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National Transport Authority

Luas Finglas

Environmental Impact Assessment Report 2024

Chapter 21: Landscape and Visual Amenity

BARRY TRANSPORTATION
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Project Ireland 2040
Building Ireland's Future

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GLOSSARY OF FREQUENTLY USED TERMS

Term	Definition
CDP	City (or County) Development Plan
DCC	Dublin City Council
DSM	Digital Surface Model
DTM	Digital Terrain Model
EIAR	Environmental Impact Assessment Report
EPA	Environmental Protection Agency
FCC	Fingal County Council
LCA	Landscape Character Area
LCC	Luas Cross City
LLCA	Local Landscape Character Area
LRT	Light Rail Transit
LRV	Light Rail Vehicle
LVIA	Landscape and Visual Assessment
NIAH	National Inventory of Architectural heritage
NHA	Natural Heritage Area
OCS	Overhead Contact System
PEM	Property Evidence Management
RO	Railway Order
RPS	Record of Protected Structures
TII	Transport Infrastructure Ireland
ZTV	Zone of Theoretical Visibility

SECTION 21: LANDSCAPE AND VISUAL AMENITY

21.1 Introduction

21.1.1 Purpose of this Report

This Landscape and Visual Impact Assessment has considered and assessed the potential impacts on landscape character and visual amenity associated with the Construction and Operational Phases of the proposed Luas Finglas development (hereafter referred to as the Proposed Scheme). This chapter has been prepared having regard to other chapters of the Environmental Impact Assessment Report (EIAR) and in particular, in conjunction with the following chapters:

- Chapter 5 (Description of the proposed Scheme);
- Chapter 6 (Construction Activities);
- Chapter 7 (Human Health);
- Chapter 8 (Population);
- Chapter 9 (Biodiversity);
- Chapter 11 (Land and Soils);
- Chapter 12 (Land Take);
- Chapter 13 (Air Quality);
- Chapter 14 (Climate);
- Chapter 15 (Noise and Vibration);
- Chapter 17 (Material Assets – Infrastructure and Utilities); and
- Chapter 20 (Cultural Heritage).

21.1.2 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. In addition, the proposed Scheme through the inclusion of integrated cycle lanes and cycling infrastructure sets out to facilitate multimodal "cycle-LRT trips" as a key aspect of the Luas Finglas scheme.

The proposed Scheme will comprise a number of principal elements as outlined in Table 21-1 and Table 21-2. 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 21-1: Overview of the Key Features of the proposed Scheme

Scheme Key Features	Outline Description
Permanent Scheme Elements	
Light Rail Track	3.9km extension to the Luas Green Line track from Broombridge to Finglas (2.8km of green 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, Ballyboggin 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 Margaret's 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 Road 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 Road 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.

Table 21-2: Summary of New Bridges of the proposed Scheme

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.

21.2 Methodology

21.2.1 Study Area

The study area for the Landscape and Visual Assessment (LVIA) includes the light rail corridor located along the proposed Scheme, which incorporates the immediately adjoining landscapes and properties, including open spaces, parks, gardens, and other land use areas, together with amenity, landscape, and visual planning considerations.

The study area extends where required to incorporate wider viewpoints which were identified using a Zone of Theoretical Visibility (ZTV) also referred to as a Visual Envelope. The Guidelines for Landscape and Visual Assessment (3rd edition - GLVIA[1]) require the ZTV to be based on a bare earth scenario (Digital Terrain Model or DTM, see Volume 4 – Map Figure 21-2) with no buildings or vegetation included. It identifies the areas where the site proposals will be visible from.

The ZTV shown in Volume 4 – Map Figure 21-2 to Map Figure 21-5 illustrates the area with potential visibility within a 2km corridor (1km radius from the centreline of the route), using a viewer eye height of 1.6m and based on the proposed static infrastructure including bridges, OCS and built elements. The ZTV also defines the limit and location of visual receptors for the Visual Impact Assessment elements of the study.

More information about the ZTV is presented in section 21.3.6.1 of this Chapter.

21.2.2 Relevant Guidelines, Policy, and Legislation

The assessment is based on the recommendations in the Guidelines for Landscape and Visual Impact Assessment (GLVIA) as published by the Landscape Institute (UK) and the Institute of Environmental Management and Assessment (3rd Edition, 2013). The following policies and guidelines were also considered during the assessment:

- A Guide to Landscape Treatments for National Road Schemes in Ireland, TII 2006;
- Draft EPA Advice Notes for Preparing Environmental Impact Statements (hereafter referred to as the Draft EPA Advice 2015), EPA, 2015;
- Dublin City Parks Strategy 2019-2022, DCC 2019;

1 Landscape Institute and Institute of Environmental Management & Assessment, 2013 Guidelines for Landscape and Visual Impact Assessment 3rd Edition. Routledge

- Dublin City Council Biodiversity Action Plan 2015-2020, DCC 2015;
- Dublin City Tree Strategy 2016-2020, DCC 2016;
- Dublin City Development Plan 2022-2028;
- European Commission (2017) 'Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report';
- Forest of Fingal. A Tree Strategy for Fingal 2022-2032. Fingal County Council;
- Fingal County Development Plan 2023- 2029;
- Guidelines on the information to be contained in Environmental Impact Assessment Reports (hereafter referred to as the EPA Guidelines, EPA 2022;
- Landscape character assessment (LCA) and landscape impact and visual impact assessment (LVIA) of Specified Linear Infrastructure Projects – Overarching Technical Document (OTD) (PE-ENV-01101), TII 2020;
- Landscape character assessment (LCA) and landscape impact and visual impact assessment (LVIA) of Proposed National Roads – Standard (PE-ENV-01102), TII 2020;
- Directive 2014/52/EU of the European Parliament and of the Council (amending Directive 2011/92/EU) on the assessment of the effects of certain public and private projects on the environment;
- Planning and Development Act 2000 (as amended); and
- Planning and Development Regulations 2001 (as amended).

21.2.3 Data Collection and Collation

21.2.3.1 Data Sources

Within the Luas Team, the landscape specialists have liaised with the cultural heritage specialists to ascertain if any Cultural Heritage features rely on landscape setting for their importance, and also with the Ecological team to understand the biodiversity value of any trees or riparian vegetation which will be affected by the proposed Scheme.

A qualified arborist has undertaken a Tree Survey and prepared an Arboricultural Impact Assessment, and a Tree Protection Plan. The Tree Survey was undertaken on the 17th of August 2021, in accordance with BS 5837:2012-Trees in relation to Design, Demolition and Construction. Refer to Volume 5 – Appendix A21.1. This comprises an individual tagged Tree Survey of trees with diameters of 75mm or greater. It included the species, height, diameter (DBH), tree condition, crown clearance, canopy spread, root protection area and recommendations regarding preservation / maintenance / removal, both within the footprint of the proposed Scheme and extending either side of the Alignment. Account is also taken of ancillary works, i.e., temporary construction works areas, construction compounds etc.

The objective of the Arboricultural Impact Assessment was to identify the areas that contained trees, groups of trees or hedgerows, and to ensure where practicable that these areas would be retained and to identify the trees that are to be removed to facilitate the proposed Scheme. The Arboricultural Impact Assessment reported that 178 individual trees are required to be removed out of 1,037 individual trees surveyed: 177 of the trees are required to be removed to facilitate development, one tree is to be removed due to poor condition.

Additionally, a number of small trees (163) will also be removed to facilitate construction of the proposed Scheme. These have been identified through the design process and are illustrated on the Landscape Arrangement Drawings provided in the RO Drawing Pack. The total number of trees of all sizes to be removed for the proposed Scheme is 341.

A qualified arborist has also undertaken an Ash Tree Condition Survey, to inspect ash trees previously surveyed as part of the proposed Scheme Arboricultural Impact Assessment. The condition assessment was carried out on 17th August 2022 and looked for evidence of ash dieback (*Hymenoscyphus fraxineus*). The assessment noted that ash die back was evident on 73 trees in six locations along the proposed Scheme.

21.2.3.2 Field Surveys

A preliminary site inspection was carried out by the Luas Team landscape specialists at the outset of the LVIA on 16th March 2021, in order to visit the locations of all known constraints, open spaces, and areas of significant vegetation. This was in order to ascertain their existing condition, current land use, and potential sensitivities. The preliminary site survey has also informed the optimal locations for 3D visualisations / photomontages showing "before" and "after" proposed Scheme implementation images. A second site visit was carried out on 5th August 2022 to verify the extents of visibility from residential properties towards the proposed Scheme Alignment and proposed Stops, and to record the potential change in visual amenity. The type and condition of boundary treatment which will provide a level of visual screening for the proposed Scheme alignment was also noted during this site survey. Jan Gehl survey data 2022-2023 (refer to Volume 5 - Appendix A8.1) was also used to verify amenity use and movement in the open spaces and parks of the study area and the presence of footpath, cycle paths and street furniture (seats). The survey data also served to confirm the passive surveillance from residential properties in proximity to open space and hence locations where physical change will affect for residential visual amenity.

21.2.4 Methodology for the Assessment of Impacts

When assessing the potential impacts on the landscape and visual receptors resulting from the proposed Scheme, the following criteria are considered:

- Landscape character sensitivity, or visual receptor sensitivity;
- Magnitude of likely impacts; and
- Significance of likely effects.

Table 21-3 presents the Impact Classification Terminology as published in the EPA guidance document[2]. Standard definitions are provided in this glossary, which permit the evaluation and classification of the quality, significance, duration, and type of impacts associated with the proposed Scheme on the receiving environment.

Each impact is described in terms of its quality, significance, extent, duration and frequency and type, where possible.

Table 21-3: Impact Classification Terminology Taken from Environmental Protection Agency (May 2022) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports

Impact characteristics	Term	Description
Quality of Effects	Positive	A change that improves the quality of the environment.
	Neutral	No effects or effects that are imperceptible, within normal bounds of variation within the margin of forecasting error.
	Negative / Adverse	A change that reduces the quality of the environment.
Significance of Effects	Imperceptible	An effect capable of measurement, but without significant consequences.
	Not significant	An effect which causes noticeable changes in the character of the environment, but without significant consequences.
	Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.

[2] Environmental Protection Agency (2022) *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports*

Impact characteristics	Term	Description
	Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
	Significant	An effect which, by its character, magnitude, duration, or intensity alters a sensitive aspect of the environment.
	Very significant	An effect which, by its character, magnitude, duration, or intensity significantly alters most of a sensitive aspect of the environment.
	Profound	An effect which obliterates sensitive characteristics.
Extent and Context of Effects	Extent	Describe the size of the area, the number of sites, and the proportion of a population affected by an effect.
	Context	Describe whether the extent, duration, or frequency will conform or contrast with established (baseline) conditions.
Probability of Effects	Likely	The effects that can reasonably be expected to occur because of the planned project, if all mitigation measures are properly implemented.
	Unlikely	The effects that can reasonably be expected not to occur because of the planned project if all mitigation measures are properly implemented.
Duration and Frequency of Effects	Momentary	Effects lasting from seconds to minutes.
	Brief	Effects lasting less than a day.
	Temporary	Effects lasting less than a year.
	Short-term	Effects lasting one to seven years.
	Medium-term	Effects lasting seven to fifteen years.
	Long-term	Effects lasting fifteen to sixty years.
	Permanent	Effects lasting over sixty years.
	Reversible	Effects that can be undone, for example through remediation or restoration
	Frequency	Describe how often the effect will occur. (once, rarely, occasionally, frequently, constantly – or hourly, daily, weekly, monthly, annually)
Types of Effects	Indirect / Secondary)	Impacts on the environment, which are not a direct result of the project, often produced away from the project site or because of a complex pathway.
	Cumulative	The addition of many minor or significant effects, including effects of other projects, to create larger, more significant effects.
	'Do-Nothing'	The environment as it will be in the future if the project is not carried out.
	`Worst case'	The effects arising from a project in the case where mitigation measures substantially fail.
	Indeterminable	When the full consequences of a change in the environment cannot be described.
	Irreversible	When the character, distinctiveness, diversity, or reproductive capacity of an environment is permanently lost.
	Residual	The degree of environmental change that will occur after the proposed mitigation measures have taken effect.
	Synergistic	Where the resultant effect is of greater significance than the sum of its constituents.

21.2.4.1 Sensitivity of Receptors

Landscape Sensitivity

The sensitivity of the landscape to change is the degree to which a particular Landscape Character Area (LCA) can accommodate changes or new elements without unacceptable detrimental effects to its essential characteristics.

Landscape Sensitivity, often referred to as 'value', is classified using the following criteria which have been derived from a combination of industry guidelines from the Landscape Institute for Landscape and Visual Impact Assessment and professional judgement. The criteria are presented in Table 21-4.

Table 21-4: Landscape Sensitivity Classification Criteria

Sensitivity	Description
Very High	Areas where the landscape character exhibits a very low capacity for change in the form of development. Examples of these are very high value landscapes, protected at an international level e.g., a World Heritage Site, where the principal management objectives are likely to be protection of the existing character.
High	Areas where the landscape character exhibits a low capacity for change in the form of development. Examples are high value landscapes, protected at a national level e.g., a National Park, where the principal management objectives are likely to be protection of the existing character.
Medium	Areas where the landscape character exhibits a medium capacity for change in the form of development. Examples are medium value landscapes, protected at a Local or Regional level e.g., open space areas mentioned within a County Development Plan, where the principal management objectives are likely to be protection of the existing character;
Low	Areas where the landscape character exhibits a high capacity for change and has very few or no designated landscapes or open space areas.
Negligible	Areas of landscape character that include derelict, mining, industrial land or are part of the urban fringe where there will be a reasonable capacity to embrace change or the capacity to include the development proposals. Management objectives in such areas will be focused on change, creation of landscape improvements and / or restoration to realise a higher landscape value.

Visual Sensitivity

Unlike landscape sensitivity, the sensitivity of visual receptors has an anthropocentric (or human-centric) basis. It considers factors such as the perceived quality and values associated with the view, the landscape context of the viewer, the likely activity they are engaged in and whether this heightens their awareness of the surrounding landscape. Visual sensitivity is described in Table 21-5.

Table 21-5: Visual Sensitivity Classification Criteria

Sensitivity	Description
Very High	Residents in properties within protected landscapes and travellers on a scenic route where awareness of views is likely to be heightened.
High	Residents in properties with predominantly open views from windows, gardens or curtilage. People, whether residents or visitors, who are engaged in outdoor recreation including use of public rights of way, whose attention or interest is likely to be focused on the landscape and on particular views, and those on a scenic route where the view is not specifically in the direction of the proposed Scheme.
Medium	Visitors to heritage assets, or to other attractions, where views of the surroundings are an important contributor to the experience, and communities where views contribute to the landscape setting enjoyed by residents in the area.
Low	People engaged in outdoor sport or active recreation on a local scale, which does not involve or depend upon appreciation of views of the landscape; and people at their place of work whose

	attention will be focussed on their work or activity, not their surroundings and where the setting is not important to the quality of working life, and people travelling in vehicles where their view is limited to a few minutes at any viewpoint.
Negligible	Changes affecting restricted viewpoints.

21.2.4.2 Magnitude of Impacts

Landscape Magnitude

The magnitude of a predicted landscape impact is a product of the scale, extent or degree of change that is likely to be experienced as a result of the proposed Scheme. The magnitude considers whether there is a direct physical impact resulting from the loss of landscape components, and / or a change that extends beyond the boundary of the proposed Scheme that will have an effect on the landscape character of the area, it also includes the quality of the effect in terms of positive or negative change. The criteria are presented in Table 21-6.

Table 21-6: Landscape Magnitude Classification Criteria

Sensitivity	Description
Very High	Change that will be large in extent and scale with the loss of critically important landscape elements and features, that will also involve the introduction of uncharacteristic new elements or features that contribute to an overall change of the landscape in terms of character, value, and quality.
High	Change that will be more limited in extent and scale with the loss of important landscape elements and features, that will also involve the introduction of uncharacteristic new elements or features that contribute to an overall change of the landscape in terms of character, value, and quality.
Medium	Changes that are modest in extent and scale involving the loss of landscape characteristics or elements that will also involve the introduction of uncharacteristic new elements or features that will lead to changes in landscape character, and quality.
Low	Changes affecting small areas of landscape character and quality, together with the loss of some less characteristic landscape elements or the addition of new features or elements.
Negligible	Changes affecting small or very restricted areas of landscape character. This will include the limited loss of some elements or the addition of some new features or elements that are characteristic of the existing landscape or are hardly perceivable.
Neutral	Changes that do not involve the loss of any landscape characteristics or elements and will not result in noticeable changes to the prevailing landscape character.
Positive	Changes that restore a degraded landscape or reinforce characteristic landscape elements.

Visual Magnitude

The magnitude of a visual effect is determined on the basis of several factors: the relative numbers of viewers, the distance from the viewpoint, the visual dominance of the proposed Scheme within a view and its effect on visual amenity. It also includes the quality of the effect in terms of positive or negative change, as shown in Table 21-7.

Table 21-7: Visual Magnitude Classification Criteria

Sensitivity	Description
Very High	The proposal intrudes into a large proportion or critical part of the available vista and is without question the most noticeable element. A high degree of visual clutter or disharmony is also generated, strongly reducing the visual amenity of the scene.
High	The proposal intrudes into a significant proportion or important part of the available vista and is one of the most noticeable elements. A considerable degree of visual clutter or disharmony is also likely to be generated, appreciably reducing the visual amenity of the scene.

Sensitivity	Description
Medium	The proposal represents a moderate intrusion into the available vista, is a readily noticeable element and/or it will generate a degree of visual clutter or disharmony, thereby reducing the visual amenity of the scene. Alternatively, it will represent a balance of higher and lower order estimates in relation to visual presence and visual amenity.
Low	The proposal intrudes to a minor extent into the available vista and will not be noticed by a casual observer and/or the proposal will not have a marked effect on the visual amenity of the scene.
Negligible	The proposal will be barely discernible within the available vista and/or it will not detract from, and will even enhance, the visual amenity of the scene.
Neutral	Changes that are not discernible within the available vista and have no bearing the visual amenity of the scene.
Positive	Changes that enhance the available vista by reducing visual clutter or restoring degraded features.

21.2.4.3 Significance of Impacts

Landscape Significance

The significance of the landscape impact will be the combination of the sensitivity of the landscape against the magnitude of the change. It is summarised in Table 21-8 below.

Table 21-8: Significance of Landscape and Visual Effects Based on Magnitude and Sensitivity

Significance of Landscape and Visual effects					
Magnitude	**Sensitivity**				
	Very high	**High**	**Medium**	**Low**	**Negligible**
Very High	Profound	Very significant	Significant	Moderate	Slight
High	Very significant	Significant	Moderate	Slight	Slight
Medium	Significant	Moderate	Slight	Slight	Imperceptible
Low	Moderate	Slight	Slight	Imperceptible	Imperceptible
Negligible	Slight	Slight	Imperceptible	Imperceptible	Imperceptible
Neutral	Imperceptible	Imperceptible	Imperceptible	Imperceptible	Imperceptible
Positive	Positive	Positive	Positive	Positive	Imperceptible

Visual Significance

As stated above, the significance of visual impacts is a function of visual receptor sensitivity and visual impact magnitude. This relationship is expressed in the same significance matrix as used earlier in respect of landscape impacts, per Table 21-8.

21.3 Baseline Environment

21.3.1 Proposed Urban Realm and Landscape Design

The proposed Scheme has been developed by careful consideration of the urban realm and landscape design within the railway corridor and integration of the results of the stakeholder consultation including the Jan Gehl survey data.

The Urban Integration Report, refer to Volume 5 - Appendix A21.2, includes a summary of the design principles and standards defined at the Preliminary Design stage, the definition and illustration in detail of the Reference Design. It defines stop areas within the landscape character sequences and illustrates the design palettes and design elements of the LRT landscape. The proposed Scheme travels through a number

of landscape typologies along its route. It therefore follows that different design solutions should be applied to take account of this variety and local context.

The application of the design principles to the proposed Scheme will allow for retention of most existing trees and combined with the use of a green track bed treatment, will assimilate the proposed Scheme within the open space, to reduce and avoid adverse landscape and visual impacts.

21.3.2 Timing of Surveys

The Preliminary Survey was carried out on 16th March 2021, when deciduous vegetation was not fully in leaf. The level of screening by vegetation was therefore low. The second site survey was carried out on 5th August 2022 when deciduous vegetation was fully in leaf. The level of screening by vegetation was therefore high. Where deemed relevant, consideration was given to seasonal changes in vegetation in the assessment.

21.3.3 Viewpoints

Regarding the surveys described above, photographs were taken during the site visit from locations where the proposed Scheme was expected to be visible, representing groups of visual receptors. Visual receptors are shown in Volume 4 – Map Figure 21-6.

Photomontages have been prepared from key or illustrative viewpoints across the full extent of the proposed Scheme (Refer to Volume 5 - Appendix A21.3). These views assist in providing an indication of the changes and potential effects resulting from the proposed Scheme during the Operational Phase, following its implementation. The proposed views are shown with proposed planting / mitigation semi-mature at approximately 10 years post-completion of the Construction Phase. The photomontages have been prepared having regard for the Landscape Institute (2019) Technical Guidance Note 06/2019 on Visual Representation of Development Proposals and are included in Volume 5 – Appendix A21.3 of this EIAR.

21.3.4 Public Consultation and Points Relevant to Landscape and Visual Impacts

The Public Consultation Report on the Preferred Route (August 2022), refer to Volume 5 – Appendix A1.2, noted the following:

- The alignment has been shifted to the east at Farnham to avoid bisecting the Farnham Park playing pitches. This moves the line away from Dunsink Road by approximately 60m and from Casement Road by approximately 20m;
- Where the line crosses Wellmount Road, the alignment has been shifted to preserve some trees that would have been impacted by the proposed Emerging Preferred Route;
- Realignment of the Finglas alignment east-west, making it more open and accessible than the previous north-south alignment. Here it will also have visual - as well as walking and cycling - links back towards Finglas Village east;
- Ravens Court and Cardiff Castle Road - loss of green space, an increase in anti-social behaviour, visual impact, mitigation is addressed in section 21.6 of this chapter; and
- St Margaret's Court - the loss of communal green space, loss of parking, safety risk to children crossing to the new proposed green, mitigation is addressed in section 21.6 of this chapter.

21.3.5 Landscape Character

21.3.5.1 Dublin City Development Plan 2022-2028

The preparation of a Landscape Character Assessment (LCA) is included as an objective in the Dublin CDP 2022-2028. At the time of writing this LVIA, a LCA was not available. Section 21.3.5.3 describes local landscape characters (LLCAs) areas defined for the purposes of the proposed Scheme.

Objective GI016 includes for the preparation of a Landscape Character Assessment for Dublin City during the lifetime of the plan in accordance with the National Landscape Strategy 2015-2025.

Objective GI017 includes for the preparation of a Views and Prospects Study to identify and protect the key views and prospects of the city. At the time of writing this LVIA, a Views and Prospects Study was not available. Section 21.3.5.3 describes key views and local landscape characters (LLCA's) areas defined for the purposes of the proposed Scheme.

