombridge Road/ Broome Bridge.	
Dublin City Council Jamestown Master Plan	Development Plan for 43 hectares of Jamestown Industrial Estate lands at Jamestown Road, St Margaret's Road / McKee Avenue, Finglas, Dublin 11. The Masterplan sets out the details to inform the sustainable and sequential regeneration and development of the lands.	Construction
Dublin City Council Ballyboggan Local Action Plan	Development Plan to enable the compact and sustainable mixed-use regeneration and redevelopment of the area.	Construction
Hughes Planning & Development Consultants Manhattan Peanuts	Proposed extension to the existing food production and warehouse building at Manhattan Peanuts Ltd. comprising an additional floor area of 1,913m <sup>2</sup> and associated external amendments.	Construction
Energia Solar Holdings Ltd Air Insulated Switchgear (AIS)	10kV Air Insulated Switchgear (AIS) tail-fed substation compound, combined with a 110kV underground cable connection to Finglas.	Construction
O'Cualann Cohousing Alliance CLG	Construction of 32 houses, two sheltered housing units, single storey creche and all associated site works.	Construction
Melvin Properties Limited	Construction of an eco-self-storage facility comprising 300 storage containers and all associated site works.	Construction
Rathdrinagh Land Unlimited Company	Construction of a materials recovery facility along with a food container cleaning plant and all associated site works.	Construction

#### 24.5.13.1 Construction Phase

All of the 18 'other developments' screened in for the potential; cumulative impacts on Waste Management and Resources relate to the Construction Phase if construction works were to take place at the same time as the proposed Scheme. A Construction and Demolition Resource and Waste Management Plan (CDRWMP), Volume 5 – Appendix A6.5, and a Construction Traffic Management Plan (CTMP), Volume 5 – Appendix A6.2, have been developed for the proposed Scheme. All materials consumed and waste generated by the proposed Scheme will be managed in accordance with circular economy principles and the waste hierarchy, with prevention, reuse, recycling, and other recovery methods favoured over disposal. With the standard mitigations measures included for the proposed Scheme (refer to Chapter 19 (Material Assets: Resource and Waster Management)), the cumulative impacts will not be Significant.

#### 24.5.13.2 Operational Phase

The predominant source of Operational Phase waste from the proposed Scheme may arise as a result of maintenance works undertaken at regular intervals, or as necessary. The predicted impact of operational waste will be positive (on the basis that less material will be generated, and less overall maintenance will be required compared to the Do-Nothing scenario) not significant and long-term. It is therefore considered that the Operational Phase waste arising from the proposed Scheme, taken together the types of waste arising from other projects will not give rise to likely significant cumulative effects.

#### 24.5.14 Cultural Heritage

The list of 43 'other developments' has been reviewed and assessed in relation to likely significant cumulative impacts relevant to Cultural Heritage. A total of 41 of these 'other developments' were screened out during the Construction and Operational Phases. Following consideration and assessment by the relevant experts it was determined that due to their distance from the proposed Scheme, their scale, and





nature, they would not result in any likely significant cumulative impacts on Cultural Heritage with the proposed Scheme, as set out in Volume 5 - Appendix A24.2.

A total of two of these 'other developments' were screened in for potential likely significant cumulative impacts with the proposed Scheme, prior to the implementation of any mitigation measures. These 'other developments' are listed in Table 24-15.

Table 24-15: Other Developments 'Screened In' for Potential Cultural Heritage Cumulative Impacts with the proposed Scheme (Pre-Mitigation)

Other Development Developer / Name	Short Description	Luas Finglas Phase
DART+ Programme West	DART upgrade programme will serve all existing stations along the railway corridor between Maynooth Station and M3 Parkway Station to Connolly Station and to the proposed Spencer Dock Station using electrical power, which has a lower carbon footprint than the current diesel trains.	Construction/Operational
Environment & Transportation Department Royal Canal Greenway	The proposed works shall comprise the construction of c. 4.3km of cycle and pedestrian route from Phibsborough Road, Dublin 7 - Cross Guns Bridge to Ashtown, Dublin 15 along the northern towpath. The works traverse Broome Bridge (Protected Structure) and H.S. Reilly's Bridge (Protected Structure). A Toucan (pedestrian and cycle) crossing is proposed at Broombridge Road/ Broome Bridge.	Construction

#### 24.5.14.1 Construction Phase

Two 'other developments' were screened in for potential cumulative impacts with the proposed Scheme during the Construction Phase. These developments were screened in for temporary negative potential cumulative impacts on areas of cultural importance which would have an impact on the cultural heritage of Dublin. This cumulative impact was deemed to be Slight to Moderate, for the reasons set out in Volume 5 - Appendix A24.2.

#### 24.5.14.2 Operational Phase

One project was screened in for the potential cumulative impacts with the proposed Scheme during the Operational Phase. This is due to the impact resulting from the modification of a protected structure and the introduction of new features by the 'other developments'. The cumulative impacts from this change were deemed to be Moderate.

