Chapter 17 Landscape (Townscape) & Visual





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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 Templeogue/Rathfarnham 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). 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 public 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 10km from end to end online with additional offline upgrades and quiet street treatment of approximately 2km and 1.5km respectively. The Proposed Scheme will be comprised of two main alignments, namely from Templeogue to Terenure (3.7km), and from Rathfarnham to the City Centre (6.3km)

The Templeogue to Terenure section will commence on the R137 Tallaght Road, east of the M50 Junction 11 Interchange. From here, the Proposed Scheme is routed via the R137 Tallaght Road and Templeogue Road, through Templeogue Village, to Terenure Cross, where it joins the Rathfarnham to City Centre section. The Rathfarnham to City Centre section will commence on the R821 Grange Road at the junction with Nutgrove Avenue, and is routed along the R821 Grange Road, the R115 Rathfarnham Road, the R114 Rathfarnham Road, Terenure Road East, Rathgar Road, Rathmines Road Lower, Richmond Street South, Camden Street Upper and Lower and Wexford Street as far as the junction with the R110 at Kevin Street Lower and Cuffe Street where priority bus lanes end. From Cuffe Street to Dame Street along Redmond's Hill, Aungier Street, and South Great George's Street the route will involve a traffic lane and a cycle track in both directions where it will join the prevailing traffic management regime in the city centre. In addition to the above, an alternative cycle facility will be provided along Harold's Cross Road / Terenure Road North between Terenure Cross and Parkview Avenue, as well as along Bushy Park Road, Wasdale Park, Wasdale Grove, Zion Road and Orwell Road. The route of the Proposed Scheme is shown in Image 1.1 in Chapter 1 (Introduction).

The Proposed Scheme includes an upgrade of the existing bus priority and cycle facilities. The scheme includes a substantial increase in the level of bus priority provided along the corridor, including the provision of additional lengths of bus lane resulting in improved journey time reliability. Throughout the Proposed Scheme bus stops will be enhanced to improve the overall journey experience for bus passengers and cycle facilities will be substantially improved with segregated cycle tracks provided along the links and protected junctions with enhanced signaling for cyclists provided at junctions.

Moreover, pedestrian facilities will be upgraded, and additional signalised crossings will be provided. In addition, urban realm works will be undertaken at key locations with higher quality materials, planting and street furniture provided to enhance the pedestrians' experience, an example of this can be seen in Terenure, particularly at Terenure Cross.

The primary study area is a boundary-to-boundary road / street corridor along the Proposed Scheme, which incorporates 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.

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 EIA Directive);
- Planning and Development Act 2000, as amended;
- Planning and Development Regulations 2001, as amended; and
- European Landscape Convention 2000.

17.2.2.2 Policy

- Dún Laoghaire-Rathdown County Development Plan (2022-2028);
- dlr TREES: A Tree Strategy for Dún Laoghaire-Rathdown 2011-2015 (SDCC 2011);
- South Dublin Development Plan 2022–2028 (SDCC 2022);
- Dublin City Development Plan 2022-2028 (DCC 2022);
- Dublin City Tree Strategy 2016-2020 (DCC 2016b);
- Dublin City Parks Strategy 2019-2022 (DCC 2019);
- 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' (European Landscape Convention 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);
- Dublin City Tree Strategy 2016-2020 (DCC 2016b);
- Dublin City Parks Strategy 2019-2022 (DCC 2019);
- Dún Laoghaire-Rathdown County Development Plan (2022-2028);
- dlr TREES: A Tree Strategy for Dún Laoghaire-Rathdown 2011-2015 (SDCC 2011);
- South Dublin Development Plan 2022–2028 (SDCC 2022);
- Historical and current mapping and aerial photography (ordnance survey Ireland, google earth, google maps, etc.);
- Mapping and drawings of the Proposed Scheme;
- General Arrangement and Landscape Design Drawings (refer to 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);
- Baseline information, including road infrastructure audits, Tree Survey Plans and Arboricultural Impact Assessment Report, and drone survey imagery; and

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 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 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.

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 provides 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)

Table 17.1: Publicly Available Datasets

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 receiving 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 and the relevant policy framework. Five categories are used to classify sensitivity, as set out in Table 17.2.