21.3.5.2 Fingal County Development Plan 2023-2029

Chapter 9 of the Fingal County Development Plan 2023-2029 describes the County's LCA in a similar manner to the previous 2017-2023 Plan. The six LCA's are outlined. The northern part of the Luas study area falls within the Low-Lying Character Type.

It is described as a low-lying area dominated by agriculture and a number of settlements. The area is categorised as having a modest value and Low in Sensitivity.

Policy GINHP25 – Preservation of Landscape Types, includes for the preservation of the uniqueness of a landscape character type by having regard to the character, value and sensitivity of a landscape when determining a planning application.

Objective GINHO56 – Visual Impact Assessments, requires any necessary assessments, including visual impact assessments, to be prepared prior to approving development in highly sensitive areas.

21.3.5.3 Local Landscape Character Areas

Ten Local Landscape Character Areas (LLCAs) have been defined by the Luas Team in order to aid this assessment. These LLCAs reflect the local-scale changes in vegetation and built environment and the presence of elements of landscape sensitivity i.e. designated landscapes (including scenic, cultural heritage and ecological), valued open space areas and key views, vegetation, and watercourses, which together give each area an overall landscape character, and have been confirmed through investigation during the site visits. Cultural Heritage sites which contribute to the setting of the landscape character area are numbered e.g. CHC001, as per Table 20-7 in Chapter 20 (Cultural Heritage). The LLCAs are shown in Volume 4 - Map Figure 21-1 and described and illustrated in Table 21-9 to Table 21.19.

Table 21-9: Description of Local Landscape Character Areas

Local Landscape Character Areas (LLCA's)	
LLCA 01 Royal Canal	Royal Canal LLCA includes the Broombridge Luas Stop, Broome Bridge crossing of the Dublin to Sligo railway line, the Royal Canal and the Royal Canal Way.
LLCA 02 Broombridge Road / Industrial Estate	Broombridge Road / Industrial Estate LLCA passes through an area of mixed commercial and light industrial development. It connects the open space areas of the Royal Canal with the Tolka Valley Park.
LLCA 03 Tolka Valley Park	Tolka Valley Park LLCA includes a section of the Tolka Valley Park and is bounded to the south by Ballyboggan Road and to the north by Tolka Valley Road.
LLCA 04 St Helena's	St Helena's LLCA is a linear open space bounded to the south by Tolka Valley Road and to the north by St Helena's Road and the St Helena's Childcare / Resource Centre.
LLCA 05 Farnham Park	Farnham Park LLCA is a square shaped park bound on three sides by trees and roads: St Helena's Road to the south, Farnham Road to the east, Dunsink Road to the west and by a pedestrian footpath to the north.
LLCA 06 Wellmount Road	Wellmount Road LLCA starts at the open space overlooked by residential properties on Casement Road, and includes land either side of Wellmount Road, Patrickswell Place, Cardiff Castle Road, Ravens Court and Mellowes Crescent.
LLCA 07 Finglas Main Street West	Finglas Main Street West LLCA is located on Mellowes Road, it is an urban road corridor bounded by mixed community (Fire Station, Civic Offices, and the Garda station), and residential properties.
LLCA 08 Mellowes Park	Mellowes Park LLCA starts at the Fire Station and Civic Offices on Mellowes Road. It is bound by Finglas Road on the east, Casement Road on the west and stretches as far as the roundabout that intersects with St Margaret's Road on the east and Casement Road on the west, the Finglas Road / North Road.
LLCA 09/09a Finglas Road Corridor	Finglas Road LLCA runs parallel to Mellowes Park and includes the land and buildings around the roundabout that intersects with St Margaret's Road, Casement Road, and Finglas Road / North Road. It includes a pedestrian footbridge linking Casement Park to North Road across Finglas Bypass.
LLCA 10 Charlestown / St Margaret's	Charlestown / St Margaret's LLCA starts at the roundabout that intersects with St Margaret's Road, Casement Road and Finglas Road / North Road and includes commercial, light industrial area and residential properties either side of St Margaret's Road corridor as far as Charlestown Place / Melville Road, south of Charlestown Shopping Centre.

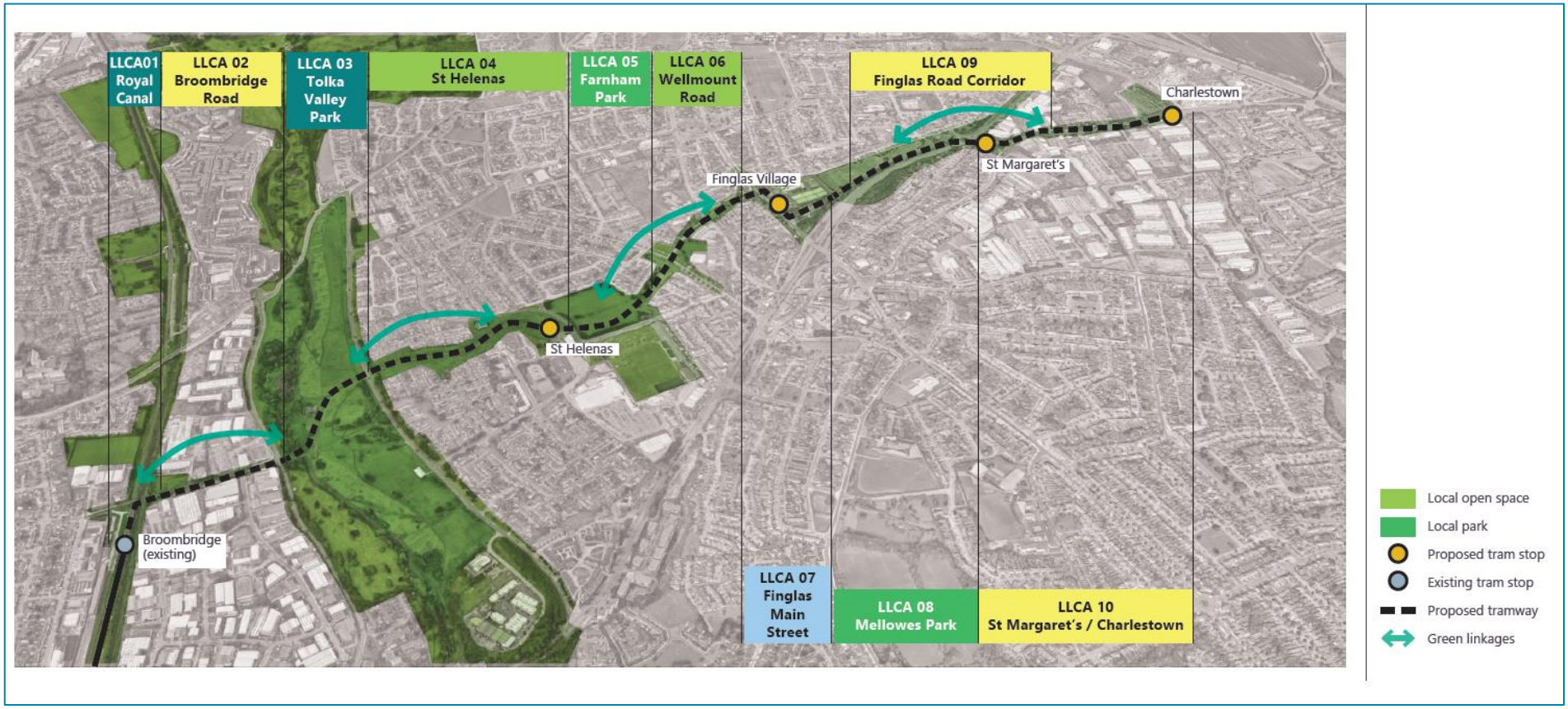

Figure 21 1: Local Landscape Character Areas (LLCA's)

Table 21-10: LLCA 01 Royal Canal

Description

The Royal Canal runs in an east-west direction and includes a public footpath on the north bank and a railway on the south bank. The canal is lined with riparian vegetation. Broome Bridge (CHC001.1), a two-arch limestone bridge, crosses the railway and canal. The built structure including the bridge, and the railway pedestrian access ramp enclose this area and restrict visibility. The telecommunication masts and street lighting and the adjacent industrial units which border the canal, define the areas as an urban corridor and reduce the scenic value of the area.

Designated Sites

The Royal Canal (CHC003) is designated as part of a Conservation Area (CHC004) in the Dublin City Development Plan 2022-2028**.** Conservation of these areas is a key objective of the City Council, and this designation assists in the delivery of the core strategy strand for: a compact, quality, green, well-connected city, which generates a dynamic, mixed-use environment for living, working and cultural interaction. The Hamilton Sculpture (CHC001.8), installed in 2019 at the Broombridge Luas Stop, south of the canal, re-enacts the story of Hamilton's discovery of the quaternion formula. Close to this landscape character area is the 7th Lock (CHC003.2) and the single-span railway bridge (CHC001.4) over the canal and c.600m east of the proposed Luas bridge. The latter is close to the proposed Hamilton depot extension. Broome Bridge (CHC001.1) is a Protected Structure and recorded on the National Inventory of Architectural Heritage. The Royal Canal is also a proposed Natural Heritage Area (pNHA). The ecological value of the canal lies more in the diversity of species it supports along its linear habitats than in the presence of rare species. There are no trees designated as having a Tree Preservation Order within this LLCA and there are no Key Views and Prospects in the City Development Plan.

Key Landscape Features

The mature hedgerow along the canal towpath, the riparian vegetation, and the watercourse, Broome Bridge arch way and the channelled views are the key features of this character area.

Amenity Value / Land use

The Royal Canal Way is used as a walking and cycling facility; it links the Cabra, Drumcondra and Ashtown areas with the city centre. The Royal Canal Cycle Route is a key objective of the cycle network plan for Dublin and is mentioned in the City Development Plan as one of a number of routes being developed, currently at planning stage. The cycle route will increase the amenity value and use of the canal corridor.

Baseline Sensitivity

In accordance with Table 21-4, the landscape sensitivity of this character area is High i.e. it includes elements which contribute to the landscape character which are protected at a national level e.g., RPS, pNHA, NIAH, Conservation Area, where the principal management objectives are protection of the existing character.

Table 21-11: LLCA 02 Broombridge Road / Industrial Estate

Description

Broombridge Road passes through an area of mixed commercial and light industrial development. It connects the open space areas of the Royal Canal with the Tolka Valley Park. There is a footpath on the eastern side of the road and the verge on the western side is overgrown with scrub vegetation. The industrial units are not screened from view leading to a poor-quality landscape character. Planting is largely absent along the road corridor, with boundary treatments purely functional.

Designated Sites

There are no cultural heritage sites in this LLCA. There are no trees designated as having a Tree Preservation Order within this LLCA and there are no Key Views and Prospects noted in the City Development Plan (DCC Dev Plan, 2022).

Key Landscape Features

The channelled view towards the Tolka Valley Park in a northerly direction and the views along the Royal Canal from the crest of the bridge, these are the key landscape features.

Amenity Value / Land use

The road corridor has no amenity value; it is an important route linking Cabra to the industrial properties off Broombridge Road and Ballyboggan Road.

Baseline Sensitivity

In accordance with Table 21-4, the landscape sensitivity of this character area is Low i.e. it exhibits a high capacity for change and has very few or no designated landscapes or open space areas.

Table 21-12: LLCA 03 Tolka Valley Park

Description

Tolka Valley Park follows the course of the River Tolka. It is composed of steeply sloping banks and amenity grassland, with small groups of semi-mature trees scattered mainly around the river on the southern side of the park. The topography limits views outside of the river corridor and channels views along the watercourse. This LLCA is bounded to the north by Tolka Valley Road and to the south by Ballyboggan Road. It includes Finglaswood Bridge (CHC009), built c.1600 (and possibly rebuilt c. 1820), and which is a two-arch rubble limestone structure that crosses the river within the Tolka Valley Park, and the site of the former dwelling, Finglaswood House (King James' Castle) (CHC015). The bridge provided access to that house from Ballyboggan Road. A DCC depot is also located in this LLCA on the northern side of the river plus a 110kV overhead line and lattice transmission tower.

Designated Sites

The River Tolka and its banks are designated as a Conservation Area (CHC012) in the City Development Plan 2022-2028. The conservation of these areas is a key objective of the City Council, and this designation assists in the delivery of the core strategy strand for: a *compact, quality, green, well-connected city, which generates* a dynamic, mixed-use environment for living, working and cultural interaction. There are 2 cultural heritage sites in this LLCA: Finglaswood Bridge (CHC009) is a Protected Structure and recorded on the National Inventory of Architectural Heritage and the former dwelling Finglaswood House (King James' Castle) (CHC015) Site of Archaeological Interest on the Record of Monuments and Places.

There are no trees designated as having a Tree Preservation Order within this LLCA and there are no Key Views and Prospects noted in the City Development Plan.

Key Landscape Features

The Tolka River, the grass embankments, Finglaswood Bridge and the channelled views are the key features of this character area.

Amenity Value / Land use

The Tolka Valley Greenway passes in an east-west direction through this LLCA on the northern side of the river, it is a 4km cycling and walking route which links Glasnevin, Cabra, Finglas and Ashtown. Construction of the cycle route has increased the amenity value and use of the park. The Greenway is also used to access the river for fishing.

Baseline Sensitivity

In accordance with Table 21-4, the landscape sensitivity of this character area is High i.e. it includes elements which contribute to the landscape character which are protected at a national level e.g. RPS, NIAH, Site of Archaeological Interest, Conservation Area, where the principal management objectives are likely to be protection of the existing character.

Table 21-13: LLCA 04 St Helena's

Description

St. Helena's is a linear shaped public open space (inactive) in between two areas of low-rise residential development. It is known colloquially as 'The Valley'. There is a public footpath with no public lighting that passes though the space in a north-south direction. The rear boundaries and gable walls of the properties bound the green space, and as a result there are low levels of supervision. The local topography is steeply sloping, from north to south with long-range views to the Dublin Mountains. The LLCA is bounded to the north by St Helena's Road and the St Helena's Childcare / Resource Centre, and in the south by Tolka Valley Road. The LLCA is bounded to the west by the residential areas of Barnmore Park / Crescent / Grove and the Finglas Youth Services building and to the east by the residential areas of Gortmore Drive / Road plus Carrigallen Road / Drive / Park, St. Oliver Plunkett's Church, and National School, and more recently by St Helena's Court.

Designated Sites

There is one cultural heritage site in this LLCA: St Helena's House is a Protected Structure (Ref. 7575) (CHC020) and recorded on the National Inventory of Architectural Heritage. The NIAH Garden Survey also includes an entry for the garden of St Helena's House which it records as being covered by residential development. There are no trees designated as having a Tree Preservation Order within this LLCA and there are no Key Views and Prospects noted in the City Development Plan.

Key Landscape Features

Due to the sloping topography within this LLCA, there are long-distance southerly views to the Dublin Mountains from the high point on St Helena's Road. Glimpse views of the western façade of St Helena's House through the existing mature trees are also possible from the opens space area off St Helena's Road.

Amenity Value / Land use

This linear green space is used as a walking facility for the local residents; it links the residential areas with the Tolka Valley Park.

Baseline Sensitivity

Although there is one designated heritage site within the LLCA protected at a national level, it is partially screened by vegetation and does not influence the character of the area. In accordance with Table 21-4, the landscape sensitivity of this character area is Low i.e. the landscape character exhibits a high capacity for change and has very few or no designated landscapes or open space areas.

Table 21-14: LLCA 05 Farnham Park

Description

Farnham Park is a square-shaped, local amenity area composed of two grass sports pitches: one soccer and one GAA. The park is bounded by a double row of trees, which when in leaf, screen visibility of the residential properties from within the area and create an enclosed character. It is bound on three sides by roads and overlooked on the western side by residential properties on Dunsink Road and Casement Road. There is a public footpath with no public lighting that passes through the park in a gently curving north-south direction, passing between the two sport pitches and with intermittent trees either side. A further footpath runs along the northern perimeter of the park and links Casement Road to Farnham Drive.

Designated Sites

There are no cultural heritage sites in this LLCA. There are no trees designated as having a Tree Preservation Order within this LLCA and there are no Key Views and Prospects noted in the City Development Plan.

Key Landscape Features

The landscape in unremarkable in this LLCA. The boundary tree planting is the key landscape feature.

Amenity Value / Land use

This square-shaped green amenity space is used as a local sports facility and as a walking route for the local residents and the footpaths link St Helena's Road with Casement Road and Farnham Drive.

Baseline Sensitivity

There are no designated sites within this LLCA. However, the sport pitches are well used and are an important local recreational asset. They are a focal point too for the local community and they define the character of the area. In accordance with Table 21-4, the landscape sensitivity of this character area is Medium i.e. where the principal management objectives are likely to be protection of the existing character.

Table 21-15: LLCA 06 Wellmount Road

Description

LLCA 06 is a sequence of narrow green open spaces (inactive) in areas of residential low-rise and community-based development. Groups of semi-mature trees add character to the area, which includes sections of tree-lined streets such as Wellmount Road and Cappagh Road. Views in the LLCA are generally local with no long-range visibility. There are no public footpath passing though these open spaces and footpaths are generally included within the road corridors. This LLCA is overlooked by residential properties on Casement Road, and oblique views will be possible from properties on Farnham Crescent, Wellmount Road, Wellmount Parade, Patrickswell Place, Cardiff Castle Road, Ravens Court and Mellowes Crescent. Bordering this LLCA are community facilities including St Michael's Holy Faith Secondary School to the east and the Kingdom Hall of Jehovah's Witnesses and St. Fergal's Boys National School to the west.

Designated Sites

From north of Casement Road and Mellowes Court, this LLCA is designated as a Zone of Archaeological Interest. Of significance to this LLCA is the King William's Rampart (CHC027) which is a Protected Structure, on the Record of Monuments and Places, and is close to Patrickswell Court. The Rampart was part of the defences for the historic settlement of Finglas. The Kingdom Hall of Jehovah's Witness (CHC031) a 20th Century religious building is located within this LLCA, as is St. Patrick's Well (CHC034) which is a Holy Well based on the tradition that St Patrick once visited the location. There are no trees protected under a Tree Preservation Order within this LLCA and there are no Key Views and Prospects noted in the City Development Plan.

Key Landscape Features

The landscape is unremarkable in this LLCA. The mature tree planting in the sequence of spaces are the key landscape features.

Amenity Value / Land use

The sequence of green space is largely inactive, but it provides visual amenity and channelled views through the urban fabric.

Baseline Sensitivity

The majority of this LLCA is a Zone of Archaeological Interest, including one designated heritage site and which provides a level of interest to the landscape character. In accordance with Table 21-4, the landscape sensitivity of this character area is Medium i.e. where the principal management objectives are likely to be protection of the existing character.

Table 21-16: LLCA 07 Finglas Main Street West

Description

Finglas Main Street West LLCA comprises Mellowes Road (R103). This is an urban road corridor bounded by mixed community (Fire Station, Civic Offices, and the Garda station), and residential properties. The footpath is separated from the road surface by a grass verge within which mature trees have established. The width of the road corridor creates a more formal and less intimate landscape character area. The community buildings are not screened from view, car parking and poor-quality surfacing has led to a low-quality urban character.

Designated Sites

There are no cultural heritage sites in this LLCA. A hand ball Alley (CHC036) which dates to the second half of the 20th Century, is in the ground of the fire station carpark. There are no trees designated as having a Tree Preservation Order within this LLCA and there are no Key Views and Prospects noted in the City Development Plan.

Key Landscape Features

The tree-lined, channelled view towards the prominent buildings of the Civic Offices on the northern side and the Garda station on the southern side is the key landscape feature.

Amenity Value / Land use

The road corridor has no amenity value; it is an important route linking Finglas West to Finglas Road (R135) and Finglas Village centre beyond.

Baseline Sensitivity

In accordance with Table 21-4, the landscape sensitivity of this character area is Low i.e. it exhibits a high capacity for change and has very few or no designated landscapes or open space areas.

Table 21-17: LLCA 08 Mellowes Park

Description

Mellowes Park is a linear local amenity area composed of one grass sports pitch for GAA, a circular paved walking route with no public lighting, and an informal dog training grass area in the northern part. The park is bound by Finglas Road (R135) (LLCA09) on the east, with a strong screening hedge boundary. To the west is Casement Road where residential properties overlook the park through an intermittent hedgerow.

Semi-mature tree groups within the park and a locally important monument to Liam Mellows (CHC039), including a community notice board, add interest to the area.

At the northern end of the park, a pedestrian footpath passes over Finglas Road and connects Finglas West to Finglas East and to the industrial and employment zones, including Jamestown Business Park and Finglas Business Centre.

Designated Sites

There are no cultural heritage sites in this LLCA. There are no trees designated as having a Tree Preservation Order within this LLCA and there are no Key Views and Prospects noted in the City Development Plan.

Key Landscape Features

The landscape in unremarkable in this LLCA. The boundary tree planting within the park and the monument to Liam Mellows are the key landscape features.

Amenity Value / Land use

This amenity space is used as a local sports facility and as a walking facility for the local residents; the footpaths link Finglas West to Finglas East.

Baseline Sensitivity

There are no designated sites within this LLCA. However, the sports pitch is well used and is an important local recreational asset. It is a focal point for the local community, and it defines the character of the area. In accordance with Table 21-4, the landscape sensitivity of this character area is Medium i.e. where the principal management objectives are likely to be protection of the existing character.

Table 21-18: LLCA 09/09a Finglas Road Corridor

Description

The Finglas Road Corridor (R135) is a dual carriageway which connects Finglas Village with Charlestown and the M50 beyond. Adjacent to Mellowes Park, the road corridor (LLCA09) is at a lower ground level and is screened from the park by a wide embankment with mature tree and shrub planting.

There are no footpaths within the southern part of the road corridor, pedestrians pass over the road via Mellowes Road bridge (R103), or via the pedestrian footbridge at the northern end of Mellowes Park hedgerow.

North of the roundabout, which intersects with St Margaret's Road (R104) on the east and Casement Road on the west, the Finglas Road / North Road (R135) is at grade and includes footpaths on either side and a pedestrian-controlled crossing point. The character of both 09 and 09a LLCAs is low quality and dominated by road traffic movement and noise.

Designated Sites

There are no cultural heritage sites in this LLCA. There are no trees designated as having a Tree Preservation Order within this LLCA and there are no Key Views and Prospects noted in the City Development Plan.

Key Landscape Features

The roadside vegetation which screens the residential and industrial development beyond is the key feature in this LLCA.

Amenity Value / Land use

The road corridor has no amenity value; it is an important route linking Finglas West to Finglas Road (R135) and Finglas Village centre beyond.

Baseline Sensitivity

In accordance with Table 21-4, the landscape sensitivity of this character area is Low i.e. it exhibits a high capacity for change and has very few or no designated landscapes or open space areas.

Table 21-19: LLCA 10 Charlestown / St Margaret's

Description

Charlestown / St Margaret's is a mixed commercial and light industrial area which includes several business parks (Jamestown Business Park, Finglas Business Park, and Century Business Park) with pockets of residential properties i.e. McKee Avenue and McKelvey Road, close to and overlooking the St Margaret's Road corridor. The boundary treatment separating the road corridor from the commercial and light industrial development is poorly maintained, as is the quality of the footpath surfacing in the area, leading to an overall low quality urban character. Intermittent roadside trees channel the views along the road corridor and partially screen the development from view. Charlestown shopping centre is a focal point for this road corridor.