#### 24.5.15 Landscape and Visual Amenity

The list of 43 'other developments' has been reviewed and assessed in relation to likely significant cumulative impacts relevant to Landscape and Visual Amenity. A total of 42 of these 'other developments' were screened out during the Construction and Operational Phases. Following consideration and assessment by the relevant experts, it was determined that due to their distance from the proposed Scheme, their scale, and nature, they would not result in any likely significant cumulative impacts on Cultural Heritage with the proposed Scheme, as set out in Volume 5 - Appendix A24.2.

One development was screened in for potential likely significant cumulative impacts with the proposed Scheme, prior to the implementation of any mitigation measures. This development is listed in Table 24-16.





Table 24-16: Other Developments 'Screened In' for Potential Landscape & Visual Amenity Cumulative Impacts with the proposed Scheme (Pre-Mitigation)

Other Development Developer / Name	Short Description	Luas Finglas Phase
Dublin BusConnects CBC 03 Ballymun - Finglas	Sustainable transport project to support integrated usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) for the Ballymun and Finglas communities.	Construction

#### 24.5.15.1 Construction Phase

One 'other development' was screened in for potential cumulative Landscape and Visual impacts at the roundabout of North Road and St Margaret's Road, if construction works were to take place at the same time as the Construction phase of the proposed Scheme. Subject to construction timing, there may be cumulative impacts at the roundabout of North Road and St Margaret's Road as both project boundaries overlap in this area.

The proposed soft and hard landscape proposals for BusConnects which will enhance the local character area and improve pedestrian circulation from Mellowes Park to St Margaret's Road will be removed for construction of the proposed landscape proposals associated with the Luas. This is because the function of the roundabout will change for the Luas as it will become a signalised intersection controlling and separating trams from road traffic, from pedestrians and cyclists. As a result of the new function of the Luas roundabout, it is not possible to retain the footpaths and proposed planting designed for the BusConnects. The cumulative disruption in this area will have high levels of impact to the landscape character, visual amenity and land use for local residents during construction.

To mitigate potential impacts, liaison will be required between the NTA, TII and the appointed Contractors to ensure that pedestrian footpaths, road crossing points and new planting which is constructed as part of BusConnects, should be incorporated into the Luas streetscape design where possible to minimise disruption to the landscape character. Planting fast growing screen planting on the western side of the roundabout will reduce visibility into this area for residential properties during construction, in order to minimise disruption to the landscape character and on residential visual amenity.

#### 24.5.15.2 Operational Phase

There were no developments which were screened in for potential operational Landscape and Visual cumulative impacts. This is due to other major developments such as BusConnects and DART+ West having been accommodated within the proposed Scheme alignment design.

#### 24.6 Hub Assessment

The European Commission's 2017 Guidance highlights the importance of assessing cumulative effects, which are changes to the environment caused by an action in combination with other actions. These effects can arise from the interaction between different projects in the same area or between various impacts within a single project. The EIA Directive mandates that the Environmental Impact Assessment Report (EIAR) must include a description of the likely significant effects stemming from the cumulation of effects with other existing and/or approved projects. This is crucial because two projects, which individually may not have a significant environmental impact on a particular receptor, can nonetheless act cumulatively to have a significant impact when considered together. Therefore, it is essential not only to assess the cumulative impacts of each project individually with the proposed Scheme, but also to evaluate the proposed Scheme in conjunction with all other plans or projects. This comprehensive assessment approach is why it was chosen to perform an evaluation on development 'hubs,' ensuring that the cumulative impacts of multiple developments and the proposed Scheme are considered in unison.





Broombridge, Finglas Village, and Charlestown were chosen as hubs to assess the cumulative impacts of developments due to their strategic significance and diverse functionalities.

- Broombridge serves as a critical transport hub, integrating the Luas, DART and greenway networks, while also being a focal point for residential development;
- Finglas Village is another essential area, acting as a transport hub with BusConnects and serving as a commercial centre, alongside significant housing developments; and
- Charlestown was selected for its role as a Park & Ride (P&R) facility, its extensive residential
  developments, as well as industrial activities. By evaluating these areas, the cumulative impacts of
  various developments on the environment and community can be comprehensively assessed.

#### 24.6.1 Broombridge Hub

The Broombridge Hub includes five 'other developments', which are described in Table 24-17 below. The assessment of cumulative impacts at the Broombridge Hub reveals a variety of potential impacts across different domains. However, none of these impacts will be significant, and only one has the potential to be long-term. Additionally, Electromagnetic Compatibility Interference and Landscape and Visual are not expected to experience any cumulative impacts at this location.

