

Chapter 17
Landscape
(Townscape)
& Visual

Contents

17. Landscape (Townscape) & Visual	1
17.1 Introduction	1
17.2 Methodology	2
17.2.1 Study Area	2
17.2.2 Relevant Legislation, Policy and Guidelines	2
17.2.3 Data Collection and Collation	4
17.2.4 Appraisal Method for the Assessment of Impacts	5
17.3 Baseline Environment	15
17.3.1 City Context	15
17.3.2 Overview of Route of the Proposed Scheme	15
17.3.3 Landscape, Townscape and Visual Planning Policy	15
17.4 Potential Impacts	22
17.4.1 Characteristics of the Proposed Scheme	22
17.4.2 Do Nothing Scenario	29
17.4.3 Construction Phase	29
17.4.4 Operational Phase	38
17.5 Mitigation and Monitoring Measures	48
17.5.1 Construction Phase	48
17.5.2 Operational Phase	51
17.6 Residual Impacts	63
17.6.1 Construction Phase	63
17.6.2 Operational Phase	65
17.7 Conclusion	67
17.8 References	68

17. Landscape (Townscape) & Visual

17.1 Introduction

This Chapter of the Environmental Impact Assessment Report (EIAR) has considered the potential landscape (townscape) and visual impacts associated with the Construction and Operational Phases of the Swords to City Centre Core Bus Corridor Scheme (hereafter referred to as the Proposed Scheme).

During the Construction Phase, the potential landscape (townscape) and visual impacts associated with the development of the Proposed Scheme have been assessed. This included streetscape disturbance, impacts on property boundaries, removal of trees and vegetation, traffic issues and the general visual intrusion of construction activities due to utility diversions, road resurfacing and road realignments.

During the Operational Phase, the potential landscape (townscape) and visual impacts associated with changes to the physical layout of the street, alteration of views and the visual character and changes to the urban realm have been assessed.

The assessment has been carried out according to best practice and guidelines relating to landscape (townscape) and visual assessment, and in the context of similar large-scale infrastructural projects.

The aim of the Proposed Scheme when in operation is to provide enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin Region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor. The objectives of the Proposed Scheme are described in Chapter 1 (Introduction & Environmental Impact Assessment Process). The Proposed Scheme, which is described in Chapter 4 (Proposed Scheme Description), has been designed to meet these objectives. The specific objective applicable to this assessment is:

- Ensure that the urban realm is carefully considered in the design and development of the transport infrastructure and seek to enhance key urban focal points where appropriate and practicable.

The design of the Proposed Scheme has evolved through a comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts where practicable, whilst ensuring the objectives of the Proposed Scheme are attained. In addition, feedback received from the comprehensive consultation programme undertaken throughout the option selection and design development process have been incorporated where appropriate.

17.2 Methodology

17.2.1 Study Area

The Proposed Scheme has an overall length of approximately 12 kilometres (km) and commences south of Swords at Pinnock Hill Junction and travels in a southerly direction along the R132 Swords Road past Airside Retail Park, Dublin Airport and Santry Park. The route continues on the R132 past Santry Demesne, where the Swords Road joins the R104 at Coolock Lane. The route continues on the R132 in a southerly direction through Santry village. It continues along the Swords Road past Whitehall to Griffith Avenue. The route follows Drumcondra Road Upper past the Dublin City University (DCU) St Patrick's Campus to the river Tolka. It continues through Drumcondra, on Drumcondra Road Lower to Binns Bridge on the Royal Canal. From there it continues on Dorset Street Lower as far as Eccles Street, where it continues on Dorset Street Upper to North Frederick Street/Parnell Square East and Granby Row/Parnell Square West. A detailed description of the Proposed Scheme is provided in Chapter 4 (Proposed Scheme Description).

The primary study area is a boundary-to-boundary road/street corridor along the Proposed Scheme, which incorporates the immediately adjoining landscapes, including open spaces, parks, gardens and other land use areas, together with amenity, landscape/townscape and visual planning considerations. This study area also extends where required to incorporate wider viewpoints to the Proposed Scheme (e.g. views along River Tolka and Royal Canal – refer to Figure 17.1 in Volume 3 of this EIAR).

17.2.2 Relevant Legislation, Policy and Guidelines

The assessment has been carried out with reference to the following legalisation, policy and guidelines:

17.2.2.1 Legislation

- Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (the Environmental Impact Assessment (EIA) Directive);
- Planning and Development Act 2000, as amended;
- Planning and Development Regulations 2001, as amended; and
- Council of Europe Landscape Convention 2000 (ETS No.176).

17.2.2.2 Policy

- Dublin City Development Plan 2022-2028 (DCC 2022);
- Fingal County Development Plan 2023-2029 (FCC 2023);
- Dublin City Tree Strategy 2016-2020 (DCC 2016b);
- Dublin City Parks Strategy 2019-2022 (DCC 2019);
- Dublin Airport Local Area Plan 2020 (FCC 2020);
- Department of Transport (DoT) National Cycle Policy Framework (DoT 2009); and
- National Transport Authority (NTA) Greater Dublin Area Cycle Network Plan (NTA 2013).

17.2.2.3 Guidelines

- Environmental Protection Agency (EPA) Guidelines on the Information to be contained in Environmental Impact Assessment Reports (hereafter referred to as the EPA Guidelines EPA 2022);
- Landscape Institute and the Institute of Environmental Management and Assessment (IEMA) Guidelines for Landscape and Visual Impact Assessment (hereafter referred to as the GLVIA) 3rd edition (Landscape Institute and IEMA 2013);
- Landscape Institute Technical Information Note 05/2017 (Revised 2018) on Townscape Character Assessment (hereafter referred to as the TCA) (Landscape Institute 2018);

- Department of Housing, Planning and Local Government (DHPLG) Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (hereafter referred to as the GEIA) (DHPLG 2018); and
- Landscape Institute Technical Guidance Note 06/2019 on Visual Representation of Development Proposals (hereafter referred to as the VRDP) (Landscape Institute 2019).

While the EPA Guidelines (EPA 2022) provide a general methodology, impact ratings and assessment structure applicable across all environmental assessments, the GLVIA (Landscape Institute and IEMA 2013) provides specific guidance for landscape and visual impact assessments. The TCA (Landscape Institute 2018) is a resource for the application of landscape character assessment to townscapes. Therefore, in this Chapter, a combination of the approaches outlined in the EPA Guidelines (EPA 2022) and in the GLVIA (Landscape Institute and IEMA 2013), supported by the TCA (Landscape Institute 2018) and the professional experience and expertise of the assessor, is utilised in the landscape and visual assessment.

17.2.2.4 Key Definitions

The following key definitions are relevant to the methodology for the landscape and visual impact assessment:

Landscape: 'means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors' (Council of Europe 2000).

Townscape: 'the landscape within the built-up area, including the buildings, the relationship between them, the different types of urban open spaces, including green spaces and the relationship between buildings and open spaces' (Landscape Institute and IEMA 2013). Different combinations and spatial distribution of these elements create variations in townscape character. In this assessment, 'Townscape' is used to describe built-up areas of a medium to large extents, generally equivalent to neighbourhood scale or larger.

Streetscape: 'The term 'streetscape' refers to the design quality of the street and its visual effect, particularly how the paved area (carriageway and footway) is laid out and treated' (CABE and ODPM 2002). Streetscape 'is a term used to describe the natural and built fabric of the street' (Torbay Council 2004). Streetscape represents a smaller scale pattern or combination of elements and features than 'townscape' In this assessment 'streetscape' is used to define built up areas of largely public space within the confines of a street or road corridor.

Landscape Character Assessment: 'is the process of identifying and describing variation in the character of the landscape. It seeks to identify and explain the unique combination of elements and features (characteristics) that make landscapes distinctive' (Natural England 2014).

Landscape Character Types: 'are distinct types of landscape that are relatively homogeneous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation, historical land use, and settlement pattern' (Natural England 2014).

Landscape Character Areas: 'are single unique areas which are the discrete geographical areas of a particular landscape type. Each will have its own individual character and identity, even though it shares the same generic characteristics with other areas of the same type' (Natural England 2014).

Landscape and Visual Impact Assessment: 'is a tool used to identify and assess the significance of and the effects of change resulting from development on both the landscape as an environmental resource in its own right, and on people's views and visual amenity' (GVLIA) (Landscape Institute and IEMA 2013).

Townscape Impact Assessment: identifies the changes to townscape character which would result from the Proposed Scheme, and assesses the significance of those effects on the townscape as a resource (TCA) (Landscape Institute 2018).

Visual Impact Assessment: is concerned with changes that arise in the composition of available views and the overall effect on the visual amenity of an area (Landscape Institute and IEMA 2013).

Landscape impacts vs. landscape effects: 'Impact' is defined as the action been taken, whilst 'effect' is defined as result (change or changes) of that action, (e.g. the 'impact' of the additional green space treatment where a roundabout has been converted to a signalised junction has a significant positive 'effect' on the character of the streetscape).

17.2.3 Data Collection and Collation

Data collection and collation is based on initial desk studies, supported by full route walkovers and augmented by further specific site reviews, along the corridor of the Proposed Scheme, together with the selection and preparation of verified photomontages of the Proposed Scheme in Figure 17.2 on Volume 3 of this EIAR.

Desk studies, which allow for identification of designated and potential significant/sensitive areas, involved a review of:

- Dublin City Development Plan 2022-2028 (DCC 2022);
- Fingal County Development Plan 2023-2029 (FCC 2023);
- Local Area Plan for Dublin Airport 2020 (FCC 2020);
- Dublin City Tree Strategy 2016-2020 (DCC 2016b);
- Dublin City Parks Strategy 2019-2022 (DCC 2019);
- Historical and current mapping and aerial photography (Ordnance Survey Ireland (OSI), Google Earth, Google maps, etc.);
- Mapping and drawings of the Proposed Scheme;
- General Arrangement and Landscape Design Drawings (BCIDB-JAC-GEO_GA-0002_XX_00-DR-CR-9001_and BCIDB-JAC-ENV_LA-0002_XX_00-DR-LL-9001 in Volume 3 of this EIAR), including chainages referenced throughout this Chapter;
- Other reports and documents relating to the baseline environment, including other chapters of this EIAR and in particular, Chapter 4 (Proposed Scheme Description), Chapter 5 (Construction), Chapter 12 (Biodiversity), Chapter 15 (Archaeological & Cultural Heritage) and Chapter 16 (Architectural Heritage);
- Review of baseline information, including road infrastructure audits, Tree Survey Plans and Arboricultural Impact Assessment Report, and drone survey imagery; and
- Review of contextual information relating to the development of the Proposed Scheme - Urban Realm Concept Designs (NTA 2020).

Site-based studies, which allow for verification of desk study findings and for analysis of current conditions in the receiving environment, involved:

- Full walkover surveys of the route of the Proposed Scheme;
- Further site visits to verify conditions at specific areas along the route of the Proposed Scheme; and
- Selection of locations for verified photomontages of the Proposed Scheme.

The information collected during the desk study field surveys has been collated and presented in Section 17.3 of this Chapter.

The publicly available datasets listed in Table 17.1 have been consulted in the analysis of the baseline environment. These were accessed in 2020/2021.

Table 17.1: Publicly Available Datasets

Source	Name	Description
Ordnance Survey Ireland (OSI)	Geohive	Current and historical mapping
OSI	Geohive	Historical aerial imagery
Google	Google Maps	Mapping and aerial imagery
Microsoft	Bing	Mapping and aerial imagery
EPA	EPA Maps	Environmental datasets
National Parks and Wildlife Service	NPWS Maps and Data	Datasets provide information on national parks, protected sites and nature reserves
Department of Culture, Heritage and the Gaeltacht	Historic Environment Viewer	Database provides access to National Monuments Service Sites and Monuments Record (SMR) and the National Inventory of Architectural Heritage (NIAH)

17.2.4 Appraisal Method for the Assessment of Impacts

As noted under Section 17.2.2.3, in preparing the landscape (townscape) and visual impact assessment this Chapter utilises a combination of approaches as outlined in the EPA Guidelines (EPA 2022) and in the GLVIA (Landscape Institute and IEMA 2013), supported by the TCA (Landscape Institute 2018) and the professional experience and expertise of the author.

The EPA Guidelines provide a generalised methodology suitable for guiding the range of environmental assessments that are carried out under the EIA process, whereas GLVIA provides guidance that is specifically relevant to landscape and visual impact assessment. GLVIA has been used in this assessment to inform the methodology in direct relation to assessing landscape and visual sensitivity, magnitude of change and effects. In order to provide an assessment of effects which is comparable to other types of environmental assessment it is necessary to use the significance criteria specified in the EPA guidelines. A matrix showing the relationship between sensitivity, magnitude and effect significance has been adapted from Figure 3.4 in the EPA Guidelines (EPA 2022) and is shown in Diagram 17.1 Landscape and Visual Impact Assessment Criteria. This matrix only differs from the EPA Guidelines in that a 'very high' level of both magnitude and sensitivity has been included, the intention of which is to create an extra degree of definition to help distinguish between impacts that would lead to either Significant, Very Significant and Profound levels of effect. In addition to predicting the significance of the impacts, EIA methodology (EPA 2022) requires that the quality of the effects be classified as positive/beneficial, neutral, or negative/adverse.

A detailed description of the Proposed Scheme is provided in Chapter 4 (Proposed Scheme Description). The landscape (townscape) and visual impact assessment has assessed the Proposed Scheme including the provision of the landscape design and urban realms elements.

17.2.4.1 Landscape, Townscape and Streetscape

Existing guidance requires that effects on townscape be assessed separately from the effects on views/visual amenity, although it is accepted that the two subjects are naturally connected.

Landscape for the purposes of the Directive 2014/52/EU, and as defined in Section 17.2.2.4, is an overarching term relating to both rural and built-up (urban) areas. However, use of the term townscape as defined in Section 17.2.2.4, is considered appropriate where it relates to urban or built-up landscapes, such as those relevant to the baseline environment of the Proposed Scheme. For the purposes of this assessment, 'townscape' will be used to refer to medium to large scale areas of built-up landscapes, generally equivalent to neighbourhood scale or larger.

In addition, the Proposed Scheme is a corridor-based scheme utilising primarily existing roads or streets within the existing developed urban or built environment. In this regard terms 'street' or 'streetscape', as defined in Section 17.2.2.4 and below are also important components of the receiving environment for the Proposed Scheme.

'Street' is defined as:

'a multi-functional space, providing enclosure and activity as well as movement. Its main functions are:

- *circulation, for vehicles and pedestrians;*
- *access to buildings, and the provision of light and ventilation for buildings;*
- *a route for utilities;*
- *storage space, especially for vehicles; and*
- *public space for human interaction and sociability; everything from parades and protests to chance encounters...*

...Virtually all streets in urban areas perform all of these functions, and often the balance between them will vary along the length of the street. Ideally, all these facets of the street can successfully coexist, but all too often it is one function (especially the movement of vehicles) which has been allowed to dominate. Getting the balance right at the right place is critical because streets are the most important part of the public realm, and thus are fundamental to how we live together in towns and cities' (CABE and ODPM 2002).

'Streetscape' is defined as:

'The term 'streetscape' refers to the design quality of the street and its visual effect, particularly how the paved area (carriageway and footway) is laid out and treated' (CABE and ODPM 2002).

'[Streetscape] is a term used to describe the natural and built fabric of the street' (Torbay Council 2004).

'The main indicators of quality, which are the test of successful streetscape, can be listed under six headings:

- *Comfortable and safe for pedestrians and the disabled;*
- *A street designed to accommodate all sorts of functions, not dominated by any one function;*
- *Visually simple, and free of clutter. Regardless of whether a street is a straightforward or complex space, what matters is the simplicity and clarity of its paving, street furniture, lighting and landscaping;*
- *Well cared for, and where utilities or 'extraneous' advertising are subordinate to all other street functions;*
- *Sympathetic to local character and activity context, in design and detail; and*
- *Making appropriate ordered provision for access, deliveries and storage of vehicles' (CABE and ODPM 2002).*

The importance of soft landscaping in the streetscape is emphasised in the Manual for Streets (Department for Transport, 2007):

'Planting adds value; it helps to soften the urban street-scene, creates visual and sensory interest, and improves the air quality and microclimate. It can also provide habitats for wildlife. The aromatic qualities or contrasting colours and textures of foliage are of value to all, and can assist the navigation of those with visual impairment. Flowers and fruit trees add seasonal variety. Planting can provide shade, shelter, privacy, spatial containment and separation. It can also be used to create buffer or security zones, visual barriers, or landmarks or gateway features. Vegetation can be used to limit forward visibility to help reduce vehicle speeds.'

As defined in Section 17.2.2.4, the term ‘streetscape’ represents a smaller-scale pattern of elements and features compared to ‘townscape’ and is used to define built-up areas of largely public space within the confines of a street or road corridor. Therefore, this assessment refers to townscape in describing the wider urban or built-up landscape, and to ‘streetscape’ in describing the immediate landscape corridor of the Proposed Scheme.

17.2.4.2 Methodology for Assessment of Townscape Effects

Assessment of potential townscape effects involves:

- Classifying the sensitivity of the baseline environment of the townscape resource; and
- Describing and classifying the magnitude of change in the townscape resulting from the Proposed Scheme.

These factors are combined to provide a classification of significance of impacts of the Proposed Scheme.

17.2.4.2.1 Methodology for Assessment of Townscape Sensitivity

The sensitivity of the townscape is a function of its existing land use, patterns and scale, enclosure, visual characteristics and value. The nature and scale of the Proposed Scheme is taken into account, as are trends of change, i.e. ongoing changes in the environment and the relevant policy framework. Five categories are used to classify sensitivity, as set out in Table 17.2.

Table 17.2: Townscape Sensitivity

Sensitivity	Description
Very High	Areas where the townscape exhibits very strong, positive character with valued elements, features and characteristics that combine to give an experience of unity, richness and harmony. The townscape character is such that its capacity to accommodate change is very low. These attributes are recognised in policy or designations as being of national or international value and the principal management objective for the area is protection of the existing character from change.
High	Areas where the townscape exhibits strong, positive character with valued elements, features and characteristics. The townscape character is such that it has limited/low capacity to accommodate change. These attributes are recognised in policy or designations as being of national, regional or county value and the principal management objective for the area is the conservation of existing character.
Medium	Areas where the townscape has certain valued elements, features or characteristics but where the character is mixed or not particularly strong, or has evidence of alteration, degradation or erosion of elements and characteristics. The townscape character is such that there is some capacity for change. These areas may be recognised in policy at local or county level and the principal management objective may be to consolidate townscape character or facilitate appropriate, necessary change.
Low	Areas where the townscape has few valued elements, features or characteristics and the character is weak. The character is such that it has capacity for change; where development would make no significant change or would make a positive change. Such townscapes are generally unrecognised in policy and the principal management objective may be to facilitate change through development, repair, restoration or enhancement.
Negligible	Areas where the townscape exhibits negative character, with no valued elements, features or characteristics. The character is such that its capacity to accommodate change is high; where development would make no significant change or would make a positive change. Such townscapes include derelict industrial lands, as well as sites or areas that are designated for a particular type of development. The principal management objective for the area is to facilitate change in the townscape through development, repair or restoration.

As adapted from GLVIA (Landscape Institute and IEMA 2013)

17.2.4.2.2 Methodology for Assessment of Magnitude of Change in the Townscape

Magnitude of change is a factor of the scale, extent and degree of change imposed on the townscape by the Proposed Scheme, with reference to its key elements, features and characteristics and the affected surrounding Character Areas (collectively termed ‘townscape receptors’). Five categories are used to classify magnitude of change, as set out in Table 17.3.

Table 17.3: Magnitude of Townscape Change

Sensitivity	Description
Very High	Change that is large in extent, resulting in the loss of or major alteration to key elements, features or characteristics of the townscape, and/or introduction of large elements considered totally uncharacteristic in the context. Such development may result in a fundamental change in the character of the townscape and/or streetscape.
High	Change that is moderate to large in extent, resulting in major alteration to key elements, features or characteristics of the townscape, and/or introduction of large elements considered uncharacteristic in the context. Such development may result in a notable change to the character of the townscape and/or streetscape.
Medium	Change that is moderate in extent, resulting in partial loss or alteration to key elements, features or characteristics of the townscape, and/or introduction of elements that may be prominent but not necessarily substantially uncharacteristic in the context. Such development may result in a moderate change to the character of the townscape and/or streetscape.
Low	Change that is moderate or limited in scale, resulting in minor alteration to key elements, features or characteristics of the townscape, and/or introduction of elements that are not uncharacteristic in the context. Such development may result in a minor change to the character of the townscape and/or streetscape.
Negligible	Change that is limited in scale, resulting in no alteration to key elements features or characteristics of the townscape, and/or introduction of elements that are characteristic of the context. Such development results in no change to the townscape character.

As adapted from GLVIA (Landscape Institute and IEMA 2013)

17.2.4.2.3 Methodology for Assessment of Significance of Effects

To classify the significance of effects, the magnitude of change is measured against the sensitivity of the townscape based on Figure 3.4 in the EPA Guidelines (EPA 2022), as adapted and presented in Diagram 17.1. Details of the adaption from the guidelines is covered in Section 17.2.4.

Determining the significance of effects that are rational and justifiable is also based on the professional judgement, expertise and experience of the author.

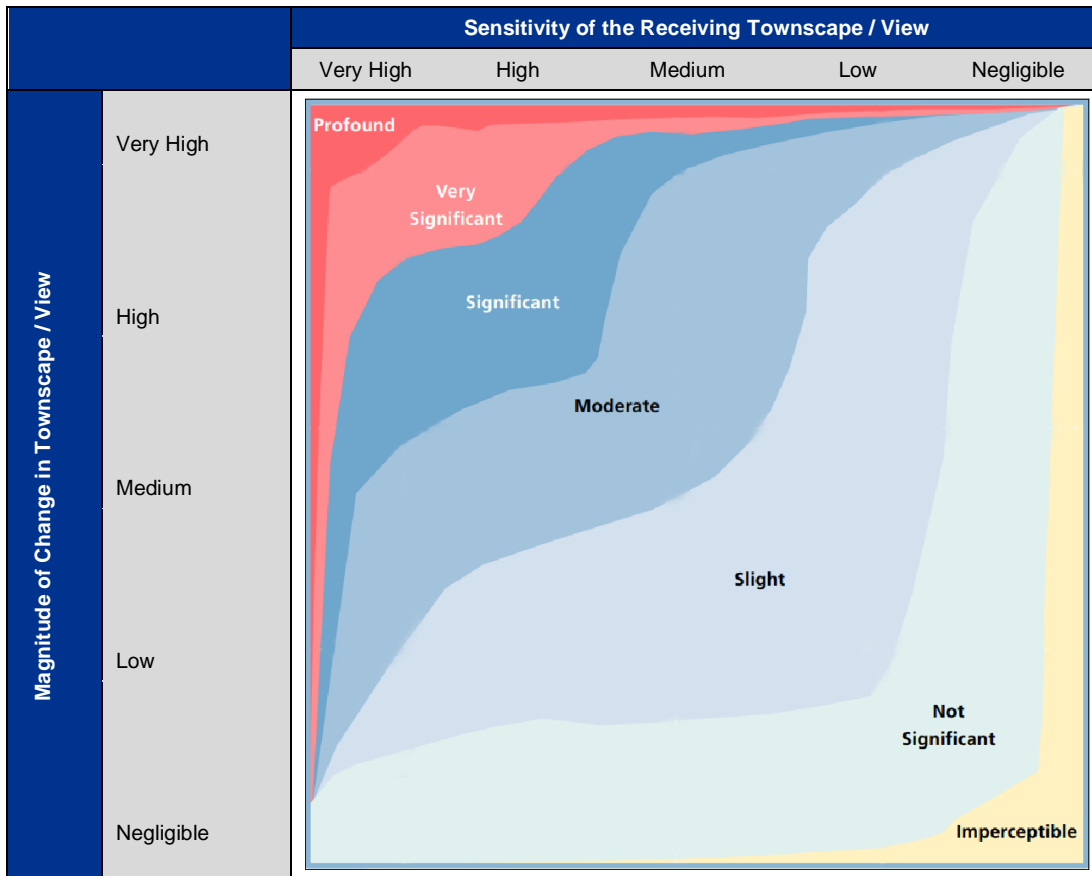


Diagram 17.1: Guide to Classification of Significance of Townscape and Visual Effects; as Adapted from EPA Guidelines (EPA 202217)

17.2.4.2.4 Quality, Duration and Frequency of Landscape and Visual Effects

Consideration of quality (i.e. positive, neutral, negative), duration (i.e. temporary (lasting up to 1 year); short-term (lasting 1 to 7 years); medium-term (lasting 7 to 15 years); long-term (lasting 15 to 60 years); or permanent (lasting over 60 years)) and frequency of effects, is as described in Table 3.3 of the EPA Guidelines (EPA 2022).