Designated Sites

There are no cultural heritage sites in this LLCA. There are no trees designated as having a Tree Preservation Order within this LLCA and there are no Key Views and Prospects noted in the Dublin City Development Plan or the Fingal County Development Plan.

Key Landscape Features

The tree lined, channelled view towards the prominent building of the Charlestown shopping centre is the key landscape feature.

Amenity Value / Land use

There is one amenity area in the northern part of this LLCA located to the south of the St Margaret's Road / Charlestown Place junction: the McKelvey Celtic AFC all weather soccer pitch. The northern portion of St Margaret's Road corridor is part of the Great Dublin Area (GDA) Cycle Network, a combined cycleway/pedestrian footpath is present on the western side of the road.

Baseline Sensitivity

In accordance with Table 21-4, the landscape sensitivity of this character area is Low i.e. it exhibits a high capacity for change and has very few or no designated landscapes or open space areas.

21.3.6 Visual Amenity

The proposed Scheme runs through a series of parks and along roads through a mixture of residential and commercial areas. There are medium distance views towards the route within the parks (Tolka Valley Park, and Mellowes Park and long-distance views from St Helena's linear open space towards the Dublin Mountains), with close or glimpse views in other areas through existing vegetation or between buildings. The proposed tracks will be low to the ground (at grade) other than when elevated on the proposed bridges, meaning that the main elements that will intrude upon the existing view and cause either visual intrusion or obstruct the view and cause visual obstruction will be the LRVs themselves, the Stops including shelters, and the Overhead Contact System (OCS), plus any trackside equipment or substations.

21.3.6.1 Zone of Theoretical Visibility

Volume 4 – Map Figure 21-2 ZTV DTM, with Static Infrastructure, was produced for the proposed Scheme to help give an indication of the surrounding landscape with potential visibility of the proposed Scheme and associated infrastructure. In the absence of vegetation or buildings, visibility is good to the west, north, and east, with views to the south constrained by landform. Volume 4 – Map Figure 21-3 DSM, with Static Infrastructure, also gives an indication of the surrounding landscape with potential visibility of the proposed Scheme and infrastructure with buildings and vegetation included. The ZTV illustrates the area with potential visibility within a 1km radius from the centreline of the alignment, using a viewer eye height of 1.6m and based on the elemental heights below.

ZTV of Static Elements

The ZTV of static elements comprises the following elements:

- Bridges (Refer to Structural Drawings provided in the RO Drawing Pack);
  - Luas Rail bridge over Royal Canal and railway (7.9-8.5m in height above towpath (5.5m height above towpath to bottom of deck (varies)) plus steel fin parapet (2.4-3m depth)); and
  - Luas Rail bridge over Tolka River (5.2m in height above riverbank (varies) including steel fin parapet (2.1m depth), note parapet is the principal bridge element visible in park at ground level)).
- Overhead Contact System (OCS) /catenary masts (8.4m in height);
- Built elements at the Stops; and
  - Shelters (2.65m in height);
  - CCTV and lighting columns (5-10m in height); and
  - Passenger information displays (3.4m in height).
- ZTV of Mobile elements comprises the following elements;
  - LRVs (3.33m in height).

The radius of analysis of 1km for the ZTV was chosen based on the nature of the proposed Scheme and the area it will pass through. The track will run through a built urban environment, which already contains other infrastructure and moving elements (i.e. cars, buses, railway lines). The built environment constrains the development to the immediate surroundings, while the infrastructure and moving elements lower the potential magnitude of impact to receptors in the wider area.

The ZTV is based on a digital terrain model (DTM) and represents a bare ground scenario i.e. with no vegetation or built features present that will provide screening.

The existing vegetation and buildings in the area mean that visibility on the ground is constrained to a greater extent than is implied within the ZTV. In order to depict the extents of visual constraint due to the existing vegetation and built environment, a plan accounting for this has also been produced. This is shown in Volume 4 – Map Figures 21-3 to 21-5 and has been produced with the use of Digital Surface Model (DSM) files. To differentiate between the two manipulations, the standard ZTV will also be referred to as ZTV_{DTM},

(Volume 4 – Map Figure 21-2 and Map Figure 21-4) and the ZTV based on the DSM will be referred to as ZTV_{DSM} (Volume 4 – Map Figure 21-3 and Map Figure 21-5).

21.3.6.2 Protected Views and Prospects

No designated views or prospects are identified in either the Fingal CDP 2023-2029, or the Dublin CDP 2022-2028. The Dublin CDP 2022-2028 illustrates key views and prospects within Dublin City Centre; however, none overlap with the ZTV of the proposed Scheme. The nearest to the southern part of the ZTV is over 3km away; this view is from Islandbridge looking in a northerly direction and including the Wellington Monument in the Phoenix Park.

21.3.6.3 Cultural Heritage

Cultural heritage features in the study area have been assessed as part of Chapter 20 (Cultural Heritage) of this EIAR. While many of these features are archaeological and below ground, and therefore not impacted by landscape and visual amenity, some are above ground or rely on their setting as part of their value. Chapter 20 has been reviewed and cultural heritage features (identified in Chapter 20, Table 20-7, by a unique number prefixed by 'CHC') which are relevant to LVIA are assessed in this chapter.

21.4 Potential Impacts

21.4.1 Construction Phase

21.4.1.1 Common Construction Activities

Construction activities for the Scheme are summarised in Figure 6-1 of Chapter 6 (Construction Activities) of this EIAR. These construction activities will be visible at ground level for local receptors and are therefore considered to be impacts on the landscape character and visual amenity. The location and unique reference number for each visual receptor is shown in Volume 4 - Map Figure 21-6. They include the following activities which are common to all locations of the proposed Scheme:

- Removal of existing soft landscape features including areas of grass, trees, hedgerows, riparian strips, cuttings and embankments within public open space or private gardens;
- Removal of existing hard landscape features including fencing, street furniture, footpaths, roads, bridges, car park and boundary treatment;
- Installation of temporary fencing and hoarding;
- Installation of traffic management infrastructure (temporary traffic lights, signage);
- Construction of temporary footpaths;
- Diversion of overhead and underground services and utilities;
- Construction works associated with the proposed engineering works for the track, OCS and poles, bridges, stations and associated car parking and maintenance building;
- Construction works associated with proposed pedestrian footpaths, cycle, road bridges and vehicular access routes;
- Construction work associated with replacement of soft landscape treatment and regrading works within public open space or private gardens; and
- Construction work associated with replacement hard landscape features including footpaths, roads, and boundary treatment.

21.4.1.2 Site-Specific Construction Activities

- Construction of site compounds (two primary and seven secondary compounds, see Table 21-20 below); and
- Cranes including the gantry crane over railway, mobile crane over Royal Canal for the Royal Canal and Rail Overbridge and over the Tolka River for the Tolka Valley Park Bridge and for construction of the Park & Ride facility at North Road/St Margaret's Road.

The work during construction will pass through a series of character areas as described in Table 21-10 to Table 21-19 which include urban industrial, residential, commercial and open space (active and passive recreational areas). The proposed Scheme will be at grade (other than 3 bridge crossings) and temporary diversions will be implemented to allow for pedestrian and vehicular traffic and active recreation activities to continue to function.

Table 21-20: Construction Compounds

No.	Area / Section	LLCA	Location	Use (Primary/ Secondary)	Approximate Size
C-31A	S31.1	LLCA 01	West of Broombridge Road – on southern side of rail and canal crossing adjacent depot entrance	S	2036m^2
C-31B	S31.1	LLCA 02	West of Broombridge Road – use of green area to north of railway	P	3427m^2
C-31C	S31.1	LLCA 02	West of Broombridge Road – use of unit in the Glen Industrial estate prior to demolition	P	1522m^2
C-31D	S31.3	LLCA 03	Tolka Park – The Parks Building	S	2519m^2
C-32A	S32.1	LLCA 04	Adjacent to St Helena's Stop	S	5448m^2
C-32B	S32.2	LLCA 06	Northwest corner of Wellmount Road crossing	S	1034m^2
C-33A	S33.1	LLCA 08	Old Park Superintendent's House and land to north next to Finglas Fire station	S	1829m^2
C-33B	S33.3	LLCA 08	Northern extents of Mellowes Park	P	2017m^2
C-33C	S33.3	LLCA 10	St Margaret's / McKee's Avenue Junction	S	948m^2

21.4.1.3 LLCA 01

LLCA 01 Royal Canal Landscape Character- Activities During Construction

During construction, the specific activities occurring in the vicinity of the Royal Canal will include: minor changes to the layout of bus turning areas at Broombridge Luas Stop to the south of the canal; removal of seven trees around the Luas Stop area; dismantling of the existing steel pedestrian railway ramp; construction of the proposed railway bridge to the eastern side of Broome Bridge (CHC001.1); rerouting the pedestrian footpaths underneath the proposed railway bridge and linking to Broombridge Road; construction of a footpath and cycle path on the western side of Broombridge Road plus implementation of associated soft landscape works. In addition, construction of the proposed Hamilton depot stabling site, east of the Broombridge Luas Stop is within this LLCA. It will involve extension of existing tracks into an existing development site and a removal of 16 trees. The proposed stabling site is within a publicly non-accessible area which will require initial site clearance and removal of existing boundary treatments and the installation of temporary or permanent boundary treatment to secure the construction site.

A secondary construction compound (C-31A, see Volume 4 – Map Figure 6-1) will be located west of Broombridge Road, on the southern side of the rail and canal crossing adjacent depot entrance, in between R003 and R004. The compound will contain local site office and welfare facilities, parking for construction

vehicles and will also be a localised storage area for material, plant and equipment. The compound will have site hoarding and gates to ensure that the site is secure, general site lighting and CCTV.

In terms of the impact during construction on Key Landscape Features of this local landscape character area, the works will result in minor disruption to mature hedgerow and riparian vegetation along the canal towpath, and obstruction of the west facing view of Broome Bridge arch way (CHC001.1). The Royal Canal Way used for walking, cycling and fishing will be disrupted during construction, and diverted to a temporary access route close to the canal. The total number of trees to be removed in LLCA 01 is 23.

LLCA 01 Impacts on Landscape Character in During Construction

The sensitivity of the landscape character in LLCA 01 is High. The magnitude of change during the Construction Phase is High as construction involves 'the introduction of uncharacteristic new elements or features that will lead to changes in landscape character, and quality' and alters the setting of a Conservation Area (CHC004). The overall impact on the landscape character during construction will be Significant, Temporary and Negative.

LLCA 01 Location of Visual Receptors

The location and unique reference number for each visual receptor is shown in Volume 4 – Map Figure 21-6.

Residents of six north-facing properties on Bannow Road (R003) will have visibility of the construction activities in construction compound (C-31A), they will have clear views of the cranes and activity associated with the construction of the proposed railway bridge. The construction activities will intrude upon the skyline formed by the trees in Tolka Valley Park. People working in and around the nearby industrial units on Broombridge Road (R001, R002, R004) will also have views of construction of both bridges.

People using the canal towpath (R005) and passengers using the existing Luas at Broombridge and the adjacent Irish Rail service (R172) will have visibility of the construction activities associated with the dismantling of the existing steel pedestrian railway ramp, and construction of the proposed railway bridge. The construction activities will obscure the channelled views along the Royal Canal and the focal point of the Broome Bridge (CHC001.1).

The proposed boundary treatment on southern side of the Hamilton depot stabling site will obscure visibility into the site for residential properties on Bannow Road.

LLCA 01 Impacts on Visual Receptors During Construction

People working in R001, R002, R004 and Luas and Irish Rail passengers R172 are Low in sensitivity, the magnitude of change during the Construction Phase is Low. The visual impact for R001, R002, R004 and R170 is Imperceptible, Temporary and Negative.

Residents in R003 are High in sensitivity, the magnitude of change during the construction phase is High as 'construction involves a considerable degree of visual clutter or disharmony is also likely to be generated, appreciably reducing the visual amenity of the scene'. The visual impact for R003 is Significant, Temporary and Negative.

People using the canal tow path R005 are Medium in sensitivity as views of the surroundings are an important contributor to the experience of using the towpath. The magnitude of change during the Construction Phase is High. The visual impact for R005 is Moderate, Temporary and Negative.

21.4.1.4 LLCA 02

LLCA 02 Broombridge Road / Industrial Estate Landscape Character - Activities During Construction

During construction, there will be land take along the eastern side of Broombridge Road both for the proposed railway bridge ramp and for the at-grade section of Luas track. The footpath, roadside barrier, walls and fencing of industrial units and intermittent sections of hedge and 27 trees will be removed and car

parking inside the industrial units will be lost. On the western side, boundary walls and fencing of industrial units, street lighting and intermittent scrub planting and roadside parking will be removed. Two construction depots will be created on the western side of the road.

Two primary construction compounds will be in this LLCA, one West of Broombridge Road (C-31B, see Volume 4 – Map Figure 6-1) i.e. the green area to north of railway adjacent to R007 and another in a unit in the Glen Industrial estate prior to demolition (C-31C, see Volume 4 – Map Figure 6-1). The compounds will contain local site office and welfare facilities, parking for construction vehicles and will also be a localised storage area for material, plant and equipment. The compound will have site hoarding and gates to ensure that the site is secure, general site lighting and CCTV.

The Key Landscape Feature in this LLCA is the channelled view in a northerly direction towards the Tolka Valley Park. The view will remain during construction with low levels of disruption caused by the removal of roadside boundary treatment. Access onto the Royal Canal walking and cycling facility from Broombridge Road will be rerouted during construction. The total number of trees to be removed in LLCA 02 is 27.

LLCA 02 Impacts on Landscape Character in During Construction

The sensitivity of the landscape character in LLCA 02 is Low. The magnitude of change during the construction phase is Medium. The changes are modest in extent and scale involving 'the loss of landscape characteristics or elements that will also involve the introduction of uncharacteristic new elements or features that will lead to changes in landscape character, and quality'. The overall impact on the landscape character during construction will be Slight, Temporary and Negative.

LLCA 02 Location of Visual Receptors

The location and unique reference number for each visual receptor is shown in Volume 4 – Map Figure 21-6.

There are no residential properties overlooking Broombridge Road for which visual amenity will be altered during construction. Workers in the overlooking industrial units (R006-R016) either side of Broombridge Road will have visibility of the construction works when accessing their buildings.

LLCA 02 Impacts on Visual Receptors During Construction

People working in R006-R016 are Low in in sensitivity, the magnitude of change during the Construction Phase is High. The visual impact for R006-R016 is Slight, Temporary and Negative.

21.4.1.5 LLCA 03

LLCA 03 Tolka Valley Park Landscape Character - Activities During Construction

During construction, the working area for lifting and positioning components for the proposed single-span bridge next to Finglaswood Bridge (CHC009) off Ballyboggan Road will disrupt access and activities in the southern part of the park including the users of the pitch and putt, the Greenway, and leisure activities such as the Tolka Valley Park Run. The Parks Department depot will be used as a construction depot as the route passes to the west of the site of King James' Castle / Finglaswood House (CHC015). There will be vegetation removal across the working width inside the park (18 trees, riparian and wetland planting either side of the River Tolka and sections of amenity grassland) and disruption to several pedestrian and cycle routes. There will be disruption to access into the park and vehicular traffic on Tolka Valley Road where the proposed alignment passes north.

A secondary construction compound will be located Tolka Park (C-31D, see Volume 4 – Map Figure 6-1) – The Parks Building R019. The compound will contain local site office and welfare facilities, parking for construction vehicles and will also be a localised storage area for material, plant and equipment. The compound will have site hoarding and gates to ensure that the site is secure, general site lighting and CCTV.

The Key Landscape Features in this LLCA are the River Tolka, grass embankments, Finglaswood Bridge, and the channelled views. Pollution prevention measures detailed in Chapter 10 (Water) will ensure no impacts on the river corridor which is a Conservation Area. However, there will be disruption to the riparian

vegetation (bird / bat flight lines), as detailed in Chapter 9 (Biodiversity), and to grass embankments from construction of the bridge substructure. The channelled east-facing view towards Finglaswood Bridge (CHC009), will be altered due to the intrusion of activities for the proposed Luas bridge and although no works are proposed to the bridge itself, the setting will be altered. There will be disruption to the Tolka Valley Greenway through the park during construction. However, the cycle route will be diverted locally and within the park to maintain this resource. The total number of trees to be removed in LLCA 03 is 18.

LLCA 03 Impacts on Landscape Character in During Construction

The sensitivity of the landscape character in LLCA 03 is High. The magnitude of change during the Construction Phase is High as construction involves 'the introduction of uncharacteristic new elements or features that will lead to changes in landscape character, and quality'. The overall impact on the landscape character during construction will be Significant, Temporary and Negative.

LLCA 03 Location of Visual Receptors

The location and unique reference number for each visual receptor is shown in Volume 4 – Map Figure 21-6.

Workers in the overlooking industrial units (R013-R016) and within the DCC park depot (R019) will have visibility of the construction works when accessing the buildings.

There are no residential properties overlooking the Tolka Valley Park from Ballyboggan Road on the southern side. Residents of 14 east-facing properties on Barnamore Grove and Barnamore Park and 12 south-facing properties on Carrigallen Park (R020- R021) will have visibility of the construction activities for the proposed Scheme at either access / egress point of the Tolka Valley park.

People using the park (R017) will have their visual amenity disrupted during construction.

LLCA03 Impacts on Visual Receptors During Construction.

People working in R013-R016, R019 are Low in in sensitivity, the magnitude of change during the construction phase is High. The visual impact for R013-R016 is Slight, Temporary and Negative

Residents in R020 and R021 are High in sensitivity, the magnitude of change during the Construction Phase is High as 'construction involves a considerable degree of visual clutter or disharmony is also likely to be generated, appreciably reducing the visual amenity of the scene'. The visual impact for R020 and R021 is Significant, Temporary and Negative.

People using the park R017 are Medium in sensitivity as views of the surroundings are an important contributor to the experience of visiting the park, particularly channelled east-facing views towards Finglaswood Bridge (CHC009) which will be obscured during construction. The magnitude of change during the construction phase is High. The visual impact for R017 is Moderate, Temporary and Negative.

21.4.1.6 LLCA 04

LLCA 04 St Helena's Landscape Character - Activities During Construction

During construction, there will be disruption to the north-south pedestrian footpath linking Tolka Valley Park and Tolka Valley Road and to the residential areas off Barnamore Grove and St Helena's Road, arising from construction of the proposed track and St Helena's Stop. There will be vegetation removal across the working width inside the linear open space (12 trees lost plus the amenity grassland). There will be no disruption to the setting of St Helena's House, Protected Structure (CHC020), and which is also recorded on the National Inventory of Architectural Heritage.

A secondary construction compound (C-32A, see Volume 4 - Map Figure 6-1) will be located adjacent to and on the western side of St Helena's Stop, close to R042. The compound will contain local site office and welfare facilities, parking for construction vehicles and will also be a localised storage area for material, plant and equipment. The compound will have site hoarding and gates to ensure that the site is secure, general site lighting and CCTV.

The boundary tree planting is the Key Landscape Feature in this character area. The most significant trees are the mature trees along the southern boundary and to west of St Helena's Resource Centre. The total number of trees to be removed in LLCA 04 is 12.

LLCA 04 Impacts on Landscape Character in During Construction

The sensitivity of LLCA 04 is Low. The magnitude of change during the Construction Phase is Medium, and it is modest in extent and scale involving the loss of landscape characteristics. The overall impact on the landscape character during construction will be Slight, Temporary and Negative.

LLCA 04 Location of Visual Receptors

The location and unique reference number for each visual receptor is shown in Volume 4 – Map Figure 21-6.

Residents of 35 east-facing properties on Barnamore Grove and Barnamore Park (R020, R025, R026, R033, R034, R035, R036) and approximately 39 south / north-facing properties on Carrigallen Park, Carrigallen Drive, Gortmore Road, Gortmore Drive, St Helena's Drive, St Helena's Court (R021, R022, R023, R027, R028, R029, R030, R031, R032, R038, R039, R040); and 4 east-facing properties on Dunsink Road (R043) will have visibility of the construction activities for the proposed Scheme and St Helena's Stop, in addition to users of the linear open space (R018).

Staff and visitors in the Youth Service Den building (R037), St Helena's Resource Centre (R041), St Helena's Childcare Centre (R042), St Malachy's Mixed National School (R045) will have visibility of the construction works from east / west-facing widows and from car parks.

LLCA 04 Impacts on Visual Receptors During Construction

Residents in 78 properties (R020, R025, R026, R033, R034, R035, R036, R021, R022, R023, R027, R028, R029, R030, R031, R032, R038, R039, R040, R043) are High in sensitivity, the magnitude of change during the Construction Phase is Medium as the work represents a moderate intrusion into the available vista, is a readily noticeable element and/or it will generate a degree of visual clutter or disharmony, thereby reducing the visual amenity of the scene. The visual impact for the receptors is Moderate, Temporary and Negative.

Staff and visitors in the Youth Service Den building (R037), St Helena's Resource Centre (R041), St Helena's Childcare Centre (R042), St Malachy's Mixed National School (R045) are Low in sensitivity, their attention will be focussed on their work or activity, not their surroundings and where the setting is not important to the quality of working life. The magnitude of change during the construction phase is Medium. The visual impact for R037, R041, R042 and R045 is Slight, Temporary and Negative.

People using the linear open space (R018) are Low in sensitivity, the southerly views towards the Dublin Mountains are the key views from this space. The magnitude of change during the Construction Phase is High. The visual impact for R018 is Moderate, Temporary and Negative.

21.4.1.7 LLCA 05

LLCA 05 Farnham Park - Activities During Construction

During construction, the GAA and soccer pitches will be repositioned westwards of their current location in order for the proposed Scheme to be constructed on the eastern part of the park. Subject to timing of the works, this will cause disruption to the programme of games. The existing north-south and east-east footpaths which run through the park will also be relocated resulting in disruption to pedestrian circulation during construction. Removal of 46 trees will be required from the perimeter and central part of the pitches to allow for repositioning of pitches and the Alignment and disruption to the amenity grassland.

The boundary tree planting is the Key Landscape Feature in this character area, this will be affected by the construction process. The total number of trees to be removed in LLCA 05 is 46.

LLCA 05 Impacts on Landscape Character in During Construction

The sensitivity of LLCA 05 is Medium. The magnitude of change during the construction phase is Medium, and it is modest in extent and scale involving the loss of landscape characteristics. The overall impact on the landscape character during construction will be Slight, Temporary and Negative.

LLCA 05 Location of Visual Receptors

The location and unique reference number for each visual receptor is shown in Volume 4 – Map Figure 21-6.

Residents of 25 east / south-facing properties on Dunsink Road (R046-R049), Casement Road (R050) and Farnham Crescent (R054) will have visibility of the construction activities for the proposed Luas and St Helena's Stop. People using the park (R044) including players and spectators of sports pitches will have their visual amenity disrupted during construction and their invisibility will be blocked of the activities on the pitches to the east of Farnham Drive.