Table 24-17: Other developments located in the Broombridge Hub

Development	Short Description of Development	Distance from Hub
DART+ Programme West	It will serve all existing stations along the railway corridor between Maynooth Station and M3 Parkway Station to Connolly Station and to the proposed Spencer Dock Station using electrical power, which has a lower carbon footprint than the current diesel trains.	Intersection with proposed Scheme
Dublin BusConnects: CBC 05 Blanchardstown to City Centre	Support integrated sustainable transport usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) and all future services who will use the corridor. It commences at Junction 3 (Blanchardstown / Mulhuddart) southbound offslip from the N3 and proceeds along the R121 Blanchardstown Road South into the Blanchardstown Shopping Centre.	0.95km southeast
Royal Canal Greenway	The proposed works shall comprise the construction of c. 4.3 km of cycle and pedestrian route from Phibsborough Road, Dublin 7 - Cross Guns Bridge to Ashtown, Dublin 15 along the northern towpath. The works traverse Broome Bridge (Protected Structure) and H.S. Reilly's Bridge (Protected Structure). A Toucan (pedestrian and cycle) crossing is proposed at Broombridge Road/ Broome Bridge.	120m north
Ballyboggan Local Action Plan	The LAP is being prepared to enable the compact and sustainable mixed-use regeneration and redevelopment of the area; supported by high-quality public transport in accordance with the Core Strategy of the Development Plan	0.5km south
John Fetherston	Construction of a dwelling and all associated site works.	0.38km south

In terms of Human Health, no significant cumulative effects are predicted to occur during the construction phases of these developments. However, in the long term, the transport works will positively impact journey characteristics and reduce road network pressures, benefiting pedestrians and cyclists.

In terms of Population, low impacts could arise from short-term disruptions to public transport services and community severance if multiple projects occur simultaneously. However, in the long term, the transport





works will positively impact journey characteristics and reduce road network pressures, benefiting pedestrians and cyclists.

With regard to Biodiversity, the proposed DART+ West project is located within disturbance zones of known Light-bellied Brent Goose foraging areas (Glasnevin and Ashtown amenity grassland areas). However, given that the project's NIS report outlines that works will not be conducted during October to November, this will safeguard the Light-bellied Goose foraging activities. Additionally, through further examination of the project's NIS, it is apparent that the prescribed mitigations will safeguard the local impact receptor pathways to the North Dublin Bay SAC, South Dublin Bay SAC, Rockabill to Dalkey Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, and North-west Irish Sea SPA. Therefore, the DART+ West project does not have the capacity to act in-combination with the proposed Scheme to generate cumulative impacts on the Dublin Bay Natura 2000 sites, and their respective KERs. The NIS report also outlines safeguards for other overlapping Zol buffers, i.e., surface water, groundwater and air.

The proposed Phase 4B of the Royal Canal Greenway is located within disturbance zones of known Light-bellied Brent Goose foraging areas (Glasnevin, Cabra East and Ashtown amenity grassland areas). The project's Ecological Impact Assessment does not mitigate for the potential disturbance to Light-bellied Brent Goose foraging activities within the locality of the works. Therefore, this project does have the capability to generate a cumulative disturbance impact on the Light-bellied Brent Goose southern sub-population of North Bull Island SPA. However, given the mitigation measures outlined within this EIAR document, the proposed Scheme will not result in the disturbance of Light-bellied Brent Goose, or any other KER bird species, during the winter months, and thus prevent the occurrence of any cumulative or in-combination impacts. The EIAR also outlines safeguards for other overlapping ZoI buffers, i.e., surface water, groundwater and air.

No shared ecological ZoI buffers occur between the proposed Scheme and BusConnects - Blanchardstown to City Centre project. The pending application 319753 (APB) overlaps with the proposed Scheme's disturbance ZoI buffer; however, the area of the buffer which it overlaps does not contain disturbance KER species, i.e., wintering bird species; thereby, ruling out the potential for cumulative or in-combination impacts. The pending Ballyboggan LAP has a ZoI which will overlap with all of the proposed Scheme's ZoI buffers.

If the construction of the Broombridge, Ballyboggan and Tolka Valley Park sections of the proposed Scheme overlap with any of developmental elements of the Ballyboggan LAP, there will be the potential for cumulative or in-combination impacts. However, given that the mitigation measures proposed within the Biodiversity Chapter include the liaison between overlapping large-scale project teams such as the Ballyboggan LAP, (as well DART+ West and the Royal Canal Greenway), to ensure that construction times within this area do not coincide, thus preventing the potential for cumulative or in-combination impacts. The pending Ballyboggan LAP has a Zol which will overlap with all of the proposed Scheme's Zol buffers. If the construction of the Broombridge, Ballyboggan and Tolka Valley Park sections of the proposed Scheme overlap with any of developmental elements of the Ballyboggan LAP, there will be the potential for cumulative or in combination impacts. However, given that the mitigation measures proposed within the Chapter 9 (Biodiversity) include the liaison between overlapping large-scale project teams such as the Ballyboggan LAP, as well as DART+ West and the Royal Canal Greenway), to ensure that construction times within this area do not coincide, this prevents the potential for cumulative or in-combination impacts.

With regard to Water, simultaneous developments could lead to accidental discharges affecting water quality, but planning guidelines and adequate treatment measures will mitigate significant impacts during operation. Waste management faces potential impacts if construction phases overlap, but the government's circular economy policy and compliance with waste management plans will ensure minimal waste generation. The construction phase impacts are negligible, and operational impacts are minimal.