17.2.4.2.5 Geographical Extents of Townscape and Visual Effects

The geographical area over which the landscape effects will be felt must also be considered. This is distinct from the size or scale of the effect – there may, for example, be moderate loss of landscape elements over a large geographical area, or a major addition affecting a very localised area. Where townscape or visual receptors cover a large geographical area, it is often necessary to describe the local effect and the overall effect separately. The terms ‘local’, ‘locally’ or ‘localised’ are used within this assessment to denote effects which occur within the relatively small area or section of a receptor in proximity to the Proposed Scheme. The term ‘overall’ is used to describe the effect on the receptor as a whole.

17.2.4.2.6 Significance and Quality of Landscape and Visual Effects

An effect assessed as being significant may also be either positive, neutral or negative. For example, the introduction of a new structure may represent a significant change with an associated significant effect. However, the significant effect may be: positive, in that the structure enhances the landscape/townscape or visual quality of the receiving environment; negative, in that it detracts from the receiving environment; or neutral, in that despite the significant change, any negative and positive aspects are balanced or cancelled. Significant neutral effects can occur over time, where a development or structure, which initially created a

significant change in the receiving environment, is increasingly accepted as part of the receiving landscape/townscape/view.

17.2.4.3 Views and Visual Amenity

As noted in Section 17.2.2.4, visual impact assessment is concerned with changes that arise in the composition of available views and the overall effect on the visual amenity of an area. This includes effects on protected and designated views as well as on the typical range of views from within the urban realm and private areas or properties. As such, the primary study area is a boundary-to-boundary road/street corridor along the Proposed Scheme, which takes in immediately adjoining landscapes, including open spaces, parks, gardens, and other land use areas, together with amenity, landscape/townscape and visual planning considerations.

17.2.4.4 Methodology for Assessment of Visual Effects

Assessment of visual effects involves identifying a number of key/representative viewpoints in the baseline environment of the Proposed Scheme, and for each one of these:

- Classifying the viewpoint sensitivity; and
- Classifying the magnitude of change in the view.

These factors are combined to provide a classification of significance of the effects of the Proposed Scheme on each viewpoint.

17.2.4.4.1 Methodology for Assessment of Sensitivity of the Viewpoint/Visual Receptor.

Viewpoint sensitivity is a function of two main factors:

- Susceptibility of the visual receptor to change. The duration and frequency of exposure informs the susceptibility; a greater length of time or more frequent experience of views results in a receptor being more susceptible to changes in views. The level of awareness of people to views also affects susceptibility; people engaged in activities reliant on appreciation of views are of higher susceptibility than those focused on other activities. Visual receptors most susceptible to change include residents at home, people engaged in outdoor recreation focused on the landscape (e.g. park/walk users), or where the appreciation of views over the landscape are a key factor contributing to the quality of the activity. Visual receptors less susceptible to change include travellers on road, rail and other transport routes (unless on recognised scenic routes), people engaged in outdoor recreation where the surrounding landscape does not influence the experience, and people in their place of work or shopping. Visual receptors of moderate susceptibility include users of the streetscape such as non-recreational pedestrians and cyclists whose activity is not dependent on appreciation of the views but may have a greater awareness of the townscape by virtue of their slower speed and people engaged in outdoor recreation where the surrounding landscape does not influence the experience, and people in their place of work or shopping. Visual receptors least susceptible to change include travellers on road, rail and other transport routes generally travelling at speed (unless on recognised scenic routes); and
- Value attached to the view. This depends to a large extent on the subjective opinion of the visual receptor but also on factors such as policy and designations which indicate a shared social value (e.g. scenic routes, protected views), or the view or setting being associated with a heritage asset, visitor attraction, place of congregation, or having some other cultural status.

Five categories are used to classify a viewpoint's sensitivity, as set out in Table 17.4.

Table 17.4: Categories of Viewpoint / Visual Receptors Sensitivity

Sensitivity	Description
Very High	Views or viewpoints (views towards or from a townscape feature or area) that are recognised in policy or otherwise designated as being of national value. Designed views which may be from or be directed towards a recognised heritage asset or other important designated feature, where a key management objective for the view is its protection from change. Visual receptors using national trails or nationally recognised public rights of way. Views recognised in art or literature may also be of very high value. The principal management objective for the view is its protection from changes which would affect the valued or designated features of the view.
High	Viewpoints or views that are recognised in policy or otherwise designated as being of value, or viewpoints that are highly valued by people that experience them regularly (e.g. views from houses or outdoor recreation amenities focused on the townscape). The composition, character and quality of the view may be such that it is likely to have high value for people experiencing it and is consequently vulnerable to changes which may lower this value. The principal management objective for the view is its protection from change that reduces visual amenity.
Medium	Views that may not have features or characteristics that are of particular value, but have no major detracting elements, and which thus provide some visual amenity. These views may have capacity for appropriate change. Visual receptors may include people with a moderate susceptibility to change engaged in outdoor sports which do not rely on an appreciation of the surrounding landscape/townscape, or road users on minor routes passing through areas of valued townscape character. The principal management objective is to facilitate change to the composition that does not detract from visual amenity, or which enhances it.
Low	Views that have no features of appreciable value, and/or where the composition and character are such that there is little appreciable value in the view. Visual receptors include people involved in activities with no particular focus on the landscape. Visual receptors may include fast moving users of roads/rail through landscapes/townscapes which may or may not contain valued elements or characteristics. For such views the principal management objective is to facilitate change that does not detract from visual amenity or enhances it.
Negligible	Views that have no features of value or where the composition and character may be unsightly (e.g. in derelict landscapes). For such views the principal management objective is to facilitate change that repairs, restores or enhances visual amenity.

As adapted from GLVIA (Landscape Institute and IEMA 2013)

17.2.4.4.2 Methodology for Assessment of Magnitude of change in the View / Viewpoint

Classification of the magnitude of change takes into account the size or scale of the intrusion of the Proposed Scheme into the view (relative to the other elements and features in the composition, i.e. its relative visual dominance); the degree to which it contrasts or integrates with the other elements and the general character of the view; and the way in which the change will be experienced (e.g. in full view, partial or peripheral view, or in glimpses). It also takes into account the geographical extent of the change, as well as the duration and reversibility of the visual effects. Five categories are used to classify magnitude of visual change to a view, as set out in Table 17.5.

Table 17.5: Categories of Magnitude of Visual Change

Magnitude	Description
Very High	Full or extensive intrusion of the development in the view, or partial intrusion that obstructs valued features or characteristics, or introduction of elements that are completely out of character in the context, to the extent that the development becomes dominant in the composition and defines the character of the view and the visual amenity.
High	Extensive intrusion of the development in the view, or partial intrusion that obstructs valued features, or introduction of elements that may be considered uncharacteristic in the context, to the extent that the development becomes co-dominant with other elements in the composition and affects the character of the view and the visual amenity.
Medium	Partial intrusion of the development in the view, or introduction of elements that may be prominent but not necessarily uncharacteristic in the context, resulting in change to the composition but not necessarily the character of the view or the visual amenity.
Low	Minor intrusion of the development into the view, or introduction of elements that are not uncharacteristic in the context, resulting in minor alteration to the composition and character of the view but no change to visual amenity.
Negligible	Barely discernible intrusion of the development into the view, or introduction of elements that are characteristic in the context, resulting in slight change to the composition of the view and no change in visual amenity.

As adapted from GLVIA (Landscape Institute and IEMA 2013)

17.2.4.4.3 Methodology for Assessment of Significance of Visual Effects

As with townscape effects, classification of the significance of visual effects, involves measurement between the magnitude of change to the view and the sensitivity of the view/viewpoint, as set out in Diagram 17.1.

17.2.4.5 Quality of Effects

In addition to predicting the significance of the effects, EIA methodology (EPA 2017) requires that the quality of the effects be classified as positive/beneficial, neutral, or negative/adverse. For townscape to a degree, but particularly for visual effects, this will involve a degree of subjectivity. This is because townscape and visual amenity are perceived by people and are therefore subject to variations in the attitude and values, including aesthetic preferences of the receptor. One person's attitude to the Proposed Scheme may differ from another person's, and thus their response to the effects on the townscape or a view may vary.

Additionally, in certain situations there might be policy encouraging a particular development in an area, in which case the policy is effectively prescribing a degree of townscape and visual change. If the Proposed Scheme achieves the objective of the policy the resulting effect might be considered positive, even if existing townscape character or views are significantly altered. The classification of quality of townscape and visual effects seeks to take these variables into account and provide for a rational and robust assessment.

17.2.4.6 Presentation of Construction Effects

As required by the EIA Directive, the assessment should outline the temporary, short-term, medium-term and long-term, effects arising from the Proposed Scheme. Construction effects are described based on a cautionary principle; where effects are expected to be temporary (under 1 year in duration) but have reasonable potential to extend beyond this duration, due to unplanned schedule slippage, effects are described as Temporary/Short-Term. Also, it should be noted, in some cases, where a townscape section is described as experiencing a Temporary/Short-Term effect, this can result from sequential construction along the length of the section, and localised streetscape/visual receptors within that section may only experience temporary effects.

17.2.4.7 Presentation of Operational Effects

The design process of the Proposed Scheme has included integrated landscape measures to avoid, reduce or remediate landscape (townscape) and visual effects wherever practicable. The Proposed Scheme will become established and increasingly integrated within its landscape (townscape) setting over time, and the potential negative operational effects will be reduced. To illustrate this change in effects, potential operational effects are outlined for the beginning of the Operational Phase (up to 1 year post-Construction Phase) and for the beginning of the Long-Term (at 15 years post-Construction Phase). Predicted residual Operational Phase effects which have greater than moderate significance, at 15 years post-Construction Phase, are also outlined.

The Operational Phase effects are presented as follows:

- Potential Operational Phase effects (early stage - at 1 year post completion of the Construction Phase) – refer to Table 17.8;
- Potential Operational Phase effects (comparison of effects at 1 year post completion and at 15 years post-Construction Phase) – Refer to Table 17.10; and
- Predicted residual Operational Phase effects (those effects above moderate significance at 15 years post-Construction Phase) – Refer to Table 17.12.

17.2.4.8 Photomontage Methodology

The methodology for the preparation of photomontages has regard to the VRDP (Landscape Institute 2019), and is further informed by experience in photomontage production. The photomontages are prepared as accurate verified photo-realistic views (equivalent to Type 4 as set out in VRDP (Landscape Institute 2019)).

The method follows five main steps:

- Photography;
- Survey;
- 3D Modelling and camera matching;
- Rendering and finishing of photomontages; and
- Presentation.

17.2.4.8.1 Photography

17.2.4.8.1.1 Conditions, Date and Time

Baseline photographs are clear and representative of the relevant context at each location. Wherever possible, photographs are taken with all key elements of the view clearly visible and unobscured by foreground obstructions, such as vehicular or pedestrian traffic, street furniture, trees, signage, etc. Photographs are up to date insofar as possible, and are taken in good clear weather conditions, without precipitation, excessive darkness or shade, or sun glare etc. The date and time of each photograph is recorded, together with camera and lens metadata.

17.2.4.8.1.2 Camera and Camera Set-Up

Baseline photographs have been taken using a digital single lens reflex (SLR) camera with a full frame sensor. At each viewpoint the camera was positioned on a tripod with the lens 1.65m above ground level (the level of the average adult's eyes), directed at the site and levelled in the horizontal and vertical axes.

17.2.4.8.1.3 Lenses

Prime lenses (fixed focal length with no zoom function) have been used as this ensures that the image parameters for every photograph are the same and that all photographs taken with the same lens are comparable. A 24mm prime lens has been used and this lens captures a horizontal field of view of 73° (degrees). This relatively wide field of view is preferred as it shows more of the landscape/townscape context in urban settings.

17.2.4.8.2 Survey

The coordinates of each viewpoint/camera position, including the elevation have been measured accurately relative to the topographic survey of the corridor of the Proposed Scheme. For each viewpoint, the coordinates of several static objects or 'reference points' in the view (e.g. lamp posts, corners of buildings, etc.) have also been measured in a similar manner. The coordinates of the camera and 'reference points' are used later in the process to ensure that the direction of view of the camera in the 3D digital model matches that of the view of the photograph.

17.2.4.8.3 3D Modelling and Camera Matching

17.2.4.8.3.1 Creation of 3D Model

Drawings (roads, hard and soft landscape areas etc.) have been used to generate a 3D digital model of the Proposed Scheme with sufficient detail for the viewpoint(s). The 3D digital model has then been exported to specialist software to allow for application of materials and textures to the model.

17.2.4.8.3.2 3D Camera Positions

The coordinates of the camera and 'reference points' for each view have been inserted into the 3D digital model, with information on the focal length of the lens and horizontal angle of coverage attributed to each camera/view, and the direction of each view is calculated and aligned so as to match the geometry of the original baseline photograph. Additionally, the date and time have been set to match that of the baseline

photograph so as to ensure the sunlight and shadow projections in the renderings generated match those of the baseline photographs.

17.2.4.8.3.3 Rendering of 3D Model and Finishing Photomontages

For each view, a high-resolution render of the Proposed Scheme has been generated. This process allows for the creation of a realistic image of the 3D digital model, as seen from each camera/view position, with sunlight and shadow applied to the model. The render of the Proposed Scheme has then been inserted (or montaged) into the baseline photograph and the composite image edited to take away elements to be removed from the existing baseline to create the photomontage of the Proposed Scheme. Some degree of photo-modelling/photo-manipulation is required in instances where foreground/middle-ground elements are removed (e.g. trees, plantings, etc.), thereby revealing backgrounds which are not captured in the baseline photograph. The intent is to provide a best-fit presentation which assists in illustrating the principal effects of the Proposed Scheme at a stage approximately 10 to 15 years post completion of construction.

17.2.4.8.4 Presentation and Viewing

Individual photomontages are presented, in 'as existing' and 'as proposed' versions, on A3 pages in landscape format in Figure 17.2 in Volume 3 of this EIAR. For each photomontage, the viewpoint number, location description, and the date and time of photography have been provided on the page.

17.3 Baseline Environment

17.3.1 City Context

The Proposed Scheme will be located in the northern city running from the Fingal County town of Swords through the outer city village of Santry and outer city suburbs located along the R132 Swords Road, to the inner city village of Drumcondra, and along the Dorset Street corridor to Frederick Street North/Parnell Square East and Granby Row/Parnell Square West, within the City Centre.

The Proposed Scheme is sub-divided into five sections:

- Section 1 – Pinnock Hill to Airside Junction;
- Section 2 – Airside Junction to Northwood Avenue;
- Section 3 – Northwood Avenue to Shantalla Road;
- Section 4 – Shantalla Road to Botanic Avenue; and
- Section 5 – Botanic Avenue to Granby Row.

An overview of the Proposed Scheme is provided in Section 17.3.2 and a detailed description of the Proposed Scheme is provided in Chapter 4 (Proposed Scheme Description).

17.3.2 Overview of Route of the Proposed Scheme

The Proposed Scheme will be approximately 12km in length running south of the county town of Swords across the peri-urban landscape around Dublin Airport, through the outer city suburbs of Santry and Whitehall, to the inner-city suburb of Drumcondra and the urban street of Dorset Street. The Proposed Scheme ends at Granby Row, within the northern City Centre.

Along the route, the Proposed Scheme spans the agricultural greenbelt separating Swords from the north city and passes to the east of Dublin Airport. From the south of Dublin Airport the Proposed Scheme follows one of the established historic access roads into the northern City Centre. The Proposed Scheme passes to the east of Santry Demesne (now a public park, Santry Park) and Morton Stadium, where a Tree Preservation Order is in place (Tree Preservation (Santry Demesne) Order 1987) on the former demesne lands. The Proposed Scheme will cross the River Tolka at Frank Flood Bridge, pass through Drumcondra Village and along its prominent mature tree-line streetscape, before crossing the Royal Canal at Binns Bridge. The Proposed Scheme follows the urban thoroughfare of Dorset Street before moving into the North City Georgian area at Frederick Street North and Parnell Square East in the City Centre.

The Proposed Scheme includes a wide variety of suburban and city landscape, townscape and visual features, from streetscape boundary and urban realm features, to residential and mixed-use zonings, historic landscapes and boundaries, to biodiversity and heritage assets.

17.3.3 Landscape, Townscape and Visual Planning Policy

Landscape, townscape and visual planning policy is set out in the following with reference to the appropriate higher-level county/city development plans, lower level local area plans and other documents as appropriate.

17.3.3.1 Fingal Development Plan 2023-2029

The Fingal Development Plan 2023-2029 (FCC 2023) is the overarching county level planning framework applicable to the northern end of the Proposed Scheme from the Pinnock Hill Roundabout to the R132 Swords Road/R104 Santry Avenue Junction.

Chapter 4 of the plan, *Community Infrastructure and Open Space*, sets out objectives in relation to Open Space (Section 4.5.2) and includes Objective CIOSO52, which seeks to protect, preserve and ensure the effective management of trees and groups of trees.

Chapter 6, *Connectivity and Movement*, includes Objectives CMP18 to CMO31, which support sustainable mobility objectives relating to major rail and bus projects such as MetroLink, BusConnects and DART+ and LUAS Expansion under the National Development Plan 2021–2030. Objective CMO28 supports the national transport agencies in creating bus connectivity between Dublin 15, including the Blanchardstown Centre and Dublin Airport/Swords. Objective CMO30 aims to support opportunities provided by any public transport infrastructure works to improve and provide new cycling and walking links, including crossings of motorways and major roads which currently represent major permeability barriers to active travel especially in South Fingal.

Chapter 9, *Green Infrastructure and Natural Heritage*, addresses biodiversity, parks, open space and recreation, surface water, heritage, and landscape. Special Amenity Areas, High Amenity Areas, Highly Sensitive Areas, County Geological Sites and beaches are specifically noted under landscape, and specific objectives for Green Infrastructure are set out under Objectives GINHP1 to GINHO26. Policies in relation to biodiversity and geology as they relate to the Proposed Scheme, are discussed in greater detail in Chapter 12 (Biodiversity) and Chapter 14 (Land, Soils, Geology & Hydrogeology), respectively. No County Geological Sites (CGS), as shown on Figure 9.1 of Chapter 9, are in proximity to the Proposed Scheme.

Objective GINHP10 seeks a net gain in green infrastructure through the protection and enhancement of existing assets, through the provision of new green infrastructure as an integral part of the planning process. Objective GINHO22 states an intention to resist development that would fragment or prejudice the County's strategic green infrastructure network. Objective GINHO30 states that all infrastructure projects are to have a net biodiversity gain and this principle shall be incorporated from the start of the Proposed Scheme.

Section 9.6 of the plan, *Natural Heritage*, addresses: Trees and Hedgerows; Landscape Character Assessment; Views and Prospects; Special Amenity Areas; and High Amenity Zoning. Section 9.6.9, *Protection of Trees and Hedgerows*, sets out objectives in relation to protection of trees and hedgerows including Tree Protection Orders and Tree Protection Objectives. Policy GINHP21 aims to protect existing woodlands, trees and hedgerows which are of amenity value and contribute to landscape character. The route of the Proposed Scheme is located in the low sensitivity 'Low Lying Character Type', a large landscape character area covering all of central south Fingal, including Dublin Airport. The area contains pockets of important valued areas requiring particular attention such as important archaeological monuments and demesnes and Santry Demesne proposed Natural Heritage Area (pNHA). Objective GINHO60 seeks to protect views and prospects that contribute to the character of the landscape, particularly those identified in the Fingal Development Plan (see Sheet 8 Swords), from inappropriate development. There are no Special Amenity or High Amenity Areas along the route of the Proposed Scheme.

Chapter 10 of the plan, *Heritage, Culture and Arts*, sets out policies and objectives in relation to Archaeological and Architectural Heritage, including protected structures, architectural conservation areas, industrial heritage and designed landscapes. Policies in relation to heritage as they relate to the Proposed Scheme are discussed in greater detail in Chapter 15 (Archaeological & Cultural Heritage) and Chapter 16 (Architectural Heritage).

Chapter 14, *Development Management Standards*, sets out the development standards and criteria to ensure development occurs in an orderly and efficient manner.

Sheet 8, Swords, of the Development Plan identifies existing trees to the north and south of the Pinnock Hill Roundabout for protection and preservation. Sheet 8 identifies protected views east from the R132 Dublin Road at Airside.

Sheet 11, Fingal South, of the Development Plan identifies that existing trees within Santry Demesne for protection and preservation. Trees in Santry Demesne are subject to a Tree Preservation Order (Tree Preservation (Santry Demesne) Order 1987). Sheet 11 highlights protected structures No. 604 (Thatch Cottage, Collinstown Cross), No. 609 (Cloghran Church (in ruins) and Graveyard) and No. 611 (Castlemoate House) in close proximity to the route of the Proposed Scheme.

Sheet 14, Green Infrastructure 1, indicates Mapped Objective GIM2 for Santry Demesne: to protect the natural and built heritage, which include important historic sites, landscapes and gardens, while providing significant public amenities.

Sheet 15, Green Infrastructure 2, highlights Santry Demesne as a Nature Development Area.

The principal land use zonings to either side of the Proposed Scheme within Fingal are:

- 'Objective RA: Provide for new residential communities subject to the provision of the necessary social and physical infrastructure' (e.g. Fosterstown);
- 'Objective RS: Provide for residential development and protect and improve residential amenity' (e.g. Boroimhe and Santry);
- 'Objective HT: Provide for office, research and development and high technology/high technology manufacturing type employment in a high quality built and landscaped environment' (e.g. Fosterstown);
- 'Objective RW: Provide for retail warehousing development' (e.g. Airside, Cloghran, and Collinstown Cross to Santry);
- 'Objective GB: Protect and provide for a Greenbelt' (i.e. between Swords south and Dublin Airport),
- 'Objective DA: Ensure the efficient and effective operation and development of the airport in accordance with an approved Local Area Plan' (i.e. Dublin Airport); and
- 'Objective OS: Preserve and provide for open space and recreational amenities' (e.g. Santry Demesne).