LLCA 05 Impacts on Visual Receptors During Construction

Residents in 25 properties (R046-R049) are High in sensitivity, the magnitude of change during the Construction Phase is Medium as the work represents a moderate intrusion into the available vista, is a readily noticeable element and/or it will generate a degree of visual clutter or disharmony, thereby reducing the visual amenity of the scene. The visual impact for the receptors is Significant, Temporary and Negative.

People using the open space (R044) are Medium in sensitivity as views of the surroundings are an important contributor to the experience of visiting the park. The magnitude of change during the Construction Phase is High. The visual impact for R044 is Moderate, Temporary and Negative.

21.4.1.8 LLCA 06

LLCA 06 Wellmount Road - Activities During Construction

During construction, there will be disruption to east-west footpaths located south and north of Wellmount Road, disruption to pedestrian and vehicular access to Wellmount Parade, Patrickswell Court and Assumption Convent from the realigned Patrickswell Place, relocation of boundary wall, and disruption to the access to Ravens Court, along with the removal of a building at Finglas Garda Station. The realigned road and removal of trees for construction of track infrastructure will expose the Zone of Archaeological Interest of King William's Rampart (CHC027), which is a Protected Structure and on the Record of Monuments and Places, although the perimeter fence around the monument will not be impacted. The Kingdom Hall of Jehovah's Witness (CHC031) and St. Patrick's Well (CHC034) will not be affected during construction. The removal of 24 trees in amenity grass will be required in the linear open space of this Character area.

A secondary construction compound (C-32B, see Volume 4 – Map Figure 6-1) will be located northwest corner of Wellmount Road crossing close to R059. The compound will contain local site office and welfare facilities, parking for construction vehicles and will also be a localised storage area for material, plant and equipment. The compound will have site hoarding and gates to ensure that the site is secure, general site lighting and CCTV.

The Key Landscape Feature in this LLCA is the mature tree planting in the sequence of linear open spaces, and this will be affected by the construction process. The total number of trees to be removed in LLCA 06 is 24.

LLCA 06 Impacts on Landscape Character in During Construction

The sensitivity of LLCA 06 is Medium. The magnitude of change during the Construction Phase is Medium, and it is modest in extent and scale involving the loss of landscape characteristics. The overall impact on the landscape character during construction will be Slight, Temporary and Negative.

LLCA 06 Location of Visual Receptors

The location and unique reference number for each visual receptor is shown in Volume 4 – Map Figure 21-6.

Residents of approximately 70 east / south-facing properties on Casement Road (R051-R053), Farnham Crescent (R054-R056), Wellmount Road (R057), Wellmount Parade (R059), Aylward Green off Cappagh Road (R061), Little Sisters of the Assumption Building (R062), Cardiff Castle Road (R069-R075) and Raven's Court (R076) will have visibility of the construction activities for the proposed Scheme, in addition to users of the linear open space (R063).

Pupils and staff in the St Michael's Holy Faith Secondary School (R058) and the school sport pitches (R060), visitors to the Kingdom Hall of Jehovah's Witnesses (R064), and staff in Finglas Garda Station (R081) will have visibility of the construction works.

LLCA 06 Impacts on Visual Receptors During Construction

Residents (R051-R053, R054-R057, R059, R061, R062, R069-R075, R076) are High in sensitivity. The magnitude of change during the Construction Phase is High as construction involves a considerable degree of visual clutter or disharmony is also likely to be generated, appreciably reducing the visual amenity of the scene. The visual impact for (R051-R053, R054-R057, R059, R061, R062, R069-R075, R076) is Significant, Temporary and Negative.

Pupils and staff in the St Michael's Holy Faith Secondary School (R058), visitors to the Kingdom Hall of Jehovah's Witnesses (R064), and staff in Finglas Garda Station (R081) are Low in in sensitivity, the magnitude of change during the Construction Phase is High. The visual impact for R013-R016 is Slight, Temporary and Negative.

People using St Michael's Holy Faith Secondary School sport pitches (R060) and people using the open space to the south of Ravens Court (R063) are Low in sensitivity. The magnitude of change during the Construction Phase is High. The visual impact for R044 is Slight, Temporary and Negative.

21.4.1.9 LLCA 07

LLCA 07 Finglas Main Street West - Activities During Construction

During construction, there will be disruption to the public footpath located in front of the local government office on Mellowes Road and traffic on Mellowes Road for construction of the track and Finglas Village Stop. Removal of 25 trees in and around the buildings will be required and car parking in front of the local government buildings will be lost during construction.

A secondary construction compound (C-33A, see Volume 4 – Map Figure 6-1) will be located in the old Park Superintendent's House and land to north next to Finglas Fire Station, identified as R089. The compound will contain local site office and welfare facilities, parking for construction vehicles and will also be a localised storage area for material, plant and equipment. The compound will have site hoarding and gates to ensure that the site is secure, general site lighting and CCTV. A Handball Alley (CHC036) in the grounds of the fire station carpark, it will not be affected during construction.

The Key Landscape Feature in this LLCA is the tree-lined, channelled view towards the prominent buildings of the Civic Offices on the northern side and the Garda station on the southern side. The channelled view will be altered due to the intrusion of construction activities for the proposed Scheme and Finglas Village Stop. The total number of trees to be removed in LLCA 07 is 25.

LLCA 07 Impacts on Landscape Character in During Construction

The sensitivity of LLCA 07 is Medium. The magnitude of change during the Construction Phase is Medium, and it is modest in extent and scale involving the loss of landscape characteristics i.e. street trees and the channelled view. The overall impact on the landscape character during construction will be Slight, Temporary and Negative.

LLCA 07 Location of Visual Receptors

The location and unique reference number for each visual receptor is shown in Volume 4 – Map Figure 21-6.

Residents of 20 north-facing properties on Mellowes Crescent (R077) will have visibility of the construction activities for the proposed Scheme in Finglas High Street and pedestrians, as well as vehicular traffic on the High Street (R086).

Staff in Finglas Garda Station (R082) (building to the south, R0081, will be demolished) will have visibility of the construction works on Mellowes Road, as will staff and visitors to Mellow Spring Childcare Development Centre (R084), Finglas Sports and Fitness Centre (R085), Finglas Youth Resource Centre (R086) and Finglas Fire Station (R083) both from south-facing windows and from the car parks.

LLCA 07 Impacts on Visual Receptors During Construction

Residents in Mellowes Crescent (R077) are High in sensitivity. The magnitude of change during the Construction Phase is Medium as proposal represents a moderate intrusion into the available vista but will be screened by the existing trees on southern side of Mellowes Road. The visual impact for R077 will be Moderate, Temporary and Negative.

Staff in Finglas Garda Station (R082), staff and visitors to Mellow Spring Childcare Development Centre (R084), Finglas Sports and Fitness Centre (R085), Finglas Youth Resource Centre (R086) and Finglas Fire Station (R083) and pedestrians and vehicular traffic on the High Street (R086) are Low in in sensitivity. The, the magnitude of change during the Construction Phase is Medium and the visual impact will be Slight, Temporary and Negative.

21.4.1.10 LLCA 08

LLCA 08 Mellowes Park - Activities During Construction

During construction, there will be disruption to the footpath which runs along the eastern perimeter of the park and to the circular walking running trail around the park (Children's Park Run, 2km). There will be vegetation removal across the working width inside the linear open space (90 trees on the eastern perimeter of the park will be removed plus the amenity grassland) for construction of one of the substations and the proposed Luas track. A construction depot will also be included in the southern end of this area and will replace existing FCC storage and works areas (R088-R091).

A primary construction compound (C-33B, see Volume 4 - Map Figure 6-1) will be located in the northern extents of Mellowes Park to the southwest of the roundabout and opposite R126, R127 and R128. The compound will contain local site office and welfare facilities, parking for construction vehicles and will also be a localised storage area for material, plant and equipment. The compound will have site hoarding and gates to ensure that the site is secure, general site lighting and CCTV. The setting around the monument to Liam Mellows (CHC039) will be disrupted due to the presence of construction hoarding, plant and equipment.

The boundary tree planting is the Key Landscape Feature in this character area, and this will be affected by the construction process. There will also be disruption to the amenity value of this park due to construction activities. The footbridge across the Finglas bypass will be removed after the proposed crossing has been constructed. The total number of trees to be removed in LLCA 08 is 90.

LLCA 08 Impacts on Landscape Character in During Construction

The sensitivity of LLCA 08 is Medium. The magnitude of this change is Medium, and it is modest in extent and scale involving the loss of landscape characteristics. The overall impact on the landscape character during Construction Phase will be Slight, Temporary and Negative.

LLCA 08 Location of Visual Receptors

The location and unique reference number for each visual receptor is shown in Volume 4 – Map Figure 21-6.

Residents of 53 east-facing properties on Casement Road (R094-R127) will have visibility of the construction activities for the proposed Scheme in the park, in addition to users of the open space (R065).

LLCA 08 Impacts on Visual Receptors During Construction

Residents (R094-R127) are High in sensitivity.

For Residents of R125-R127 closest to the primary construction compound (C-33B, see Volume 4 – Map Figure 6-1) and to the footbridge which will be removed the magnitude of change will be High and the visual impact will be Significant, Temporary and Negative.

For Residents in R094-R117 the magnitude of change during the Construction Phase is Medium and the visual impact will be Moderate, Temporary and Negative.

Users of the open space (R065) are Medium in sensitivity as views of the surroundings are an important contributor to the experience of visiting the park. The magnitude of change during the Construction Phase is High. The visual impact for R065 is Moderate, Temporary and Negative.

21.4.1.11 LLCA 09/09A

LLCA 09 / 09A Finglas Road Corridor - Activities During Construction

During construction, changes will be made to the layout of the roundabout which intersects with St Margaret's Road (R104) on the east and Casement Road on the west, the Finglas Road / North Road to control the traffic and allow the Luas to pass at grade across the roundabout. Pedestrian circulation will be designed at the roundabout and the existing footbridge will be removed. Construction will be phased to maintain pedestrian and vehicular traffic as discussed in Chapter 6 (Construction Activities). One of two substations will be constructed adjacent to (eastern side of) the R135. Small trees (five) and shrubs southwest of the roundabout will be removed for the Luas track and on the southeast of the roundabout for construction of the substation.

A new 350-space / six-storey Park & Ride facility (R139-R140) will be constructed off St Margaret's Road at the interchange (Discount DIY).

The boundary vegetation and tree planting are the Key Landscape Feature in this character area and will not be affected by the construction process. The total number of trees to be removed in LLCA 09/09A is five.

LLCA 09 / 09A Impacts on Landscape Character in During Construction

The sensitivity of LLCA 09/ 09A is Low. The magnitude of this change is High, due to the introduction of uncharacteristic new elements or features that contribute to an overall change of the landscape in terms of character, value and quality. The overall impact on the landscape character during Construction Phase will be Slight, Temporary and Negative.

LLCA 09 / 09A Location of Visual Receptors

The location and unique reference number for each visual receptor is shown in Volume 4 – Map Figure 21-6.

Residents of 31 east-facing properties on Casement Road (R127-R130) and west-facing properties on North Road (R131-R135) and will have visibility of the construction activities for the proposed Scheme and the Park & Ride within the Finglas Road Corridor, in addition to vehicular users of the road.

LLCA 09 / 09A Impacts on Visual Receptors During Construction

Residents R128-R135 are High in sensitivity. For Residents of R128-R130 closest to the Park & Ride and to primary construction compound (C-33B, see Volume 4 – Map Figure 6-1) the magnitude of change will be Medium but will be screened by the existing trees on western side of North Road and the visual impact will be Moderate, Temporary and Negative.

For Residents in R131-R135 the magnitude of change during construction is High, due to the footpath and vegetation removal and the visual impact will be Significant, Temporary and Negative.

21.4.1.12 LLCA 10

LLCA 10 Charlestown / St Margaret's - Activities During Construction

During construction, there will be disruption to the road corridor and footpaths either side from alignment of the road to accommodate the proposed Scheme, which will run along the eastern side of St Margaret's Road. There will be tree removal (71 trees) on both sides of the road. New access will be created for St Margaret's Court and a new access road to the industrial areas on the east of St Margaret's Road.

A secondary construction compound (C-33C, see Volume 4 – Map Figure 6-1) will be located at the St Margaret's / Mc Kees Avenue Junction adjacent to R138. The compound will contain local site office and welfare facilities, parking for construction vehicles and will also be a localised storage area for material, plant and equipment. The compound will have site hoarding and gates to ensure that the site is secure, general site lighting and CCTV.

The Key Landscape Feature in this LLCA is the tree-lined, channelled view towards Charlestown Shopping Centre at the northern end of St Margaret's Road. The channelled view will be altered due to the intrusion of construction activities for the proposed Scheme and St Margaret's Road Stop. The total number of trees to be removed in LLCA 10 is 71.

LLCA 10 Impacts on Landscape Character in During Construction

The sensitivity of LLCA 10 is Low. The magnitude of this change is High, due to the introduction of uncharacteristic new elements or features that contribute to an overall change of the landscape in terms of character, value and quality. The overall impact on the landscape character during Construction Phase will be Slight, Temporary and Negative.

LLCA 10 Location of Visual Receptors

The location and unique reference number for each visual receptor is shown in Volume 4 – Map Figure 21-6.

Residents of 37 east / west-facing properties on McKee Avenue (R138), St Margaret's Court (R151), St Margaret's Road (R150-R165), plus 32 apartments in Melville Lawn (R170) and above Charlestown Shopping Centre (R171), will have visibility of the construction activities for the proposed Scheme along St Margaret's Road, the St Margaret's Road Stop and the Charlestown Stop. Users of McKelvey Celtic AFC pitches (R165) will also have clear views towards the construction activities for the track and the Charlestown Stop on St Margaret's Road.

Workers in the overlooking commercial and industrial units (R137, R141-R149, R152, R156, R158, R163, R164, R166) will have visibility of the construction works when accessing the building.

LLCA 10 Impacts on Visual Receptors During Construction

Residents of R138, R150-R165, R170 and R171, are High in sensitivity.

For Residents of R138 closest to the Park & Ride, St Margaret's Road Stop, secondary construction compound (C-33C, see Volume 4 – Map Figure 6-1) and St Margaret's Court (R151) the magnitude of change will be High, and the visual impact will be Significant, Temporary and Negative.

For Residents of R150, R152-R165, R170 and R171, on St Margaret's Road the magnitude of change will be Medium, and the visual impact will be Moderate, Temporary and Negative.

Workers in R137, R141-R149, R152, R156, R158, R163, R164, R166 are Low in in sensitivity. The magnitude of change during the Construction Phase is Medium and the visual impact will be Slight, Temporary and Negative.

Users of McKelvey Celtic AFC pitches (R165) are Low in sensitivity. The magnitude of change during the construction phase is Medium and visual impact for R044 is Slight, Temporary and Negative.

21.4.2 Operational Phase

The characteristics of the proposed Scheme and potential operational impacts are described below within each of the ten local landscape character areas.

21.4.2.1 Do Nothing Scenario

In the Do Nothing scenario and without the proposed Scheme in place, the landscape character and visual amenity along the proposed alignment will remain low in quality for the majority of locations and the opportunities for enhancement of public realm and biodiversity will remain low.

21.4.2.2 Photomontages

Verified photomontages have been prepared from 16 key locations or viewpoints shown in Table 21-21, from across the full extent of the proposed Scheme. The locations for photomontages were determined through consultation with Dublin City Council and Fingal County Council.

Photomontages have been prepared with particular regard to the Landscape Institute's Advice Note 06/19; Visual representation of development proposals (LI, 2019) and with reference to Section 7.1.3 of TII's Overarching Technical Document PE-ENV-01101; Landscape Character Assessment (LCA) and Landscape and Visual Impact Assessment (LVIA) of Specified Infrastructure Projects (TII, Dec.2020).

Table 21-21: Location for Photomontage

		Finglas Luas extension, verified viewpoints for LVIA photomontage.
Viewpoint	**LLCA**	**Direction**
1	LLCA 01	View from Royal Canal Greenway at Broombridge
2	LLCA 03	View from Tolka Valley Park river path looking towards new Luas bridge
3	LLCA 04	View from St Helena's Road towards new St Helena's Stop
4	LLCA 05	View from Casement Road looking southeast across playing fields
5	LLCA 06	View from Wellington Parade looking southeast
6	LLCA 06	View from Cardiff Castle Road looking towards Ravens Court
7	LLCA 07	Views towards Finglas Village Stop from public footpath on Mellows Road
8	LLCA 08	From Casement Road looking eastwards into Mellowes Park
9	LLCA 09/09A	View of Luas crossing North Road from Liam Mellows Memorial Garden
10	LLCA 10	View from St Margaret's Court looking north
11	LLCA 10	View from public footpath outside Charlestown Shopping centre looking southwest
12	LLCA 09/09A	View from North Road looking north towards Lidl car park
13	LLCA 09/09A	View from North Road looking south towards the footbridge over Finglas Bypass

		Finglas Luas extension, verified viewpoints for LVIA photomontage.
14	LLCA 06	View from Patrickswell Place
15	LLCA 03	View from Tolka Valley Park looking southeast
16	LLCA 09/09A	View from Casement Road, towards proposed Park & Ride facility

These views assist in providing an indication of the changes and potential effects resulting from the proposed Scheme during the Operational Phase. The proposed views are shown with proposed planting (included as part of the scheme design) at approximately 10 years post-completion of the Construction Phase. The photomontages have been prepared in accordance with the methodology set out in section 21.2 and are included in Volume 5 - Appendix A21.3.

LLCA 01 Royal Canal - Characteristic of the proposed Scheme

During the Operational Phase of the proposed Scheme, the Royal Canal character area will be altered by the proposed Luas Rail bridge over Royal Canal.

Photomontage Viewpoint 1-View from Royal Canal Greenway at Broombridge (Refer to Volume 5 - Appendix A21.3 for proposal illustration in this area).

The proposed Luas Rail bridge will dominate the environment of the canal towpath and riparian edge (CHC003.1) and create an urban, built character. It will intrude upon the east-west views towards the arched façade of Broome Bridge (CHC001.1), (a Key Landscape Feature) and create a sense of enclosure in the space. The other Key Landscape Features including mature hedgerow along the canal towpath, the riparian vegetation and the watercourse, and the channelled views along the water feature will remain but will be altered due to the proposed built elements.

The Royal Canal Way will be accommodated within the proposed design at this location and the amenity value of this future Cycle Route will not be affected by the proposals. However, the cycle way will pass under the proposed Luas bridge structure which will be a change to the open character at present.

Also, within this character area, there are changes to the northern end of Broombridge Road that are required to accommodate the Luas bridge and the track, as it progresses downwards to ground level.

Close to the Royal Canal there will be public realm proposals for the proposed expansion works at Broombridge Stop. These include a new bus set down area, tree planting and seating within the footpath area, a ramp for the bridge to cross the canal and retention of existing tree and screen planting bordering the track.

LLCA 01 Impacts on Landscape Character During Operational Phase

The landscape sensitivity of this character area is High as it includes elements which contribute to the landscape character and which are protected at a national level e.g., RPS, pNHA, NIAH, Conservation Area (CHC004). For these elements, the principal management objectives are likely to be protection of the existing character. The proposed Luas bridge involves the introduction of an uncharacteristic new element or feature that contributes to an overall change of the landscape in terms of character, value and quality. The change resulting from the proposed bridge will not require physical alteration to the protected Broome Bridge (CHC001.1), but will obscure the view of the bridge, reducing its influence over the character area and altering the setting. In terms of amenity value, as the cycleway passes under the proposed bridge there will be a change in forward vision which reduces the amenity value of the area due to personal safety perception.

The magnitude of change for the proposed Scheme in this area is High and the quality is Negative due to the introduction of the bridges and the ramp structure which are an ‘uncharacteristic new elements or features that will lead to an overall change in landscape character and quality’.

Overall, the potential effects on the landscape character in this area during the Operational Phase will be Significant, Permanent and Negative.

LLCA 01 Location of Visual Receptors

Visual receptors in this area include residents of 6 north-facing properties on Bannow Road (R003) and users of the canal tow path (R005), workers accessing in the nearby industrial units on Broombridge Road (R001, R002, R004) and passengers of the Luas and Irish Rail (R172).

LLCA 01 Impacts on Visual Receptors During Operational Phase

People working in R001, R002, R004, and passengers R172 are Low in sensitivity and will have visibility towards the proposed Scheme, in particularly the proposed Luas bridge, when accessing the estate from Broombridge Road or walking between buildings. The magnitude of change during the Operational Phase is Low and the quality is Negative. The visual impact for R001, R002, R004 and R172 is Imperceptible, Permanent and Neutral.

Residents in R003 are High in sensitivity, the magnitude of change during the Operational Phase from the proposed Luas bridge over the Royal Canal and railway and OCS and poles is High and the quality is Negative, as these new built elements involve a ‘considerable degree of visual clutter or disharmony is also likely to be generated, appreciably reducing the visual amenity of the scene’. The visual impact for R003 is Significant, Permanent and Negative.

People at R005 using the canal towpath are Medium in sensitivity as views of the surroundings are an important contributor to the experience of using the tow path.

Photomontage Viewpoint 1-View from Royal canal Greenway at Broombridge (Refer to Volume 5 - Appendix A21.3) illustrates the view for R005. The proposed Luas bridge over the Royal Canal and railway (7.9-8.5m in height above towpath (5.5m height above towpath to bottom of deck (varies)) plus steel fin parapet (2.4-3m depth)), and the OCS, all create high levels of visual clutter along the towpath. The Luas bridge over the Royal Canal and railway obstructs the east west view of Broombridge, the magnitude of change during the Operational Phase is still High and the quality is Negative, the visual impact for R005 is Moderate, Permanent and Negative.

LLCA 02 Broombridge Road / Industrial Estate - Characteristic of the proposed Scheme

During the Operational Phase of the proposed development, the Broombridge Road Industrial estate road corridor will be widened to accommodate the proposed Scheme (Refer to Volume 5 - Appendix A21.3). The Key Landscape Feature of this character area is the channelled view towards the Tolka Valley Park in a northerly direction, and this will remain during the Operational Phase.

On the eastern side there will be careful detailing of the proposed abutment walls for the Luas bridge in order to maintain ground level streetscape improvements at a pedestrian scale. Along the road corridor, there will a cycleway and a separate tree-lined footpath on the western side. Low shrub planting in linear beds with street trees and features trees will allow for visibility of LRVs and road vehicles through the tree canopies, thereby creating a safe and open character in this transport corridor. Sitting out areas are included on the western side of the road. Over two thirds of the track will be green track in this character area and including railings for pedestrian safety.

At the crossing of Broombridge Road and Ballyboggan Road and the entrance to the Tolka Valley Park, there will be widened footpaths with sitting out areas, pedestrian crossing points and new boundary treatment. There will be careful detailing of abutment walls adjacent to footpaths in order to maintain ground level streetscape improvements at a pedestrian scale.