Concerning Waste, due to the scope and close proximity of these projects (0.38km - 120m) to the proposed Scheme, there will be potential impacts if construction phases of all the projects overlap or occur at the same time. These impacts result from transport of materials and resources and mainly onward disposal of waste generated onsite. The circular economy policy rolled out by the government is to ensure resources used are sustainable and are kept in circulation and waste is minimized as far as is reasonably practicable





for all projects in Ireland. In relation to waste generated, the inclusion of circular economy principles in Site Construction Waste Management Plans and compliance with national and local regulations will ensure minimal waste is generated. There is adequate capacity within the EMWR region for waste disposal and recovery if all projects occur together. Construction Phase impacts are negligible as waste generated by the developments will reduce regional landfill void capacity baseline by <1% (IEMA,2020). There will be no significant impacts during the operational phase as waste generated will be minimal.

With regard to Land and Soils, if multiple developments proceed at the same time, during construction there is potential for increased accidental spillages resulting in contamination of the soils and groundwater. By following the guidance set out in CIRIA's Control of water pollution from linear construction projects (CIRIA, 2006), it is anticipated this would result in a negligible impact. Similarly, there is increased risk of indirect impacts such as accidental leaks or discharges during the Operational Phase. However, as the proposed Scheme is an electrified transport system, the operational contamination risks are significantly lower compared to transport vehicles powered by internal combustion engines and hydrocarbon fuels, and it is anticipated that the cumulative impact will be negligible. There is potential for Operational Phase cumulative impacts of reduced groundwater recharge at this hub location, due to increased area of hardstanding. The Broombridge hub shall result in approximately 0.0024 km² of additional hardstanding. This hub is already in a highly developed area, the cumulative impact is considered to be Negligible.

Regarding Land Take, the most notable overlap occurs with the DART+ West project. The DART+ West initiative involves land acquisition for construction compounds that align with the locations chosen for the proposed scheme. Depending on the schedules of both projects, this overlap could potentially cause delays for one or both projects and/or extend the use of the compound sites, thereby affecting the property owners. Additionally, both projects will influence construction traffic and traffic management in the Broombridge Road area due to activities on the existing bridge and the construction of the new LRT bridge. This area is also part of the Royal Canal Greenway project, which may introduce further impacts. Therefore, close coordination among all three projects will be essential.

Air Quality and Climate assessments indicate that simultaneous construction projects could increase dust and emissions, but proposed mitigation measures will prevent significant impacts. The proposed Scheme will enhance sustainable transport, reduce reliance on private vehicles, and lower transport emissions, resulting in beneficial cumulative impacts during the operational phase. Overall, the Broombridge Hub's development considers various cumulative impacts and incorporates measures to mitigate potential adverse effects.

In terms of Noise and Vibration, the cumulative impacts are limited to potential short-term effects during construction if multiple projects coincide, but this risk is considered low due to constrained work areas and standard thresholds for noise and vibration.

Infrastructure and Utilities are not expected to face significant cumulative effects during construction or operation, though further consultations are necessary to avoid unintended impacts.

With regard to Traffic and Transport, the Construction Traffic Management Plan (CTMP) detailed in Volume 5 – A6.2 of the EIAR, outlines how the interface between public and construction-related traffic will be managed to minimize disruption and ensure safety. The CTMP ensures coordination with other projects through DCC and FCC, maintaining unobstructed construction access and managing cumulative impacts. The NTA oversees strategic traffic management for major projects like DART+ and Dublin BusConnects, similar to the approach used for Luas Cross City, involving continuous engagement in 'Traffic Forums' with relevant stakeholders. As such, no likely significant cumulative effects on traffic and transport are predicted due to the construction of the other projects in the vicinity of the Broombridge Hub, over and above the effects of the Proposed Scheme in isolation. In terms of operational impact, the proposed developments have been included in overall land-use forecasts used to assess the future impacts of the proposed Scheme. These forecasts, and the distribution of growth used, have been agreed with the local authorities and based on the targets and caps set in the National Planning Framework. As such, they provide a robust basis for informing the future year assessment within the EIAR. The operational traffic and transport impact assessment for the proposed Scheme included likely future transport schemes. The modelling analysis





included the delivery of DART+ West, the Dublin BusConnects CBCs and delivery of the Royal Canal Greenway as part of the wider GDA Strategy Cycle Network Plan.

Cultural Heritage may experience short-term impacts during simultaneous construction activities, but appropriate mitigation measures will be in place. There is a potential moderate, permanent adverse impact due to modifications of protected structures and new bridge introductions by the DART+ Programme West.

#### 24.6.2 Finglas Village Hub

The Finglas Village Hub includes five 'other developments', which are described in Table 24-18 below. The assessment of cumulative impacts at the Finglas Village Hub indicates several potential short-term effects across various domains. However, none of these impacts will be long term or significant. Additionally, Human Health, Cultural Heritage, Land Take, Electromagnetic Compatibility Interference, and Biodiversity are not expected to experience any cumulative impacts at this location.