17.3.3.1.1 Dublin Airport Local Area Plan 2020

The Dublin Airport Local Area Plan 2020 (FCC 2020) is the lower level planning framework applicable to lands zoned DA: Dublin Airport in the Fingal Development Plan. The zoning extends from R122 St. Margaret's Road in the west to the M1 Motorway in the east. The existing R132 Swords Road, and hence the Proposed Scheme, passes north to south through the eastern end of the Dublin Airport Zoned lands, approximately 0.6km to 1km west of the M1 Motorway.

Figure 8.1 and Objective EA02 indicate the potential for an upgrade of the existing Airport Roundabout, possibly including grade separation. Figure 8.1 and Objectives EA06 and PT04 note the provision of a Core Bus Corridor on the R132 Swords Road and its strategic national importance to the sustainable growth of Dublin Airport. Figure 8.1 also indicates the location of existing and indicative cycle/pedestrian routes in the area. Objective CY01 supports the provision of cycle paths separated from traffic along the R132 Swords Road between Pinnock Hill Roundabout and the boundary with the DCC area at Santry, as part of the Proposed Scheme. Section 8.3.3 sets out a range of public transport measures and objectives of relevance to Dublin Airport.

Figure 9.2 and Table 9.2 show the location of protected structures within Dublin Airport lands. Castlemoate House (No. 611) is in close proximity to the R132 Swords Road.

Section 9.8.3, *Natural Heritage*, includes Objective NH01, which requires development involving significant removal of trees, hedgerow or which otherwise might impact on existing ecology including wildlife habitat, shall be accompanied by proposals for compensatory habitat either within the Dublin Airport Local Area Plan boundary or on alternative lands in the general vicinity of Dublin Airport. Policies in relation to biodiversity as they relate to the Proposed Scheme are discussed in greater detail in Chapter 12 (Biodiversity) and Chapter 15 (Archaeological & Cultural Heritage).

17.3.3.2 Dublin City Development Plan 2022 - 2028

The Dublin City Development Plan 2022 – 2028 (DCC 2022) is the higher county level planning framework applicable to the southern section of the Proposed Scheme from R104 Santry Avenue/R104 Coolock Lane south to Parnell Square.

Chapter 8, *Sustainable Movement*, includes for policies and objectives in relation to public transport, walking and cycling. Objective SMT12 supports the reallocation of space to pedestrians and public realm to provide a safe and comfortable street environment for pedestrians. Objective SMT seeks to manage City Centre road-space to best address the needs of pedestrians and cyclists, public transport shared modes and the private car including at intersections with the existing and proposed bus network.

Chapter 10 of the plan, *Green Infrastructure and Recreation*, sets out policies in relation to the provision, importance, protection and enhancement of green infrastructure, landscape, parks and open spaces, rivers, canals and the coastline, biodiversity, trees and sport, recreation and play within the city. The strategic green network as indicated on Figure 10-1 of the Development Plan highlights the River Tolka and the Royal Canal as blue/green corridors. Objective GI21 seeks to promote the city landscapes including rivers and Canals as major resources for the city which form core areas of the green infrastructure network. Dublin City Council has also prepared separate overarching strategies for the protection, management and improvement of trees (DCC 2016b) and parks (DCC 2019) within the city.

Chapter 11 of the plan, *Built Heritage and Archaeology*, sets out policies relating to preservation, protection and improvement of built heritage, protected structures (RPS), Architectural Conservation Areas (ACA) and Conservation Areas, trees in ACAs, zones of archaeological interest and industrial heritage, monuments and Dublin's cultural assets. There are many sites, buildings and features of historic and heritage interest located along the corridor of the Proposed Scheme, including Residential Conservation Areas, protected structures, and Conservation Areas along the Royal Canal, along Frederick Street North and around Parnell Square East. The southern end of Parnell Square is also within the Parnell Square/O'Connell Street Upper ACA. Policies in relation to archaeological and architectural heritage, including definitions of heritage features e.g. protected structures, as they relate to the Proposed Scheme are discussed in greater detail in Chapter 15 (Archaeological & Cultural Heritage) and Chapter 16 (Architectural Heritage) respectively of this EIAR.

The principal land use zonings to either side of the Proposed Scheme within Dublin City are:

- 'Objective Z1: To protect, provide and improve residential amenities';
- 'Objective Z2: To protect and/or improve the amenities of residential conservation area';
- 'Objective Z4: To provide for and improve mixed-services facilities'; and
- 'Z8: To protect the existing architectural and civic design character, and to allow only for limited expansion consistent with the conservation objective', (e.g. Frederick Street North and Parnell Square East).

Other land use zonings include:

- 'Objective Z3: To provide for and improve neighbourhood facilities' (e.g. R132 Swords Road / R104 Santry Avenue/Church Lane Junction);
- 'Z9: To preserve, provide and improve recreational amenity and open space and ecosystem services', (e.g. Verges along N1 Drumcondra Road Lower, the River Tolka and the Royal Canal corridors);
- 'Objective Z12: To ensure that existing environmental amenities are protected in the predominantly residential future use of these lands' (e.g. Clonliffe College); and
- 'Objective Z15: To protect and provide for community uses and social infrastructure' (e.g. Plunket College, St. Patrick's College).

The grounds of Clonliffe College, which bound the Proposed Scheme at N1 Drumcondra Road Lower, has planning permission for significant new residential and recreation development.

17.3.4 Townscape/Streetscape Character

The townscape and streetscape character of the Proposed Scheme is described in Table 17.6 with reference to landscape, townscape and visual characteristics, features, designations, and sensitivities. The key features are identified on Figure 17.1 in Volume 3 of this EIAR. Protected structures are generally described within groups e.g. a number of buildings lining a road, but are noted individually where they form unique and prominent

features in the townscape or streetscape, or form a less noticeable but intrinsic part of the fabric of the streetscape. Refer to Chapter 15 (Archaeological & Cultural Heritage) and Chapter 16 (Architectural Heritage) of this EIAR, for full details and definitions of protected structures.

Table 17.6: Analysis of Baseline Townscape and Visual Environment of the Proposed Scheme

Proposed Scheme Section	Baseline Description	Baseline Sensitivity
<p>1. Pinnock Hill to Airside Junction</p>	<p>Townscape Character: Informed by major road infrastructure corridor from the county town of Swords towards the junction with Airside Retail Park. There is a significant dual carriageway throughout with a large roundabout and at-grade junctions at Pinnock Hill and Airside Retail Park.</p> <p>Streetscape Character: While broadly following the corridor of the historic Swords to Santry Road, the route has been significantly upgraded, widened and re-aligned. Today the road is dominated by the extent of road infrastructure and associated traffic.</p> <p>The road corridor is generally enclosed by dense young plantations.</p> <p>Key Townscape Features: A road corridor within outer-city town context influenced by an out-of-town shopping centre.</p> <p>Amenity Designations: There is greenbelt between Swords and Dublin Airport.</p> <p>TPO: None.</p> <p>Tree / Woodland Preservation Objectives: There is a TPO at group of trees to northern side of Pinnock Hill Roundabout.</p> <p>Protected Views: A protected view is present east from R132 Swords Road at Airside.</p> <p>Protected Structures: Milestone (RPS 0866) is the only item of historic street furniture to exist along this section of the Proposed Scheme.</p> <p>Other: None.</p>	<p>Low / Negligible</p>
<p>2. Airside Junction to Northwood Avenue</p>	<p>Townscape Character: Informed by major road infrastructure corridor from the city edge towards the outer city suburbs. Primarily composed of significant dual carriageway with large at-grade junctions at, Corballis Road and Old Airport Road.</p> <p>Streetscape Character: The streetscape transitions from a road corridor with moderate tree cover to both sides, to an open corridor at Dublin Airport to primarily industrial / warehousing south of the airport and to mixed use and residential areas north of Santry. While broadly following the corridor of the historic Swords to Santry Road, the route has been significantly upgraded, widened and re-aligned. Today the route is dominated by the extent of road infrastructure and associated traffic.</p> <p>The road corridor is generally enclosed by adjacent trees, woodland planting and tall hedgerows in the northern section becoming more open in the vicinity of Dublin Airport and increasingly enclosed by development south of the airport lands.</p> <p>The Richard Enda King's 'Spirit of the Air' sculpture on the Airport Roundabout is a prominent landmark at the entrance to Dublin Airport. Traffic barriers define the central median from the Cloghran Roundabout south to the Airport Roundabout. The road corridor is usually dominated by heavy road traffic.</p> <p>Key Townscape Features: A road corridor transitioning from the outer city to the suburban city context dominated by the influence of Dublin Airport in the central section to mixed suburban development to the south.</p> <p>Amenity Designations: There is a greenbelt between Swords and Dublin Airport. There are small areas of open space along the road corridor.</p> <p>Tree Preservation Order: None.</p> <p>Tree / Woodland Preservation Objectives: None.</p> <p>Protected Views: None relevant</p> <p>Protected Structures: No. 604 a thatched cottage south of Collinstown Cross, No. 609: Cloghran Church (in ruins) and Graveyard, and No. 611 Castlemoate House. (Refer to Chapter 16 (Architectural Heritage) for full details).</p> <p>Other: A short section of the route is within the Dublin Airport Local Area Plan 2020 area (DCC 2020). Two thatched properties (one a protected structure) located south of Collinstown Cross.</p>	<p>Low</p>
<p>3. Northwood Avenue to Shantalla Road</p>	<p>Townscape Character: Outer city suburbs. Mixed residential/commercial through Santry, residential south of Santry.</p> <p>Streetscape Character: High quality historic parkland with mixed residential and commercial use through Santry, to traditional suburban residential road from south of Santry.</p> <p>The Proposed Scheme follows a historic road corridor. The historic aesthetic/character of original road corridor remains most intact along tree-lined boundary wall at Santry Demesne – although the boundary wall has modern interventions/entrances and the rear of Morton</p>	<p>High</p>

Proposed Scheme Section	Baseline Description	Baseline Sensitivity
	<p>Stadium is a prominent feature close to the roadside boundary.</p> <p>There is major commercial/retail development at Omni (Santry) Shopping Centre which is segregated from street by low walls and railings. Otherwise, the road boundary is generally defined by two-storey semi-detached housing with front gardens. A short length of attractive single-storey residential terraces exists south of Omni Shopping Centre.</p> <p>Street tree planting and off-street tree planting (notably in Santry Demesne) are prominent features to either side of R132 Swords Road/R104 Coolock Lane Junction, but are notably less prominent to the open road corridor south of Omni Shopping Centre.</p> <p>The streetscape is composed of a traditional residential road south of the Omni Shopping Centre. The highest visual quality is associated with mature woodland and tree-lined boundary and entrance to the major parkland and public amenity of Santry Demesne/Park. There are primarily narrow concrete footpaths throughout with low quality paved sections at the Omni Shopping Centre. The road corridor is heavily trafficked.</p> <p>Key Townscape Features: Tree and woodland-lined boundary of Santry Demesne and St. Pappan's Church and Grounds, with mature tree planting are key features.</p> <p>Amenity Designations: Major open space/park at Santry Demesne/Park, which also includes the Morton Athletics Stadium.</p> <p>Tree Preservation Order: Trees at Santry Demesne (Tree Preservation (Santry Demesne) Order 1987).</p> <p>Tree / Woodland Preservation Objectives: Preservation objective for group of trees at Santry Demesne.</p> <p>Protected Views: None relevant.</p> <p>Protected Structures: There are Protected Structures at No. 1543 St. Pappan's Church and Holy Well, Santry. (Refer to Chapter 16 (Architectural Heritage) for full details).</p> <p>Other: The Omni (Santry) Shopping Centre is a significant commercial/retail development along the R132 Swords Road in Santry. Mature trees are an important visual feature along Santry Demesne and in the open spaces at Santry Villas/St. Pappan's Church grounds and Lorcan Drive.</p>	
<p>4. Shantalla Road to Botanic Avenue</p>	<p>Townscape Character: Composed of inner city suburb with tree-lined streetscape to either side of inner city village of Drumcondra.</p> <p>Streetscape Character: There is a transition from major dual carriageway at Whitehall to traditional city street with prominent mature street trees, bounded by high-quality residential properties, mature front gardens, historic boundary walls and railings. The city village of Drumcondra is centred on Drumcondra Bridge crossing of the River Tolka. Mature street trees are a notable feature of sections of the road corridor, especially to either side of the tree-lined avenue of R102 Griffith Avenue along N1 Drumcondra Road Upper north of Drumcondra Village, and also in wide grass verges with surrounding railings along N1 Drumcondra Road Lower south of Drumcondra Village (see following character area also).</p> <p>Development to either side is generally of fine two storey city residences with mature gardens. Occasional three-storey buildings through Drumcondra Village. There are significant areas of institutional land uses to either side – often with mature trees and high stone wall defining road boundaries.</p> <p>Key Townscape Features: Defined by long, straight city streetscape with prominent mature tree-line sections and with high quality two-storey residential buildings which are set back behind mature gardens, and institutional lands with stone walls and tree-line boundaries. Traditional city village of Drumcondra located at river crossing at centre of corridor. Mainly concrete footpaths with wide tree-lined verges and surrounding railings to south. The street corridor is usually dominated by traffic flow.</p> <p>Amenity Designations: Ellenfield Park is present to east of R132 Swords Road / N1 National Road at Whitehall. The small park/open space of Our Lady's Park is located within the River Tolka Conservation Area at Frank Flood (Drumcondra) Bridge. There are mature tree-lined road verges along the route which are designated as open space and the route passes through the River Tolka Conservation Area at Frank Flood Bridge.</p> <p>Tree Preservation Order: None.</p> <p>Tree / Woodland Preservation Objectives: None.</p> <p>Protected Views: Views east and west along the River Tolka (Conservation Area).</p> <p>Protected Structures: These are limited to the southern end of corridor, south of R102 Griffith Avenue, and include institutional properties, such as those in the grounds of St. Patrick's College (Dublin City University). (Refer to Chapter 16 (Architectural Heritage) for full details).</p> <p>Other: Attractive village/riverside setting at Frank Flood Bridge (Drumcondra Bridge, which is listed in NIAH) over the River Tolka.</p>	<p>High</p>

Proposed Scheme Section	Baseline Description	Baseline Sensitivity
<p>5. Botanic Avenue to Granby Row</p>	<p>Townscape Character: Character transitions from inner city suburbs with tree lined streetscapes, through to the historic City Centre.</p> <p>Streetscape Character: At the northern end of this section the character is informed by traditional city streets with prominent mature street trees, bounded by high-quality residential properties, mature front gardens, historic boundary walls and railings. Mature street trees are a notable feature in wide grass verges with surrounding railings along Drumcondra Road Lower south of Drumcondra Village. Development to either side is generally of fine two storey city residences with mature gardens. Significant areas of institutional land uses including Clonliffe College.</p> <p>From Clonliffe Road to Frederick Street North and on to junction with Granby Row the character is of a city street providing access to City Centre which is lined by generally three and four-storey red-brick and rendered terraces, with occasional variation, including some over basements. In places there are some modern interventions. No street trees are present other than recently planted trees in the median at northern end of Dorset Street Upper and at the southern end of Drumcondra Road Lower. The road corridor crosses the green corridor of the Royal Canal at Binns Bridge. There are generally commercial uses at street level, with office/residential uses above, but some sections of full residential exist.</p> <p>From Frederick Street North/Parnell Square to Granby Row the streetscape character is of a historic City Centre street typically defined by four and five storey red brick Georgian terraces, punctuated by Findlater's Church and Spire on corner of Parnell Square. Parnell Square is surrounded by four-storey over basement Georgian terraces on east north and west. The route joins O'Connell Street at south-east corner, where the Parnell Monument (a National Monument SMR DU018-42) in a prominent feature in the junction island. Parnell Square is a tree-lined square enclosed by walls, railings and buildings, including Rotunda Hospital and Gate Theatre. The square includes setting for the Garden of Remembrance with Oisín Kelly's copper bronze sculpture of 'The Children of Lir'.</p> <p>Sections of historic and modern granite kerbs, granite steps, plinth walls, coalhole covers, and historic railings. Generally concrete paved footpaths. Largely a heavily trafficked road corridor.</p> <p>Key Townscape Features: Long straight city streetscape with prominent mature tree-lined sections and with high quality two-storey residential buildings set back with mature gardens. Vistas east and west over Royal Canal corridor from Binns Bridge. Georgian brick streetscape vistas, Georgian square, with memorial garden, monuments and sculptures. There are historic cast-iron lamp posts, concrete footpaths with historic and modern granite kerbs and steps and railings around basement openings.</p> <p>Amenity Designations: Mature tree-lined road verges are designated as open space. Residential Conservation Areas, with some protected structures along sections of Drumcondra Road Lower. River Tolka Conservation Area and Royal Canal Conservation Areas. Residential Conservation Areas on Drumcondra Road Lower.</p> <p>Conservation Area. ACA (O'Connell Street and Environs ACA) at southern end of Parnell Square. (Refer to Chapter 16 (Architectural Heritage) for full details). Garden of Remembrance at northern of Parnell Square is a Memorial Garden and public open space.</p> <p>Tree Preservation Order: None.</p> <p>Tree / Woodland Preservation Objectives: None.</p> <p>Protected Views: There are views east and west along Royal Canal (Conservation Area) and key vistas south from Parnell Square to O'Connell Street/the Spire, as well as street views within the Conservation Area at Parnell Square.</p> <p>Protected Structures: These include institutional properties, such as those in the grounds of Clonliffe College, a number of residential properties to either side of Drumcondra Road Lower, Binns Bridge (Royal Canal) and number of properties along Dorset Street. The majority of buildings along Frederick Street North and around Parnell Square, including Findlater's Church (Abbey Presbyterian Church) and buildings within Parnell Square, including Rotunda Hospital and Gate Theatre are Protected Structures. (Refer to Chapter 16 (Architectural Heritage) for full details).</p> <p>Other: There is significant visual amenity along mature tree-lined section of Drumcondra Road Lower. Young tree planting is located in new granite paved central road median. Modern granite kerbing and feature street light standards. Peadar Kearney Memorial is present at junction of Parade and Dorset Street. There are sections of historic and modern granite kerbing. The 1913 Rotunda Rink Memorial and two mature trees outside railings of Parnell Square on Parnell Square East. Garden of Remembrance and Parnell Square are features of cultural and heritage significance and the garden is a public amenity. Findlater's Church (Abbey Presbyterian Church) is a prominent landmark in the Streetscape.</p>	<p>High / Very High</p>

17.4 Potential Impacts

This section presents potential impacts that may occur due to the Proposed Scheme, in the absence of mitigation. This informs the need for mitigation or monitoring to be proposed (refer to Section 17.5). Predicted 'residual' impacts taking into account any proposed mitigation are presented in Section 17.6.

17.4.1 Characteristics of the Proposed Scheme

17.4.1.1 General

The key characteristics of the Proposed Scheme of particular relevance to the (landscape) townscape and visual assessment are described in the following sections under separate headings for the Construction Phase and Operational Phase.

The description of the characteristics of the Proposed Scheme is based on the Proposed Scheme drawings in Volume 3 of this EIAR, including those within the Arboricultural Impact Assessment Report (Appendix A17.1 in Volume 4 of this EIAR).

A detailed description of the Proposed Scheme is provided in Chapter 4 (Proposed Scheme Description) and a detailed description of the Construction Phase of the Proposed Scheme is provided in Chapter 5 (Construction).

17.4.1.2 Development of the Proposed Scheme Design

Consideration of the potential landscape (townscape) and visual impacts have been important in defining the Proposed Scheme design. Following initial assessment of impacts, availability of additional information, as well as public consultation, suggestions and recommendations from local residents, community groups and stakeholders, the Proposed Scheme has undergone iterative design development with the aim of minimising potential negative impacts as far as practicable. This process has also helped define suitable improvements to the urban realm. The design changes are described in Section 3.4 of Chapter 3 (Consideration of Reasonable Alternatives).

The following are design changes that have been incorporated into the Proposed Scheme design, and which are applicable to this assessment, and have led to a reduction in predicted landscape and visual effects:

- Introduction of a pedestrian and cycle connection with the Santry Greenway at Northwood Junction;
- Elimination of land acquisition and associated loss of trees at Kilronan;
- Substantial iterative changes have been made to the proposed road layout adjacent to Santry Demesne to reduce what would have been significant impacts to Morton Stadium and Santry Park including mature trees, and avoid impacts to the historic curtilage wall of the demesne;
- Reconfiguration of the proposed layout of the junction of Swords Road and Coolock Lane, thereby avoiding significant impacts to two prominent mature trees at the entrance to Santry Park;
- Proposal of an alternative layout of the northbound diverge ramp after Whitehall Church to avoid impacts on the adjacent green area;
- Reduction in cycle track width in the vicinity of Plunket College and Highfield Hospital, to minimise impacts on adjacent mature trees; and
- Substantial iterative design work for the proposals at Frank Flood Bridge and Our Lady's Park to refine the structural design of the new foot/cycle bridge to be sympathetic to the townscape context. The finalised design uses a visually lightweight structure with slender components that provide only limited screening of the historic bridge, thus maintaining views of the bridge from surrounding areas and limiting the impacts on the views from the bridge.

17.4.1.3 Construction Phase

The key characteristics of the Proposed Scheme of particular relevance to the landscape (townscape) and visual assessment during the Construction Phase, include:

- Amendment and adaption of existing road network throughout, including surfacing, kerbs, footpaths, drainage, lighting, service/utility features, road markings, etc.;
- Amendment and adaption of existing junctions throughout, including surfacing, kerbs, footpaths, traffic controls, lighting, cycle facilities, road markings, etc.;
- Temporary and permanent land take from properties along the Proposed Scheme;
- Establishment/use of temporary Construction Compounds;
- Amendment and adaption of areas of existing verges, roadside and median tree planting and boundaries; and
- Provision of additional areas for SuDS/landscape enhancement and interventions, tree planting, planting, landscape works, etc.