LLCA 02 Impacts on Landscape Character during Operational Phase

The landscape sensitivity of this character area is Low, i.e. it exhibits a ‘high capacity for change and has very few or no designated landscapes or open space areas’. The proposed Scheme will introduce quality surfaces for footpath and cycleway on the western side of the road and new property boundary treatment.

The removal of the existing low quality boundary treatment and poor-quality footpaths and replacement pipeline and quality surfaces for footpath and cycleway on the western side of the road and new property boundary treatment represents a significant positive aspect of the proposed Scheme in this area. Magnitude of Landscape change during the Operational Phase is Medium and the quality is Positive. Overall, the potential effects on the landscape during the Operational Phase will be Slight, Permanent and Positive.

LLCA 02 Location of Visual Receptors

There are no residential properties overlooking Broombridge Road. Workers in the adjacent industrial units on Broombridge Road (R006-R016) and vehicular drivers and pedestrians on Broombridge Road are visual receptors.

LLCA 02 Impacts on Visual Receptors During Operational Phase

The channelled northerly view towards the Tolka Valley Park is the key view for receptors passing through this area and for those working in the adjacent industrial area (R006-R016). The proposed Scheme including green track (two thirds of the track), street trees, widened footpaths, pedestrian crossing points and new boundary treatment including careful detailing of abutment walls adjacent to footpaths, will enhance this view during the Operational Phase. Refer to Volume 5 - Appendix A21.3 for proposal illustration in this area.

People working in R006-R016 and those travelling along Broombridge Road are Low in sensitivity. The removal of the poor-quality boundary treatment and the changes that will restore a degraded landscape represents a significant positive aspect of the proposed Scheme in this area. The magnitude of Landscape change during the Operational Phase is Medium and the quality is Positive. The frequent movement of LRVs along the track and across the Canal bridge may create Slight periodic disruption but may also create aspects of interest in the visually poor environment that do not currently exist.

Overall, the potential effects on receptors R006-R016 during the Operational Phase will be Slight, Permanent and Positive.

LLCA 03 Tolka Valley Park- Characteristic of the proposed Scheme

During the Operational Phase of the proposed Scheme, the proposed bridge close to Ballyboggan Road, the presence of trackside infrastructure in the river valley, and the movement of the LRVs will alter the quiet riverside character of this part of the park. These new build elements will dominate the area, restrict east-west views, including the east-facing view towards the arched façade of Finglaswood Bridge (CHC009), (a Key Landscape Feature). The other Key Landscape Features including the riparian and wetland vegetation, and the watercourse, and the channelled views along the water feature, will remain but will be altered due to the obstruction of the arched bridge.

The Tolka Valley Greenway will be diverted to cross the proposed tracks, and the proposed trackside infrastructure (OCS) will pass around the site of the former dwelling Finglaswood House (King James' Castle) (CHC015). The Luas corridor will include a footpath, cycle way, cycle racks, sitting out areas. Other than the bridge track, the track will be green track in this character area.

The introduction of the trackside infrastructure and the realigned footpath through the park, will not alter the primary function of the space and will maintain the pedestrian and cyclist circulation. However, the presence of the proposed Luas corridor will alter the perceived safe boundary of the open space and present a hazard for children and dogs which will alter the character of the park.

The Luas corridor will include a footpath, cycle way, cycle racks, sitting out areas and vegetation including street trees, trees for SuDS measures and parkland trees in accordance with the Architects Urban Integration Report within Volume 5 - Appendix A21.2.

LLCA 03 Impacts on Landscape Character During Operational Phase

The landscape sensitivity of this character area is High as it includes elements which contribute to the landscape character which are protected at a national level e.g. RPS, NIAH, Site of Archaeological Interest, and a Conservation Area (CHC012), where the principal management objectives are likely to be protection

of the existing character. The proposed bridge and track Alignment involve the introduction of uncharacteristic new elements or features that contribute to an overall change of the landscape in terms of character, value and quality.

The change resulting from the proposed bridge will not require physical alteration to the protected Finglaswood Bridge (CHC009) and its ecological features, but the proposed bridge steel fin parapet (2.1m height above ground level depth), will obscure the view of the bridge and grass embankments (Key landscape Features), reducing its influence over the character area. The Tolka Valley Greenway will be diverted to cross the proposed tracks. However, increased vigilance for the cyclist will change the traffic free perception of the route through the park, thus reducing the amenity value slightly. The presence of the proposed trackside infrastructure (OCS) and lighting passing around the former dwelling Finglaswood House (CHC015) (King James' Castle) will change the natural park landscape setting of the area but will have no impact on this cultural heritage asset.

The sensitivity of the Tolka Valley Park character area is High, the magnitude of change is High, and quality is Negative. In accordance with Table 21-8, the significance of the effect of the proposed Scheme on this LLCA is Significant, Permanent and Negative.

LLCA 03 Location of Visual Receptors

Visual receptors in this area include workers in the overlooking industrial units (R013-R016) and within the DCC park depot (R019) and will have visibility of the proposed Scheme. Residents of 14 east-facing properties on Barnamore Grove and Barnamore Park and 12 south-facing properties on Carrigallen Park (R020- R021), will have visibility of the proposed Scheme at either access / egress points of the Tolka Valley park. In addition, people walking and cycling and using formal recreational facilities (Pitch and Put and Tolka Valley Children's playground) in the park (R017) are visual receptors.

Photomontage Viewpoint 2- View from Tolka Valley Park path looking towards new Luas bridge. Refer to Volume 5 - Appendix A21.3 for proposal illustration in this area.

Photomontage Viewpoint 15- View from Tolka Valley Park looking southeast Refer to Volume 5 - Appendix A21.3 for proposal illustration in this area.

LLCA 03 Impacts on Visual Receptors During Operational Phase

People working in R013-R016, R019 are Low in sensitivity and will have with visibility towards the proposed Scheme only when accessing the estate from Ballyboggan Road or walking between buildings. The magnitude of change during the Operational Phase is Low and the quality is Neutral. The visual impact for R013-R016, R019 is Imperceptible, Permanent and Neutral.

Residents in R020- R021 are High in sensitivity, the magnitude of change during the Operational Phase from the proposed Luas bridge, OCS and lighting at Luas entrance/egress points on Tolka Valley Road is High as construction involves a 'considerable degree of visual clutter or disharmony is also likely to be generated, appreciably reducing the visual amenity of the scene'. The quality of the effect is Negative. The visual impact for R020- R021 is Significant, Permanent and Negative.

People using the park R017 are Medium in sensitivity as views of the surroundings are an important contributor to the experience of using the tow path. Photomontage Viewpoint 2-View from Tolka Valley Park River path looking towards new Luas bridge (Refer to Volume 5 - Appendix A21.3) illustrates the view for park users entering from Ballyboggan Road. The proposed Luas bridge, and the OCS create high levels of visual clutter through the park, and the proposed bridge steel fin parapet (2.1m height above ground level depth), will obscure the view of the bridge obstruct the east west view of the river valley and towards Finglaswood Bridge (CHC009). The magnitude of change during the Operational Phase is High, the quality is Negative and the visual impact for R017 is Moderate, Permanent and Negative.

LLCA 04 St Helena's - Characteristic of the proposed Scheme

During the Operational Phase of the proposed Scheme, the St Helena's character area will be altered by the presence of the trackside infrastructure, in addition to the cycleway and footpath in the linear shaped public open space. The movement of the LRVs and activity of the pedestrians and cyclists will alter the open and largely unremarkable character of this grass area. Other than the pedestrian crossing points, the track will be green track in this character area.

However, long-distance southerly views to the Dublin Mountains and to the western façade of St Helena's House (CHC020) (both Key landscape Features), will be maintained.

In the southern part of St Helena's, the proposed Scheme will be located on the western side of the linear space. At the northern end of the character area St Helena's Stop will be located within a landscaped area which includes a footpath network to connect the residential area and community facilities across the Luas Stop. Refer to Volume 5 - Appendix A21.3 for proposal illustration in this area.

LLCA 04 Impacts on Landscape Character During Operational Phase

The landscape sensitivity of this character area is Low, i.e. it exhibits a high capacity for change and has very few or no designated landscapes or open space areas. The proposed Scheme will introduce quality surface footpath and cycleway with low level, directional lighting (5m lantern height) on the western side of the space and new property boundary treatment, resulting in a noticeable improvement in streetscape quality. The proposed noise barrier on the western side of the St Helena's Childcare Centre will separate the garden/outdoor activity area from the St Helena's Stop area to the west and allow for privacy for the Montessori school. 10 trees will be removed: six small trees along the road verge along Tolka Valley road and four trees to the west of the Childcare centre and section of amenity grassland.

The magnitude is Positive, the design includes 'changes that restore a degraded landscape or reinforce characteristic landscape elements'.

The magnitude of change is High as it involves the 'introduction of uncharacteristic new elements or features that contribute to an overall change of the landscape in terms of character, value, and quality'. The magnitude of change is also Positive as the design includes 'changes that restore a degraded landscape or reinforce characteristic landscape elements'.

In accordance with Table 21-8, the significance of the effect of the proposed Scheme on this LLCA is Slight, Permanent and Positive.

LLCA 04 Location of Visual Receptors

Visual receptors in this area are primarily the residents of properties overlooking the linear space. 35 east facing properties on Barnamore Grove and Barnamore Park (R020, R025, R026, R033, R034, R035, R036); and 39 south / north-facing properties on Carrigallen Park, Carrigallen Drive, Gortmore Road, Gortmore Drive, St Helena's Drive, St Helena's Court (R021, R022, R023, R027, R028, R029, R030, R031, R032, R038, R039, R040). Additionally, 4 east-facing properties on Dunsink Road (R043) will have visibility of the proposed Scheme and St Helena's Stop,

Local people passing through the linear open space (R018) are also visual receptors.

Staff and visitors in the Youth Service Den building (R037), St Helena's Resource Centre (R041), St Helena's Childcare Centre (R042), St Malachy's Mixed National School (R045) will have visibility of the proposed Scheme including St Helena's Stop from east / west-facing windows and from car parks.

Photomontage Viewpoint 3-View from St Helena's Road towards new St Helena's Luas Stop (Refer to Volume 5 - Appendix A21.3) illustrates the view of the LRT passing through this area.

LLCA 04 Impacts on Visual Receptors During Operational Phase

Residents in R020, R025, R026, R033, R034, R035, R036, R021, R022, R023, R027, R028, R029, R030, R031, R032, R038, R039, R040 and R043 are High in sensitivity. The magnitude of change during the Operational Phase from the proposed St Helena's Stop and OCS and poles is Medium as the proposed Scheme represents a moderate intrusion into the available vista. It is a readily noticeable element and/or it will generate a degree of visual clutter or disharmony. The proposals will introduce quality surface footpath and cycleway, green track and new property boundary treatment, resulting in a noticeable improvement in streetscape quality, the quality of the effect is Positive. There will however be low level, directional pedestrian lighting (5m lantern height within the linear space) into an existing dark area which will change the visual amenity at park entrances in the evening.

Overall, the potential effects on receptors R020, R025, R026, R033, R034, R035, R036, R021, R022, R023, R027, R028, R029, R030, R031, R032, R038, R039, R040 and R043 during the Operational Phase will be Moderate, Permanent and Positive.

People passing through the linear open space (R018) are Low in Sensitivity as the space is of local importance and their use of the space does not involve or depend upon appreciation of views of the landscape. The magnitude of change is Medium, and the quality is Positive. Overall, the potential effects on receptors R018 during the Operational Phase will be Slight, Permanent and Positive.

Receptors working in R037, R041, R042, and R045 are Low in Sensitivity The magnitude of change is Medium. For staff and visitors to the Helena's Childcare Centre (R042) the presence of the 2.25m high solid wall (which also acts as a noise barrier - refer to Chapter 15 (Noise and Vibration)) on the western side of the St Helena's Childcare Centre will obscure visibility into the new LRT stop area. Nevertheless, this will also improve local privacy for this resource. The quality of the effect is Positive. Overall, the potential effects on receptors R037, R041, R042, and R045 during the Operational Phase will be Slight, Permanent and Positive.

LLCA 05 Farnham Park - Characteristic of the proposed Scheme

During the Operational Phase of the proposed Scheme, Farnham Park's character area will remain as a local amenity area with two sports pitches. The introduction of footpaths in between the sport pitches and the presence of the trackside infrastructure will not alter the function of the space. However, the presence of the proposed Luas corridor will alter the perceived safe boundary of the open space and present a hazard for children and dogs which will alter the character of the park. Earth mounding will create a spectator view opportunity for the sports pitches and create visual separation of the track from the amenity area. This will be supplemented by a retaining wall and fencing for safety reasons to prevent the ball entering the track zone. The existing boundary tree planting is the Key Landscape Feature in this character area.

Refer to Volume 5 - Appendix A21.3 for proposal illustration in this area. The earth mounding will create visual separation of the track from the amenity area and will be supplemented by a retaining wall and fencing for safety reasons to prevent the ball entering the track zone. The existing boundary tree planting will be strengthened by planting additional boundary trees to enhance this feature and create further enclosure within the park.

LLCA 05 Impacts on Landscape Character During Operational Phase

The landscape sensitivity of this character area is Medium, i.e. it exhibits a medium capacity for change and where the principal management objectives are likely to be protection of the existing character. The proposed Scheme will introduce quality footpath surfaces to either side of the pitches, and a cycleway on the road to the east of the park, resulting in an improvement in connectivity. Aside from the pedestrian crossing points, the track in this character area will be green track. The magnitude is Low as the changes '*affect small areas of landscape character and quality, together with the loss of some less characteristic landscape elements or the addition of new features or elements'*. The magnitude of change is Negative due to the loss of a portion of the open space along the eastern boundary.

In accordance with Table 21-8, the significance of the effect of the proposed Scheme on this LLCA is Slight, Permanent and Negative.

LLCA 05 Location of Visual Receptors

Visual receptors in this area include residents of 25 east / south-facing properties on Dunsink Road (R046-R049), Casement Road (R050) and Farnham Crescent (R054) along with users of the linear open space (R044).

Photomontage Viewpoint 4 -View from Casement Road looking southeast across the playing fields (Refer to Volume 5 - Appendix A21.3) illustrates the view of the LRT passing around the eastern side of the open space.

LLCA 05 Impacts on Visual Receptors During Operational Phase

Residents in R046-R049, R050, and R054 are High in sensitivity. The magnitude of change during the Operational Phase from the proposed track passing around the eastern of the open space is Low as the proposed Scheme 'intrudes to a minor extent into the available vista and will not be noticed by a casual observer and/or the proposal will not have a marked effect on the visual amenity of the scene'. There will be low level, directional pedestrian lighting (5m lantern height) adjacent to the track at the pedestrian crossing points on the eastern boundary which will be a minor change to the visual amenity of this part of the park in the evening, with a Negative effect. Overall, the potential effects on receptors R046-R049, R050, and R054 during the Operational Phase will be Slight, Permanent and Negative.

People using the open space and sport pitches (R044) are Low in Sensitivity as the space is of local importance and their use of the space does not involve or depend upon appreciation of views of the landscape. The magnitude of change is Medium as the proposed Scheme will be a 'readily noticeable element and/or it will generate a degree of visual clutter or disharmony, thereby reducing the visual amenity of the scene'. The quality of the effect is Negative as there will be a perceived loss of open space. Overall, the potential effects on receptors R018 during the Operational Phase will be Slight, Permanent and Negative.

LLCA 06 Wellmount Road - Characteristic of the proposed Scheme

During the Operational Phase of the proposed Scheme, Wellmount Road's character area will remain as linear open space. However, the presence of the trackside infrastructure, the cycleway (north of Wellmount Road) and footpath will alter the character. The movement of the LRTs and activity of the pedestrians and cyclist will alter the open and largely unremarkable character of this grass area. The mature tree planting in the sequence of spaces is the Key Landscape Feature in this character area; these trees are all retained.

The mature tree planting along Casement Road at the southern end of this character area will remain. North of Wellmount Road, the proposed track will be aligned on the eastern side of the linear space, the existing road (Patrickswell Place) will be reconstructed in a westerly position, closer to the religious buildings and to the King William's Rampart (CHC027), close to Patrickswell Court. The proposed track will also pass in between Raven's Court residential cul-de-sac and Finglas Garda Station. The Ravens Court boundary wall will be rebuilt closer to the residential properties of the cul-de-sac. The Garda Property Evidence Management (PEM) building will be demolished and car parking provision at the Garda station will be reorganised. Refer to Volume 5 - Appendix A21.3 for proposal illustration in this area.

The mature trees planting along Casement Road at the southern end of this character area will remain, and additional tree planting will be concentrated on the eastern side of the proposed track to reinforce existing planting. Proposed lighting will be restricted to one side of the track to minimise night-time glare and allow for dark corridors for bats. Aside from the pedestrian crossing points, the track in this character area will be green track.

LLCA 06 Impacts on Landscape Character During Operational Phase

The landscape sensitivity of the Wellmount Road's character area is Medium, i.e. it exhibits a medium capacity for change and where the principal management objectives are likely to be protection of the existing character. The proposed Scheme will introduce, a cycleway on the eastern side of the space, and a noticeable improvement in streetscape quality.

The realigned Patrickswell Place Road will impact negatively on the setting of the King William's Rampart (CHC027) by bringing traffic noise and the movement of cyclists, pedestrians, and vehicles closer to the site.

At Ravens Court, the proposed track will pass close to the residential area and affect residential amenity. The boundary wall will be relocated closer to the residential properties reducing the amount of semi-private open space and creating a sense of enclosure created by the presence of the track along the courtyard boundary. The removal of the PEM building will allow visibility down Cardiff Castle Road from 1st floor windows of residential properties.

The magnitude is Medium, and the quality is Negative as the design involves 'the introduction of uncharacteristic new elements or features that will lead to changes in landscape character, and quality'. In accordance with Table 21-8, the significance of the effect of the proposed Scheme on this landscape character area is Slight, Permanent and Negative.

LLCA 06 Location of Visual Receptors

Visual receptors in this area include residents of approximately 70 east / south-facing properties on Casement Road (R051-R053), Farnham Crescent (R054-R056), Wellmount Road (R057), Wellmount Parade (R059), Aylward Green off Cappagh Road (R061), Little Sisters of the Assumption Building (R062), Cardiff Castle Road (R069-R075) and Ravens Court (R076), in addition to users of the linear open space (R060).

Photomontage Viewpoint 5 -View from Wellmount Parade looking Southeast (Refer to Volume 5 - Appendix A21.3) illustrates the view of the LRT passing around the eastern side of the open space.

Photomontage Viewpoint 6 -View from Cardiff Castle Road looking towards Ravens Court (Refer to Volume 5 - Appendix A21.3) illustrates the view of the LRT passing along the western side of Ravens Court cul de sac.

Photomontage Viewpoint 14 -View from Patrick's Well Place (Refer to Volume 5 - Appendix A21.3) illustrates the view of the LRV passing along the eastern side of the linear open space.

Pupils and staff in the St Michael's Holy Faith Secondary School (R058), visitors to the Kingdom Hall of Jehovah's Witnesses (R064) and staff in Finglas Garda Station (R081) will have visibility of the proposed Scheme from north-facing widows and from the car park.

LLCA 06 Impacts on Visual Receptors During Operational Phase

Residents in R051-R053, R054-R056, R057, R059, R061, R062, R069-R075 are High in sensitivity. The magnitude of change during the Operational Phase from the proposed track passing through the linear open space is Low as the proposed Scheme 'intrudes to a minor extent into the available vista and will not be noticed by a casual observer and/or the proposal will not have a marked effect on the visual amenity of the scene'. There will be low level, directional pedestrian lighting (5m lantern height) adjacent to the track at pedestrian crossing points which bring a level of lighting into an existing dark corridor which will be a minor change to the visual amenity of this part of the park in the evening. The quality of the effect will be Negative. The potential effects on receptors R051-R053, R054-R056, R057, R059, R061, R062, R069-R075 during the Operational Phase will be Slight, Permanent and Negative.

Residents in R076 (Ravens Court) are also High in sensitivity. The magnitude of change during the Operational Phase from the OCS along the western boundary and the proposed 2.25m high solid boundary

wall replacing the fence on the northwestern boundary and the wall on the southwestern boundary is High. The quality of the effect will be Negative. The change '*intrudes into a significant proportion or important part of the available vista and is one of the most noticeable elements. A considerable degree of visual clutter or disharmony is also likely to be generated, appreciably reducing the visual amenity of the scene'*. The potential effects on receptors R076 during the Operational Phase will be Significant, Permanent and Negative.

Receptors working in R058, R064, and R081 will have visibility of the proposed Scheme from north-facing windows and from the car parks. These visual receptors are Low in sensitivity, the magnitude of change space is Low as the proposed Scheme 'intrudes to a minor extent into the available vista and will not be noticed by a casual observer and/or the proposal will not have a marked effect on the visual amenity of the scene'. The quality of the effect will be Neutral. The potential effects on receptors R058, R064, and R081 during the Operational Phase will be Imperceptible, Permanent and Neutral.

People using the linear open space (R063), and school sports pitches (R060) are Low in Sensitivity as the space is of local importance and their use of the space does not involve or depend upon appreciation of views of the landscape. The magnitude of change is Medium, and the quality of the effect will be Neutral. Overall, the potential effects on receptors R060 and R063 during the Operational Phase will be Slight, Permanent and Neutral.

LLCA 07 Finglas Main Street West - Characteristic of the proposed Scheme

During the Operational Phase of the proposed Scheme, the surface car parking area in front of the civic buildings will be converted into the Finglas Village Stop and rail alignment. The Mellowes Road corridor is wide enough to accommodate the proposed Scheme at this location, which comprises granite paving either side of the proposed Stop and a separate footpath. The track will be granite-paved (Embedded Track) in this character area directly in front of the civic building but green track elsewhere. At the crossing point of Mellowes Road, there will be widened footpaths and new boundary treatment. There will be no impact to the setting of Handball Alley (CHC036).

The Key Landscape Feature of this character area is the tree-lined, channelled view towards the prominent buildings of the Civic Offices on the northern side and the Garda station on the southern side, and this will remain during the Operational Phase.

Refer to Volume 5 - Appendix A21.3 for proposal illustration in this area. Quality surface footpath and cycleway will be implemented on the northern side of the road. New tree and shrub planting and street furniture will create a noticeable improvement, which comprises granite paving either side of the proposed Stop and a separate tree-lined footpath. Low shrub planting in linear beds with street trees and features trees will allow for visibility of LRTs and road vehicles through the tree canopies creating a safe and open character in this transport corridor. There will provision of an enhanced public realm by provision of sitting out areas, to be included in front of the civic buildings on the eastern side of the road. The track will be granite-paved (embedded track) in this character area directly in front of the civic building, but green track elsewhere.