Table 24-18: Other developments located in the Finglas Village Hub

Development	Short Description of Development	Distance from Hub
Prime GP3 Limited	The proposed development will consist of the demolition of a c. 1,732m². part single storey part two-storey office building facing McKee Avenue which was formally part of the Georgia Pacific facility. The proposed development will also provide for a reconfiguration of car parking spaces at the entire former Georgia Pacific facility resulting in a revised provision of 44 car parking spaces overall. Permission is also sought for all ancillary site services and landscape works necessary to facilitate the proposed development.	0.41km East
Hughes Planning & Development Consultants to Manhattan Peanuts	Proposed extension to the existing food production and warehouse building at Manhattan Peanuts Ltd. comprising an additional floor area of 1,913 m <sup>2</sup> and associated external amendments.	0.03 km North
Vantage Towers Limited	4.8-metre-high slim shrouded pole concealing telecommunications antennas fixed to the northern apex wall, replacement of existing cabinets and dishes and with other associated works.	0.85 km East

With regard to Population, there is low potential for significant cumulative effects from Prime GP3 and Vantage Towers, particularly concerning demolition traffic movements affecting traffic flow and pedestrian or cyclist movement. Coordination of timing and works would be necessary to mitigate these impacts. The Manhattan Peanuts extension could impact rear access routes, necessitating coordinated plans to improve access for businesses.

With regard to Biodiversity, the three developments within this development hub Manhattan Peanuts, Vantage Towers and PRIME GP3 will not pose any cumulative or in-combination impact risks when considered alongside the proposed Scheme. The Manhattan Peanuts development overlaps with the proposed Scheme in regard to ZoI buffers. However, it is located towards the northern extent of the proposed Scheme and is beyond any impact range for any of the dust or disturbance sensitive KERs. Additionally, there are no shared ecological ZoI buffers between the proposed Scheme and the proposed Vantage Towers and PRIME GP3 projects.

Regarding Water, there is a risk of silty runoff impacting surface water quality during construction if mitigation measures are not implemented. Accidental pollution could negatively affect the receiving waterbody and downstream habitats. During the Operational Phase, a negligible increase in surface water runoff within the catchment is anticipated.





With regard to Land and Soils, if multiple developments proceed at the same time, during construction there is potential for increased accidental spillages resulting in contamination of the soils and groundwater. By following the guidance set out in CIRIA's Control of water pollution from linear construction projects (CIRIA, 2006), it is anticipated this would result in a negligible impact. Similarly, there is increased risk of indirect impacts such as accidental leaks or discharges during the operation phase. However, as the Luas is an electrified transport system, the operational contamination risks are significantly lower compared to transport vehicles powered by internal combustion engines and hydrocarbon fuels, and it is anticipated that the cumulative impact will be Negligible.

Air Quality and Climate assessments suggest that simultaneous construction projects could increase dust and emissions, but proposed mitigation measures will prevent significant impacts.

Noise and Vibration also present potential short-term cumulative impacts during construction, particularly when works are in close proximity, though standardised thresholds will be adhered to.

Infrastructure and Utilities are not expected to face significant cumulative effects during construction or operation, though further consultations are advised to avoid unintended impacts.

With regard to Traffic and Transport, the Construction Traffic Management Plan (CTMP) detailed in Volume 5 - A6.2 of the EIAR, outlines how the interface between public and construction-related traffic will be managed to minimize disruption and ensure safety. The CTMP ensures coordination with other projects through DCC and FCC, maintaining unobstructed construction access and managing cumulative impacts. The purpose of this CTMP is to demonstrate that the impacts to the public road network during the Construction Phase of the proposed Scheme can be minimised and that transport related activities are carried out as safely as possible and with the minimum disruption to other road users. As outlined in the CTMP, interface liaison with other projects will take place on a case-by-case basis through DCC and FCC to ensure that there is coordination between projects, that construction access locations remain unobstructed by the proposed Scheme works and that any additional construction traffic mitigation measures required to deal with cumulative impacts are managed appropriately. As such, no likely significant cumulative effects on traffic and transport are predicted due to the construction of the other projects in the vicinity of the Finglas Village Hub, over and above the effects of the Proposed Scheme in isolation. In terms of operational impact, the proposed developments have been included in overall land-use forecasts used to assess the future impacts of the proposed Scheme. These forecasts, and the distribution of growth used, have been agreed with the local authorities and based on the targets and caps set in the National Planning Framework. As such, they provide a robust basis for informing the future year assessment within the EIAR. As the proposed developments have been incorporated in the land use growth forecasts in the area, the cumulative operational traffic and transport impacts are reported in Chapter 18 (Traffic and Transport) of the EIAR.

Waste management could see significant impacts from projects in close proximity (0.41km to 0.85km) to the proposed Scheme, particularly from Prime G3 and Manhattan Peanuts, but not from Vintage Towers. The circular economy policy and compliance with EPA regulations will ensure minimal waste generation, and there is adequate regional capacity for waste disposal and recovery. Construction phase impacts are negligible, and operational impacts are minimal.

For Landscape and Visual, there is potential for short-term cumulative impacts on the landscape character of Finglas Main Street if other projects and Luas Finglas works occur simultaneously.

The proposed Scheme will enhance sustainable transport, reduce reliance on private vehicles, and lower transport emissions, resulting in beneficial cumulative impacts during the Operational Phase. Overall, the Finglas Village Hub's development considers various cumulative impacts and incorporates measures to mitigate potential adverse effects.