Description
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.
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.
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.
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.
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.

Table 17.2: Townscape Sensitivity

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

Description
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.
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.
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.
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.
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.
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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 Impacts; as adapted from EPA Guidelines (EPA 2022)

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 3.4 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 experienced 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 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 impacts 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 nonrecreational 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.

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

Sensitivity	Description
	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 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 fro	om 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.



Diagram 17.1Quality of Effects

In addition to predicting the significance of the effects, EIA methodology (EPA 2022) 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.

17.2.4.5 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 principal; 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.

17.2.4.6 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 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.

17.2.4.7 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.

17.2.4.7.1 Photography

17.2.4.7.1.1 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.

17.2.4.7.1.2 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.

17.2.4.7.1.3 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. Generally within an urban or suburban context, a 24mm prime lens has been used. This lens captures a horizontal field of view of 73°. This relatively wide field of view is preferred as it shows more of the landscape / townscape context in urban settings.

17.2.4.7.2 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.

17.2.4.7.3 3D Model and Camera Matching

17.2.4.7.3.1 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.

17.2.4.7.3.2 <u>3D Camera Positions</u>

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.

17.2.4.7.3.3 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.

17.2.4.7.4 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. Given that some views may be based on a wider angle of coverage than a 50mm prime lens, in these instances a further image is provided showing an A3 enlargement (centred on the Proposed Scheme) to equate to the coverage of a 50mm prime lens view.

17.3 Baseline Environment

17.3.1 City Context

The Proposed Scheme will be located in the south / southwest of Dublin City running along the R137 Tallaght and Templeogue Road and along the R821 Grange Road and R114 Rathfarnham Road to Terenure Cross and on via the R114 through Rathgar, Rathfarnham and to Dame Street in the city centre via the R114 Camden Street / South Great George's Street corridor.

The Proposed Scheme is sub-divided into four sections:

- Section 1: Tallaght Road to Rathfarnham Road;
- Section 2: Nutgrove Avenue to Terenure Road North Grange Road, Rathfarnham Road;
- Section 3: Terenure Road North to Charleville Road Terenure Road East, Rathgar Road; and
- Section 4: Charleville Road to Dame Street

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 has an overall length of approximately 10km from end to end online with additional offline upgrades and quiet street treatment of approx. 2km and 1.5km respectively. The Proposed Scheme will be comprised of two main alignments, namely from Templeogue to Terenure (3.7km), and from Rathfarnham to the City Centre (6.3km).

The Rathfarnham section of the Proposed Scheme will commence on the R821 Grange Road at the junction with R821 Nutgrove Avenue and be routed along the R114 Rathfarnham Road to Terenure Cross and on through Rathgar Village and Rathmines Town Centre to the city centre at Dame Street. The Proposed Scheme will pass Rathfarnham Castle and Rathfarnham Village, cross the River Dodder valley south of Terenure and the Grand Canal north of Rathmines. The Templeogue to Terenure section will commence on the R137 Tallaght Road, east of the M50 junction 11 interchange. From here, the Proposed Scheme is routed via the R137 along Tallaght Road and Templeogue Road, through Templeogue Village, past Bushy Park to Terenure Cross, where it joins the Rathfarnham to City Centre section. Further detail is provided in Chapter 4 Proposed Project Description.

The Proposed Scheme includes a wide variety of suburban and city landscape, townscape and visual features, from streetscape boundaries and public 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 South Dublin Development Plan 2022 - 2028

The South Dublin Development Plan 2022 – 2028 (SDCC 2022) is the higher county level planning framework applicable to the western end of the Templeogue section and southern end of the Rathfarnham section of the Proposed Scheme.

Chapter 7 Sustainable Movement includes for policies and objectives in relation to public transport, walking and cycling. SM1 Objective 2 supports the delivery of key sustainable transport projects including DART and Luas expansion programmes, BusConnects. SM3 Objective 4 supports accessibility to public transport, increase catchment and maximise permeability through the creation of new and upgrading of existing walking and cycling routes linking to public transport stops. SM3 Objective 9 seeks to ensure that all new public transport corridors are designed to enhance the County's green infrastructure network by ensuring adequate replacement and additional planting of native species and pollinators and to ensure that sustainable urban drainage systems

(SuDS) approaches are used to deal with surface water run-off. SM3 Objective 10 aims to ensure that all public transport proposals have regard to pertaining environmental conditions and sensitivities including biodiversity, protected species and designated sites and incorporate appropriate avoidance and mitigation measures as part of any environmental assessments.