LLCA 07 Impacts on Landscape Character During Operational Phase

The landscape sensitivity of this character area is Low, i.e. it exhibits a high capacity for change and has very few or no designated landscapes or open space areas. The proposed Scheme will introduce quality surface footpath and cycleway on the northern side of the road and new property boundary treatment, with a noticeable improvement in streetscape quality. The magnitude is Medium as the '*changes that are modest in extent and scale involving the loss of landscape characteristics or elements that will also involve the introduction of uncharacteristic new elements or features that will lead to changes in landscape character, and quality'.* The magnitude of change also Positive, the design includes 'changes that reinforce characteristic landscape elements' and the replacement quality surfaces represents a significant positive aspect of the proposed Scheme in this area. Overall, the potential effects on the landscape during the Operational Phase will be Slight, Permanent and Positive.

LLCA 07 Location of Visual Receptors

Visual receptors in this area include residents of 20 north-facing properties on Mellowes Crescent (R077). They will have visibility through the existing street of the proposed cycle routes and the new quality footpath around the proposed Finglas Village Stop.

Staff in Finglas Garda Station (R082) will have visibility of the proposed Scheme and Stop on Mellowes Road as will staff and visitors to Mellow Spring Childcare Development Centre (R084), Finglas Sports and Fitness (R085), Finglas Youth Resource Centre (R086) and Finglas Fire Station (R083) from south-facing windows and from the car parks and pedestrians and vehicular traffic on the High Street (R086).

LLCA 07 Impacts on Visual Receptors During Operational Phase

Receptors R077 are High in sensitivity and the magnitude of change is Low. The change will 'will not have a marked effect on the visual amenity of the scene'. The proposals will introduce quality surface footpath, cycleway and street future, resulting in a noticeable improvement in streetscape quality. The quality of the effect will be Positive. The potential effects on receptors R077, R069-R075 during the Operational Phase will be Slight, Permanent and Positive.

Photomontage Viewpoint 7 -View towards Finglas Village Stop from public footpath on Mellowes Road (Refer to Volume 5 - Appendix A21.3) illustrates the view of the LRT passing through this character area and the streetscape improvements.

Receptors working in R082, R084, R085, R086, R083 and R086 will have visibility of the proposed Scheme from south-facing windows and from the car parks. These visual receptors are Low in sensitivity, the magnitude of change space is Low as the proposed Scheme 'intrudes to a minor extent into the available vista and will not be noticed by a casual observer and/or the proposal will not have a marked effect on the visual amenity of the scene'. The quality of the effect will be Positive. The potential effects on receptors R082, R084, R085, R086, R083 and R086 during the Operational Phase will be Imperceptible, Permanent and Positive.

LLCA 08 Mellowes Park - Characteristic of the proposed Scheme

During the Operational Phase of the proposed Scheme, Mellowes Park will remain as a local amenity area. The proposed Scheme will pass along the eastern boundary of the linear park and the existing footpath will be realigned to the west to maintain a circular walk / jogging trail within the park. A new substation will be located close to the existing Fire station at the southern end of the park.

The introduction of the trackside infrastructure and the realigned footpath on the eastern side of the park, will not alter the primary function of the space and will maintain a circular walk / jogging trail. However, the presence of the proposed Scheme will alter the perceived safe boundary of the open space and present a hazard for children and dogs which will alter the character of the park.

The boundary tree planting within the park and the monument to Liam Mellows are the key landscape features, and they will remain. There will be new planting around the setting of the Liam Mellows memorial which will enhance this feature. Refer to Volume 5 - Appendix A21.3 for illustration in this area.

LLCA 08 Impacts on Landscape Character During Operational Phase

The landscape sensitivity of this character area is Medium, i.e. it exhibits a medium capacity for change and where the principal management objectives are likely to be protection of the existing character. The proposed Scheme will realign the eastern footpath and provide compensation tree planting. Other than the pedestrian crossing points, the track will be green track in this character area. The magnitude is Low, and the quality is Negative as the changes '*affect small areas of landscape character and quality, together with the loss of some less characteristic landscape elements or the addition of new features or elements*'.

In accordance with Table 21-8, the significance of the effect of the proposed Scheme on this LLCA is Slight, Permanent and Negative.

LLCA 08 Location of Visual Receptors

Visual receptors in this area include residents of 71 east-facing properties on Casement Road (R094-R130), and who will have visibility of the proposed Scheme in the park, in addition to users of the open space (R065).

LLCA 08 Impacts on Visual Receptors During Operational Phase

Photomontage Viewpoint 8 -View from Casement Road looking east into Mellowes Park. (Refer to Volume 5 - Appendix A21.3) illustrates the view of the LRT passing along the eastern edge of this park.

Residents in R094-R117 are High in sensitivity. The magnitude of change during the Operational Phase from the proposed track passing around the eastern of the open space is Low as the proposed Scheme 'intrudes to a minor extent into the available vista and will not be noticed by a casual observer and/or the proposal will not have a marked effect on the visual amenity of the scene'. There will be low level, directional pedestrian lighting (5m lantern height) adjacent to the track and footpaths on the eastern boundary which will be a minor change to the visual amenity of this part of the park in the evening. The quality of the effect will be Negative. Overall, the potential effects on receptors R094-R117 during the Operational Phase will be Slight, Permanent and Negative.

Residents in R125-R127 are High in sensitivity. The magnitude of change during the Operational Phase from the proposed track passing around the eastern of the open space is Medium as the proposed Scheme 'represents a moderate intrusion into the available vista, is a readily noticeable element and/or it will generate a degree of visual clutter or disharmony, thereby reducing the visual amenity of the scene. There will be low level, directional pedestrian lighting (5m lantern height) adjacent to the track and footpaths and full view of the reconfigured junction. The quality of the effect will be Negative. Overall, the potential effects on receptors R125-R127 during the Operational Phase will be Moderate, Permanent and Negative.

People using the open space and sport pitches (R065) are Low in Sensitivity as the space is of local importance and their use of the space does not involve or depend upon appreciation of views of the landscape. The magnitude of change is Medium as the proposed Scheme will be a 'readily noticeable element and/or it will generate a degree of visual clutter or disharmony, thereby reducing the visual amenity of the scene'. The quality of the effect will be Negative. Overall, the potential effects on receptors R065 during the Operational Phase will be Slight, Permanent and Negative.

LLCA 09 / 09A Finglas Road Corridor - Characteristic of the proposed Scheme

During the Operational Phase of the proposed Scheme, the junction of the Finglas Road / North Road and St Margaret's Road will accommodate the rail corridor and at grade pedestrian crossing points. A new substation will be located close to the location of the former footbridge on North Road.

The Key Landscape Feature of this character area is the shrub screen planting which hides the residential and industrial development at the roundabout of Finglas West to St Margaret's Road, and it will be retained.

Refer to Volume 5 - Appendix A21.3 for proposal illustration in this area. There will be granite paving at the Stop (St Margaret's Road Stop) and a separate tree-lined footpath. Low shrub planting in linear beds with street trees and features trees will allow for visibility of LRTs and road vehicles through the tree canopies, thereby creating a safe and open character in this transport corridor.

LLCA 09 Impacts on Landscape Character During Operational Phase

The landscape sensitivity of this character area is Low, i.e. it exhibits a high capacity for change and has very few or no designated landscapes or open space areas. The proposed Scheme will open up the junction to pedestrians, slow down the through traffic and create a more human scale environment. It will introduce quality surface footpath and cycleway and new property boundary treatment, and a noticeable improvement in streetscape quality. The magnitude is Medium as it will involve the introduction of uncharacteristic new elements or features that will lead to changes in landscape character, and quality. The magnitude is also Positive, the design includes 'changes that restore a degraded landscape or reinforce characteristic

landscape elements'. In accordance with Table 21-8, the significance of the effect of the proposed Scheme on this landscape character area Slight, Permanent and Positive.

LLCA 09 Location of Visual Receptors

Visual receptors in this area include residents of 31 east / west-facing properties on North Road (R131-R135) and Casement Road (R128-R130) will have visibility of the proposed Scheme and the Park & Ride facility within the junction and the Finglas Road Corridor.

Photomontage Viewpoint 9 - View of Luas crossing North Road from Liam Mellowes Memorial Garden (Refer to Volume 5 - Appendix A21.3) illustrates the view of the LRT passing through this character area and the streetscape improvements which will result.

Photomontage Viewpoint 12 - View from North Road looking north towards Lidl car park (Refer to Volume 5 - Appendix A21.3) illustrates the positive change to the streetscape.

Photomontage Viewpoint 13 - View from North Road looking south towards the footbridge over Finglas Bypass (Refer to Volume 5 - Appendix A21.3) illustrates the positive change to the skyline.

Photomontage Viewpoint 16 - View from Casement Road, towards proposed Park & Ride facility (Refer to Volume 5 - Appendix A21.3) illustrates the visual obstruction and change to the skyline.

LLCA 09 Impacts on Visual Receptors During Operational Phase

Residents in R128-135 are all High in sensitivity.

Residents in Casement Road R128-R130 will experience visual obstruction of their view due to the Park and Ride opposite their houses. Photomontage Viewpoint 16 - View from Casement Road looking East towards the proposed Park & Ride facility (Refer to Volume 5 - Appendix A21.3) illustrates the change to the skyline. The magnitude of change for these residents is High. The quality of the effect will be Negative. 'The proposal intrudes into a significant proportion or important part of the available vista and is one of the most noticeable elements'. The potential effects on receptors R127-R130 during the Operational Phase will be Significant, Permanent and Negative.

Residents in North Road R131-R135 will experience visual enhancement by the public realm improvements including the proposed street trees and roadside planting. Photomontage Viewpoint 12 - View from North Road looking north towards Lidl car park (Refer to Volume 5 - Appendix A21.3) illustrates the streetscape improvements. The magnitude of change for these residents is Low and the quality will be Positive. 'The proposal will not have a marked effect on the visual amenity of the scene'. The potential effects on receptors R127-R130 during the Operational Phase will be Slight, Permanent and Positive.

LLCA 10 Charlestown / St Margaret's - Characteristic of the proposed Scheme

During the Operation Phase of the proposed Scheme, the Charlestown / St Margaret's Road corridor will be realigned to the west to accommodate the rail corridor on the eastern side. The St Margaret's Road corridor is wide enough to accommodate the proposed Scheme at this location, which comprises granite paving at the Stops (Charlestown Stop) and a separate footpath.

The Key Landscape Feature of this character area is the tree lined, channelled view towards the prominent building of the Charlestown shopping centre, and it will be retained and enhanced. Refer to Volume 5 - Appendix A21.3 for proposal illustration in this area.

LLCA 10 Impacts on Landscape Character During Operational Phase

The landscape sensitivity of this character area is Low, i.e. it exhibits a high capacity for change and has very few or no designated landscapes or open space areas. The magnitude of change is High and quality is Positive as the proposed Scheme will introduce quality surface footpath and cycleway on the eastern side of the road and new property boundary treatment, with a noticeable improvement in the streetscape. The design includes 'changes that restore a degraded landscape or reinforce characteristic landscape elements'.

In accordance with Table 21-8, the significance of the effect of the proposed Scheme on this landscape character area is Slight, Permanent and Positive.

LLCA 10 Location of Visual Receptors

Visual receptors in this area include residents of 37 east / west-facing properties on North Road (R135), McKee Avenue (R138), St Margaret's Court (R151), St Margaret's Road (R150-R162), plus 32 apartments in Melville Lawn (R170) and above Charlestown Shopping Centre (R171). They will have visibility of the proposed Scheme along St Margaret's Road, the St Margaret's Road Stop and the Charlestown Stop.

Users of McKelvey Celtic AFC pitches (R165) will also have clear views towards the proposed Scheme and the Charlestown Stop on St Margaret's Road.

Workers in the overlooking commercial and industrial units (R141-R149, R152, R156, R158, R163, R164, R166) will have visibility of the proposed Scheme and Luas Stop when accessing the building. Refer to Volume 5 - Appendix A21.3 for proposal illustration in this area.

LLCA 10 Impacts on Visual Receptors During Operational Phase

Receptors R135, R138, R150, R153 -R155, R157, R159, R160-R162, R170- R171 are High in sensitivity and the magnitude of change is Medium and the quality will be Positive. The significance of the effect of the proposed Scheme in this area on these residential visual receptors without mitigation is Moderate, Permanent and Positive.

Receptors McKee Avenue (R138), closest to the Park & Ride and St Margaret's Stop, St Margaret's Court (R151) are High in sensitivity and the magnitude of change is High and the quality of the effect will be Negative, the potential effect is Significant, Permanent and Negative

Photomontage Viewpoint 10 - View from St Margaret's Court looking north (Refer to Volume 5 - Appendix A21.3) illustrates the view of the LRT passing through this character area and the streetscape improvements.

Photomontage Viewpoint 11 - View from public footpath outside Charlestown Shopping Centre looking southwest (Refer to Volume 5 - Appendix A21.3) illustrates the streetscape improvements.

People using the sports pitches (R165) are Low in Sensitivity as the space is of local importance and their use of the space does not involve or depend upon appreciation of views of the landscape. The magnitude of change is Low, and the quality of the effect will be Neutral. Overall, the potential effects on receptors R165 during the Operational Phase will be Imperceptible, Permanent and Neutral.

Receptors working in R141-R149, R152, R156, R158, R163, R164, R166 will have visibility of the proposed Scheme from the car parks. These visual receptors are Low in sensitivity, the magnitude of change space is Low, and the quality will be Positive as the proposed Scheme 'intrudes to a minor extent into the available vista and will not be noticed by a casual observer and/or the proposal will not have a marked effect on the visual amenity of the scene'. The potential effects on these receptors during the Operational Phase will be Imperceptible, Permanent and Positive.

21.5 Mitigation and Monitoring Measures

21.5.1 Types of Mitigation

This section describes mitigation and monitoring measures which are proposed to ameliorate, remediate or reduce significant landscape (streetscape) and visual impacts from the Construction and Operational Phases wherever possible.

There are three types of mitigation applied to the scheme:

- Standard Construction related Mitigation Measures applied during construction;
- Primary Design Measures - Mitigation Measures developed during the options and design process and included in the proposed Scheme; and
- Secondary Mitigation Measures to address any significant adverse effects not included within Primary Design.

21.5.1.1 Standard Construction Mitigation Measures

These include the 'Standard Construction and Operational Management practices' for avoiding and reducing environmental effects during construction. These are embedded within the construction proposals for the proposed Scheme, as outlined in Chapter 6 (Construction Activities). This involves selection of construction compounds in areas where minimal vegetation clearances are required and in areas of low-quality landscape and low levels of visual sensitivity where they do not impact on key landscape features of local landscape character areas and where they can be screened from visual receptors. The storage of construction materials in organised compounds will reduce their visibility to receptors. The compounds will have controlled directional lighting and effective dust control measures. Standard Construction and Operational Practices are described in Table 21-22 below.

Table 21-22: Summary of Standard Construction Mitigation Measures

Mitigation code	Standard Construction Mitigation Measures
A	Construction Compounds - Site compounds in proximity to residential properties will implement appropriate site management procedures to control construction vehicular access, control of site / compound lighting to divert away from residential properties and maintain effective dust and dirt control measures. The storage of construction materials will be organised to avoid obstruct visibility from residential properties.
B	Vegetation Protection - All trees and vegetation within and adjoining the works area will be protected in accordance with the British Standard Institution (BSI) British Standard (BS) 5837:2012 'Trees in relation to in relation to design, demolition, and construction - Recommendations' (BSI 2012). Works required within the root protection area (RPA) of trees to be retained will follow a project-specific arboricultural methodology for such works including robust protective fencing, supplementary watering etc).
C	Vegetation Removal - Where trees must be removed for construction activities, they should be replaced in the first planting season following construction as advanced planting for the Operational Phase.
D	Pedestrian Routes - Where pedestrian routes are disrupted during construction, alternative routes will be provided.
E	Open Space – Where construction activities are located in open space and parks, construction should be phased to minimise disruption to seasonal activities where possible.
F	Lighting - Temporary construction related lighting along the alignment will be to divert away from residential properties.

A summary of the temporary effects of proposed Scheme during Construction stage on each LLCA is shown in Table 21-23 and on Visual Receptors in Table 21-24.

Table 21-23: Summary of Construction Stage Effects on LLCAs

Construction Stage Landscape Effects							
Local Landscape Character Area (LLCA) Classification / category	**Evaluation of Baseline Sensitivity**	**Evaluation of Magnitude of Change**	**Significance of Predicted Effects**	**Quality of Effects**	**Duration of Effects**	**Mitigation (Ref. 21.5.1.1)**	**Significance of Residual Effects**
LLCA 01 Royal Canal	High	High	Significant	Negative	Temporary	A, B, D, F	Significant, Negative, Temporary
LLCA 02 Broombridge Road / Industrial Estate	Low	Medium	Slight	Negative	Temporary	A, B, D, F	Slight, Negative, Temporary
LLCA 03 Tolka Valley Park	High	High	Significant	Negative	Temporary	A, B, C, D, F	Significant, Negative, Temporary
LLCA 04 St Helena's	Low	Medium	Slight	Negative	Temporary	A, B, C, D, F	Slight, Negative, Temporary
LLCA 05 Farnham Park	Medium	Medium	Slight	Negative	Temporary	B, C, D, E, F	Slight, Negative, Temporary
LLCA 06 Wellmount Road	Medium	Medium	Slight	Negative	Temporary	A, B, C, D, E, F	Slight, Negative, Temporary
LLCA 07 Finglas Main Street West	Low	Medium	Slight	Negative	Temporary	B, C, D, E, F	Slight, Negative, Temporary
LLCA 08 Mellowes Park	Medium	Medium	Slight	Negative	Temporary	A, B, C, D, E, F	Slight, Negative, Temporary
LLCA 09/09a Finglas Road Corridor	Low	High	Slight	Negative	Temporary	B, C, D, E, F	Slight, Negative, Temporary
LLCA 10 Charlestown / St Margaret's	Low	High	Slight	Negative	Temporary	A, B, C, D, E, F	Slight, Negative, Temporary

Table 21-24: Summary of Construction Stage Effects on Visual Receptors

Summary of Construction Stage Visual Effects							
Visual Receptors (R) located in each LLCA, (see Volume 4 – Map Figure 21-6 for location of each receptor)	**Evaluation of Receptor Sensitivity**	**Evaluation of Magnitude of Change**	**Significance of Predicted Effects**	**Quality of Effects**	**Duration of Effects**	**Mitigation (Ref. 21.5.1.1)**	**Significance of Residual Effects**
LLCA 01 R001, R002, R004 Workers in industrial buildings on the south side of Broombridge Luas Stop	Low	Low	Imperceptible	Negative	Temporary	D	Imperceptible, Temporary and Negative
R003 Six Residential Properties on the south side of Broombridge Luas Stop on Bannow Road	High	High	Significant	Negative	Temporary	A, D, F	Moderate, Temporary and Negative
R005 People using Royal Canal Tow path (Open Space)	Medium	High	Moderate	Negative	Temporary	C, D, E	Slight, Temporary and Negative
LLCA 02 R006 -R016 Workers in Broombridge Road / Industrial Estate	Low	High	Slight	Negative	Temporary	A, D	Imperceptible, Temporary and Negative
LLCA 03 R017 People using Tolka Valley Park - (Open Space)	Medium	High	Moderate	Negative	Temporary	A.B, C, D, E	Moderate, Temporary and Negative
R013 – R016, R019 Workers in DCC depot in Park and Industrial buildings on Ballyboggan Road	Low	High	Slight	Negative	Temporary	A, D	Slight, Temporary and Negative
R021, R022, 26 Residential Properties on Barnamore Grove and Barnamore Park and Carrigallen Park	High	High	Significant	Negative	Temporary	A, C, D, E, F	Moderate, Temporary and Negative
LLCA 04 35 east-facing Residential properties on Barnamore Grove and Barnamore Park (R020, R025, R026, R033, R034, R035, R036) and 39 south / north-facing properties on Carrigallen Park, Carrigallen Drive, Gortmore Road,	High	Medium	Moderate	Negative	Temporary	A, C, D, E, F	Slight, Temporary and Negative

Summary of Construction Stage Visual Effects							
Visual Receptors (R) located in each LLCA, (see Volume 4 – Map Figure 21-6 for location of each receptor)	**Evaluation of Receptor Sensitivity**	**Evaluation of Magnitude of Change**	**Significance of Predicted Effects**	**Quality of Effects**	**Duration of Effects**	**Mitigation (Ref. 21.5.1.1)**	**Significance of Residual Effects**
Gortmore Drive, St Helena's Drive, St Helena's Court (R021, R022, R023, R027, R028, R029, R030, R031, R032, R038, R039, R040), and four east-facing properties on Dunsink Road (R043)							
R037, R041, R042, R045 Staff and visitors in the Youth Service Den building, St Helena's Resource Centre, St Helena's Childcare Centre, St Malachy's Mixed National School	Low	Medium	Slight	Negative	Temporary	A, D, E	Slight, Temporary and Negative
R018 People using the linear Open Space	Low	Medium	Slight	Negative	Temporary	A, B, C, D, E	Moderate, Temporary and Negative
LLCA 05 Staff and visitors in the St Helena's Childcare Centre (R042), will have visibility of the construction works from east / west-facing windows and from car parks.	Low	Medium	Slight	Negative	Temporary	A, D, E	Imperceptible, Temporary and Negative
Residents in 25 properties Dunsink Road (R046-R049), Casement Road (R050) and Farnham Crescent (R054)	High	Medium	Moderate	Negative	Temporary	A, C, D, E, F	Slight, Temporary and Negative
R044 People using the park and the formal pitches	Medium	High	Moderate	Negative	Temporary	B, C, D, E	Slight, Temporary and Negative
LLCA 06 Residents of 70 east and south-facing properties on Casement Road (R051-R053), Farnham Crescent (R054-R056), Wellmount Road (R057), Wellmount Parade (R059), Aylward Green off Cappagh Road (R060), Little	High	High	Significant	Negative	Temporary	A, C, D, E, F	Moderate, Temporary and Negative

Summary of Construction Stage Visual Effects							
Visual Receptors (R) located in each LLCA, (see Volume 4 – Map Figure 21-6 for location of each receptor)	**Evaluation of Receptor Sensitivity**	**Evaluation of Magnitude of Change**	**Significance of Predicted Effects**	**Quality of Effects**	**Duration of Effects**	**Mitigation (Ref. 21.5.1.1)**	**Significance of Residual Effects**
Sisters of the Assumption Building (R062), Cardiff Castle Road (R069-R075) and Ravens Court (R076)							
Pupils and staff in the St Michael's Holy Faith Secondary School (R058) and the school sport pitches (R060), visitors to the Kingdom Hall of Jehovah's Witnesses (R064), and staff in Finglas Garda Station (R081)	Low	High	Slight	Negative	Temporary	A, D	Slight, Temporary and Negative
Users of the sport pitches (R060) and the linear open space (R063)	Low	Medium	Slight	Negative	Temporary	A, B, C, D, E	Slight, Temporary and Negative
LLCA 07 Staff in Finglas Garda Station (R082) (building R0081 will be demolished) will have visibility of the construction works on Mellowes Road as will staff and visitors to Mellow Spring Childcare Development Centre (R084), Finglas Sports and Fitness Centre (R085), Finglas Youth Resource Centre (R086) and Finglas Fire Station (R083) from south-facing windows and from the car parks.	Low	Low	Imperceptible	Negative	Temporary	As described	Imperceptible
Residents of 20 north-facing properties on Mellowes Crescent (R077)	High	Medium	Moderate	Negative	Temporary	B, C, D, F	Slight, Temporary and Negative
LLCA 08 Mellowes Park open space (R065).	Medium	High	Moderate	Negative	Temporary	B, C, D, E, F	Slight & Negative
Residents of 41 properties R094-R117 on Casement Road	High	Medium	Moderate	Negative	Temporary	B, C, D, F	Slight, Temporary and Negative

Summary of Construction Stage Visual Effects							
Visual Receptors (R) located in each LLCA, (see Volume 4 – Map Figure 21-6 for location of each receptor)	**Evaluation of Receptor Sensitivity**	**Evaluation of Magnitude of Change**	**Significance of Predicted Effects**	**Quality of Effects**	**Duration of Effects**	**Mitigation (Ref. 21.5.1.1)**	**Significance of Residual Effects**
Residents of 12 properties in R125-R127 on Casement Road	High	High	Significant	Negative	Temporary	A B, C, D, F	Moderate, Temporary and Negative
LLCA 09/09a Residents of 14 west-facing properties on North Road (R131-R135)	High	Medium	Moderate	Negative	Temporary	B, C, D, F	Slight, Temporary and Negative
Residents of 17 east-facing properties on Casement Road (R128-R130)	High	High	Significant	Negative	Temporary	A, B, C, D, F	Moderate, Temporary and Negative
LLCA 10 Residents of 37 east / west-facing properties on North Road (R135), St Margaret's Road (R150, R152-R165), and 12 properties in Melville Lawn (R170) and 20 properties above Charlestown Shopping Centre (R171),	High	Medium	Moderate	Negative	Temporary	B, C, D, F	Slight, Temporary and Negative
For Residents one of McKee Avenue (R138), closest to the Park & Ride, St Margaret's Road Luas Stop, secondary construction compound and 12 properties in St Margaret's Court (R151)	High	High	Significant	Negative	Temporary	A, B, C, D, F	Moderate, Temporary and Negative
Users of McKelvey Celtic AFC pitches (R0165)	Low	Medium	Slight	Negative	Temporary	D	Slight, Temporary and Negative
Workers in commercial and industrial units (R141-R149, R152, R156, R158, R163, R164, R166)	Low	Medium	Slight	Negative	Temporary	A, D	Slight, Temporary and Negative

21.5.1.2 Primary Design Mitigation Measures

Primary Design Mitigation Measures are those Landscape Design and Engineering proposals which were developed through the iterative Scheme design, and which have become integrated or embedded into the proposed Scheme. These are as described in section 21.3.1 Proposed Urban Realm and Landscape Design and listed in Table 21-25 below.