#### 24.6.3 Charlestown Hub

The Charlestown Hub includes five developments, which are described in Table 24-19 below. The assessment of cumulative impacts at the Charlestown Hub indicates minimal expected effects across various domains. However, none of these impacts will be long term or significant. Additionally, no cumulative impacts on landscape character or visual amenity are anticipated. Similarly, Noise and Vibration, Electromagnetic Compatibility Interference, Cultural Heritage, Human Health and Biodiversity are not expected to experience any cumulative impacts at this location.

Table 24-19: Other developments located in the Charlestown Hub

Development	Short Description of Development	Distance from Hub
Melvin Properties Limited	Construction of an eco-self-storage facility comprising 300 storage containers and all associated site works.	0.79km North
Charlestown Development: Puddenhill Property Limited	590 apartments, a creche and all associated site works.	180m North

Population impacts are anticipated to be low, with potential short-term negative effects on traffic flow and pedestrian or cyclist movement if construction works coincide. Coordination of timing and works will be necessary to mitigate these impacts. Residents will benefit from improved public transport provided by the proposed Scheme, resulting in a positive long-term effect.

With regard to Biodiversity, the two developments within this development hub proposed by Puddenhill Property Developments and Melvin Properties Limited, will not pose any cumulative or in-combination impact risks when considered alongside the proposed Scheme. The Puddenhill Property development overlaps with the proposed Scheme in regard Zol buffers. However, it is located towards the northern extent of the proposed Scheme, and is beyond any impact range for any of the dust or disturbance sensitive KERs. The Melvin Properties Limited development is located beyond any of the proposed Scheme's ecological Zol buffers.

Regarding Water, Construction Environmental Management Plans (CEMPs) and Surface Water Management Plans (SWMPs) attached to all projects will incorporate measures to reduce impacts on surrounding watercourses and surface water networks to negligible levels. Surface water runoff will be attenuated and treated adequately during the operational phase, ensuring no cumulative impacts.

For Land and Soils, if multiple developments proceed at the same time, during construction there is potential for increased accidental spillages resulting in contamination of the soils and groundwater. By following the guidance set out in CIRIA's Control of water pollution from linear construction projects (CIRIA, 2006), it is anticipated this would result in a negligible impact. Similarly, there is increased risk of indirect impacts such as accidental leaks or discharges during the Operational Phase. However, as the Luas is an electrified transport system, the operational contamination risks are significantly lower compared to transport vehicles powered by internal combustion engines and hydrocarbon fuels, and it is anticipated that the cumulative impact will be negligible. There is potential for Operational Phase cumulative impacts of reduced groundwater recharge at this hub location, due to increased areas of hardstanding. The Charlestown hub shall result in approximately 0.0008km² of additional hardstanding. An approximate additional 0.029km² of hardstanding may result from the identified neighbouring projects. As Luas Finglas contributes less than 3% of the total additional hardstanding area at this hub, which is already in a highly developed area, the cumulative impact is considered to be Negligible.

Regarding Land Take, there is an overlap in land acquisition for the proposed strategic housing scheme in Charlestown. The two designs have been coordinated to ensure compatibility. However, there is potential for cumulative impacts in Charlestown if the construction of the proposed residential development opposite the Luas terminus Stop coincides with the construction of the proposed Scheme. Close coordination with the developer and the Luas Finglas construction team will be necessary.





For Air Quality and Climate, no cumulative impacts are expected. However, if multiple projects progress simultaneously, construction dust mitigation measures will be implemented to prevent significant impacts. The proposed Scheme will enhance sustainable transport, reduce reliance on private vehicles, and lower transport emissions, resulting in beneficial cumulative impacts during the operational phase.

Infrastructure and Utilities are not expected to face significant cumulative effects during Construction or Operational Phases, though further consultations are advised to avoid unintended impacts.

For Waste, the proximity of various projects (0.18km - 0.79km) to the proposed Scheme suggests potential impacts if construction phases overlap. These impacts will stem from the transport of materials and waste disposal. Adherence to circular economy principles and Waste Management Plans will minimize waste generation and ensure sustainable material use. The Eastern Midlands Waste Region (EMWR) has adequate landfill capacity, and construction phase impacts are negligible. No significant operational phase impacts are expected as waste generation will be minimal.

For Traffic and Transport, the Construction Traffic Management Plan (CTMP) detailed in Volume 5 – A6.2 of the EIAR, outlines how the interface between public and construction-related traffic will be managed to minimize disruption and ensure safety. The CTMP ensures coordination with other projects through DCC and FCC, maintaining unobstructed construction access and managing cumulative impacts. The purpose of this CTMP is to demonstrate that the impacts to the public road network during the Construction Phase of the proposed Scheme can be minimised and that transport related activities are carried out as safely as possible and with the minimum disruption to other road users. As outlined in the CTMP, interface liaison with other projects will take place on a case-by-case basis through DCC and FCC to ensure that there is coordination between projects, that construction access locations remain unobstructed by the proposed Scheme works and that any additional construction traffic mitigation measures required to deal with cumulative impacts are managed appropriately. As such, no likely significant cumulative effects on traffic and transport are predicted due to the construction of the other projects in the vicinity of the Charlestown Hub, over and above the effects of the Proposed Scheme in isolation. In terms of operational impact, the proposed developments have been included in overall land-use forecasts used to assess the future impacts of the proposed Scheme. These forecasts, and the distribution of growth used, have been agreed with the local authorities and based on the targets and caps set in the National Planning Framework. As such, they provide a robust basis for informing the future year assessment within the EIAR. As the proposed developments have been incorporated in the land use growth forecasts in the area, the cumulative operational traffic and transport impacts are reported in Chapter 18 (Traffic and Transport) of the EIAR.