The following provide more detail on the key construction characteristics of the Proposed Scheme on a section-by-section basis:

17.4.1.3.1 Section 1: Pinnock Hill to Airside Junction (for baseline features refer to Figure 17.1 in Volume 3 of this EIAR)

- Conversion of existing Pinnock Hill Roundabout to a BusConnects Protected Junction (Ch.A100 to Ch.A250);
- Land acquisition from residential properties to south of the junction for revised local access with removal of section of trees/woodland belt (Ch.A150 to Ch.A280);
- Conversion of Airside Junction to BusConnects Protected Junction, with works to landscaped areas including construction of SuDS area. Land acquisition north of Airside Junction is proposed with removal of a section of woodland band (Ch.A680 to Ch.A820);

17.4.1.3.2 Section 2: Airside Junction to Northwood Avenue (for baseline features refer to Figure 17.1 in Volume 3 of this EIAR)

- Works within wide verges along the R132 including land acquisition for construction of footpaths, cycle lanes and bus stops;
- Land acquisition from residential property south of Airside Junction is proposed with setting back of boundaries, and removal of sections of hedgerows and trees, including within private garden areas (Ch.A820 to Ch.A870);
- Land acquisition fronting service station along west side of R132 south of Airside Junction (Ch.A850 to Ch.A920);
- Land acquisition from area of verge to west side of R132 for road widening, construction of bus stop and conversion from hardstanding to grassed area (Ch.A1000 to Ch.A1150);
- Land acquisition from wide verge for realignment of entrance road to Glenmore House (Ch.A1160 to Ch.A1220);
- Temporary land acquisition fronting Kilronan House along east side of R132 (Ch.A1360 to Ch.A1400);
- Works within wide verges including construction of SuDS attenuation areas, resulting in removal of section of existing hedgerows and plantings (Ch.A1420 to Ch.A1550);
- Removal of section of hedgerow for construction of bus stop on western side of R132 (Ch.A1620 to Ch.A1650);
- Removal of section of hedgerow for construction of bus stop, general widening of road corridor, construction of SuDS attenuation area and siting of Construction Compound SW1 to eastern side of R132, including some young trees to be lifted, stored and reinstated according to best practice guidelines (Ch.A1710 to Ch.A2000);

- Works within road corridor and western verge, including removal of section of hedgerow (Ch.A1900 to Ch.A2000);
- Conversion of existing Cloghran roundabout to BusConnects Protected Junction, with short sections of land acquisition and removal of sections of existing woodland belts and vegetation, including from widened verges to the south to accommodate widened carriageway (Ch.A2000 to Ch.A2150);
- Land acquisition from Coachman's Inn for carriageway widening including setting back of low stone boundary wall and changes to parking layout (Ch.A2150 to Ch.A2270);
- Works within road corridor and adjoining verges, including removal of sections of existing woodland belts and plantings (Ch.A2220 to Ch.A2520);
- Works around existing Airport Roundabout with minor changes to road layout including short sections of land acquisition and removal of a short section of existing woodland belt and vegetation to the south-west side of the junction (Ch.A2550 to Ch.A2850);
- Land take from roadside verge for new bus-stop with limited loss of vegetation (Ch.A2900 to A3040);
- Land take from commercial property at Kealy's Pub and residential properties to western side of R132, including removal of section of grass verge for widening footpath (Ch.A3040 to Ch.A3150);
- Land acquisition along west side of R132 (south of No.1 Swords Road, Corballis) with removal of section of hedgerow/trees (Ch.A3170 to Ch.A3200);
- Land acquisition at Collinstown Cross Industrial, Estate south-east of Collinstown Cross junction, with removal of short sections of tree-lines, and demolition of single storey industrial building for relocation of entrance to the south away from Swords Road/Old Airport Road junction (Ch.A4100 to Ch.A4160);
- Land take from open space to the south-west of Swords Road/Old Airport Road Junction for Construction Compound SW2 and construction of SuDS attenuation area with loss of small section of tree group (Ch.A4120 to Ch.A4200);
- Land acquisition at Thatch Cottage (Swords Road, Cloghran) on west side of R132, with setting back of property boundary wall (to be reinstated like-for-like), and impact on entrance and private area (Ch.A4200 to Ch.A4220);
- Land acquisition along sections of east and west side of R132 from south of Collinstown Cross to the M50 overbridge, including sections of private boundaries and gardens, boundary with Paddy Shanahan Cars, Quick Park, Carlton Hotel, GreatGas Express, Royal College of Surgeons Sports Ground, Whitehall Colmcille GAA Club and Altrad Generation, and with removal of two derelict houses, a short section of hedgerow, and two trees (Ch.A4200 to Ch.A4700); and
- Land acquisition along sections on east and west side of R132 from south of M50 overbridge to Northwood Avenue, from business and commercial areas at Dublin Airport Business Park, Airways Industrial Estate, Furry Park Industrial Estate for widening of the road corridor and at Santry River corridor for tie-in to footpath networks, and with removal of sections of boundaries, planting, vegetation and trees (Ch.A4970 to Ch.A5700).

17.4.1.3.3 Section 3: Northwood Avenue to Shantalla Road (for baseline features refer to Figure 17.1 in Volume 3 of this EIAR)

- Substantial works within existing road corridor from Northwood Avenue to Coolock Lane with temporary land take for regrading entrances/driveways, and removal of grass verge for widening of road corridor with loss of one mature and three early mature street trees (Ch.A5700 to Ch.A6350);
- Land acquisition from open space to the north of Coolock Lane for Construction Compound SW3 as well as permanent land acquisition for construction of a bus terminus and SuDS attenuation areas, requiring removal of four trees (Ch.A6320 to Ch.A6330);
- Works to median and land acquisition on either side of R132 from section of open space at Santry Villas and along boundary of Santry Park/Santry Demesne, with impact on existing boundaries and loss of small number of young/early-mature trees and one mature tree (Ch.A6350 to Ch.A6460);

- Sections of acquisition of open space areas at tree-lined verge fronting Chadwicks site and adjoining business site, and land acquisition from Trade Electric Group building;
- St. John's Court, AIB, Santry Industrial Estate, Magenta Crescent/Hall, including from garden at No. 1 Magenta Crescent, and open space at Lorcan Road, with impact on open space boundaries, planting, areas of open space areas and loss of a number of trees (Ch.6550 To Ch.6980);
- Substantial sections of acquisition of private areas and gardens from residential properties, with removal of property boundaries, plantings, sections of driveway lawn and garden, and temporary land acquisition for regrading of driveways and provision of off road parking, from properties at even Nos. 304-296 (5 no.), even Nos. 282 to 276 (4 no.), even Nos. 272 to 232 (20 no.), odd Nos. 305 to 277 (15 no.), odd Nos. 269 to 241 (15 no.), Swords Road, including creation of new off-road parking areas in gardens of nos. 277 to 299 Swords Road (12 no.) (Ch.A7120 to Ch.A7510); and
- Works and land acquisition from open space between Shantalla and Shanrath (Ch.A7660 to Ch.A7680).

17.4.1.3.4 Section 4: Shantalla Avenue to Botanic Avenue (for baseline features refer to Figure 17.1 in Volume 3 of this EIAR)

- Removal of edge of woodland area to boundary of Swords Road/Santry Bypass off-slip (Ch.A7650 to 7730);
- Land acquisition at carpark for Whitehall Holy Child Church for road widening with impact on existing boundaries and loss of band of early-mature tree planting in grass verge (Ch.8040 to Ch.8230);
- Works to Swords Road/Collins Avenue junction including changes to road layout and construction of new cycle tracks, with land acquisition from roadside open spaces and landscape islands and removal of a single early-mature tree (Ch.A8150 to Ch.A8250/Ch.AB300 to Ch.B383);
- Area of temporary acquisition of land south-east of Swords Road/Collins Avenue junction (for Construction Compound SW4) and bus stop with removal of seven early-mature street trees (Ch.8240 to Ch.8400);
- Area of land acquisition north of entrance to Highfield Healthcare, with removal of existing boundary, mature tree and other planting (Ch.8550 to Ch.8640);
- Small areas of land acquisition at Plunket College with removal of boundary and small area of tree planting (Ch.8720 to Ch.8750);
- Works at junction with Seven Oaks/entrance to Bonnington Hotel and adjacent verge including loss of six semi and early mature trees from the verge (Ch.A8820 to Ch.A8900);
- Works at Swords Road/Griffith Avenue junction including small areas of land acquisition at Nos. 186 and 188 Swords Road and No. 237 Griffith Avenue, with associated removal of four mature street trees, impact on property boundaries and gardens and associated garden planting (Ch.A9030 to Ch.A9130);
- Minimal impact on key characteristics, including mature trees and grass verges between Griffith Avenue and Millmount Terrace, with removal of only three young/early-mature trees (Ch.A9130 to Ch.A9900);
- Temporary land acquisition from area of hardstanding to the front of commercial units on eastern side of Drumcondra Road Upper (Ch.9820 to A9910); and
- Area of land acquisition at Millmount Terrace and from Our Lady's Park at Tolka River for provision of new cycle and pedestrian bridge along west side of Frank Flood Bridge. Acquisition will allow for provision of Construction Compound SW5 on part of Our Lady's Park and involve removal of six semi mature trees at Millmount Terrace and two early mature trees (columnar poplar) on the southern riverbank and other planting in open space. Existing Marian statue will be removed and reinstated after decommissioning of the Construction Compound. (Ch.A9930 to Ch.A10050).

17.4.1.3.5 Section 5: Botanic Avenue to Granby Row

- Limited works to construct cycle tracks on both sides of the road, resulting in minimal impact on key characteristics, with some land acquisition from grass verges and retention of existing mature trees and metal railings (Ch.A10050 to Ch.A10550);
- Moderate changes and works within existing road corridor (Ch.10550 to Ch.11764), including realignment of sections of median with removal (including some for reinstatement) of associated young street trees between St. Annes Road and Leo Street (Ch.10550 to Ch.10900);
- Temporary land acquisition from areas of hardstanding to the front of commercial units at Nos. 3 to 26 Dorset Street (23 no.) and Nos. 46A to 70A (26 no.), for resurfacing in natural stone to match proposed surfacing to adjacent areas (Ch.A11120 to Ch.A11500); and
- Modest changes and works within existing road corridor along Frederick Street North and Parnell Square East (Ch.0000 to Ch.0450) and along Parnell Square West and Granby Row with minimal impact on key characteristics (Ch.C0 to Ch.0374).

Construction Compounds are to be located:

- SW1: on landscape verge north-east of Cloghran roundabout (Ch.1910 to Ch.2000);
- SW2: on part remnant road/part landscape verge at junction between Swords Road and Old Airport Road (Ch.4100 to Ch.4200);
- SW3: on landscape area adjacent to Coolock Lane east of Swords Road (Ch. 6320 – 6340);
- SW4: on previous Construction Compound lands (for Port Tunnel) south-east of junction between Swords Road and Collins Avenue (Ch.8310 to Ch.8400); and
- SW5: on part of existing open space at Our Lady's Park Drumcondra (Ch.9980 to Ch.10050).

17.4.1.4 Operational Phase

The key characteristics of the Proposed Scheme of particular relevance to the (landscape) townscape and visual assessment during the Operational Phase, include:

- A small number of changes to traffic movements along the Proposed Scheme;
- Changes in streetscape elements, including allocation of carriageway space, provision of cycle and footpath facilities, signage, lighting, surfacing, road marking, etc. along the Proposed Scheme;
- Permanent land acquisition for a considerable number of properties; and
- Loss of areas of planted tree belts, street trees and trees within private curtilages.

17.4.1.4.1 Section 1: Pinnock Hill to Airside Junction (for baseline features refer to Figure 17.1 in Volume 3 of this EIAR)

- Existing roundabout junction replaced with signalised cross junction at Pinnock Hill;
- Minor changes in local road connectivity/access arrangements at Pinnock Hill; and
- Minor changes to carriageway allocation, including provision of footpaths and cycleways; and
- Permanent land acquisition for a small number of properties.

The following key landscape measures are proposed in this section:

- Replacement tree planting and new ornamental planting to landscape areas surrounding the Pinnock Hill Roundabout, including reinstated landscaping to boundary of adjacent properties, repositioned welcome sign and improved setting for existing sculpture (Ch.A80 to Ch.A260);
- Hedgerow planting to gap in existing tree belt to west and east sides of Swords Road (Ch.A490 to Ch.A570); and
- Proposed tree planting to enhance frontage of Airside Retail Park (Ch.A770 to Ch.A780).

17.4.1.4.2 Section 2: Airside Junction to Northwood Avenue (for baseline features refer to Figure 17.1 in Volume 3 of this EIAR)

- Existing roundabout junction replaced with signalised cross junction at Cloghran;
- Minor changes to carriageway allocation, including provision of footpaths and cycleways; and
- Permanent land acquisition for a range of residential, business and commercial properties and amenity/open spaces.

The following key landscape measures are proposed in this section:

- New tree and hedgerow planting to western and eastern sides of Swords Road including change from area of hardstanding to new grass verge with hedgerow boundary to front of Boland Car Dismantler (Ch.A990 to Ch.A1200);
- Provision of hedgerow/tree band planting and SuDS attenuation areas to verges/agricultural areas (Ch.A1420 to Ch.A2030);
- Replacement tree planting to repair edge of existing woodland belt to western side of Swords Road (Ch.A2220 to Ch.A2520);
- Provision of proposed species rich grassland to landscape areas to north-east of Airport Roundabout (Ch.A2440 to Ch.A2700);
- Reinstatement of boundary planting to front of Carlton Hotel (Ch.A4320 to Ch.A4370), to front of Royal College of Surgeons Sport Ground (Ch.A4500 to Ch.A4550), to boundary of North Ring Business Park (Ch.A4970 to Ch.A5040) and boundary of Airways Industrial Estate (Ch.A5260 to Ch.A5390), as well as replacement of low brick boundary wall and railings with low stone wall and railings at Dublin Airport Business Park (Ch.A5040 to Ch.A5210);
- Provision of improved footpaths along Swords Road with proposed concrete paving (Ch.A5550 to Ch.A5700); and
- Provision of appropriate replacement boundaries/landscape measures for properties directly impacted by temporary and/or permanent acquisition from Pinnock Hill to Northwood Avenue (Ch.A800 to Ch.A5700).

17.4.1.4.3 Section 3: Northwood Avenue to Shantalla Road (for baseline features refer to Figure 17.1 in Volume 3 of this EIAR);

- Substantial changes to carriageway allocation, including provision of footpaths and cycleways;
- Provision of new bus terminus in open space north at Coolock Lane; and
- Permanent land acquisition for a substantial number of residential, business and commercial properties and amenity/open spaces.

The following key landscape measures are proposed in this section:

- Provision of improved footpaths along Swords Road, and adjoining sections of Coolock Road and Lorcan Road with proposed concrete paving (Ch.A5700 to Ch.7630);
- Provision of landscape measures at new bus terminus on Coolock Lane including tree planting and concrete block paving (Ch.A6310 to Ch.A6340);
- Replacement tree planting to open spaces at Santry Park and Santry Villas to compensate for limited loss of trees at these locations (Ch.A6420 to Ch.A6450);
- Provision of appropriate tie-in to existing entrances to Santry Demesne and for provision of high quality boundary detail in replacement of impacted section at southern end of demesne (Ch.6330 to Ch.6490);
- Replacement of garden boundaries at Magenta Crescent and low wall and railing boundary at adjacent commercial property (Ch.A6690 to Ch.6750);
- Replacement tree planting, creation of a retaining wall, improved timber boundary fencing, and new concrete paving to footpaths at Magenta Hall to help improve the landscape and visual amenity for these properties (Ch.A6600 to Ch.A6980); and

- Provision of appropriate replacement boundaries and landscape measures for properties directly impacted by temporary and/or permanent acquisition from Northwood Avenue to Shantalla Road, as well as provision of new off-road parking space to some properties (Ch.A5700 to Ch.A7500);

17.4.1.4.4 Section 4: Shantalla Avenue to Botanic Avenue (for baseline features refer to Figure 17.1 in Volume 3 of this EIAR)

- Changes to carriageway allocation, including provision of footpaths and cycleways;
- Permanent land acquisition for a number of residential, other properties and amenity/open spaces; and
- Provision of new cycle and pedestrian bridge over River Tolka to west of Frank Flood Bridge, with changes to parapet of existing bridge and loss of area of open space within Our Lady's Park, Drumcondra.

The following key landscape measures are proposed in this section:

- Improvements to footpaths on western side of Swords Road/Collins Avenue Junction, and around junction with Iveragh Road with provision of new concrete paving (Ch.A8160 to Ch.A8280);
- Tree planting to landscape area at entrance to Bonnington Hotel/commercial units/Seven Oaks (Ch.A8790 to Ch.A8820);
- Improvements to urban realm with provision of raised crossing points at junctions in stone/concrete sett paving, and provision of concrete paving to footpaths and areas to front of commercial units on Drumcondra Road Upper (Ch.A9200 to Ch.A10050); and
- Provision of replacement tree planting, new seating area with stone paving surrounding reinstated statue and realigned path finished in resin bound aggregate at Our Lady's Park, as well as replacement tree planting at Millmount Terrace (Ch.A10025).

17.4.1.4.5 Section 5: Botanic Avenue to Granby Row

- Changes to carriageway allocation, including provision of footpaths and cycleways, including provision of cycleways within wide grass verges at Drumcondra Road Upper.

The following key landscape measures are proposed in this section:

- Provision of raised pedestrian and cycle crossings with sett paving to side-street junctions along Drumcondra Road Lower and stone paving to footpaths around Drumcondra Road Lower/Clonliffe Road Junction (Ch.A10520 to Ch.A10550);
- Provision of raised pedestrian and cycle crossings with sett paving and stone paving to footpaths along Drumcondra Road Lower and Dorset Street, with retention of existing stone paving where appropriate to create a consistent appearance along this section (Ch.A10550 to Ch.A11610);
- Existing trees in median on Drumcondra Road Lower to be lifted and reused if feasible and new tree planting to replace those removed/unsuitable for relocation (Ch.A10620 to Ch.A110750);
- Existing trees in median on Drumcondra Road Lower to be lifted and reused if feasible and new tree planting to replace those removed/unsuitable for relocation; and
- Provision of raised pedestrian crossings with sett paving to side-street junctions and stone paving to footpaths along Frederick Street North, with retention of existing stone paving where appropriate.

In addition to the above works, the following general landscape/townscape and visual measures are included within the Proposed Scheme:

- Where paving, existing trees, hedges, and/or plantings are removed from temporary acquisition areas, new planting and paving replacements will be provided as appropriate. Where practicable, new plants will be the same species to those removed. Replacement plant sizes will be those that are readily available and therefore, will be unlikely to match the maturity of plants removed (especially in the case of larger trees). However, where practicable, semi-mature trees will be used in the replanting works throughout the Proposed Scheme. Where the same or similar species are provided, maturity similar to that of the existing can be achieved in time;

- New boundaries will be established on the setback line to match the existing boundary. The construction and provision of the new boundaries will take account of the location of existing trees, other plantings, gradients, drainage, property features and access arrangements so as to minimise additional indirect effects. Where practicable, existing railings, gates, cut stone walls and/or piers (or where appropriate, elements of same) to be removed will be reinstated on the new setback boundary line subject to discussion between the landowner and the NTA;
- The Proposed Scheme will provide for the planting of new semi-mature street trees to replace removed trees, where practicable, and for improvement of the streetscape environment. Species selected shall be appropriate to the urban street environment and to the characteristics of the specific location;
- Proposals for the treatment of the urban realm within the streetscape impacted by the Proposed Scheme will have regard to the existing character of the street or location, to emerging policies, objectives and proposals for the urban realm and to opportunities for mitigation of impact on the urban realm and the streetscape. Proposals will have regard to historic details and features, to the quality of existing and proposed materials, to the reduction of clutter, ease of legibility and management and maintenance requirements;
- Landscape proposals will have regard to the recommendations of Chapter 12 (Biodiversity) in relation to opportunities for provision of biodiversity and of Chapter 13 (Water) in relation to opportunities for incorporation of Sustainable Urban Drainage Systems (SuDS);
- All aspects of the Proposed Scheme within public areas will revert to ongoing management and maintenance in accordance with normal operational practices. This will include hard and soft landscape works and townscape measures, new and reinstated tree and other planting, and new and reinstated surfacing and paving, etc.; and
- Maintenance and monitoring of reinstatement and other works in private areas (e.g. temporary acquisition areas) will ensure that any defective materials or workmanship will be made good within a period of 12 months following completion of Construction Phase.

17.4.2 Do Nothing Scenario

With respect to Landscape (Townscape) and Visual, the 'Do Nothing' scenario means that the Proposed Scheme would not proceed and associated changes to the Landscape (Townscape) and Visual environment would not arise. Therefore, landscapes/townscapes and properties along the Proposed Scheme would not experience the negative impacts that are associated with the Proposed Scheme and their existing setting would experience little or no change in the short to Medium-Term. Nevertheless, given the suburban/urban context of the Proposed Scheme it is considered likely that the road corridor of the Proposed Scheme will continue to experience pressure for reallocation of carriageway space and associated traffic movements in direct response to the increasing demand for alternative modes of transport (i.e. away from private car).

There would be a Neutral effect on the Landscape (Townscape) and Visual baseline under the 'Do Nothing' scenario.

17.4.3 Construction Phase

The Construction Phase of the Proposed Scheme will give rise to temporary or short-term (one to two years) townscape streetscape and visual impact through the following:

- Site mobilisation and establishment, fencing and hoarding of Construction Compounds and works areas - including within private areas/gardens;
- Site demolition, including removal of boundaries, kerbs, verges, surfaces, signage, lighting, landscape areas, trees and plantings – including boundary fences, walls and plantings within private areas/gardens;
- Site activity and visual disturbance from general construction works and operation of construction machinery both within the site and at the Construction Compounds;
- Construction works involving diversion of existing underground/overground services and utilities, provision of new services and utilities, drainage features and connections, etc.;

- Site activity and construction works involved in the construction of new carriageways, kerbings, footpaths and cycle tracks, a bridge, bus stops and signage, reinstatement of boundaries/provision of new boundaries and landscape reinstatement works/provision of new landscape; and
- Decommissioning of works areas and Construction Compounds.

A detailed description of the construction of the Proposed Scheme is provided in Chapter 5 (Construction).

17.4.3.1 Impact on Townscape and Streetscape Character

As set out in Section 17.3.1 the Proposed Scheme is sub-divided into five sections:

- Section 1 – Pinnock Hill to Airside Junction;
- Section 2 – Airside Junction to Northwood Avenue;
- Section 3 – Northwood Avenue to Shantalla Road;
- Section 4 – Shantalla Road to Botanic Avenue; and
- Section 5 – Botanic Avenue to Granby Row.

17.4.3.1.1 Pinnock Hill to Airside Junction

The baseline townscape is of low sensitivity and construction of the Proposed Scheme involves changes to modern dual carriageway road infrastructure. The Construction Phase involves demolition, excavation and construction works to the roundabout and junction, sections of road carriageways, verges, drainage features, utilities, road boundaries, removal of sections of existing tree and other planting and roadside boundaries, and areas of land acquisition from private property including some residential property. The works are generally limited in extent but will result in substantial removal of roadside bands of tree planting, including mature trees. The existing townscape character along this section of the Proposed Scheme will not be altered but there will be an impact on localised sections of streetscape. The magnitude of change in the baseline environment is medium/high.

The potential townscape/streetscape impact of the Construction Phase on this section is assessed to be Negative, Slight/Moderate and Temporary/Short-Term.

17.4.3.1.2 Airside Junction to Northwood Avenue

The baseline townscape is of low sensitivity and the construction of the Proposed Scheme involves changes to modern mainly dual carriageway road infrastructure. The Construction Phase involves demolition, excavation and construction works primarily within and to the road carriageway and junctions, verges, drainage features, utilities, with only limited impact on sections of road boundary and existing tree and other planting – most notably from Cloghran roundabout, and at Collinstown Cross to Northwood Avenue. The works will require land acquisition from areas of several commercial properties, and limited acquisition from residential property, with impacts on boundaries and private areas. There will be demolition of small commercial buildings to provide realigned access to the surrounding commercial units and demolition of two derelict cottages to facilitate cycle track and footway provision and future development of the land by others. The construction works will have a limited impact on the existing townscape/streetscape character along this section of the Proposed Scheme. The magnitude of change in the baseline environment is medium/high.

The potential townscape/streetscape impact of the Construction Phase on this section is assessed to be Negative, Slight/Moderate and Temporary/Short-Term.