Table 21-25: Summary of Primary Design Mitigation Measures

Mitigation code	Primary Design Mitigation Measures
G	Vegetation Removal - Minimising the removal of existing trees (341 to be removed), taking into consideration the information in the Tree Survey to maintain healthy trees where possible and protect the tree root protection zone.
H	Vegetation Reinstatement - Reinstatement of bankside vegetation along Royal Canal and River Tolka from bridge construction.
I	Track Vegetation - Use of green track bed treatment rather than a hard track design.
J	Streetscape Planting - Provide Street trees and soft landscape areas as a planted buffer between road, cycle path and footpath, to aid traffic calming and to highlight safe crossing points.
K	Woodland Vegetation - Provide native woodland planting to create visual screening for residential areas.
L	Tree Strategy – Implement a tree planting strategy to ensure long-term tree cover with a tree mix focussed on biodiversity and climate resilience. 916 trees are proposed as part of the design, these include street trees, parkland trees, feathered trees, SuDS trees, and edible trees. This Strategy will also describe the function of the tree types in relation to the rail corridor i.e. avenue trees and linear planted areas to create buffers between road, cycle path and footpath, to aid traffic calming and to highlight safe crossing points.
M	Biodiversity – Strengthen linkages to green spaces to create ecological corridors and provide for biodiversity enhancement, 50-80 % of plant mixes to be pollinator friendly plants.
N	Transport Connectivity - Maintain pedestrian, bicycle, and maintenance access along Royal Canal.
O	Connectivity between Spaces - Improve connectivity between local spaces by provision of new footpaths and removal of fencing.
P	Open Space - Relocating open space areas and sports pitches as opposed to removal of open space areas.
Q	Public Realm – Provide public realm enhancements and street furniture including seating areas, shelters (including bicycle storage in strategic areas) careful position and clustering of utility cabinets, signage, high quality, dynamic bridge structures and alternative-coloured finishes for OCS poles to mitigate their visual impact i.e. poles to be a dark colour in planted areas to visually blend in with a planted backdrop and light grey steel elsewhere.
R	Trackside Safety Lighting - Provide safe, lit, crossing points for Luas tracks for pedestrians and cyclists and LRT timber bollards to further delineate the green track perimeter and the LRT swept path.
S	Trackside Safety Fencing - Provision of ball stop fencing beside LRT line to protect LRT line passage.
T	Drainage - SuDS based drainage proposals.
U	Boundary Treatment Typologies - New boundary treatment along boundaries disturbed by the proposed Scheme, boundary typologies as agreed with local residential and commercial stakeholders.
V	Barrier Boundary Treatment - Provision of anti-trespass measures and wheel traps at park entrances to prevent anti-social wheeled access.
W	Light Mitigation for Wildlife – Minimise light emission in locations where sensitive habitats and nocturnal species are present to avoid disturbance to wildlife.

Mitigation code	Primary Design Mitigation Measures
X	Light Mitigation for Residents – Provide lighting which avoids light pollution for surrounding residential areas.
Y	Lighting for Passenger Safety – Limit lighting within parks and open space where night-time activity is required for passenger safety.
Z	Maintenance - Public open space maintenance strategies aligned with DCC Parks management objectives including monitoring of reinstatement works in public areas

Primary Mitigation Measures to be applied to each character area of the site during Operational Phase are shown in the Landscape Drawings provided as part of the RO Drawing Pack**.**

21.5.1.3 Secondary Mitigation Measures

Secondary Mitigation Measures designed to address any site specific significant adverse effects remaining after Primary Design measures have been incorporated into the proposed Scheme and as a result of interaction with other disciplines.

Table 21-26: Summary of Secondary Mitigation Measures

Mitigation code	Secondary Mitigation Measures	LLCA
AA	Soft landscape treatment and finishes to walls including noise barriers in specific locations.	LLCA04
BB	Soft landscape treatment to create immediate visual screening.	LLCA01, LLCA10
CC	Ecological mitigation within the landscape character areas.	LLCA03, LLCA05

Secondary Mitigation Measures to be applied to each character area of the site during Operational Phase are shown in the Landscape Drawings provided as part of the RO Drawing Pack**.**

21.5.1.4 LLCA 01

LLCA 01 Royal Canal – Mitigation of Landscape Impacts included within Primary Design

Primary Mitigation Measures incorporated within the proposed Scheme are shown on the Landscape Drawings provided as part of the RO Drawing Pack. There will be public realm proposals for the proposed expansion works at Broombridge Stop -, this is included as Primary Design Mitigation Measure Q-Public Realm. These measures include a new bus set down area, tree planting and seating within the footpath area, a new covered bike parking area, retention of existing tree and screen planting bordering the track and ramps either side of the Canal. Ecological mitigation will include reinstatement of canal side vegetation, Primary Design Mitigation Measure H-Vegetation Reinstatement.

Pedestrian and bicycle access along the Royal Canal Way will be maintained by a new resurfaced section of Greenway which links to Broombridge Road and will pass under the Luas bridge - this is Primary Design Mitigation Measure N- Transport Connectivity. The new Luas bridge over the canal will be dynamic in design to help mitigate the visual obstruction of the heritage arched façade of Broome Bridge, a Key Landscape Feature, Primary Design Mitigation Measure Q-Public Realm.

The public realm proposals at the Broombridge Luas Stop, the improvements to the surface of the Royal Canal Greenway and connectivity over the Canal to the railway will have a positive effect on the landscape character in this area. However, the presence of the new Luas bridge, albeit dynamic in design will obscure the view of the heritage arched façade of Broome Bridge, a Key Landscape Feature and change the tranquil, linear character of this area. The effect on the landscape character with Primary Mitigation Measures will be Significant, Permanent and Negative.

LLCA 01 Royal Canal – Mitigation of Visual Impacts

People using the Canal tow path R005 will experience visual clutter resulting from the proposed Luas bridge and the OCS which will intrude upon the east-west view of the heritage arched façade of Broombridge. Primary Mitigation includes Measure Q-Public Realm, dynamic bridge design (Luas bridge) and Measure H-Vegetation Reinstatement. The visual impact will be as Moderate, Permanent and Negative.

However, for people working in R001, R002, R004, R172, the views towards the proposed Luas bridge cannot be mitigated and the visual impact will be Imperceptible, Permanent and Neutral.

Residents in R003 will experience visual clutter and obstruction of part of the skyline from the proposed Luas bridge and OCS, the visual impact remains as Significant, Permanent and Negative. Secondary Mitigation BB is required at this location to screen the proposed Luas bridge and maintain privacy into the residential properties. Fast growing, evergreen, columnar tree planting will be planted either in the northwest corner of the Broombridge Luas Stop terminal within the amenity grass, or directly in front of the residential properties on the footpath at the corner of Broombridge Road and Bannow Road. Further liaison with the residents of R003 Bannow Road will be carried out to determine if this screening measure is preferred. On implementation of the Secondary Mitigation Measures, the impact will be reduced to Moderate, Permanent and Negative.

21.5.1.5 LLCA 02

LLCA 02 Broombridge Road / Industrial Estate – Mitigation of Landscape Impacts included within Primary Design

Primary Mitigation Measures incorporated within the proposed Scheme are shown on the Landscape Drawings provided as part of the RO Drawing Pack**.**

Along the Broombridge Road corridor, there will be a cycleway and a separate tree-lined footpath on the western side - this is included as Primary Design Mitigation Measure J- Streetscape Planting and Measure Q- Public Realm. These measures will act as a planted buffer between road, cycle path and footpath, to aid traffic calming and to highlight safe crossing points and improve the streetscape quality. The proposed roadside avenue trees are Mitigation Measure L–Tree Strategy and will reinforce the Key Landscape Feature of this character area i.e. the channelled view towards the Tolka Valley Park in a northerly direction.

The cycle way and footpath Primary Design Mitigation O-Connectivity between Spaces will improve connectivity between the Royal Canal towpath and Tolka Valley Park and will strengthen linkages to create green corridors i.e. Primary Design Mitigation M–Biodiversity through the use of pollinator friendly plant mixes.

The Primary Design includes over two thirds of the track as green track in this character area as Primary Design Mitigation I-Track Vegetation. The detailing of abutment walls of the proposed Luas bridge adjacent to footpaths is included as Primary Design Mitigation Q–Public Realm enhancements to create improvements at a pedestrian scale. Additionally, there will be improvements to industrial boundary treatment through Primary Design Mitigation U-Boundary Treatment typologies, which has been agreed with local residential and commercial stakeholders. The effect on the landscape character with Primary Mitigation will be Moderate, Permanent and Positive.

LLCA 02 Broombridge Road / Industrial Estate – Mitigation of Visual Impacts

Primary Mitigation Measures incorporated within the proposed Scheme to reduce visual impacts for people working in Broombridge Road / Industrial Estate R006-R016 include Primary Design Mitigation Measure U-Boundary Treatment typologies; the typologies have been agreed with local commercial stakeholders. These measures combined with the streetscape proposals Q–Public Realm enhancements to create improvements at a pedestrian scale represents a significant positive change to the proposed Scheme in this area.

Additionally, Mitigation Measure L-Tree Strategy, which will reinforce the Key Landscape Feature of this character area i.e. maintain the channelled view towards the Tolka Valley Park in a northerly direction will

mitigate visual obstruction for workers in this location. The visual impact on receptors R006-R016 will be Slight, Permanent and Positive.

21.5.1.6 LLCA 03

LLCA 03 Tolka Valley Park– Mitigation of Landscape Impacts included within Primary Design

Primary Mitigation Measures incorporated within the proposed Scheme are shown on the Landscape Drawings provided as part of the RO Drawing Pack**.** Within the Tolka Valley Park there will be a Mitigation G-Vegetation Removal to minimise the removal of healthy trees, there will be Mitigation Measure H-Vegetation Reinstatement of the Integrated Constructed Wetlands after construction of the proposed bridge and replacement of amenity grassland.

The Primary Design includes Green Track bed in this character area as Primary Design Mitigation I–Track Vegetation and Mitigation J-Streetscape Planting to create a planted buffer between track, pedestrian and bicycle within the park and safety will be reinforced by the inclusion of Mitigation R-Trackside Safety Lighting and using LRT timber bollards to further delineate the green track perimeter and the LRT swept path.

The cycle way and footpath Primary Design Mitigation Measure O-Connectivity between Spaces, will create connectivity between the Tolka Valley Park and St Helena's open space. Mitigation T-SuDS drainage methods will be implemented throughout the park to promote sustainable drainage methods. The Primary Design includes Mitigation Measure V-Barrier Boundary Treatment and the inclusion of anti-trespass measures and wheel traps at park entrances to prevent anti-social wheeled access. There will be minimal lighting within the park (Measure W-Light Mitigation for Wildlife) in accordance with DCC lighting policy, to avoid disturbance to nocturnal species. The proposed Scheme within the park will be maintained as per Mitigation Measure Z in accordance with maintenance strategies aligned with DCC Parks management objectives including monitoring of reinstatement works in public areas.

The presence of the new Luas bridge Mitigation Q-Public Realm, albeit dynamic in design will obscure the view of the Finglaswood Bridge and grass embankments (Key landscape Features), reducing its influence over the character area. Additionally, the presence of the proposed trackside infrastructure (OCS) passing around the former dwelling Finglaswood House (CHC015) will also change the natural landscape setting for this asset.

Secondary Mitigation CC-Ecological Mitigation - will include reinstatement of the Integrated Constructed Wetlands under the proposed Luas bridge. Refer to Chapter 8 (Biodiversity).

The effect on the landscape character with Primary Mitigation will be Significant, Permanent and Negative.

LLCA 03 Tolka Valley Park – Mitigation of Visual Impacts

Primary Mitigation Measures incorporated within the proposed Scheme to reduce visual impacts at this location for people using the park R017 includes green track Mitigation Measure I-Track Vegetation, Mitigation Measure Y-Lighting for Passenger Safety (otherwise, lights will be restricted to along cycleways where night-time activity is required for cyclist safety and Measure W-Light Mitigation for Wildlife, to minimise light emission in locations where sensitive habitats and nocturnal species are present to avoid disturbance i.e. no lights to be facing River Tolka where bats are present. However, views of the proposed Luas bridge, and the OCS create high levels of visual clutter through the park, and they intrude upon the east west view of the river valley, the visual impact for park user R017 will be Moderate, Permanent and Negative.

Mitigation Measure U-Boundary Treatment typologies have been agreed with local stakeholders will maintain the low levels of visual impacts for industrial property owners R013-R016 on Ballyboggan Road and R019 staff of the DCC Park Depot. Their visual impact will be Imperceptible, Permanent and Neutral.

Residents in R020- R021 will also notice Measure U-Boundary Treatment typologies and Measure X-Light Mitigation for Residents, which avoids pollution. Local residents will still have visibility the proposed Luas bridge and OCS causing a degree of visual clutter reducing the visual amenity towards the park. The visual impact for R020- R021 will be Significant, Permanent and Negative.

21.5.1.7 LLCA 04

LLCA 04 St Helena's – Mitigation of Landscape Impacts included within Primary Design

Primary Mitigation Measures incorporated within the proposed Scheme are shown on the Landscape Drawings provided as part of the RO Drawing Pack.

Measure G-Vegetation Removal will minimise removal of existing trees in the northern part of the open space and close to St Helena's House and Measure I-Track Vegetation will maintain the soft character of the space. Mitigation Measure K-Woodland Vegetation, includes the use of native woodland to along eastern perimeter which will create visual screening for the residential area and enhance the space as an ecological corridor.

Mitigation Q-Public Realm proposal at the northern end of the space will include trackside seating and resting areas to consider the site's topography (high point of the area) and take advantage of the views to the Tolka Valley Park, the urban skyline and the Wicklow mountains as well as towards the western façade of St Helena's House (Key landscape Features). Also, at the northern end of this character area where St Helena's Stop will be located, there will be community facilities comprising a garden, outdoor educational areas, and child play facilities to encourage activity and natural surveillance. Tree and shrub planting plus street furniture will create a sense of enclosure and enhance streetscape value in this character area and complement the historical setting of St Helena's Resource Centre and the adjacent Childcare Centre.

Mitigation R-Trackside Safety and the use of LRT timber bollards, will delineate the green track perimeter, and the LRT swept path to increase trackside safety to further. Measure W-Light Mitigation for Wildlife, will ensure the eastern side of the open space remains unlit and dark to facilitate bat commuting routes.

The proposed Scheme within the park will be maintained as per Mitigation Measure Z in accordance with maintenance strategies aligned with DCC Parks management objectives including monitoring of reinstatement works in public areas.

The effect on the landscape character with Primary Mitigation will be Slight, Permanent and Positive.

LLCA 04 St Helena's – Mitigation of Visual Impacts

Primary Mitigation K-Woodland Vegetation includes the use of native woodland to along eastern perimeter will create visual screening for the residential area (R020, R025, R026, R033, R034, R035, R036, R021, R022, R023, R027, R028, R029, R030, R031, R032, R038, R039, R040 and R043). Mitigation X- Light Mitigation for Residents, will reduce light pollution for local people. Their visual impact will be Moderate, Permanent and Positive.

For people passing through the linear open space (R018), Mitigation L-Tree Strategy will maintain channelled views to the south and, in addition, to the improved visual amenity from Mitigation Q-Public Realm. The visual impact will be Slight, Permanent and Positive.

Measure U-Boundary Treatment typologies have been agreement with local stakeholders, these will enhance privacy and maintain the low levels of visual impacts for local workers (R037, R041, and R045). Their visual impact will remain as Slight, Permanent and Positive.

For Staff and visitors in the St Helena's Childcare Centre (R042), Mitigation U -Boundary Treatment typologies, will be applied to the 2.25m high noise barrier on the northern side of the Childcare Centre and will improve local privacy for users of this resource. Secondary Mitigation AA is required at this location to soften the appearance of the wall/noise barrier and to assimilate the wall into the area. Fast growing, evergreen, flowering climbing plants will be grown against the internal and external surface of the wall. On implementation of the Secondary Mitigation Measures the impact will be Slight, Permanent and Positive.

21.5.1.8 LLCA 05

LLCA 05 Farnham Park – Mitigation of Landscape Impacts within Primary Design

Primary Mitigation Measures incorporated within the proposed Scheme are shown on the Landscape Drawings provided as part of the RO Drawing Pack. Within Farnham Park Mitigation Measure G-Vegetation Removal will minimise the loss of healthy trees around the perimeter of the park which is a Key Landscape Feature. The Primary Design includes green track in this character area as Primary Design Mitigation I-Track Vegetation and Mitigation J-Streetscape Planting to create a planted buffer between track, pedestrian and bicycle within the park. Safety will be reinforced by the inclusion of Mitigation R-Trackside Safety Lighting and through the use of LRT timber bollards to further delineate the green track perimeter and the LRT swept path. Secondary Mitigation Measures CC-Ecological Mitigation will include replacement of amenity grassland utilised by protected wintering bird species. Refer to Chapter 8 (Biodiversity).

Mitigation Measure P-Open Space will ensure relocation of the established sports pitches as opposed to removal and Mitigation Measure S-Trackside Safety Fencing will provide ball stop fencing beside the LRT line and the east of the sport pitches to protect LRT passage.

Mitigation Measure O- Connectivity between Spaces will improve movement between local spaces by provision of new footpaths and removal of fencing. Footpaths will be constructed in between the sports pitches and the trackside infrastructure. A cycleway and footpath will also be constructed on the eastern side of the park. Earth mounding will create a spectator view for the sports pitches.

The proposed Scheme within the park will be maintained as per Mitigation Measure Z in accordance with maintenance strategies aligned with DCC Parks management objectives including monitoring of reinstatement works in public areas.

The effect on the landscape character with Primary Mitigation will be Slight, Permanent and Negative.

LLCA 05 Farnham Park – Mitigation of Visual Impacts

Mitigation G-Vegetation Removal will minimise the removal of existing trees, will maintain the screening effect of the perimeter planting for residents in R046-R049, R050, and R054. Mitigation W-Light Mitigation for Wildlife will ensure lighting is located at pedestrian track crossing points on eastern boundary to reduce light emission for sensitive habitats and nocturnal species (bats). Their visual impact will be Slight, Permanent and Negative.

Mitigation I-Track Vegetation, the use of Green Track bed treatment rather than a hard track design will minimise impacts on the visual amenity of the park for people using the open space (R044). Their visual impact will be Slight, Permanent and Negative.

21.5.1.9 LLCA 06

LLCA 06 Wellmount Road – Mitigation of Landscape Impacts included within Primary Design

Primary Mitigation Measures incorporated within the proposed Scheme are shown on the Landscape Drawings provided as part of the RO Drawing Pack. Mitigation Measure G-Vegetation Removal, there will be minimal removal of existing trees along Casement Road at the southern end of this character area, and additional tree planting will be concentrated on the eastern side of the proposed track to reinforce existing planting. Measure X-Light Mitigation for Residents and Measure W-Light Mitigation for Wildlife will ensure that proposed lighting will be restricted to one side of the track to minimise nighttime glare to maintain the dark corridors for bats. Measure I-Track Vegetation, will help maintain the green soft character of this linear space.

Mitigation J-Streetscape Planting will create a planted buffer between track, pedestrian and bicycle within the linear space and safety will be reinforced by the inclusion of Mitigation R-Trackside Safety Lighting.

Mitigation O-Connectivity between Spaces, will improve movement between local open space by provision of new footpaths and removal of fencing. The effect on the landscape character with Primary Mitigation will be Slight, Permanent and Negative.

LLCA 06 Wellmount Road – Mitigation of Visual Impacts

Mitigation Measure X-Light Mitigation for Residents, will be applied and will reduce light pollution for these residents (R051-R053, R054-R056, R057, R059, R061, R062, R069-R075) plus Mitigation I-Track Vegetation will avoid changes to visual amenity of this linear space. Their visual impact will be Slight, Permanent and Negative.

Mitigation U-Boundary Treatment typologies, these have been agreed with local residents in Ravens Court (R076) and from the overlooking properties of R073-R075 on Cardiff Castle Road. In Raven's Court the proposed western boundary wall will be 2m high. The proposed wall will in itself cause visual obstruction of views resulting in a Significant, Permanent and Negative visual impact for R076. Secondary Mitigation AA is required at this location to soften the appearance of the wall and to assimilate the wall into the linear park. Fast growing, evergreen, flowering climbing plants will be grown against the external surface of the wall. Further liaison with the residents of Ravens Court (R076) will be carried out to determine if planting is preferred for the internal wall finish inside the cul de sac. On implementation of the Secondary Mitigation Measures the impact will still be Significant, Permanent and Negative.