# 24.7 Mitigation Measures

No specific mitigation measures over and above those already proposed for the proposed Scheme have been identified for cumulative impacts. In most cases the mitigation included in the proposed Scheme, together with standard mitigation measures which would be implemented by the 'other developments', will be sufficient to reduce cumulative impacts so that they are not significant.

The assessments presented in Volume 5 - Appendix A24.2 of the EIAR take account of all the mitigation measures that will be applied as part of the proposed Scheme, to prevent significant negative impacts occurring as a result of the proposed Scheme and thereby reducing also the potential for significant negative cumulative impacts with 'other developments'. These mitigation measures are set out in the respective specialist chapters of this EIAR (Chapter 7 to Chapter 21), in Volume 5 - Appendix A6.1 and summarised in Chapter 25 (Summary of Mitigation Measures, Monitoring & Residual Impacts) of the EIAR.

Appropriate construction planning of the proposed Scheme and other nearby developments will be applied to prevent potential cumulative impacts of general construction disruption on neighbouring communities. This has been developed as part of a detailed and dynamic CEMP together with a Traffic Management Plan for the proposed Scheme (by the appointed contractor). This plan will be updated and finalised by the Project Supervisor for the Construction Stage (PSCS) / Contractor prior to commencing the works. The PSCS shall co-ordinate the implementation of the CTMP during construction of the proposed Scheme. The Works





Requirements will require the implementation of all the mitigation measures identified in the EIAR and any additional measures required pursuant to conditions imposed by An Bord Pleanála.

The CTMP takes consideration of the phasing requirements of the proposed Scheme and will ensure safe construction and minimise the impact on traffic on non-motorised users along the route of the proposed Scheme and maintain flow of all modes of transport.

This will limit impacts of construction disruption from the proposed Scheme as far as practicable, noting that the construction programmes for 'other developments' will be set by other developers.

## 24.8 Residual Impacts

In the evaluation of the proposed Scheme a total of 17 positive impacts have been identified. These positive impacts span various aspects and demonstrate the overall beneficial nature of the proposed Scheme. Conversely, only two potential significant negative impacts have been identified. This stark contrast highlights the predominantly positive influence of the proposed Scheme.

With the implementation of the proposed Scheme mitigation measures, as outlined in Volume 5 - Appendix A24.2 of the EIAR and summarised in Chapter 25 (Summary of Mitigation Measures, Monitoring & Residual Impacts), the majority of the identified potential negative cumulative impacts will be avoided or reduced to a level that is not considered to be a significant residual impact (i.e. Not Significant, Slight or Imperceptible). In addition, there are also a number of positive residual impacts which will occur as a result of the operation of the proposed Scheme in combination with the operation of other transport-related developments.

These significant positive and negative residual impacts are outlined in Table 24-20 and Table 24-21 respectively.

Table 24-20: Potential Positive Significant Residual Cumulative Impacts with the proposed Scheme

Other Development Developer / Name	Environmental Aspect / Potential Residual Impact	Luas Finglas Phase
MetroLink	Population – Positive and Significant cumulative impact due to the provision of public transport services and a potential for modal shift from private vehicles to public transport.	Operational
	Air Quality - Positive and Significant cumulative impact due to the provision of public transport services and a potential for modal shift from private vehicles to public transport, which will lead to a reduction in emissions (and pollution) released into the atmosphere.	
	Population – Positive and Significant cumulative impact due to the provision of public transport services and a potential for modal shift from private vehicles to public transport.	Operational
DART+ West	Air Quality - Positive and Significant cumulative impact due to the provision of public transport services and a potential for modal shift from private vehicles to public transport, which will lead to a reduction in emissions (and pollution) released into the atmosphere.	
DART+ Southwest	Air Quality - Positive Significant cumulative impact due to the provision of public transport services and a potential for modal shift from private vehicles to public transport, which will lead to a reduction in emissions (and pollution) released into the atmosphere.	Operational