17.4.3.1.3 Northwood Avenue to Shantalla Road

The baseline townscape is of high sensitivity and construction of the Proposed Scheme involves changes effectively across and along the full extent of the existing road through established residential/mixed-use suburbs. The Construction Phase involves demolition, excavation and construction works within the existing road corridor, including road carriageways, junctions, parking, and surfacing, verges and open spaces, features of urban realm, drainage, utilities, and removal of sections road boundaries, and associated areas of property,

gardens and plantings. There will be impacts on open space at Coolock Lane with the introduction of a bus terminus. There will be impacts on Santry Demesne/Park with the removal and setting back of an existing modern wall and railings and loss of one mature and three early mature trees in a visually prominent location. The construction works are extensive and result in substantial changes to elements of the existing streetscape. While the construction works will not alter the existing townscape character along this section of the Proposed Scheme the works are extensive and will result in changes to elements of the existing streetscape, most notably through the removal of mature trees. The magnitude of change in the baseline environment is high.

The potential townscape/streetscape impact of the Construction Phase on this section is assessed to be Negative, Significant and Temporary/Short-Term.

17.4.3.1.4 Shantalla Road to Botanic Avenue

The baseline townscape is of high sensitivity and construction of the Proposed Scheme involves changes across and along the existing road infrastructure through established residential/mixed-use suburbs. The Construction Phase involves demolition, excavation and construction works to the existing road corridor, including road carriageways, junctions, parking, and surfacing, verges, features of urban realm, drainage, utilities, and removal of some tree planting and short sections of road boundaries. The Proposed Scheme includes for construction of a new cycle and pedestrian bridge over the River Tolka west of Frank Flood Bridge and connections through Our Lady's Park. Works will also involve limited changes to the parapet on Frank Flood Bridge (listed on NIAH). The construction works will not alter the existing townscape character along this section of the Proposed Scheme but there will be changes to the streetscape character in some locations, most notably through the loss of a substantial number of trees at the Church of the Holy Child. The magnitude of change in the baseline environment is medium/high.

The potential townscape/streetscape impact of the Construction Phase on this section is assessed to be Negative, Significant and Temporary/Short-Term.

17.4.3.1.5 Botanic Avenue to Granby Row

The baseline townscape is of high/very high sensitivity and construction of the Proposed Scheme involves generally modest changes within the existing road corridor through this established city area. The Construction Phase involves demolition, excavation and construction works to sections of the existing road corridor, road carriageways, junctions, parking, features of urban realm, drainage, utilities, and removal of some street young tree planting in the medians on Drumcondra Road Lower and Dorset Street, either side of Binns Bridge which crosses over the Royal Canal. Works will be present in the vicinity of the Peadar Kearney Memorial but there will be no direct impacts. The construction works will not alter the existing townscape/streetscape character along this section of the Proposed Scheme. The magnitude of change in the baseline environment is medium.

The potential townscape/streetscape impact of the Construction Phase on this section is assessed to be Negative, Moderate/Significant and Temporary/Short-Term.

17.4.3.2 Impact on Streetscape Elements and Visual Impacts

17.4.3.2.1 Architectural Conservation Areas

The sole architectural conservation area (ACA) along the Proposed Scheme is the O'Connell Street and Environs ACA at the southern end of Parnell Square. Construction of the Proposed Scheme has very limited works to the road/footpath corridor within the ACA and it is proposed to retain the existing footpath surfacing in this area. Although it is not proposed to alter any of the sensitive characteristics of the ACA, there is potential for accidental construction damage to wide granite kerbs which form part of the historic fabric of the streetscape. The sensitivity is very high, and the magnitude of change is low/medium.

The potential townscape/streetscape impact of the Construction Phase on this section is assessed to be Negative, Moderate and Temporary/Short-Term.

17.4.3.2.2 Conservation Areas

The River Tolka and Royal Canal corridors and Parnell Square are conservation areas.

The construction of the Proposed Scheme will result in substantial changes at the River Tolka with provision of a new cycle/pedestrian bridge west of Frank Flood Bridge. The cycle/pedestrian link passes through Our Lady's Park, where a Construction Compound is proposed. Works are also proposed to the parapet and road carriageway on Frank Flood Bridge (an NIAH). The extents of the works are limited relative to the full size of the conservation area, but the works will detract from views along the river corridor and from the general area in the vicinity of Frank Flood Bridge/Our Lady's Park. The sensitivity is very high and the magnitude of change in the baseline environment is medium/high.

The potential townscape/streetscape and visual impact of the Construction Phase on the River Tolka conservation area is assessed to be Negative, Significant/Very Significant and Temporary/Short-Term.

The construction of the Proposed Scheme will result in minor changes to the road corridor in the vicinity of the Royal Canal corridor and around Parnell Square conservation areas. The works will not affect key characteristics or features of the conservation areas, however, there is potential for accidental damage to some elements during construction. The sensitivity is very high and the magnitude of change in the baseline environment is low/medium.

The potential townscape/streetscape and visual impact of the Construction Phase on the Royal Canal/Parnell Square conservation areas is assessed to be Negative, Moderate and Temporary/Short-Term.

17.4.3.2.3 Residential Conservation Areas

Residential conservation areas are limited to sections of Drumcondra Road Upper/Lower and will not be directly impacted, where works are restricted to the road corridor, however, the works will be visible from these areas and they will have a detrimental impact on their amenity while works are ongoing. The sensitivity is high and the magnitude of change in the baseline environment is medium.

The potential townscape/streetscape and visual impact of the Construction Phase on residential conservation areas is assessed to be Negative, Moderate and Temporary/Short-Term.

17.4.3.2.4 Protected Structures

A number of protected structures are located along the Proposed Scheme. These include dispersed properties and features such as Cloghran Church (in ruins) and Graveyard, and Castlemoate House north of the Airport Roundabout, a thatched cottage at Collinstown Cross, and St Pappan's Church and Holy Well at Santry. South of Whitehall these include institutional properties such as St. Patrick's College and Clonliffe College, and Binns Bridge, as well as a number of properties along Drumcondra Road Lower and Dorset Street and the majority of properties along Fredrick Street North and around Parnell Square, including within Parnell Square.

There will be direct impacts on one protected structure, a thatched cottage in Collinstown, Swords Road (FCC RPS 604), where a land take is proposed to accommodate segregated cycle tracks, widened footpaths and carriageway widening. The boundary will be removed and reinstated like-for-like at a set back location and there will be some loss of private area to the front of the building. The sensitivity is very high and the magnitude of change is medium/high.

The potential townscape/streetscape and visual impact of the Construction Phase on this protected structure (FCC RPS 604) is assessed to be Negative, Significant/Very Significant and Temporary Short-Term.

While located along the principal road corridor of the Proposed Scheme, where substantial works are proposed with consequent visual impact, there is no direct effect on other protected structures. The sensitivity is very high and the magnitude of change is low/medium (Refer also to Chapter 16 (Architectural Heritage)).

The potential townscape/streetscape and visual impact of the Construction Phase on other protected structures is assessed to be Negative, Moderate and Temporary/Short-Term.

17.4.3.2.5 Amenity Designations

A number of amenities (mainly open spaces, parks, River Tolka and Royal Canal, tree-lined avenues) are located along the Proposed Scheme. These include areas of very high sensitivity such as Santry Demesne/Park, tree-lined avenues such as Griffith Avenue and Drumcondra Road Lower and Parnell Square, as well as smaller open spaces which are of high sensitivity.

The iterative design process has eliminated most impacts on Santry Demesne/Park and the historic sections of boundary wall, main entrance and main tree groups are unaffected by the works. The construction of the Proposed Scheme is limited to the southern corner of Santry Demesne with associated removal of one mature Category C (low value) tree, three early mature trees and an impact on the existing (modern) wall/railing boundary which will be set back and reinstated. The sensitivity is high/very high and the magnitude of change is low/medium.

The potential townscape/streetscape and visual impact of the Construction Phase on Santry Demesne is assessed to be Negative, Moderate and Temporary/Short-Term.

The construction of the Proposed Scheme will result in substantial changes and alterations to small open spaces along Swords Road within Santry (Coolock Lane, Santry Villas, at Chadwicks, Magenta Hall/Lorcan Road, Shanrath Road) and at Our Lady's Park (River Tolka) Drumcondra, where a Construction Compound is also provided. The works will impact existing boundaries, trees and other vegetation and exclude use of some areas. The sensitivity is high and the magnitude of change in the baseline amenity is high.

The potential townscape/streetscape and visual impact of the Construction Phase on amenities at Santry and Our Lady's Park is assessed to be Negative, Significant and Temporary/Short-Term.

While the construction of the Proposed Scheme involves minor works within the road corridor at Santry River, along tree-lined section of Drumcondra Road Lower, the Royal Canal and around the highly sensitive Parnell Square, the works will not result in a direct impact in the characteristics or features of the amenities. Nevertheless, the works will be openly visible and will form visual detractors in the streetscape. The sensitivity is high/very high and the magnitude of change is medium.

The potential townscape/streetscape and visual impact of the Construction Phase on at Santry River, tree-lined section of Drumcondra Road Lower, Royal Canal and Parnell Square is assessed to be Negative, Moderate and Temporary/Short-Term.

17.4.3.2.6 Tree Preservation Orders/Tree Preservation Objectives

Tree preservation objectives pertain to trees at Pinnock Hill Roundabout. Works will be limited to outside the designation but there remains some potential for accidental damage to rootzones. The sensitivity is high and the magnitude of change is low.

The townscape/streetscape and visual impact of the Construction Phase on TPOs preservation objectives at Pinnock Hill will be Negative, Slight and Temporary/Short-Term.

A tree preservation order (TPO) also pertains to the mature trees within Santry Demesne/Park. Substantial iterative design development has been undertaken to reduce impacts on this designation. The impact is limited to the south-east corner of the now public park with removal of three immature trees, and one mature Category C tree (low value). The sensitivity is high and the magnitude of change is low/medium.

The potential townscape/streetscape and visual impact of the Construction Phase on TPOs preservation objectives at Santry Demesne/Park is assessed to be Negative, Slight/Moderate and Temporary/Short-Term.

17.4.3.2.7 Preserved Views / Scenic Views, etc.

Protected views are limited to east from R132 Swords Road at Airside, views east and west along the River Tolka, views east and west along Royal Canal, key vistas south from Parnell Square to O'Connell Street/the Spire and views of the street within the Parnell Square conservation area.

The Construction Phase of the Proposed Scheme provides for a new cycle and pedestrian bridge over the River Tolka, which will impact on views from Frank Flood Bridge. Otherwise, the works involves changes within the road corridor and while these will limit/disrupt the viewpoint, they do not impact on the sensitive characteristics of the views. The sensitivity is high and the magnitude of change is low/medium.

The potential townscape/streetscape and visual impact of the Construction Phase on protected views is assessed to be Negative, Slight/Moderate and Temporary/Short-Term.

17.4.3.2.8 Properties

Construction of the Proposed Scheme will require land acquisition from a significant number of residential properties along the Proposed Scheme, most notably through Santry from Coolock Lane to Shantalla Road. There will be a total of approximately 66 no. residential properties affected, including:

- Milton Fields, Pinnock Hill (1no.);
- Nevinstown House / Lodge, 1 Orchard, & Hollytree House (3 no.);
- Kilronan House (1 no.);
- 1 Swords Road (1 no.);
- The Thatch Cottage, Collinstown Cross (1no.);
- Dardistown House;
- Derryloam (1no.);
- Marymount 1 no.)
- Carey House; (1no.);
- Lima House (1no.)
- Two cottages at Royal College of Surgeons Ireland sportsground (2no.);
- No. 1 Magenta Crescent (1no.);
- Nos. 304-296 (5 no.), even Nos. 282-276 (4 no.), even Nos. 270-258 (7 no.), even Nos. 248-244 (3 no.), odd Nos. 305 to 277 (15 no.), odd Nos. 269-249 (11 no.); and
- No. 188, No. 186 Swords Road and No. 237 Griffith Avenue (3no.).

Construction works for widening of the road corridor will result in the removal of the existing boundaries and entrances, portions of gardens, private property and associated plantings. Access to properties will be retained throughout construction. Construction works adjacent to and within these private and adjoining public areas will be openly visible from these properties. The sensitivity is high and the magnitude of change is very high.

The potential townscape/streetscape and visual impact of the Construction Phase on many of these residential properties is assessed to be Negative, Very Significant/Profound and Temporary/Short-Term.

Construction of the Proposed Scheme will require land acquisition from non-residential properties (business, hotel and commercial, etc.), most notably from Collinstown Cross to Northwood Avenue and from several private (commercial) landings and four cellars between Botanic Avenue and Granby Row, which will be filled. While some areas are hard standing, works will involve removal of boundaries hard and soft landscape areas and plantings. There will be the demolition of three buildings (one commercial unit at Collinstown Cross Industrial Estate and two derelict cottages associated with the Royal College of Surgeons). The sensitivity is medium / high and the magnitude of change is high.

The potential townscape/streetscape and visual impact of the Construction Phase on these properties is assessed to be Negative, Significant and Temporary/Short-Term.

In addition to those properties directly affected through land acquisition of private areas, construction of the Proposed Scheme will also result in visual impacts for other residential and non-residential properties located along, fronting and viewing the Proposed Scheme. Impacts will arise from the provision of Construction Compounds, general disturbance, demolition, excavation and construction works within the road corridor of the Proposed Scheme. Construction works will be openly visible from these properties. The sensitivity is high and the magnitude of change is high.

The potential townscape and visual impact of the Construction Phase on these properties is assessed to be Negative, Significant and Temporary/Short-Term.

17.4.3.2.9 Trees and Vegetation

Construction of the Proposed Scheme will require limited removal of existing trees and other plantings at specific locations along the road corridor. These include sections along the dual carriageway from Pinnock Hill to the Airport Roundabout, areas of property acquisition from Collinstown Cross to Northwood Avenue and through Santry to Shantalla Road, as well as at Whitehall Church and along short, localised sections of Drumcondra Road Upper and Lower (median trees, some of which will be stored and reinstated where feasible). The sensitivity is medium/high and the magnitude of change is medium/high.

The potential townscape and visual impact of the Construction Phase on trees and plantings is assessed to be Negative, Moderate/Significant and Temporary/Short-Term.

The summary of the landscape/townscape and visual impact assessment for the Construction Phase of the Proposed Scheme is set out in Table 17.7.

Table 17.7: Summary of Predicted Construction Phase Effects

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
Townscape and Streetscape Character				
	Section 1: Pinnock Hill to Airside Junction For proposed changes see Section 17.4.3.1.1	Low	Medium / High	Negative Slight / Moderate Temporary / Short-Term
	Section 2: Airside Junction to Northwood Avenue For proposed changes see Section 17.4.3.1.2	Low	Medium / High	Negative Slight / Moderate Temporary / Short-Term
	Section 3: Northwood Avenue to Shantalla Road For proposed changes see Section 17.4.3.1.3	High	High	Negative Significant Temporary / Short-Term
	Section 4: Shantalla Road to Botanic Avenue For proposed changes see Section 17.4.3.1.4	High	Medium / High	Negative Significant Temporary / Short-Term
	Section 5: Botanic Avenue to Granby Row For proposed changes see Section 17.4.3.1.5	High / Very High	Medium	Negative Moderate / Significant Temporary /

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
				Short-Term
Streetscape Characteristics and Visual Impacts				
Architectural Conservation Areas (ACA)	For proposed changes see Section 17.4.3.2.1	Very High	Low / Medium	Negative Moderate Temporary / Short-Term
Conservation Areas	River Tolka For proposed changes see Section 17.4.3.2.2	Very High	Medium / High	Negative Significant / Very Significant Temporary / Short-Term
	Royal Canal / Parnell Square For proposed changes see Section 17.4.3.2.2	Very High	Low / Medium	Negative Moderate Temporary
Residential Conservation Areas	For proposed changes see Section 17.4.3.2.3	High	Medium	Negative Moderate Temporary / Short-Term
Protected Structures	Thatch Cottage in Collinstown, Swords Road (FCC RPS 604) For proposed changes see Section 17.4.3.2.4 (Refer also to Chapter 16 (Architectural Heritage)).	Very High	Medium / High	Negative Significant / Very Significant Temporary / Short-Term
	Other Protected Structures	Very High	Low / Medium	Negative Moderate Temporary / Short-Term
Amenity Designations	Santry Demesne For proposed changes see Section 17.4.3.2.5	High / Very High	Low / Medium	Negative Moderate Temporary / Short-Term
	Open Spaces at Santry, Our Lady's Park, Drumcondra For proposed changes see Section 17.4.3.2.5	High	High	Negative Significant Temporary / Short-Term
	Santry River, Drumcondra Tree-lined Verges, Royal Canal, Parnell Square For proposed changes see Section 17.4.3.2.5	High / Very High	Medium	Negative Moderate Temporary / Short-Term
Tree Preservation Orders / Tree Protection	Pinnock Hill Roundabout For proposed changes see Section 17.4.3.2.6	High	Low	Negative Slight Temporary / Short-Term

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
Objectives	Santry Demesne / Park For proposed changes see Section 17.4.3.2.6	High	Low / Medium	Negative Slight / Moderate Temporary / Short-Term
Preserved Views / Scenic Views etc.	For proposed changes see Section 17.4.3.2.7	High	Low / Medium	Negative Slight / Moderate Temporary / Short-Term
Properties	Part of residential property in temporary acquisition For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Very Significant / Profound Temporary / Short-Term
	Non-residential properties included in permanent or temporary acquisition (e.g. business, commercial, hotel, etc.) For proposed changes see Section 17.4.3.2.8.	Medium / High	High	Negative Significant Temporary / Short-Term
	Properties located along, fronting and viewing the Proposed Scheme For proposed changes see Section 17.4.3.2.8	High	High	Negative Significant Temporary / Short-Term
Trees and Vegetation	For proposed changes see Section 17.4.3.2.9	Medium / High	Medium / High	Negative Moderate / Significant Temporary / Short-Term

17.4.4 Operational Phase

The Operational Phase of the Proposed Scheme will give rise to townscape streetscape and visual effects through the following:

- Alterations in the physical and visual character of the corridor of the existing road/street;
- Changes in traffic, pedestrian and cycle movements;
- Modification of areas of private property/gardens/boundaries; and
- Adjustments to other areas/boundaries.

These effects may be temporary, Short-Term, Medium-Term, Long-Term or permanent.

While alterations in the road corridor and changes in traffic, pedestrian and cycle movements are features of the Proposed Scheme, it is not anticipated that these aspects in themselves will give rise to significant landscape, townscape or visual effects. Changes in road corridors, including in traffic signalisation, signage, and in carriageway/parking allocation and traffic movements are a common and regular aspect of active road and traffic management for urban roads and streets. Therefore, these changes may be considered part and parcel of ongoing or regular changes that may be expected to occur, and do occur, from time to time in any urban streetscape environment and such changes are considered as a low or negligible magnitude of change.

A detailed description of the Proposed Scheme is provided in Chapter 4 (Proposed Scheme Description).

17.4.4.1 Impact on Townscape and Streetscape Character

As set out in Section 17.3.1 the Proposed Scheme is sub-divided into five sections:

- Section 1 – Pinnock Hill to Airside Junction;
- Section 2 – Airside Junction to Northwood Avenue;
- Section 3 – Northwood Avenue to Shantalla Road;
- Section 4 – Shantalla Road to Botanic Avenue;
- Section 5 – Botanic Avenue to Granby Row;

17.4.4.1.1 Pinnock Hill to Airside Junction

The baseline townscape is of low sensitivity and operation of the Proposed Scheme involves minor changes to dual carriageway infrastructure – mainly replacing a roundabout with a signalised junction. There will be continued effects from the loss of areas of roadside tree planting, including early mature trees, which will be removed during the Construction Phase. The majority of tree planting will be replaced but and there will be localised improvements with replacement of areas of existing mown grass at Pinnock Hill with native planting. The screening to adjacent properties will be mostly restored through proposed planting. The Operational Phase will not alter the overall existing townscape character along this section of the Proposed Scheme but there will be some negative short and medium-term effects on streetscape due to tree loss, which will become neutralised over the long-term as replacement planting matures. The magnitude of change in the baseline environment is medium/high.

The potential townscape/streetscape impact of the Operational Phase is assessed to be Negative, Slight/Moderate and Short-Term becoming Neutral, Slight, Long-Term.

17.4.4.1.2 Airside Junction to Northwood Avenue

The baseline townscape is of low sensitivity and operation of the Proposed Scheme involves the replacement of a roundabout junction with a signalised junction at Cloghran junction and minor changes to road infrastructure – south of Collinstown Cross. The proposals have been designed to limit the impact on existing trees and vegetation as far as practicable, however, there will be some limited effects remaining from the loss of roadside trees removed during the Construction Phase. The proposals include new and replacement planting wherever

appropriate and trees will be replaced in the majority of cases, such that negative effects will be neutralised over the long-term as the substantial proposed planting matures. There will also be some localised improvements to the streetscape, most notably with the provision of an improved paving scheme between Furry Park Industrial Estate, Airways Industrial Estate and Northwood Avenue. In addition, SuDS features and areas of species-rich grassland are proposed to areas of existing grassland which will have a positive impact on the quality of green infrastructure as well as landscape amenity. The Operational Phase will not alter the overall existing character along this section of the Proposed Scheme, however, there will be an improvement to the streetscape at a local level over the long-term. The magnitude of change in the baseline environment is medium.

The potential townscape/streetscape impact of the Operational Phase is assessed to be Negative, Slight and Short-Term becoming Positive, Slight, Long-Term.

17.4.4.1.3 Northwood Avenue to Shantalla Road

The baseline townscape is of high sensitivity and operation of the Proposed Scheme involves notable changes where permanent acquisition of private gardens/ands/open space is required. There will be permanent land acquisition from open space at Coolock Lane for a new bus terminus. A large number of properties will experience some permanent loss of private area; however, the extents are mostly limited to relatively narrow strips of land to accommodate widening of the road corridor, with boundaries, planting and surfaces reinstated like-for-like. The impact on the streetscape character from changes to these properties is minimal. Although the proposals have been designed to minimise tree loss wherever feasible, there will be some limited continuing effects from the loss of trees removed during the Construction Phase. The impacts on Santry Demesne/Park are limited; the existing stone wall boundary and the vast majority of trees in will not be impacted by the proposals, due to revisions to the design, and tree loss will be limited to a small number of mainly immature trees on the south-east corner. However, in the majority of cases trees will be replaced and the associated negative effects will be largely negated over the long-term as the replacement planting matures. There will be an improvement to streetscape character across this section over the long-term, with the provision of an improved paving scheme to footpaths across most of this section, and a slight improvement to the setting of Santry Demesne/Park with the exclusion of pedestrian guardrails and provision of an improved paving scheme at the revised junction layout at Swords Road/Coolock Lane junction. There will also be improved planting and boundary treatment to the frontage of Magenta Hall to replace the existing inappropriate informal boundary. The magnitude of change in the baseline environment is medium.

The potential townscape/streetscape impact of the Operational Phase is assessed to be Negative, Moderate and Short-Term becoming Positive, Moderate, Long-Term.