Mitigation I-Track Vegetation will be applied, and the use of Green Track bed treatment rather than a hard track design will minimise impacts on the visual amenity of the park for people using the open space (R060 and R063). Their visual impact will be Slight, Permanent and Neutral.

Mitigation G-Vegetation Removal will be applied to minimise the loss of existing trees at this location. This will maintain the screening effect of the perimeter planting for receptors working in R058, R064, and R081 in combination with Mitigation J-Streetscape Planting. These measures will reduce visibility towards the proposed Scheme. The visual impacts for receptors will remain as Imperceptible, Permanent and Neutral.

21.5.1.10 LLCA 07

LLCA 07 Finglas Main Street West – Mitigation of Landscape Impacts included within Primary Design

Primary Mitigation measures incorporated within the proposed Scheme are shown on the Landscape Drawings provided as part of the RO Drawing Pack. These include Mitigation Measures G-Vegetation Removal, and this will minimise loss of existing trees along Mellowes Road and will preserve the channelled view towards the prominent buildings of the Civic Offices on the northern side and the Garda station on the southern side (Key Landscape Feature).

Mitigation Q-Public Realm will be applied and will provide streetscape enhancements, proposed street furniture including seating areas, shelters, bicycle storage and signage. Paving will comprise granite paving either side of the proposed Stop and a separate tree-lined footpath. The track will be granite paved (Embedded Track) in this character area directly in front of the civic buildings, but green track elsewhere (Mitigation I-Track Vegetation).

The effect on the landscape character with Primary Mitigation will be Slight, Permanent and Positive.

LLCA 07 Finglas Main Street West – Mitigation of Visual Impacts

Mitigation G-Vegetation Removal will be applied in this location to minimise the loss of existing trees and will maintain the screening effect of the perimeter planting for residential receptors R077, in combination with Mitigation J-Streetscape Planting. These measures will allow visibility of the public realm improvements, Mitigation Q-Public Realm and reduce visibility towards the track infrastructure. The visual impacts for receptors will be Slight, Permanent and Positive.

For receptors R082, R084, R085, R086, R083 and R086 the implementation of J-Streetscape Planting will provide a planted buffer between track, road, cycle path and footpath, to aid traffic calming and to highlight

safe crossing points and allow visibility of the public realm improvements Mitigation Q-Public Realm. The impact will remain as Imperceptible, Permanent and Positive.

21.5.1.11 LLCA 08

LLCA 08 Mellowes Park – Mitigation of Landscape Impacts included within Primary Design

Primary Mitigation measures incorporated within the proposed Scheme are shown on the Landscape Drawings provided as part of the RO Drawing Pack. These include Mitigation Measures G-Vegetation Removal, to minimise the loss of existing trees except where necessary for the track alignment and for the proposed substation access.

Mitigation Measure P-Open Space, will be implemented to relocate open space areas and sports pitches as opposed to removal of these facilities; this will maintain a circular walk / jogging trail within the park.

Measures X-Light Mitigation for Residents, and W-Light Mitigation for Wildlife, will ensure that light emissions will be restricted to one side of the track to minimise nighttime glare and allow for dark corridors for bats. Measure R-Trackside Safety Lighting will provide safe, lit, crossing points of Luas tracks for pedestrians and cyclists, with LRT timber bollards (in park areas) to further delineate the green track perimeter and the LRT swept path. Mitigation I-Track Vegetation will help maintain the green, planted character of this linear space.

Measure S-Trackside Safety Fencing (ball stop fencing), will be implemented beside the LRT along the eastern boundary of park and will protect the LRT passage. Measure T-Drainage will include SuDS attenuation areas will be incorporated along the eastern side of the park.

The proposed Scheme within the park will be maintained as per Mitigation Measure Z, in accordance with maintenance strategies aligned with DCC Parks management objectives including monitoring of reinstatement works in public areas.

The effect on the landscape character with Primary Mitigation will be Slight, Permanent and Negative.

LLCA 08 Mellowes Park – Mitigation of Visual Impacts

Primary Mitigation L-Tree Strategy, will be applied to this park including the implementation of avenue trees, and linear planted areas which will reduce visibility of the LRT for Residents in R094-R117. Mitigation X-Light Mitigation for Residents, will also be applied to minimise light emissions and reduce light pollution. The visual impact for R094-R117 will be Slight, Permanent and Negative.

Primary Mitigation L-Tree Strategy, will be applied to this park including the implementation of avenue trees, and linear planted areas which will reduce visibility of the LRT for Residents in R125-127. Mitigation X-Light Mitigation for Residents, will also be applied to minimise light emissions and reduce light pollution. The visual impact for R125-R127 will be Moderate, Permanent and Negative.

For people using the open space (R065) Mitigation Measure I-Track Vegetation, will be implemented, and the green track bed treatment rather than a hard track design will reduce visibility of the LRT line. Their visual impact will be Slight, Permanent and Negative.

21.5.1.12 LLCA 09 /09A

LLCA 09 / 09A Finglas Road Corridor – Mitigation of Landscape Impacts included within Primary Design

Primary Mitigation measures incorporated within the proposed Scheme are shown on the Landscape Drawings provided as part of the RO Drawing Pack. These include Mitigation Measures G-Vegetation Removal to minimise the removal of existing trees, in particular those along Casement Road that visually separate the residential area from the road corridor.

Measure J-Streetscape Planting will be applied in this area including the provision of Street trees and soft landscape areas along North Road to act as a planted buffer, to aid traffic calming and to highlight safe crossing points for pedestrians and cyclist.

The effect on the landscape character with Primary Mitigation will be Slight, Permanent and Positive.

LLCA 09 09 / 09A Finglas Road Corridor – Mitigation of Visual Impacts

For residents in Casement Road R128-R130 the implementation of Mitigation G-Vegetation Removal will minimise the loss of existing trees, in combination with Mitigation J-Streetscape Planting along North Road, will help create visual screening for residents towards the proposed Park & Ride. However, due to the height of the proposed Park & Ride the potential effects on receptors R128-R130 will be Significant, Permanent and Negative.

Mitigation I-Track Vegetation and the use of green track bed treatment over a portion of the track at the road junction will reduce visibility of the proposed Scheme for residents in North Road R131-R135. Mitigation Q-Public Realm enhancements including planting, street furniture and seating areas, in combination with the removal of the roundabout and the pedestrian footbridge will create an improvement to the visual amenity of this area. The potential effects on receptors R131-R135 will be Slight, Permanent and Positive.

21.5.1.13 LLCA 10

LLCA 10 Charlestown / St Margaret's – Mitigation of Landscape Impacts included within Primary Design

Primary Mitigation Measures incorporated within the proposed Scheme are shown on the Landscape Drawings provided as part of the RO Drawing Pack. These include Measure J-Streetscape Planting, the provision of street trees and soft landscape areas which will create a planted buffer between track, road, cycle path and footpath, to aid traffic calming and to highlight safe crossing points. Measure J in combination with Measures I-Track Vegetation, Green Track bed treatment, will create streetscape improvements along the road corridor.

Mitigation Measure Q-Public Realm will provide enhancements and street furniture including seating areas, combined with Measure U- Boundary Treatment typologies, which will mitigate impacts on visual amenity by the proposed Scheme and will further improve the character of the road corridor.

The effect on the landscape character with Primary Mitigation remain as Slight, Permanent and Positive.

LLCA 10 Charlestown / St Margaret's – Mitigation of Visual Impacts

Residents in R135, R138, R150, R153 -R155, R157, R159, R160-R162, R170- R171 will have their visual impacts of the proposed Scheme reduced by the implementation of Mitigation I-Track Vegetation, green track bed treatment, which will replace 50% of the road surface. Mitigation Q-Public Realm enhancements including planting, street furniture and seating areas will also create an improvement to the visual amenity of this area. The potential effects on these residential receptors will remain as Moderate, Permanent and Positive.

Resident in St Margaret's Court (R151) will have a new vehicular access created to the rear of their properties off the Jamestown Business Park Access Road. Mitigation Measure U-Boundary Treatment typologies will delineate the proposed Scheme from front gardens, but high levels of visual intrusion will remain due to the proximity of the proposed Scheme. The potential effect will be Significant, Permanent and Negative**.** Secondary Mitigation BB is required at this location to screen the proposed Scheme and maintain privacy of the residential properties. Fast growing, evergreen, columnar tree planting will be planted either inside the front garden or in the footpath to screen visibility of the proposed Scheme. Further liaison with the residents of St Margaret's Court (R151) will be carried out to determine if this screening measure is preferred. On implementation of the Secondary Mitigation Measures the impact will be Significant, Permanent and Negative.

Mitigation Measure J-Streetscape Planting will provide a planted buffer between track, road, cycle path and footpath, to aid traffic calming and to highlight safe crossing points. This will benefit people using the sports pitches (R165) and reduce visibility towards the proposed Scheme. The potential effects will be Imperceptible, Permanent and Neutral.

Receptors working in R141-R149, R152, R156, R158, R163, R164, R166 will have reduced visual impacts from the proposed Scheme by the implementation Mitigation J-Streetscape Planting. The planted buffer between track, road, cycle path and footpath, will aid traffic calming and highlight safe crossing points and will allow visibility of the public realm improvements (Measure Q). The impact for these receptors will be Imperceptible, Permanent and Positive.

21.5.1.14 Summary for LLCA 01 through LLCA10 of Operational Phase Landscape and Visual Effects

Table 21-27 and Table 21-28 below provide a summary of landscape and visual effects in the Operational Phase.

Table 21-27: Summary of Operational Phase Effects on LLCA's

Operational Phase Landscape Effects								
Local Landscape Character Area (LLCA) Classification/category	**Evaluation of Baseline Sensitivity**	**Evaluation of Magnitude of Change**	**Significance of Predicted Effects**	**Quality of Effects**	**Duration of Effects**	**Primary Design Mitigation Measures as described in 21.5.1.2**	**Secondary Mitigation Measures as described in 21.5.1.3**	**Significance and Quality of Residual Effects (trees 10 years of maturity)**
LLCA 01 Royal Canal	High	High	Significant	Negative	Permanent	H, N, Q	None	Significant, Negative,
LLCA 02 Broombridge Road / Industrial Estate	Low	Medium	Slight	Positive	Permanent	I, J, L, M, O, Q, U	None	Slight, Positive
LLCA 03 Tolka Valley Park	High	High	Significant	Negative	Permanent	G, H, I, J, L, O, Q, R, T, V, W, Z	None	Significant, Negative,
LLCA 04 St Helena's	Low	Medium	Slight	Positive	Permanent	G, I, K, Q, R, W, Z	None	Slight, Positive
LLCA 05 Farnham Park	Medium	Medium	Slight	Negative	Permanent	G, I, O, J, P, R, S, Z	CC	Slight, Negative,
LLCA 06 Wellmount Road	Medium	Medium	Slight	Negative	Permanent	G, I, J, O, R, W, X	None	Slight, Negative,
LLCA 07 Finglas Main Street West	Low	Medium	Slight	Positive	Permanent	G, Q, I	None	Slight, Positive,
LLCA 08 Mellowes Park	Medium	Medium	Slight	Negative	Permanent	G, I, P, R, S, T, X, W, Z	None	Slight, Negative,
LLCA 09/09a Finglas Road Corridor	Low	High	Slight	Positive	Permanent	G, J	None	Slight, Positive
LLCA 10 Charlestown / St Margaret's	Low	High	Slight	Positive	Permanent	J, I, Q, U	None	Slight, Positive

Table 21-28: Summary of Operational Phase Effects on Visual Receptors

Operational Phase Visual Effects								
Visual Receptors (R) located in each LLCA (see Volume 4 – Map Figure 21-6 for location of each receptor)	**Evaluation of Baseline Sensitivity**	**Evaluation of Magnitude of Change**	**Significance of Predicted Effects**	**Quality of Effects**	**Duration of Effects**	**Primary Design Mitigation Measures as described in 21.5.1.2**	**Secondary Mitigation Measures as described in 21.5.1.3**	**Significance and Quality of Residual Effects (trees 10 years of maturity)**
LLCA 01 R001, R002, R004, R172 Workers in industrial buildings on the south side of Broombridge Luas Stop and passenger on Luas and Irish Rail	Low	Low	Imperceptible	Neutral	Permanent	None	None	Imperceptible
R003 Six Residential properties on the south side of Broombridge Luas Stop on Bannow Road	High	Medium	Moderate	Negative	Permanent	None	BB	Moderate, Negative
R005 People using Royal Canal Towpath (Open Space)	Medium	High	Moderate	Negative	Permanent	H, Q	None	Moderate Negative
LLCA 02 R006-R016 Workers in Broombridge Road / Industrial Estate	Low	Medium	Slight	Positive	Permanent	L, Q, U	None	Imperceptible
LLCA 03 R017 People using Tolka Valley park - (Open Space)	Medium	High	Moderate	Negative	Permanent	I, W, Y	CC	Moderate, Negative
R013 – R016, R019 Workers in DCC depot in Park and Industrial buildings on Ballyboggan Road	Low	Low	Imperceptible	Neutral	Permanent	U	None	Imperceptible
R020, R021 comprising 26 Residential properties on Barnamore Grove and Barnamore Park and Carrigallen Park	High	High	Significant	Negative	Permanent	U, X,	None	Moderate, Negative
LLCA 04	High	Medium	Moderate	Positive	Permanent	K, X,	None	Slight, Positive

Operational Phase Visual Effects								
Visual Receptors (R) located in each LLCA (see Volume 4 – Map Figure 21-6 for location of each receptor)	**Evaluation of Baseline Sensitivity**	**Evaluation of Magnitude of Change**	**Significance of Predicted Effects**	**Quality of Effects**	**Duration of Effects**	**Primary Design Mitigation Measures as described in 21.5.1.2**	**Secondary Mitigation Measures as described in 21.5.1.3**	**Significance and Quality of Residual Effects (trees 10 years of maturity)**
35 east-facing Residential properties on Barnamore Grove and Barnamore Park (R025, R026, R033, R034, R035, R036) and 39 south / north-facing properties on Carrigallen Park, Carrigallen Drive, Gortmore Road, Gortmore Drive, St Helena's Drive, St Helena's Court (R022, R023, R027, R028, R029, R030, R031, R032, R038, R039, R040), and four east-facing properties on Dunsink Road (R043)								
R037, R041, R042, R045 Staff and visitors in the Youth Service Den building, St Helena's Resource Centre, St Helena's Childcare Centre, St Malachy's Mixed National School	Low	Medium	Slight	Positive	Permanent	U	AA	Slight, Positive
R018 People using the linear Open Space	Low	Medium	Slight	Positive	Permanent	L,	None	Slight, Positive
LLCA 05 R046-R049, R050 Residents in 25 properties Dunsink Road (R046-R049), Casement Road (R050) and Farnham Crescent (R054)	High	Low	Slight	Negative	Permanent	G, W,	None	Slight, Negative
R044 People using the park and the formal pitches	Low	Medium	Slight	Negative	Permanent	I	None	Slight, Negative
LLCA 06	High	Low	Slight	Negative	Permanent	X, I	None	Slight, Negative

Operational Phase Visual Effects								
Visual Receptors (R) located in each LLCA (see Volume 4 – Map Figure 21-6 for location of each receptor)	**Evaluation of Baseline Sensitivity**	**Evaluation of Magnitude of Change**	**Significance of Predicted Effects**	**Quality of Effects**	**Duration of Effects**	**Primary Design Mitigation Measures as described in 21.5.1.2**	**Secondary Mitigation Measures as described in 21.5.1.3**	**Significance and Quality of Residual Effects (trees 10 years of maturity)**
Residents of 70 east and south-facing properties on Casement Road (R051-R053), Farnham Crescent (R054-R056), Wellmount Road (R057), Wellmount Parade (R059), Aylward Green off Cappagh Road (R060), Little Sisters of the Assumption Building (R062), Cardiff Castle Road (R069-R072)								
Residents 18 properties in Raven's Court (R076) and (R073-R075) on Cardiff Castle Road	High	High	Significant	Negative	Permanent	U	AA	Significant, Negative
Pupils and staff in the St Michael's Holy Faith Secondary School (R058), visitors to the Kingdom Hall of Jehovah's Witnesses (R064), and staff in Finglas Garda Station (R081)	Low	Low	Imperceptible	Neutral	Permanent	G, J	None	Imperceptible
Users of the sport pitches (R060) and the linear open space (R063)	Low	Medium	Slight	Neutral	Permanent	I,	None	Imperceptible
LLCA 07 Staff in Finglas Garda Station (R082) (building R0081 will be demolished) will have visibility of the construction works on Mellowes Road as will staff and visitors to Mellow Spring Childcare Development Centre (R084), Finglas Sports and Fitness Centre	Low	Low	Imperceptible	Positive	Permanent	J, Q	None	Imperceptible

Operational Phase Visual Effects								
Visual Receptors (R) located in each LLCA (see Volume 4 – Map Figure 21-6 for location of each receptor)	**Evaluation of Baseline Sensitivity**	**Evaluation of Magnitude of Change**	**Significance of Predicted Effects**	**Quality of Effects**	**Duration of Effects**	**Primary Design Mitigation Measures as described in 21.5.1.2**	**Secondary Mitigation Measures as described in 21.5.1.3**	**Significance and Quality of Residual Effects (trees 10 years of maturity)**
(R085), Finglas Youth Resource Centre (R086) and Finglas Fire Station (R083) from south-facing windows and from the car parks.								
Residents of 20 north-facing properties on Mellowes Crescent (R077)	High	Low	Slight	Positive	Permanent	G, J, Q	None	Slight, Positive
LLCA 08 Mellowes Park open space (R065).	Low	Medium	Slight	Negative	Permanent	I	None	Imperceptible
Residents of 41 properties R094-R117 on Casement Road	High	Low	Slight	Negative	Permanent	L, X	None	Slight, Negative
Residents of 12 properties in R125-R127 on Casement Road	High	Medium	Moderate	Negative	Permanent	L, X	None	Moderate, Negative
LLCA 09/09a Residents of 14 west-facing properties on North Road (R131-R135)	High	Low	Slight	Positive	Permanent	I, Q,	None	Slight, Negative
Residents of 17 east facing properties on Casement Road (R128-R130)	High	High	Significant	Negative	Permanent	G, J	None	Moderate, Negative
LLCA 10 Residents of 37 east and west facing properties on North Road (R135), St Margaret's Road (R150, R152-R165), and 12 properties in Melville Lawn (R170) and 20	High	Medium	Moderate	Positive	Permanent	I, Q	None	Slight, Positive

Operational Phase Visual Effects								
Visual Receptors (R) located in each LLCA (see Volume 4 – Map Figure 21-6 for location of each receptor)	**Evaluation of Baseline Sensitivity**	**Evaluation of Magnitude of Change**	**Significance of Predicted Effects**	**Quality of Effects**	**Duration of Effects**	**Primary Design Mitigation Measures as described in 21.5.1.2**	**Secondary Mitigation Measures as described in 21.5.1.3**	**Significance and Quality of Residual Effects (trees 10 years of maturity)**
properties above Charlestown Shopping Centre (R171)								
For Residents of one property on McKee Avenue (R138), closest to the Park & Ride, St Margaret's Road Stop, secondary construction compound	High	High	Significant	Negative	Permanent	U,	BB	Moderate, Negative
For Residents of 12 properties in St Margaret's Court (R151)	High	High	Significant	Negative	Permanent	U,	BB	Significant, Negative
Users of McKelvey Celtic AFC pitches (R0165)	Low	Low	Imperceptible	Neutral	Permanent	J	None	Imperceptible
Workers in comercial and industrial units (R141-R149, R152, R156, R158, R163, R164, R166)	Low	Low	Imperceptible	Positive	Permanent	J, Q	None	Imperceptible

21.6 Residual Impacts

Following the implementation of Primary Design Mitigation Measures as described in section 21.5.1.2 and Table 21-25 and Secondary Mitigation Measures described in 21.5.1.3 and Table 21-26, including the establishment (10 years of growth to a semi-mature state for the proposed 916 trees) of mitigation measures, due to gradual acceptance of the proposed changes by receptors, the proposed Scheme will become increasingly integrated within its landscape (townscape) setting and the residual impacts will reduce over time.

21.6.1 Negative Residual Impacts

The following residual Negative impacts of Moderate or Greater Significance on local landscape character areas (LLCA) and visual receptors will remain during the Operational Phase:

- Landscape character of LLCA 01 Royal Canal;
- Landscape character of LLCA 03 Tolka Valley Park;
- Visual amenity for six residential properties on Bannow Road (R003);
- Visual amenity for people using Royal Canal towpath (R005);
- Visual amenity for people using Tolka Valley Park (R017);
- Visual amenity for 26 residential properties (overlooking Tolka Valley Park) on Barnamore Grove, Barnamore Park and Carrigallen Park (R020 and R021);
- Visual amenity for 18 residential properties of Raven's Court (R076) and Cardiff Castle Road (R073-R075);
- Visual amenity for 29 residential properties on Casement Road (R125-R130);
- Visual amenity for one residential property on McKee Avenue (R138); and
- Visual amenity for 12 residential properties on St Margaret's Court (R151).

21.6.2 Positive Residual Impacts

Following the implementation of Primary Design Mitigation Measures as described in section 21.5.1.2 and Table 21-25 and Secondary Mitigation Measures described in 21.5.1.3 and Table 21-26, the proposed Scheme will have post-mitigation residual Positive impacts of Slight or greater Significance on the settings and visual amenity of the following local landscape character areas (LLCA) and visual receptors:

- Landscape character of LLCA02 Broombridge Road;
- Landscape character of LLCA04 St Helena's;
- Landscape character of LLCA07 Finglas Main Street West;
- Landscape character of LLCA09/09a Finglas Road Corridor;
- Landscape character of LLCA10 Charlestown / St Margaret's;
- Visual amenity for 78 residential properties (overlooking St Helena's open space) on Barnamore Grove, Barnamore Park, (R025, R026, R033, R034, R035, R036), Carrigallen Park, Carrigallen Drive, Gortmore Road, Gortmore Drive, St Helena's Drive, St Helena's Court, (R022, R023, R027, R028, R029, R030, R031, R032, R038, R039, R040) and Dunsink Road (R043);
- Visual amenity for workers in the Youth Service Den building (R037), St Helena's Resource Centre (R041), St Helena's Childcare Centre (R042), St Malachy's Mixed National School (R045);
- Visual amenity for people using St Helena's Open Space (R018);
- Visual amenity for 20 residential properties on Mellowes Crescent (R077); and
- Visual amenity for 69 residential properties on North Road (R135), St Margaret's Road (R150, R152-R165); Melville Lawn (R170) and properties above Charlestown Shopping Centre (R171).

21.7 Difficulties Encountered in Compiling Information

The visual impact assessment for elevated properties such as apartments around Charlestown Shopping Centre in LLCA 10 was made from the public domain and based on ground level views. The proposed Scheme 3D model / fly through assisted in understanding visibility from the elevated locations.

21.8 References

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Transport Infrastructure Ireland

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