Other Development Developer / Name	Environmental Aspect / Potential Residual Impact	Luas Finglas Phase
DART+ Tunnel Element (Kildare Line to Northern Line)	Population – Positive and Significant cumulative impact due to the provision of public transport services and a potential for modal shift from private vehicles to public transport.	Operational
	Air Quality – Positive Significant cumulative impact due to the provision of public transport services and a potential for modal shift from private vehicles to public transport.	
Dublin BusConnects CBC 02 Swords to City Centre	Population – Moderate to Significant Positive cumulative impact due to the provision of public transport services and a potential for modal shift from private vehicles to public transport.	Operational
	Air Quality – Positive Significant cumulative impact due to the provision of public transport services and a potential for modal shift from private vehicles to public transport.	
Dublin BusConnects CBC 03 Ballymun - Finglas	Population – Moderate to Significant Positive cumulative impact due to the provision of public transport services and a potential for modal shift from private vehicles to public transport.	Operational
	Air Quality – Significant Positive cumulative impact due to the provision of public transport services and a potential for modal shift from private vehicles to public transport, which will lead to a reduction in emissions (and pollution) released into the atmosphere.	
Dublin BusConnects CBC 05 Blanchardstown to City Centre	Population – Moderate to Significant Positive cumulative impact due to the provision of public transport services and a potential for modal shift from private vehicles to public transport.	Operational
	Air Quality – Positive Significant cumulative impact due to the provision of public transport services and a potential for modal shift from private vehicles to public transport, which will lead to a reduction in emissions (and pollution) released into the atmosphere.	
Royal Canal Greenway	Population – Moderate to Significant Positive cumulative impact due to the provision of public transport services and a potential for modal shift from private vehicles to public transport.	Operational
	Air Quality - Positive and Significant cumulative impact due to the provision of public transport services and a potential for modal shift from private vehicles to public transport, which will lead to a reduction in emissions (and pollution) released into the atmosphere.	
DCC Jamestown Development Plan	Population – Profound, long-term Positive cumulative effects for businesses due to redevelopment of area to include greater residential together with potentially Profound positive effect from availability of public transport due to proposed Scheme.	Operational





Table 24-21: Potential Negative Significant Residual Cumulative Impacts with the proposed Scheme

Other Development Developer / Name	Environmental Aspect / Potential Residual Impact	Luas Finglas Phase
DART+ West	Land Take – Some cumulative effects predicted to occur with respect to regard to Land Take during construction of this development. Site compound locations are concurrent. Close liaison with IE DART + Team to coordinate use of sites, programme/access/works/safety requirements.	Operational
	Cultural Heritage – Moderate to Significant Negative cumulative cultural heritage impacts resulting from the modification of the protected structure (Broome Bridge) and the introduction of new features into its setting	

#### 24.9 Conclusion

The assessment of potential impacts from various developments reveals predominantly positive outcomes, particularly in terms of population and air quality. The provision of public transport services and the potential for a modal shift from private vehicles to public transport are expected to yield significant cumulative benefits for the population, enhancing connectivity and reducing congestion. This shift is also anticipated to lead to a notable reduction in emissions and pollution, thereby positively impacting air quality across the affected areas. However, one notable negative impact is identified in the realm of cultural heritage, with modifications to the protected structure of Broome Bridge and the introduction of new features into its setting, resulting in moderate to significant cumulative cultural heritage impacts. Nevertheless, the overall assessment underscores the transformative potential of the proposed Scheme, with profound, long-term positive effects projected for businesses through area redevelopment and increased residential accessibility facilitated by enhanced public transportation infrastructure.

# 24.10 Difficulties Encountered in Compiling Information

The cumulative impacts of the proposed Scheme in conjunction with each of the 'other developments' were assessed to a level of detail commensurate with the information that was available at the time of assessment. Where information regarding proposed 'other developments' was limited, these gaps have been acknowledged within the assessment, and the associated uncertainties in such instances have been documented. A key challenge in this context was the need to establish a definitive cut-off point for the assessment, which inherently restricted the information available for consideration.





#### 24.11 References

CIRIA, 2006. Control of water pollution from linear construction projects, s.l.: CIRIA.

Department of Environment, Heritage, and Local Government, 2009. *Guidance for Planning Authorities on Appropriate Assessments*, Ireland: s.n.

DoHLGH, 2018. Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, Ireland: Department of Housing, Local Government and Heritage, Government of Ireland.

EPA, 2015. Draft Advice Notes for Preparing Environmental Impact Statements, Ireland: Environmental Protection Agency.

EPA, 2022. Guidelines on the Information to be Contained in Environmental Impact Assessment Reports, Ireland: Environmental Protection Agency.

European Commission, 1999. *Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions*, European Commission: EC.

European Union, 2011. Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment., European Union: EU.

European Union, 2014. Directive 2014/52/EU of 16 April 2014 on the assessment of the effect of certain public and private projects on the environment. European Union: EU.

European Union, 2017c. *Environmental Impact Assessment of Projects - Guidance on the Preparation of the EIAR*, European Union: European Union.

European Union, 2017. Environmental Impact Assessment of Projects – Guidance on Scoping (Directive 2011/92/EU as amended by 2014/52/EU) (European Union 2017b);, European Union: EU.

Government of Ireland, 2001. *Transport (Railway Infrastructure) Act, 2001 (as amended),* Ireland: Government of Ireland.

Ministry of Housing, Communities and Local Government, 2019. *Cumulative Effects Assessment Relevant to Nationally Significant Infrastructure Projects*, United Kingdom: Government of United Kingdom.

NTA, 2022. Greater Dublin Area Transport Strategy 2022 - 2042, Ireland: National Transport Authority.

Office of Planning Regulator (OPR), 2021. *OPR Practice Note PN01: Appropriate Assessment Screening fro Development Managemnet*, Ireland: Office of Planning Regulator (OPR).