17.4.4.1.4 Shantalla Road to Botanic Avenue

The baseline townscape is of high sensitivity and operation of the Proposed Scheme involves changes along the existing road corridor – the majority of which do not alter the existing townscape or streetscape character of the corridor. Although the proposals have been designed to limit the impact on existing trees and vegetation as far as practicable, there will be some continued effects from loss of trees removed during the Construction Phase, most notably at Whitehall Church of the Holy Child and Swords Road/Griffith Avenue junction. However, trees will be replaced in the majority of cases and associated negative effects will be largely negated over the long-term as the replacement planting matures. The proposals include for provision of a new cycle and pedestrian bridge over the River Tolka west of Frank Flood Bridge, changes to Frank Flood Bridge, including concealing of an existing mounted service pipe into new bridge structure, and provision of connections through Our Lady's Park. The proposed bridge has undergone substantial iterative design development resulting in a slender construction with minimal screening of the existing bridge, reducing impacts on views. The new bridge will provide much improved cycle and pedestrian access across the River Tolka, and arguably will provide increased amenity space and vistas along the river for its users. There will be improvements to Our Lady's Park with improved paving, footpaths and additional seating, and the setting of the relocated Marian statue will be enhanced. There will be improvements to streetscape character with provision of an improved paving scheme along the majority of this section of the Proposed Scheme. The magnitude of change in the baseline environment is medium.

The potential townscape/streetscape impact of the Operational Phase is assessed to be Negative, Moderate and Short-Term becoming Positive, Moderate, Long-Term.

17.4.4.1.5 Botanic Avenue to Granby Row

The baseline townscape is of high/very high sensitivity and operation of the Proposed Scheme involves some minor changes to the layout of the existing road corridor. Although the proposals have been designed to minimise tree loss wherever feasible there will be some limited continuing effects from loss of trees removed from central medians at Drumcondra Road Lower and Dorset Street during the Construction Phase. However, these trees are young and/or in poor condition and it is proposed the majority will have been either reinstated or replaced with similarly-sized new tree planting, and therefore most negative effects will be negated over the short-term. There will be no impacts on the valued avenue trees along Drumcondra Road Lower, and there will only be a slight reduction in the area of grass verge to accommodate realigned cycle tracks. There will be substantial improvements to the streetscape with the provision of a consistent paving scheme using high quality stone materials to match the existing stone paving along parts of this section and enhance the setting of the adjoining historic buildings. The Operational Phase will not appreciably alter the overall existing townscape but there will be a positive change to streetscape character along this section of the Proposed Scheme. The magnitude of change in the baseline environment is low/medium.

The potential impact of the Operational Phase is assessed to be Positive, Moderate and Short-Term becoming Positive, Moderate/Significant, Long-Term.

17.4.4.2 Impact on Streetscape Elements and Visual Impacts

17.4.4.2.1 Architectural Conservation Areas

The sole architectural conservation area (ACA) along the Proposed Scheme is at the southern end of Parnell Square (O'Connell Street and Environs ACA). Operation of the Proposed Scheme will not alter any valued characteristics of the ACA. The sensitivity is very high and the magnitude of change in the baseline environment is negligible.

The potential townscape/streetscape impact of the Operational Phase is assessed to be Neutral, Not-Significant and Long-Term.

17.4.4.2.2 Conservation Areas

The River Tolka and Royal Canal corridors and Parnell Square are conservation areas.

The operation of the Proposed Scheme will result in substantial changes at the River Tolka with provision of a new cycle/pedestrian bridge west of Frank Flood Bridge and there will be some limited change to the bridge itself. The cycle/pedestrian link passes through Our Lady's Park, and there will be continued effects from the loss of several trees removed during the Construction Phase. The proposed bridge has undergone substantial iterative design development resulting in a slender construction with minimal screening of the existing bridge, reducing impacts on views. The new bridge will provide much improved cycle and pedestrian access across the River Tolka, and arguably will provide increased amenity space and vistas along the river for its users. There will be improvements to Our Lady's Park with improved paving, footpaths and additional seating, and the setting of the relocated Marian statue will be enhanced. The provision of the new bridge will alter existing views along the river corridor and from the general area in the vicinity of Frank Flood Bridge / Our Lady's Park. but relative to the full extents of the conservation area only a small section of the overall designation will be affected and the effect will not be significant. Effects will become neutralised over time as replacement planting matures and the bridge becomes an accepted part of the townscape. The sensitivity is very high and the magnitude of change in the baseline environment is low/medium.

The potential townscape/streetscape and visual impact of the Operational Phase on the River Tolka conservation area is assessed to be Negative, Moderate and Short-Term becoming Neutral, Moderate, Long-Term.

The operation of the Proposed Scheme will result in very minor changes to the road corridor in the vicinity of the Royal Canal corridor and around Parnell Square conservation areas. The changes will not affect key characteristics or features of the conservation areas. The sensitivity is very high and the magnitude of change in the baseline environment is negligible/low.

The potential townscape/streetscape and visual impact of the Operational Phase on the Royal Canal/Parnell Square conservation area is assessed to be Neutral, Slight and Short-Term becoming Neutral, Imperceptible, Long-Term.

17.4.4.2.3 Residential Conservation Areas

Residential conservation areas are limited to a sections of Drumcondra Road Upper/Lower and will not be directly impacted by the operation of the Proposed Scheme, however, their setting will continue to be adversely affected by loss of three trees removed during the Construction Phase. Negative effects will be reduced over the short and medium-term through growth of replacement / reinstated tree planting, and when combined with the provision of an improved paving scheme across adjacent streetscapes, there will be an overall positive effect. The sensitivity is high and the magnitude of change in the baseline environment is low / medium.

The potential townscape / streetscape and visual impact of the Operational Phase on residential conservation areas is assessed to be Negative, Slight / Moderate and Short-Term becoming Positive, Moderate, Long-Term.

17.4.4.2.4 Protected Structures

A number of protected structures are located along the Proposed Scheme. These include dispersed properties and features such as Cloghran Church (in ruins) and Graveyard, and Castlemoate House north of the Airport Roundabout, a thatched cottage at Collinstown Cross, and St Pappan's Church and Holy Well at Santry. South of Whitehall these include institutional properties such as St. Patrick's College and Clonliffe College, and Binns Bridge, as well as a number of properties along Drumcondra Road Lower and Dorset Street and the majority of properties along Fredrick Street North and around Parnell Square, including within Parnell Square.

The operation of the Proposed Scheme will require permanent land acquisition from on one protected structure, a thatched cottage in Collinstown, Swords Road (FCC RPS 604), where a land take is proposed to accommodate segregated cycle tracks, widened footpaths and carriageway widening. There will be limited permanent loss of private area to the front of the property, loss of original boundary wall and provision of a like-for-like replacement of the at a set back alignment. No other features of the property will be changed. The sensitivity is very high and the magnitude of change is low.

The potential townscape / streetscape and visual impact of the Operational Phase on this protected structure (FCC RPS 604) is assessed to be Negative, Moderate and Long-Term.

While located along the principal road corridor of the Proposed Scheme, the Operational Phase will not directly impact on other protected structures but in general their setting will be enhanced through provision of a more sympathetic paving scheme. The effect will become more positive as replacement planting establishes over the long-term. The sensitivity is very high and the magnitude of change is low. (Refer also to Chapter 16 (Architectural Heritage)).

The potential townscape/streetscape and visual impact of the Operational Phase on other protected structures is assessed to be Positive, Slight and Short-Term becoming Positive, Slight / Moderate, Long-Term.

17.4.4.2.5 Amenity Designations

A number of amenities (mainly open spaces, parks, River Tolka and Royal Canal, tree-lined avenues) are located along the Proposed Scheme. These include areas of very high sensitivity such as Santry Demesne, tree-lined avenues such as Griffith Avenue and Drumcondra Road Lower and Parnell Square, as well as smaller open spaces which are of high sensitivity.

The Operational Phase of the Proposed Scheme includes changes at the southern corner of Santry Demesne with setback of the existing (modern) boundary. There will be loss of three early-mature trees and one mature tree, which will be replaced with four new trees in nearby locations, leading to a cancellation of negative effects over the long-term as this planting matures. Historic sections of boundary wall, main entrance and associated trees are unaffected. The context of the south-east corner of the park will be improved by the provision of improved paving to the external footpaths/entrances and a removal of pedestrian guardrails to the adjacent junction. The sensitivity is high/very high and the magnitude of change is low.

The potential townscape/streetscape and visual impact of the Operational Phase on Santry Demesne is assessed to be Negative, Slight/Moderate and Short-Term becoming Positive, Slight and Long-Term.

There will be a negative impact on the small roadside open space at Chadwicks with continuing effects from loss of trees removed during the Construction Phase. The effects will slightly reduce over the long-term as the remaining trees mature. The sensitivity is medium and the magnitude of change is medium.

The potential townscape/streetscape and visual impact of the Operational Phase on the open space at Chadwicks is assessed to be Negative, Moderate and Short-Term becoming Negative, Moderate, Long-Term.

There will be a negative impact on the roadside open space at Coolock Lane with continuing effects from loss of amenity space and trees removed during the Construction Phase, and the introduction of a bus terminus with associated traffic movement. The effects will reduce over the long-term as proposed trees mature. The sensitivity is medium and the magnitude of change is medium/high.

The potential townscape/streetscape and visual impact of the Operational Phase on the open space at Coolock Lane is assessed to be Negative, Moderate/Significant and Short-Term becoming Negative, Slight / Moderate, Long-Term.

The Operational Phase of the Proposed Scheme will result in changes and alterations to small open spaces along Swords Road within Santry at Santry Villas, Magenta Hall/Lorcan Road, Shanrath Road. The changes will result in short-term negative effects resulting from the loss of trees removed during the Construction Phase, however, these effects will be negated over the long-term as replacement tree planting matures. There will be some improvements to the amenity of these areas through the provision of enhanced access and/or paving schemes. The sensitivity is high and the magnitude of change in the baseline amenity is medium/high.

The potential townscape/streetscape and visual impact of the Operational Phase on these open spaces at Santry is assessed to be Negative, Moderate/Significant and Short-Term and Positive, Moderate, Long-Term.

The operation of the Proposed Scheme will result in substantial changes at the Our Lady's Park with provision of a new cycle/pedestrian bridge west of Frank Flood Bridge which crosses the River Tolka from Millmount Terrace to the park on the southern bank. The proposed bridge has undergone substantial iterative design development resulting in a slender construction with minimal screening of the existing bridge, reducing impacts on views from the park to the bridge. The new bridge will provide much improved cycle and pedestrian access across the River Tolka, improving the functionality of the open space, and arguably also provide increased amenity space for the park. There will be improvements to the open space with improved paving, footpaths and additional seating, and the setting of the relocated Marian statue will be enhanced. Effects will become positive over time as replacement planting matures and the bridge becomes an accepted part of the townscape. The sensitivity is high and the magnitude of change in the baseline environment is medium/high.

The potential townscape/streetscape and visual impact of the Operational Phase on the Our Lady's Park is assessed to be Neutral, Moderate/Significant and Short-Term becoming Positive, Moderate, Long-Term.

The operation of the Proposed Scheme involves limited changes within the road corridor at Santry River, along tree-lined section of Drumcondra Road Lower, the Royal Canal and around the highly sensitive Parnell Square, the works will not result in a direct impact in the characteristics or features of the amenities. The sensitivity is high/very high magnitude of change is negligible low.

The potential townscape/streetscape and visual impact of the Operational Phase on these amenities is assessed to be Neutral, Not-Significant/Slight and Short-Term becoming Neutral, Imperceptible, Long-Term.

17.4.4.2.6 Tree Preservation Orders / Tree Preservation Objectives

Tree preservation objectives pertain to trees at Pinnock Hill Roundabout. There will be no impact on this designation by the Operational Phase of the Proposed Scheme. The sensitivity is high and the magnitude of change is negligible.

The potential townscape/streetscape and visual impact of the Operational Phase on TPOs preservation objectives at Pinnock Hill is assessed to be Neutral, Imperceptible and Long-Term.

A tree preservation order (TPO) also pertains to the mature trees within Santry Demesne/Park. Iterative design development has led to a substantial decrease in impacts on this TPO, and the vast majority of trees within the designation will remain unaffected. There will be continuing effects resulting from the loss of four trees removed from the south-east corner during the Construction Phase, three of which are immature and one of which is mature and is defined as Category C (low value). There will be provision of four replacement trees at nearby locations, which will cancel out the negative effects over the long-term as the planting matures. The sensitivity is high and the magnitude of change is low/medium.

The potential townscape/streetscape and visual impact of the Operational Phase on TPOs preservation objectives at Santry Demesne/Park is assessed to be Negative, Slight / Moderate and Short-Term becoming Neutral, Slight, Long-Term.

17.4.4.2.7 Preserved Views / Scenic Views, etc.

Protected views are limited to east from R132 Swords Road at Airside, views east and west along the River Tolka, views east and west along Royal Canal, key vistas south from Parnell Square to O'Connell Street/the Spire and views of the street within the Parnell Square conservation area.

The Operational Phase of the Proposed Scheme provides for a new cycle and pedestrian bridge over the River Tolka. The iterative design process has ensured that the structure is as visually unobtrusive as possible in order to limit impacts on views. There will be some impact on views west from Frank Flood Bridge however, the proposed bridge itself will offer a vantage for new views along the River. Otherwise, the Operational Phase involves changes to the road corridor and will not impact on the sensitive characteristics of the views. Negative effects will be reduced over the long-term with the growth of replacement planting which will aid in integrating the proposed structure into the townscape. The sensitivity is high and the magnitude of change is low/medium.

The potential townscape/streetscape and visual impact of the Operational Phase on protected views is assessed to be Negative, Slight/Moderate and Short-Term, becoming Negative, Slight, Long-Term.

17.4.4.2.8 Properties

Operation of the Proposed Scheme will require the permanent acquisition from a significant number of residential properties along the Proposed Scheme, most notably through Santry from Santry Demesne to Shantalla Road, including:

- Milton Fields, Pinnock Hill (1no.);
- Nevinstown House / Lodge, 1 Orchard, & Hollytree House (3 no.);
- Kilronan House (1 no.);
- 1 Swords Road (1 no.);
- The Thatch Cottage, Collinstown Cross (1no.);
- Dardistown House (1no.);

- Derryloam (1no.);
- Marymount 1 no.);
- Carey House; (1no.);
- Lima House (1no.);
- Two cottages at Royal College of Surgeons Ireland sportsground (2no.);
- No. 1 Magenta Crescent (1no.);
- Nos. 304-296 (5 no.), even Nos. 282-276 (4 no.), even Nos. 270-258 (7 no.), even Nos. 248-244 (3 no.), odd Nos. 305 to 277 (15 no.), odd Nos. 269-249 (11 no.); and
- No. 188, No. 186 Swords Road and No. 237 Griffith Avenue (3no.).

This will result in changes to the existing property in terms of private area, amenity, boundaries, driveways, gardens and plantings. Generally, the amount of land take will be limited to a narrow strip to provide space for a widened road corridor and the majority of the private area to these properties will be unaltered. In addition, there will be provision of reinstated boundaries, surfaces and plantings. Negative effects will be reduced over the long-term as replacement planting matures. The sensitivity is high and the magnitude of change is medium/high.

The potential townscape/streetscape and visual impact of the Operational Phase on residential properties with permanent land acquisition is assessed to be Negative, Moderate/Significant and Short-Term becoming Negative, Moderate, Long-Term.

Operation of the Proposed Scheme will require permanent acquisition of hard standing and soft landscape areas from non-residential properties (business, hotel and commercial, etc.), most notably from Collinstown Cross to Northwood Avenue, and from several private (commercial) landings and four cellars between Botanic Avenue and Granby Row. There will be permanent effects from the demolition of three buildings (one commercial unit at Collinstown Cross Industrial Estate and two derelict cottages associated with the Royal College of Surgeons). Negative effects associated with removal of trees during the Construction Phase will be reduced over the long-term with the growth of replacement planting. The sensitivity is medium/high and the magnitude of change is medium/high.

The potential townscape/streetscape and visual impact of the Operational Phase on non-residential properties with permanent land acquisition is assessed to be Negative, Moderate/Significant and Short-Term becoming Negative, Slight/Moderate, Long-Term.

In addition to those properties directly affected through permanent acquisition, operation of the Proposed Scheme will also result in visual impacts for other residential and non-residential properties located along, fronting and viewing the Proposed Scheme. Impacts will arise from views of changes to the road corridor and traffic management arrangements. The sensitivity is high and magnitude of change is low/medium.

The potential townscape/streetscape and visual impact of the Operational Phase on these properties is assessed to be Neutral, Slight and Short-Term becoming Neutral, Imperceptible, Long-Term.

17.4.4.2.9 Trees and Vegetation

A number of trees will have been removed during the Construction Phase. The Operational Phase of the Proposed Scheme will not impact directly on additional trees but there will be some remaining effects from the removal of trees during construction. Where feasible replacement trees will be provided and negative effects will be reduced as these mature over the long-term. The sensitivity is medium/high and the magnitude of change is medium.

The potential townscape and visual impact of the Operational Phase on trees and plantings is assessed to be Negative, Moderate and Short-Term becoming Neutral, Slight/Moderate, Long-Term.

The summary of the landscape and visual impact assessment for the Operational Phase of the Proposed Scheme is set out in Table 17.8.

17.4.4.3 Summary of Predicted Operational Phase Impacts

The summary of the landscape and visual impact assessment for the Operational Phase, at 1-year post completion of the Construction Phase of the Proposed Scheme, is set out in Table 17.8.

17.4.4.3.1 Potential Benefits

Where there are landscape measures incorporated in the design of the Proposed Scheme there is potential for a beneficial effect to the fabric and character of the receiving landscape/townscape. Measures include for improvements to the streetscape in several locations along the Proposed Scheme, including new or improved footpath and cycle routes, pedestrian crossings, improved or more visually appealing hard surfacing and planting. Over the long-term, the negative effects associated with the removal of mature trees along many sections of the Proposed Scheme will reduce with the growth of replacement and additional planting. There will be an overall improvement in streetscape character, over the long-term from Northwood Avenue to Granby Row due largely to the provision of an improved paving scheme across the majority of this section.

The summary of the landscape and visual effect assessment at the early stage of the Operational Phase, at 1-year post completion of the Construction Phase, of the Proposed Scheme is set out in Table 17.8. Operational effects following the establishment of proposed planting at 15-year post completion of the Construction Phase are shown in Table 17.10.

Table 17.8: Summary of Predicted Operational Phase Effects (at 1 year post-completion of the Construction Phase)

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
Townscape and Streetscape Character				
Section 1: Pinnock Hill to Airside Junction For proposed changes see Section 17.4.4.1.1		Low	Medium / High	Negative Slight / Moderate Short-Term
Section 2: Airside Junction to Northwood Avenue For proposed changes see Section 17.4.4.1.2		Low	Medium	Negative Slight Short-Term
Section 3: Northwood Avenue to Shantalla Road For proposed changes see Section 17.4.4.1.3		High	Medium	Negative Moderate Short-Term
Section 4: Shantalla Road to Botanic Avenue For proposed changes see Section 17.4.4.1.4		High	Medium	Negative Moderate Short-Term
Section 5: Botanic Avenue to Granby Row For proposed changes see Section 17.4.4.1.5		High / Very High	Low / Medium	Positive Moderate Short-Term
Streetscape Characteristics and Visual Impacts				
Architectural Conservation Areas (ACA)	For proposed changes see Section 17.4.4.2.1	Very High	Negligible	Neutral Not-Significant Short-Term
Conservation	River Tolka	Very High	Low /	Negative

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
Areas	For proposed changes see Section 17.4.4.2.2		Medium	Moderate Short-Term
	Royal Canal and Parnell Square For proposed changes see Section 17.4.4.2.2	Very High	Negligible / Low	Neutral Slight Short-Term
Residential Conservation Areas	For proposed changes see Section 17.4.4.2.3	High	Low / Medium	Negative Slight / Moderate Short-Term
Protected Structures	Thatch Cottage, Collinstown, Swords Road (FCC RPS 604)	Very High	Low	Negative Moderate Short-Term
	Other Protected Structures For proposed changes see Section 17.4.4.2.4 (Refer also to Chapter 16 (Architectural Heritage)).	Very High	Low	Positive Slight Short-Term
Amenity Designations	Santry Demesne. For proposed changes see Section 17.4.4.2.5	High / Very High	Low	Negative Slight / Moderate Short-Term
	Open space at Chadwicks For proposed changes see Section 17.4.4.2.5	Medium	Medium	Negative Moderate Short-Term
	Coolock Lane For proposed changes see Section 17.4.4.2.5	Medium	Medium / High	Negative Moderate / Significant Short-Term
	Open Spaces at Santry For proposed changes see Section 17.4.4.2.5	High	Medium / High	Negative Moderate / Significant Short-Term
	Our Lady's Park For proposed changes see Section 17.4.4.2.5	High	Medium / High	Neutral Moderate / Significant Short-Term
	Santry River, Drumcondra Tree-lined Verges, Royal Canal, Parnell Square. For proposed changes see Section 17.4.4.2.5	High / Very High	Negligible / Low	Neutral Not-Significant / Slight Short-Term
Tree Preservation Orders / tree Protection Objectives	Pinnock Hill For proposed changes see Section 17.4.4.2.6	High	Negligible	Neutral Imperceptible Short-Term
	Santry Demesne / Park For proposed changes see Section 17.4.4.2.6	High	Low / Medium	Negative Slight / Moderate

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
				Short-Term
Preserved Views / Scenic Views etc.	For proposed changes see Section 17.4.4.2.7	High	Medium / Low	Negative Slight / Moderate Short-Term
Properties	Part of residential property in permanent acquisition For proposed changes see Section 17.4.4.2.8	High	Medium / High	Negative Moderate / Significant Short-Term
	Non-residential properties included in permanent acquisition (e.g. business, commercial, hotel, etc.) For proposed changes see Section 17.4.4.2.8	Medium / High	Medium / High	Negative Moderate / Significant Short-Term
	Properties located along, fronting and viewing the Proposed Scheme For proposed changes see Section 17.4.4.2.8	High	Low / Medium	Neutral Slight Short-Term
Trees and Vegetation	For proposed changes see Section 17.4.4.2.9	Medium / High	Medium	Neutral Moderate Short-Term

17.5 Mitigation and Monitoring Measures

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

17.5.1 Construction Phase

A series of mitigation and management measures are proposed to avoid, reduce or remediate, wherever practicable significant negative landscape (townscape) and visual effects of the Construction Phase of the Proposed Scheme. These measures are to be applied across the Proposed Scheme wherever necessary to avoid disturbance of landscape features or characteristics to be retained. Generally, the effect rating post-mitigation will be the same as pre-mitigation, however the measures proposed should still be applied as necessary to manage the potential effects of construction activities. A summary of predicted Construction Phase effects following the implementation of mitigation and monitoring measures is listed in Table 17.9.

- Trees and vegetation to be retained 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, which will be prepared by a professional qualified arborist. For details of trees to be retained refer to Tree Protection Plans in Appendix A17.1 in Volume 4 of this EIAR;
- Wherever practicable, trees and vegetation will be retained within the Proposed Scheme. Trees and vegetation identified for removal will be removed in accordance with 'BS 3998:2010 Tree Work – Recommendations' (BSI 2010) and best arboricultural practices as detailed and monitored by a professional qualified arborist. For details of trees and vegetation to be removed refer to Preliminary Design Tree Removal Plan - 1 to 38 (Drawing Ref 20-091-05, Appendix D of Preliminary Design Report) and Landscape General Arrangements (BCIDB-JAC-ENV_LA-0002_XX_00-DR-LL-9001 Volume 3 of this EIAR);
- The Arboricultural Assessment prepared for the Proposed Scheme will be fully updated by the appointed contractor at the end of the Construction Phase and made available, with any recommendations for ongoing monitoring of retained trees during the Operational Phase;
- Where properties are subject to permanent and/or temporary acquisition (as listed in Section 17.4.3.2.8 and Section 17.4.4.2.8), an inventory of boundary details and accesses, planting, paving, and other features that may be disturbed or removed will be prepared by the appointed contractor prior to commencement of construction works;
- Where properties are subject to permanent and/or temporary acquisition (as listed in Section 17.4.3.2.8 and Section 17.4.4.2.8), appropriate measures will be put in place by the appointed contractor to provide for protection of features, trees and vegetation to be retained, and for continued access during construction and for adequate security and screening of construction works. All temporary acquisition areas will be fully decommissioned and reinstated at the end of the Construction Phase or at the earliest time after the reinstatement works are completed to the satisfaction of the NTA. Where boundary features, gates, railings, archways of heritage importance (and which contribute to landscape value) are to be affected by the works, mitigation measures should follow those outlined in Chapter 16 (Architectural Heritage); and
- Appropriate access to amenities and public open spaces shall be maintained by the appointed contractor.

In addition to the above measures, construction works will be managed by the preparation of a Construction Environmental Management Plan (CEMP) – refer to Appendix A5.1 in Volume 4 of the EIAR). This provides the environmental management framework to be adhered during construction of the Proposed Scheme.

Table 17.9: Summary of Predicted Construction Phase Effects Following the Implementation of Mitigation and Monitoring Measures

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
Townscape and Streetscape Character				
	Section 1: Pinnock Hill to Airside Junction For proposed changes see Section 17.4.3.1.1	Low	Medium / High	Negative Slight / Moderate Temporary / Short-Term
	Section 2: Airside Junction to Northwood Avenue For proposed changes see Section 17.4.3.1.2	Low	Medium / High	Negative Slight / Moderate Temporary / Short-Term
	Section 3: Northwood Avenue to Shantalla Road For proposed changes see Section 17.4.3.1.3	High	High	Negative Significant Temporary / Short-Term
	Section 4: Shantalla Road to Botanic Avenue For proposed changes see Section 17.4.3.1.4	High	Medium / High	Negative Significant Temporary / Short-Term
	Section 5: Botanic Avenue to Granby Row For proposed changes see Section 17.4.3.1.5	High / Very High	Medium	Negative Moderate / Significant Temporary / Short-Term
Streetscape Characteristics and Visual Impacts				
Architectural Conservation Areas (ACA)	For proposed changes see Section 17.4.3.2.1	Very High	Low / Medium	Negative Moderate Temporary / Short-Term
Conservation Areas	River Tolka For proposed changes see Section 17.4.3.2.2	Very High	Medium / High	Negative Significant / Very Significant Temporary / Short-Term
	Royal Canal / Parnell Square For proposed changes see Section 17.4.3.2.2	Very High	Low / Medium	Negative Moderate Temporary
Residential Conservation Areas	For proposed changes see Section 17.4.3.2.3	High	Medium	Negative Moderate Temporary / Short-Term

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
Protected Structures	Thatch cottage in Collinstown, Swords Road (FCC RPS 604) For proposed changes see Section 17.4.3.2.4 (Refer also to Chapter 16 (Architectural Heritage)).	Very High	Medium / High	Negative Significant / Very Significant Temporary / Short-Term
	Other Protected Structures	Very High	Low / Medium	Negative Moderate Temporary / Short-Term
Amenity Designations	Santry Demesne For proposed changes see Section 17.4.3.2.5	High / Very High	Low / Medium	Negative Moderate Temporary / Short-Term
	Open Spaces at Santry, Our Lady's Park, Drumcondra For proposed changes see Section 17.4.3.2.5	High	High	Negative Significant Temporary / Short-Term
	Santry River, Drumcondra Tree-lined Verges, Royal Canal, Parnell Square For proposed changes see Section 17.4.3.2.5	High / Very High	Medium	Negative Moderate Temporary / Short-Term
Tree Preservation Orders / Tree Protection Objectives	Pinnock Hill Roundabout For proposed changes see Section 17.4.3.2.6	High	Low	Negative Slight Temporary / Short-Term
	Santry Demesne / Park For proposed changes see Section 17.4.3.2.6	High	Low / Medium	Negative Slight / Moderate Temporary / Short-Term
Preserved Views / Scenic Views etc.	For proposed changes see Section 17.4.3.2.7	High	Low / Medium	Negative Slight / Moderate Temporary / Short-Term
Properties	Part of residential property in temporary acquisition For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Very Significant / Profound Temporary / Short-Term
	Non-residential properties included in permanent or temporary acquisition (e.g. business, commercial, hotel, etc.) For proposed changes see Section 17.4.3.2.8.	Medium / High	High	Negative Significant Temporary / Short-Term

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
	Properties located along, fronting and viewing the Proposed Scheme For proposed changes see Section 17.4.3.2.8	High	High	Negative Significant Temporary / Short-Term
Trees and Vegetation	For proposed changes see Section 17.4.3.2.9	Medium / High	Medium / High	Negative Moderate / Significant Temporary / Short-Term

17.5.2 Operational Phase

The design process of the Proposed Scheme has considered the potential for negative landscape/townscape and visual effects. Opportunities to avoid, reduce or remediate these have been taken wherever practicable, and landscape measures are integrated within the design as far as possible. It should be noted, that wherever practicable, the Proposed Scheme proposes improvements of key locations of the townscape/streetscape, as described in Sections 17.4.1.4 and 0. Therefore, while no mitigation or monitoring measures are proposed for the Operational Phase, the Proposed Scheme will become established and increasingly integrated within its landscape (townscape) setting, and the potential negative Operational Phase effects will be reduced. A comparative summary of predicted Operational Phase effects, at both 1 year post-Construction Phase and following establishment of landscape measures at 15 years post-Construction Phase, is presented in Table 17.10.

It is acknowledged that in some cases mitigation of effects on townscape and visual characteristics is neither possible nor practicable – for example, it is not possible to provide landscape mitigation for the loss of land from private properties, or to provide mitigation for loss of mature trees in the short/medium-term.

Table 17.10: Summary of Predicted Operational Phase Effects (at 1 and 15 years post-completion of the Construction Phase)

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts (at 15 years post-construction)
Townscape and Streetscape Character					
	Section 1: Pinnock Hill to Airside Junction For proposed changes see Section 17.4.4.1.1	Low	Medium / High	Negative Slight / Moderate Short-Term	Negative Slight Long-Term
	Section 2: Airside Junction to Northwood Avenue For proposed changes see Section 17.4.4.1.2	Low	Medium	Negative Slight Short-Term	Neutral Slight Long-Term
	Section 3: Northwood Avenue to Shantalla Road For proposed changes see Section 17.4.4.1.3	High	Medium	Negative Moderate Short-Term	Positive Moderate Long-Term
	Section 4: Shantalla Road to Botanic Avenue For proposed changes see Section 17.4.4.1.4	High	Medium	Negative Moderate Short-Term	Positive Moderate Long-Term
	Section 5: Botanic Avenue to Granby Row For proposed changes see Section 17.4.4.1.5	High / Very High	Low / Medium	Positive Moderate Short-Term	Positive Moderate / Significant Long-Term
Streetscape Characteristics and Visual Impacts					
Architectural Conservation Areas (ACA)	For proposed changes see Section 17.4.4.2.1	Very High	Negligible	Neutral Not-Significant Short-Term	Neutral Not-Significant Long-Term
Conservation Areas	River Tolka For proposed changes see Section 17.4.4.2.2	Very High	Low / Medium	Negative Moderate Short-Term	Neutral Moderate Long-Term
	Royal Canal and Parnell Square For proposed changes see Section 17.4.4.2.2	Very High	Negligible / Low	Neutral Slight Short-Term	Neutral Imperceptible Long-Term
Residential Conservation Areas	For proposed changes see Section 17.4.4.2.3	High	Low / Medium	Negative Slight / Moderate Short-Term	Positive Moderate Long-Term
Protected Structures	Thatch Cottage, Collinstown, Swords Road (FCC RPS 604)	Very High	Low	Negative Moderate Short-Term	Negative Moderate Long-Term
	Other Protected Structures For proposed changes see Section 17.4.4.2.4 (Refer also to Chapter 16 (Architectural Heritage)).	Very High	Low	Positive Slight Short-Term	Positive Slight / Moderate Long-Term

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts (at 15 years post-construction)
Amenity Designations	Santry Demesne For proposed changes see Section 17.4.4.2.5	High / Very High	Low	Negative Slight / Moderate Short-Term	Positive Slight Long-Term
	Open space at Chadwicks For proposed changes see Section 17.4.4.2.5	Medium	Medium	Negative Moderate Short-Term	Negative Slight / Moderate Long-Term
	Coolock Lane For proposed changes see Section 17.4.4.2.5	Medium	Medium / High	Negative Moderate / Significant Short-Term	Negative Moderate Long-Term
	Open Spaces at Santry For proposed changes see Section 17.4.4.2.5	High	Medium / High	Negative Moderate / Significant Short-Term	Positive Moderate Long-Term
	Our Lady's Park For proposed changes see Section 17.4.4.2.5	High	Medium / High	Neutral Moderate / Significant Short-Term	Positive Moderate Long-Term
	Santry River, Drumcondra Tree-lined Verges, Royal Canal, Parnell Square For proposed changes see Section 17.4.4.2.5	High / Very High	Negligible / Low	Neutral Not-Significant / Slight Short-Term	Neutral Imperceptible Long-Term
Tree Preservation Orders / Tree Protection Objectives	Pinnock Hill For proposed changes see Section 17.4.4.2.6	High	Negligible	Neutral Imperceptible Short-Term	Negative Slight / Moderate Long-Term
	Santry Demesne / Park For proposed changes see Section 17.4.4.2.6	High	Low / Medium	Negative Slight / Moderate Short-Term	Neutral Slight Long-Term
Preserved Views / Scenic Views etc.	Santry Demesne / Park For proposed changes see Section 17.4.4.2.7	High	Medium / Low	Negative Slight / Moderate Short-Term	Negative Slight Long-Term
Properties	Part of residential property in permanent acquisition For proposed changes see Section 17.4.4.2.8	High	Medium / High	Negative Moderate / Significant Short-Term	Negative Moderate Long-Term
	Non-residential properties included in permanent acquisition (e.g. business, commercial, hotel, etc.) For proposed changes see Section 17.4.4.2.8	Medium / High	Medium / High	Negative Moderate / Significant Short-Term	Negative Slight / Moderate Long-Term

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts (at 15 years post-construction)
	Properties located along, fronting and viewing the Proposed Scheme For proposed changes see Section 17.4.4.2.8	High	Low / Medium	Neutral Slight Short-Term	Neutral Imperceptible Long-Term
Trees and Vegetation	For proposed changes see Section 17.4.4.2.9	Medium / High	Medium	Neutral Moderate Short-Term	Negative Slight / Moderate Long-Term

17.5.2.1 Review of Photomontages

Photomontages have been prepared from key or illustrative viewpoints to give an indication of changes and potential effects resulting from the Proposed Scheme during the Operational Phase after the implementation of the Proposed Scheme. The proposed views are shown with well-established planting. This section describes the existing view available from the chosen viewpoint and the Proposed Scheme changes as illustrated in the photomontage. The photomontages have been prepared in accordance with the methodology set out in Section 17.2.4.5 and are included in Figure 17.2 in Volume 3 of this EIAR.

17.5.2.1.1 Photomontage View 1a: Junction of Swords Road, Naul Road and Stockhole Lane

View 1a: Existing

Figure 17.2.2.1 shows the existing view looking south across the roundabout junction of Swords Road, Naul Road and Stockhole Lane. There is a central island of rough grass to the roundabout which occupies the centre of the view. The background is filled by well-established bands of woodland planting to the edges of the roundabout and continuing to the south along Swords Road. The character is of a roundabout junction to a major road with well-established tree planting enclosing the view.

View 1a: As Proposed

Figure 17.2.2.2 shows the proposed view looking south across the roundabout junction of Swords Road, Naul Road and Stockhole Lane. The primary change is the conversion of the roundabout to a signalised cross-roads with new lane layout, widened road corridor, and a network of segregated cycle tracks orbiting the junction. There is significant tree loss from the woodland band to the right (south-west) side. Prominent traffic signals are introduced as new feature in the landscape, and new trees are planted and internal trees exposed within the woodland band. There would be a notable change in character from a roundabout to a signalised junction but no appreciable change in visual amenity after regrowth/establishment of tree planting, as shown.

17.5.2.1.2 Photomontage View 2: Swords Road south of the junction with Collinstown Lane looking south

View 2: Existing

Figure 17.2.2.3 shows the existing view from Swords Road south of the junction with Collinstown Lane looking south. The road at this point is composed of two lanes for general traffic and two bus lanes with an advisory cycle lane on the left (east) side within the bus lane. In the left foreground is a low rendered wall and hedge bounding adjacent residential property which is beyond the field of view on the left. On the far side of the road on the right is a historic cottage with a thatched roof. Further along the road are various commercial buildings.

The character is of a major road corridor with large scale commercial uses and some minor residential uses, including an attractive historic building.

View 2: As Proposed

Figure 17.2.2.4 shows the proposed view from Swords Road south of the junction with Collinstown Lane looking south. The primary change to the view is the introduction of a new cycle track to the left (east) side and a minor change to alignment of the road. The footpath on the left side is widened and there is some minor land take and introduction of a cycle track to the right side of the road. The boundary wall to the thatched cottage has been rebuilt in the same style as the original with a slight change to the alignment. There would be no appreciable change to the character or visual amenity of the view.

17.5.2.1.3 Photomontage View 3: Looking north from Swords Road adjacent to Value-Van Rental

View 3: Existing

Figure 17.2.2.5 shows the existing view looking north from Swords Road adjacent to Value-Van Rental. The viewpoint is positioned on a narrow pavement on the west side of the road. The road is composed of two general traffic lanes and two bus lanes containing advisory cycle lanes. On the left side of the view is the white bar steel boundary fencing/low wall to the van rental parking area. On the right side of the road is a grass verge and a tall hedgerow containing mature trees. In the distance can be seen various commercial development, bright signage to a car dealership, flag poles to the entrance of the Carlton Hotel, a billboard and other built clutter, as well as some mature trees. The character is of a major road corridor with unattractive boundary to adjacent commercial plot and some prominent mature trees.

View 3: As Proposed

Figure 17.2.2.6 shows the proposed view looking north from Swords Road adjacent to Value-Van Rental. The primary change to the view is the realignment of the boundary wall and railing to the left side, the widening of the footpath in the foreground, and the introduction of segregated cycle tracks to each side of the road. There would be no appreciable change to the character or visual amenity of the view.

17.5.2.1.4 Photomontage View 8: Looking south along Swords Road adjacent to Santry Demesne

View 8: Existing

Figure 17.2.2.7 shows the existing view looking south along Swords Road adjacent to Santry Demesne. At this point the road is composed of two general traffic lanes with an advisory cycle lane to each side. To the left of the road is a row of detached residential properties with well-treed front gardens facing onto a grassed roadside verge. The verge is intersected by regular driveway access points and with irregularly spaced medium-sized street trees. Small and medium sized trees are present in the gardens, and in combination with street trees provide a fairly continuous green edge to the road. To the right of the view is the edge of Santry Demesne, defined by a low wall and steel bar railings, separated from the road by a wide grass verge. Prominent mature trees are present along the edge of the demesne which overhang the boundary and the road in places. Footpaths are in a bitmac or poured concrete finish. The character is of a minor suburban road corridor with well treed boundaries including prominent mature trees within a historic demesne.

View 8: As Proposed

Figure 17.2.2.8 shows the proposed view looking south along Swords Road adjacent to Santry Demesne. The primary changes to the view are the overall widening of the road, the introduction of a new bus lane, and introduction of segregated cycle lanes to each side of the road. The verge on the right is reduced to accommodate the road widening with loss of some trees and new footpaths are installed to both sides of the road, finished with concrete paving. There is a negative change to the character of the view due to the widening of the road and loss of trees and grass verge, however, loss of visual amenity is limited through the improvement in footpath surfacing.

17.5.2.1.5 Photomontage View 11: Looking south along Swords Road adjacent to Santry Demesne

View 11: Existing

Figure 17.2.2.9 shows the existing view looking south along Swords Road adjacent to Santry Demesne. At this point the road is composed of two general traffic lanes, a southbound bus lane and an advisory cycle lane to the right (west) side. To the left of the road is a row of detached residential properties with front gardens divided from the road by low rendered walls and hedges of various heights. To the right is a tall masonry wall to the edge of Santry Demesne/Morton Stadium grounds, with mature trees overhanging the wall and road. Narrow poured concrete paths are present to both sides of the road. The character is of a minor suburban road corridor with some tall garden vegetation and prominent mature trees within a historic demesne.

View 11: As Proposed

Figure 17.2.2.10 shows the proposed view looking south along Swords Road adjacent to Santry Demesne. The primary change to the view is the realignment of the road corridor with a widening of the footpath on the west side of the road in the foreground. The footpath on the left side (east) side is reduced to accommodate a southbound cycle track; a segregated cycle track has been added to each side of the road. There is no change to visible vegetation or boundaries. There would be a slight positive change to the streetscape character and visual amenity of the view.

17.5.2.1.6 Photomontage View 13: Looking north-west from Coolock Lane across Swords Road

View 13: Existing

Figure 17.2.2.11 shows the existing view looking north-west from Coolock Lane across Swords Road to the main entrance into Santry Park/Demesne. Both roads are major intra-urban routes and the road junction is extensive. In the foreground is a pedestrian island with galvanised guardrails, and there is a moderate amount of associated signage and lighting visible within the view. Across the junction, the entrance to the park is substantial, formed from curved concave brick walls with tall ashlar masonry piers with decorative iron gates. Mature trees are present within the demesne providing a green backdrop to the scene. Two tall pine trees located to the right side of the gateway form prominent features in the view. The character is of a major road junction with a large number of prominent mature trees visible in the surrounding area, and a landmark gateway to a public space and historic demesne.

View 13: As Proposed

Figure 17.2.2.12 shows the proposed view looking north-west from Coolock Lane across Swords Road to the main entrance into Santry Park/Demesne. The primary change to the view is the rearrangement of the junction, the removal of the pedestrian island and guardrails, and the creation of a network of cycle lanes circumnavigating the junction. Traffic signals are moved and a new signal pole and lighting pole are present in the centre of the view. There is no visible change to trees. There would be a minor improvement to visual amenity through removal of the pedestrian guardrails.

17.5.2.1.7 Photomontage View 17: Looking north from Swords Road at the junction with Santry Avenue / Santry Villas / Church Lane

View 17: Existing

Figure 17.2.2.13 shows the existing view looking north from Swords Road at the junction with Santry Avenue/Santry Villas/Church Lane. The focus of the view is the major road corridor of Swords Road which is composed of five lanes of general traffic, with a cycle lane to each side, separated by a paved central median with young street trees. The view is well enclosed by surrounding mature trees to neighbouring areas of Santry Demesne/Park to the left and the open space at Santry Villas to the right. To the left of the view, the edge of the demesne is defined by a tall railing mounted to a low masonry wall. A pedestrian gateway flanked by two ashlar piers provides access through at the north-west side of the junction. The gateway is seen in the context of traffic

signal poles and a pedestrian island with galvanised guardrails which are located in front of the gateway. The character is of a major road junction with a large number of prominent mature trees visible in the surrounding area, with the notable presence of an adjacent public space/historic demesne.

View 17: As Proposed

Figure 17.2.2.14 shows the proposed view looking north from Swords Road at the junction with Santry Avenue / Santry Villas/Church Lane. The primary changes to the view are the rearrangement of the junction, an increase in size of the central median, the introduction of a pedestrian crossing across Swords Road, the extension of the footpath to the front of the pedestrian entrance to Santry Demesne, and loss of four trees within Santry Demesne/Park. Replacement trees are shown within the park. The pedestrian island to the front of the gateway is removed and replaced with a wide paved area, resulting in a reduction of clutter in the vicinity. Overall, there is reduction in visual clutter to the left of the view and an increase to the right. There would be a detrimental visual impact from the loss of the trees, although the demesne gateway is more visible and has fewer visual detractors in its proximity which is beneficial, and overall the change is neutral and would become positive as replacement planting further matures.

17.5.2.1.8 Photomontage View 18: From Swords Road adjacent to Saint John's Court Office Park looking south

View 18: Existing

Figure 17.2.2.15 shows the existing view from Swords Road adjacent to Saint John's Court Office Park looking south along the road. The road is composed of two general traffic lanes and a southbound bus lane. To the left of the view is a commercial property with a parking area/yard to the front separated by a railing mounted to a low masonry wall. Further along the left side of the road is a row of terraced residential properties at Magenta Crescent, the end of the terrace facing Swords Road with a garden area bounded by a hedgerow and low wall. To the right foreground is the wide concrete roadside footpath, and a grass verge, pedestrian entrance path, boundary railing/wall features and tall signage associated with the office park. A limited number of trees are visible to further along the road. The character is of a minor road corridor through a suburban mixed-use area, with limited tree cover.

View 18: As Proposed

Figure 17.2.2.16 shows the proposed view from Swords Road adjacent to Saint John's Court Office Park looking south along the road. The primary changes to the view are the overall widening of the road, the setback of boundaries to both sides of the road, the introduction of a new bus lane, and introduction of a segregated cycle track to both sides of the road. The hedge to the garden on Magenta Crescent is removed and reinstated at a setback alignment. The footpath on the right side of the road is narrowed to accommodate the road widening and northbound cycle track, and there is loss of a small area of grass verge, which is replaced with a new tree. Footpaths would be changed from poured concrete to concrete paving. There would be negative change in the character and visual amenity through the widening of the road corridor, although, this is partly mitigated by the visual improvement of footpath surfacing.

17.5.2.1.9 Photomontage View 20: From Swords Road at the junction of the entrance to Omni Park Shopping Centre looking north

View 20: Existing

Figure 17.2.2.17 shows the existing view from Swords Road at the junction of the entrance to Omni Park Shopping Centre looking north along the road. The road at this point is composed of three general traffic lanes with a cycle lane to both sides of the road. The left foreground of the view is made up of the access road to the shopping centre, a few small trees within the shopping centre grounds and a wall mounted railing which follows the boundary of the shopping centre grounds and wraps around the boundary of the junction. The right side of the view is dominated by tall tree planting along the edge of the road and within the adjacent residential area of Magenta Halls which largely screens the residential buildings behind. In the distance can be seen some

ongoing construction work to a large building further along Swords Road. The character is of a major intra-urban road corridor with a prominent boundary to a retail area to the left and substantial tree screening to the right with minimal visibility of surrounding buildings.

View 20: As Proposed

Figure 17.2.2.18 shows the proposed view from Swords Road at the junction of the entrance to Omni Park Shopping Centre looking north along the road. The primary change to the view is the widening of the road to the east to accommodate a bus lanes and segregated cycle track to each side of the road. Land has been acquired from a public space at Magenta Hall to the east, resulting a loss of the tree planting along the edge of the road and marginally greater visibility of the Magenta Hall residences. Retaining wall, with replacement tree planting and a new timber boundary fence and concrete retaining wall is shown along the edge of the space. There would be a negative change to character and visual amenity of the view due to loss of trees although this will be negated by the growth of replacement planting over the long-term.

17.5.2.1.10 Photomontage View 21: From Swords Road adjacent to the service entrance road to Omni Park Shopping Centre looking south-east

View 21: Existing

Figure 17.2.2.19 shows the existing view from Swords Road adjacent to the service entrance road to Omni Park Shopping Centre looking south-east towards residences on the far (east) side of the road. The road at this point is composed of two general traffic lanes with cycle lanes to each side of the road. The residences are semi-detached in a mid-twentieth century style. They have front gardens containing limited small trees and bordered with low rendered boundary walls. On the right side of the view is a service station largely screened by intervening small trees to the boundary. Several utilitarian lighting columns and telegraph poles are visible along the road and a prominent network of overhead wires crosses the view from the foreground into the distance. The character is of a minor road corridor in a suburban area with limited visual appeal.

View 21: As Proposed

Figure 17.2.2.20 shows the proposed view from Swords Road adjacent to the service entrance road to Omni Park Shopping Centre looking south-east towards residences on the far (east) side of the road. The primary change to the view is the minor widening of the road with a slight land acquisition from the residential properties and resulting removal and reinstatement of boundaries. Boundaries are shown reinstated in the same form with a new render and paint finish. The road now accommodates two general traffic lanes and two bus lanes. New lighting columns are installed and the overhead telecoms services are removed. There would be no appreciable change to the character but there would be a minor positive change to the visual amenity of the view due to removal of the overhead services and provision of new boundaries.

17.5.2.1.11 Photomontage View 22: From Swords Road south of Omni Park Shopping Centre looking south

View 22: Existing

Figure 17.2.2.21 shows the existing view from Swords Road south of Omni Park Shopping Centre looking south along the road. The road is composed of two lanes for general traffic, a cycle lane and a row of on-street parallel parking to the west side. Two-storey residential properties with front gardens border the road, these contain a mixture of vegetation including small trees, tall shrubs, and some larger trees in the distance. The gardens are separated from the road by low rendered walls. Poured concrete footpaths are present to both sides of the road. Several utilitarian lighting columns and telegraph poles are visible along the road and a prominent network of overhead wires crosses the view from the middle ground into the distance. The character is of a minor road corridor/residential street with moderately visible garden vegetation and minor tree cover.

View 22: As Proposed

Figure 17.2.2.22 shows the proposed view from Swords Road south of Omni Park Shopping Centre looking south along the road. The primary changes to the view are changes to the alignment of front garden boundaries and provision of new off road parking to properties on the right side of the road, and provision of improved footpath surfacing with concrete block paving to the foreground. There would be an improvement in streetscape character and visual amenity.

17.5.2.1.12 Photomontage View 23: View from the junction of Swords Road and Shanowen Road looking south

View 23: Existing

Figure 17.2.2.23 shows the existing view from the junction of Swords Road and Shanowen Road looking south along Swords Road. The foreground is filled with the junction itself with a visually prominent yellow box marking and a limited number of traffic signal poles. The road beyond is composed of three lanes for general traffic. Single storey residences are present on an elevated position along the nearest portion of the left side of the road, and two storey residences are visible further along the road to the left. Two storey properties are visible all along the right side of the road. The properties have front gardens with a limited number of small trees, shrubs and tall hedges and boundaries of a variety of low walls and railings. Poured concrete footpaths are present to both sides of the road. Several utilitarian lighting columns and telegraph poles are visible along the road and a prominent network of overhead wires crosses the view from the foreground into the distance. The character is of a minor road corridor/residential street with visible garden vegetation and limited tree cover.

View 23: As Proposed

Figure 17.2.2.24 shows the proposed view from the junction of Swords Road and Shanowen Road looking south along Swords Road. The primary change to the view is the widening of the road corridor to both sides and the loss of garden areas, changes to garden boundary alignment, and reinstatement of boundary walls and railings. There is a change to two general traffic lanes and two bus lanes, and the yellow box at the junction is enlarged. There is no significant loss of vegetation and boundaries are reinstated in a similar form and style with replacement hedge planting where appropriate. Although there is detrimental effect from the road widening the provision of improved paving to footpaths has a positive effect.

17.5.2.1.13 Photomontage View 26: From Swords Road south of the junction with Shanowen Road looking south along Swords Road

View 26: Existing

Figure 17.2.2.25 shows the existing view from Swords Road south of the junction with Shanowen Road looking south along Swords Road. The road at this point is composed of two lanes of general traffic with a bus stop on the left, with no shelter, and poured concrete footpaths. In the foreground on the left are some two-storey commercial properties with car parking and vehicle access area separated from the road by a row of low bollards. The rest of the road is lined by two-storey residential properties with well vegetated front gardens including tall hedges and some small trees. Several utilitarian lighting columns and telegraph poles are visible along the road and a moderately prominent network of overhead wires crosses the view from the foreground into the distance. The character is of a minor road corridor in a suburban mixed-use area with moderate greening and some minor tree cover.

View 26: As Proposed

Figure 17.2.2.26 shows the proposed view from Swords Road south of the junction with Shanowen Road looking south along Swords Road. The primary change to the view is the widening of the road to both sides, and the introduction of a new bus shelter in the foreground on the east side of the road. Boundaries are removed and reinstated along the road on both sides of the road; these are reinstated in a similar form and style with the exception of the bollard boundary to the commercial parking area which is changed to a low wall mounted

railing. Footpaths are upgraded to concrete pavers. There is no notable change in the character of the view but there is a minor improvement in visual amenity due to the upgrade in footpath surfacing.

17.5.2.1.14 Photomontage View 27a: From Swords Road at the junction of Collins Avenue West / Collins Avenue looking north along Sword Road

View 27a: Existing

Figure 17.2.2.27 shows the existing view from Swords Road at the junction of Collins Avenue West/Collins Avenue looking north along Sword Road. The road at this point is composed of two northbound and four southbound general traffic lanes. The left of the view is framed by mature trees within a small open space to the west of the road. The right side of the road is bordered by a row of semi-mature trees to the boundary of the car park to the Church of the Holy Child. The church is visible beyond on in the centre of the view in the middle distance partly screened by the trees. Mature tree cover is visible receding into the distance along the right side of the road. There are frequent tall utilitarian lighting columns and various signage visible interspersed along the road corridor. The character is of a major road corridor with moderate levels of tree cover to each side of the road, including some prominent mature trees.

View 27a: Proposed

Figure 17.2.2.28 shows the proposed view from Swords Road at the junction of Collins Avenue West/Collins Avenue looking north along Sword Road. The primary change to the view is the widening of the road into the car park area to the right (east), resulting in loss of the row of semi-mature trees. A new masonry boundary wall is introduced to the right edge of the road. A new bus lane is introduced to each side of the road and a new cycle track is introduced to the east side. There would be a notable negative change in character and a substantial loss of visual amenity through the loss of the trees and introduction of a new hard edge to the east side of the road.

17.5.2.1.15 Photomontage View 29b: From the junction of Swords Road and Griffith Avenue looking south along Swords Road

View 29b: Existing

Figure 17.2.2.29 shows the existing view from the junction of Swords Road and Griffith Avenue looking south along Swords Road. The foreground of the view is taken up with the junction marked by a large yellow box marking. The junction is well enclosed by surrounding street trees. There is an avenue of trees along Swords Road and very little of the surrounding buildings can be seen. Residential properties on the corner of Griffith Avenue can be glimpsed through the trees and over a tall hedge on the garden boundary. The character is of a moderate road junction in a suburban area with substantial tree cover.

View 29b: As Proposed

Figure 17.2.2.30 shows the proposed view from the junction of Swords Road and Griffith Avenue looking south along Swords Road. The primary change to the view is the widening of the road junction and loss of trees to the south-east corner and along a section of the east side of Swords Road to the south. The properties on the corner of Griffiths Avenue and along Swords Road become significantly more visible. New cycle tracks are introduced orbiting the junction. There is a substantial loss of trees and an increase in the visibility of surrounding development. There would be a some change to the character and a reduction of visual amenity of the view.

17.5.2.1.16 Photomontage View 33: From north of the junction of Drumcondra Road Lower and Whitworth Road looking north up Drumcondra Road Lower

View 33: Existing

Figure 17.2.2.31 shows the existing view from north of the junction of Drumcondra Road Lower and Whitworth Road looking north up Drumcondra Road Lower. The road at this point is composed of five general traffic lanes with the right (eastern) lane becoming a southbound bus lane a few metres further north of the viewpoint. The northbound lanes are screened by a central planted median with shrubs and young plane trees. To the left (west) side of the road is terraced row of two-storey 19th century commercial properties with cluttered frontages. To the right is row of terraced three-storey historic residential properties with small front gardens including some parking spaces. The character is of major urban road corridor/street in a historic mixed-use area with good levels of street greening.

View 33: As Proposed

Figure 17.2.2.32 shows the proposed view from north of the junction of Drumcondra Road Lower and Whitworth Road looking north up Drumcondra Road Lower. The primary change to the view is a reduction of the visible portion (east side) of the road to two lanes and the introduction of a cycle track. Changes to the west side of the road are screened by the planted median although a new bus shelter is visible in the distance. The median is realigned, shrubs replanted and existing trees reinstated/replaced. There would be no appreciable change to the character and visual amenity of the view.

17.5.2.1.17 Photomontage View 36: From Dorset Street Lower north of the junction with Belvidere Road looking north

View 36: Existing

Figure 17.2.2.33 shows the existing view from Dorset Street Lower north of the junction with Belvidere Road looking north. The road at this point is composed of five general traffic lanes with a northbound bus lane. There is a paved central median with regular tree pits, which accommodate trees in a range of conditions, however, some trees have failed to establish and several pits are lacking trees. Surrounding development is a mixture of commercial and residential uses and includes modern mixed-use apartment blocks to the left and 19th century shops to the right. The area to the right of the road is composed of a natural stone paved footpath with stainless cycle racks, a small tree planter and some decorative modern lighting poles. The character is of a major urban road corridor/street in a mixed-use area with some street tree planting in generally poor condition.

View 36: As Proposed

Figure 17.2.2.34 shows the proposed view from Dorset Street Lower north of the junction with Belvidere Road looking north. The primary change to the view is the removal of the central median with loss of the street trees. There is a change to the lane layout and the introduction of a segregated a cycle lane to each side of the road. There is a minor change in character and a loss of visual amenity through loss of the street trees, however, these are in poor condition and are not likely to have significant longevity.

17.5.2.1.18 Photomontage View 39: From the junction of Parnell Square East and Parnell Square North looking south-east

View 39: Existing

Figure 17.2.2.35 shows the existing view from the junction of Parnell Square East and Parnell Square North looking south-east along Parnell Square East. At this point the road is composed of two bus lanes and a lane for general traffic. The view is framed to the left by the presence of four-storey Georgian buildings along the edge of the street. To the right foreground is a traffic island containing an ornamental lamppost, some small planters and paved with a mixture of natural stone paving setts, concrete pavers and tactile paving for an adjacent pedestrian crossing. There are traffic signals to two poles within the foreground of the view. Behind to the right

is the entrance and tall masonry boundary walls to the Garden of Remembrance. In the distance, the tower of the Rotunda Hospital can be seen forming a prominent historic landmark. There are number of established trees in the gardens and along the right side of the road. The character is of an urban road/historic street with an adjacent City Centre open space and substantial trees.

View 39: As Proposed

Figure 17.2.2.36 shows the proposed view from the junction of Parnell Square East and Parnell Square North looking south-east along Parnell Square East. The primary change to the view is the rearrangement of the road corridor with introduction of two segregated cycle tracks and a row of bus stops to the left side. The entrance to the Garden of Remembrance is retained in its existing state. There is no notable change to the character or visual amenity of the view.

17.5.2.1.19 Photomontage Views 40 to 44: From viewpoints on and around the Frank Flood Bridge on Drumcondra Road in Drumcondra

Views 40 to 44: Existing

Figures 17.2.2.37, 17.2.2.39, 17.2.2.41, 17.2.2.43 and 17.2.2.45 show the existing views from viewpoints on and around the Frank Flood Bridge on Drumcondra Road in Drumcondra. The existing views show the bridge, the road and the small open space to the west. Development in the surrounding area is mixed with Millmount Terrace being located nearby to the west of the bridge. The bridge crosses the River Tolka and at this point the river is constrained by concrete retaining walls to each side. Tall poplar trees to the south bank on the west side of the bridge are a common feature in most of the views. The character of the views is of an urban area with nearby residential properties and a historic bridge and adjacent open space with a heavily modified river corridor.

Views 40 to 44: As Proposed

Figures 17.2.2.38, 17.2.2.40, 17.2.2.42, 17.2.2.44 and 17.2.2.46 shows the proposed views from viewpoints on and around the Frank Flood Bridge on Drumcondra Road in Drumcondra. The primary change to the view is the introduction of a new pedestrian and cycle bridge over the River Tolka to the west of Frank Flood Bridge and the removal of two poplar trees. The views are altered to varying degrees: views 40, 42 and 44 will experience minor changes the character and visual amenity of the view with the introduction of the new structure partially screening or within the context of the view of the existing bridge and some minor loss of vegetation; Views 41 and 43 will experience a substantial change to the character and visual amenity of the view due to a substantial loss of extents visible vegetation and a change to a predominantly built-up character.

17.6 Residual Impacts

17.6.1 Construction Phase

Mitigation of landscape (townscape) and visual impacts during the Construction Phase is focused on ensuring protection of elements to be retained (e.g. mature trees) and providing for a degree of visual screening of particular aspects of the works (e.g. the Construction Compounds). Construction Phase effects are temporary or short-term in nature and the proposed mitigation measures will be effective at ensuring adequate protection to features that are not identified for permanent removal as part of the works. However, it is acknowledged that for the most part effective mitigation of Construction Phase impacts on townscape and visual characteristics is neither possible nor practicable – for example, during the Construction Phase it is not possible to mitigate for the impact of the removal of mature trees to facilitate works. Therefore, for the most part, significant Construction Phase impacts remain unchanged in the post-mitigation and monitoring scenario as set out in Table 17.11.

Table 17.11: Summary of Construction Phase Significant Residual Effects (Moderate or Higher)

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
Townscape and Streetscape Character				
	Section 3: Northwood Avenue to Shantalla Road For proposed changes see Section 17.4.3.1.3	High	High	Negative Significant Temporary / Short-Term
	Section 4: Shantalla Road to Botanic Avenue For proposed changes see Section 17.4.3.1.4	High	Medium / High	Negative Significant Temporary / Short-Term
	Section 5: Botanic Avenue to Granby Row For proposed changes see Section 17.4.3.1.5	High / Very High	Medium	Negative Moderate / Significant Temporary / Short-Term
Streetscape Characteristics and Visual Impacts				
Architectural Conservation Areas (ACA)	For proposed changes see Section 17.4.3.2.1	Very High	Low / Medium	Negative Moderate Temporary / Short-Term
Conservation Areas	River Tolka For proposed changes see Section 17.4.3.2.2	Very High	Medium / High	Negative Significant / Very Significant Temporary / Short-Term
	Royal Canal / Parnell Square For proposed changes see Section 17.4.3.2.2	Very High	Low / Medium	Negative Moderate Temporary

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
Residential Conservation Areas	For proposed changes see Section 17.4.3.2.3	High	Medium	Negative Moderate Temporary / Short-Term
Protected Structures	Thatch cottage in Collinstown, Swords Road (FCC RPS 604) For proposed changes see Section 17.4.3.2.4 (Refer also to Chapter 16 (Architectural Heritage)).	Very High	Medium / High	Negative Significant / Very Significant Temporary / Short-Term
	Other Protected Structures	Very High	Low / Medium	Negative Moderate Temporary / Short-Term
Amenity Designations	Santry Demesne. For proposed changes see Section 17.4.3.2.5	High / Very High	Low / Medium	Negative Moderate Temporary / Short-Term
	Coolock Lane For proposed changes see Section 17.4.4.2.5	Medium	Medium / High	Negative Moderate Long-Term
	Open Spaces at Santry, Our Lady's Park, Drumcondra. For proposed changes see Section 17.4.3.2.5	High	High	Negative Significant Temporary / Short-Term
	Santry River, Drumcondra Tree-lined Verges, Royal Canal, Parnell Square. For proposed changes see Section 17.4.3.2.5	High / Very High	Medium	Negative Moderate Temporary / Short-Term
Properties	Part of residential property in temporary acquisition For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Very Significant / Profound Temporary / Short-Term
	Non-residential properties included in permanent or temporary acquisition (e.g. business, commercial, hotel, etc.) For proposed changes see Section 17.4.3.2.8	Medium / High	High	Negative Significant Temporary / Short-Term
	Properties located along, fronting and viewing the Proposed Scheme For proposed changes see Section 17.4.3.2.8	High	High	Negative Significant Temporary / Short-Term

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
Trees and Vegetation	For proposed changes see Section 17.4.3.2.9	Medium / High	Medium / High	Negative Moderate / Significant Temporary / Short-Term

17.6.2 Operational Phase

Residual landscape/townscape and visual effects during the Operational Phase are further influenced by the ongoing development, establishment and maturing of landscape/townscape and visual measures, as described in Section 17.5.2. A summary of residual Operational Phase effects (rated moderate or greater) following establishment of landscape measures at 15 years post-Construction Phase, is presented in Table 17.12.

Table 17.12: Summary of Predicted Operational Phase Significant Residual Effects (Moderate or Higher)

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts (at 15 years post-construction)
Townscape and Streetscape Character				
Section 3: Northwood Avenue to Shantalla Road For proposed changes see Section 17.4.4.1.3		High	Medium	Positive Moderate Long-Term
Section 4: Shantalla Road to Botanic Avenue For proposed changes see Section 17.4.4.1.4		High	Medium	Positive Moderate Long-Term
Section 5: Botanic Avenue to Granby Row For proposed changes see Section 17.4.4.1.5		High / Very High	Low / Medium	Positive Moderate / Significant Long-Term
Streetscape Characteristics and Visual Impacts				
Conservation Areas	River Tolka For proposed changes see Section 17.4.4.2.2	Very High	Low / Medium	Negative Moderate Long-Term
Residential Conservation Areas	For proposed changes see Section 17.4.4.2.3	High	Low / Medium	Positive Moderate Long-Term
Protected Structures	Thatch Cottage, Collinstown, Swords Road (FCC RPS 604)	Very High	Low	Negative Moderate Long-Term
	Open space at Chadwicks For proposed changes see Section 17.4.4.2.5	Medium	Medium	Negative Moderate Short-Term

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts (at 15 years post-construction)
	Coolock Lane For proposed changes see Section 17.4.4.2.5	Medium	Medium / High	Negative Moderate / Significant Short-Term
Amenity Designations	Open Spaces at Santry For proposed changes see Section 17.4.4.2.5	High	Medium / High	Positive Moderate Long-Term
	Our Lady's Park For proposed changes see Section 17.4.4.2.5	High	Medium / High	Positive Moderate Long-Term
Properties	Part of residential property in permanent acquisition For proposed changes see Section 17.4.4.2.8	High	Medium / High	Negative Moderate Long-Term
	Non-residential properties included in permanent acquisition (e.g. business, commercial, hotel, etc.) For proposed changes see Section 17.4.4.2.8	Medium / High	Medium / High	Negative Moderate / Significant Short-Term

17.7 Conclusion

As described in Chapter 3 (Consideration of Reasonable Alternatives) of this EIAR and noted at Section 17.4.1.2 of this Chapter, the Proposed Scheme has been subject to an iterative design development process which has sought insofar as practicable to avoid or reduce negative impacts, including townscape and visual impacts. Nevertheless, the Proposed Scheme will give rise to some degree of townscape and visual effect, most notably during the Construction Phase. These impacts arise especially where there is temporary and/or permanent acquisition of lands associated with residential or other properties including amenities, and where tree removal is required. The Proposed Scheme includes for replacement of disturbed boundaries, reinstatement of the Construction Compound, return of temporary acquisition areas, and for additional tree and other planting where possible along the Proposed Scheme.

In the Operational Phase, localised negative residual effects will remain for properties experiencing permanent land acquisition, including the Thatch Cottage at Collinstown (a protected structure). There will be a negative residual effect remaining for the River Tolka Conservation Area resulting from the introduction of a new bridge structure within the designation. There will be overall positive effects for sections of the Proposed Scheme between Northwood Avenue and Granby Row, including Residential Conservation Areas, as the Proposed Scheme provides for improvements in the urban realm, which will provide positive long-term effects for the townscape and visual character. The Proposed Scheme will also provide for a significantly enhanced level of service for public transport and for pedestrian/cycle connectivity.

17.8 References

- British Standards Institution (BSI) (2010). BS 3998:2010 'Tree Work – Recommendations'
- British Standards Institution (BSI) (2012). BS 5837:2012 'Trees in relation to in relation to design, demolition and construction. Recommendations'
- CABE and ODPM (2002). Paving the way: How we achieve clean, safe and attractive streets: a research project
- DCC (2016). Dublin City Development Plan 2016 – 2022
- DCC (2016b). Dublin City Tree Strategy 2016 – 2020
- DCC (2019). Dublin City Parks Strategy 2019 – 2022
- DCC (2022). Dublin City Development Plan 2022 – 2028
- Department of Culture, Heritage and the Gaeltacht (2020/21). Database provides access to National Monuments Service Sites and Monuments Record (SMR) and the National Inventory of Architectural Heritage [Online]. Available from: webgis.archaeology.ie/historicenvironment/
- Department for Transport (DoT) (2007). Manual for Streets
- Department of Transport (DoT) (2009). National Cycle Policy Framework
- DHPLG (2018). Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment
- EPA (2017). Draft Guidelines of the Information to be contained in Environmental Impact Assessment Reports
- EPA (2020/21). EPA Maps [Online]. Available from: gis.epa.ie/EPAMaps
- EPA (2022). Guidelines on the Information to be contained in Environmental Impact Assessment Reports
- FCC (2020). Dublin Airport Local Area Plan 2020
- FCC (2022) Fingal County Council Development Plan 2023-2029
- Google (2020/21). Google Maps [Online] Available from: www.google.com/maps
- Landscape Institute (LI) and the Institute of Environmental Management and Assessment (IEMA) (2013). Guidelines for Landscape and Visual Impact Assessment 3rd edition
- Landscape Institute (2018). Landscape Institute Technical Information Note 05/2017 (Revised 2018) on Townscape Character Assessment
- Landscape Institute (2019). Technical Guidance Note 06/2019 on Visual Representation of Development Proposals
- Microsoft (2020/21). Bing Maps [Online] Available from: www.bing.com/maps
- National Parks and Wildlife Service (2020/21). Datasets provides information on national parks, protected sites and nature reserves [Online] Available from www.npws.ie/maps-and-data
- Natural England (2014). An Approach to Landscape Character Assessment

National Transport Agency (NTA) (2013). Greater Dublin Area Cycle Network Plan

National Transport Authority (NTA) (2020). Urban Realm Concept Designs

National Transport Authority (NTA) (2021). Preliminary Design Guidance Booklet (PDGB) for BusConnects Core Bus Corridors

OSI (2020/21). OSI Current and historical mapping [Online]. Available at: map.geohive.ie/mapviewer.html

OSI (2020/21). OSI Historical aerial imagery [Online]. Available at: map.geohive.ie/mapviewer.html

Torbay Council (2004). Torbay Streetscape Guidelines

Directives and Regulations

Council of Europe Landscape Convention 2000 (ETS No. 176) (2000)

Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (the EIA Directive)

S.I. 30 of 2000 – Planning and Development Act (2000)

S.I. 600 of 2001 – Planning and Development Regulations (2001)