Table 7.1 of the Plan lists improvements to the existing cycle network and new 'Now', 'Soon' and 'Later' schemes to be progressed over the next 2, 5 and 8 years respectively. The Dodder Greenway is identified as a 'Now' Scheme.

Chapter 4 Green Infrastructure sets out policies and objectives in relation to appropriate development, enhancement and protection of green infrastructure networks, including green infrastructure in urban areas, watercourse network, public open space hierarchy and landscape setting and SuDS. Figure 4.4 of the Plan identities the Dodder River Corridor is noted as both a Core Area and a Primary GI Corridor.

Chapter 3 Natural Cultural and Built Heritage sets out policies and objectives in relation to the protection and enhancement of built heritage and architectural conservation, landscapes, natural heritage sites, public rights of way, tree preservation orders (TPO), cultural heritage and sites of geological heritage. There are no Architectural Conservation Areas or Prospects to Preserved and Protected along this section of the Proposed Scheme. Likewise there are no Tree Preservation Orders (TPO) along this section of Proposed Scheme; Table 3.3 of the Development lists Tree Preservation Orders (TPO) within the county, the nearest but outside of the Proposed Scheme is Dublin City Council Tree Preservation (Rathfarnham, Beaufort Downs) Order 1987. These trees are south of Grange Road close to where the Proposed Scheme commences.

Regarding the River Dodder corridor, Policy NCBH8 in Chapter 3 aims to 'protect and enhance the visual, recreational, environmental, ecological, geological and amenity value of the Dodder Valley, as a key element of the County's Green Infrastructure network'. NCBH8 Objective 4: states that development will only be allowed where it 'preserves the amenity value of the [Dodder] river valley'.

The Development Plan lists Architectural Conservation Areas, noting Rathfarnham Village including Willbrook which extends across the study area at Rathfarnham Road and Grange Road to the boundary with Rathfarnham Castle. Table 3.5 of the Development lists Prospects to be Preserved and Protected within the county; No prospect is in proximity to the Proposed Scheme.

Appendix 3A of the Development Plan includes the Record of Protected Structures. There are number of Protected Structures distributed along the corridor of the Proposed Scheme from Spawell through Templeogue to Bushy Park, including Templeogue Graveyard and Church (Ruin), a Stone Arch, and Cheeverstown House; and from Grange Road to the River Dodder in Rathfarnham, including the Yellow House, Rathfarnham Castle and Pearse Bridge over the River Dodder.

Chapter 12 Our Neighbourhoods includes for policies and objectives in relation to the protection, development, enhancement and protection of village centres including Templeogue and Rathfarnham. The importance of Rathfarnham Village Centre and notable structures of the Yellow House and Church of the Annunciation are noted.

Policies in relation to biodiversity as they relate to the Proposed Scheme are discussed in greater detail in Chapter 12 (Biodiversity) of this EIAR. Policies in relation to archaeological and architectural heritage 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 the South Dublin County area are:

- 'Objective RES: To protect, provide and / or improve residential amenity';
- 'Objective OS: To preserve and provide for open space and recreational amenities' (e.g. Spawell; open space around Templeogue graveyard, church in ruins and stone arch; open space at junction of Grange Road / Nutgrove Avenue / Beaufort Downs; grounds of Rathfarnham Castle; River Dodder corridor / Church Lane / Brookvale Road / Downs);
- 'Objective HA': 'To protect and enhance the outstanding natural character and amenity of the... Dodder Valley' (Dodder Valley including Bushy Park, open space south of Spawell Roundabout and open space adjacent to Pearse Bridge);

- 'Objective RU: To protect and improve rural amenity and to provide for the development of agriculture' (e.g. River Dodder corridor).
- 'Objective VC: To protect, improve and provide for the future development of Village Centres' (i.e. Templeogue Village and Rathfarnham Village).

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 document applicable to the parts of the Proposed Scheme from Templeogue and the River Dodder to the city centre.

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 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. Figure 4-1 of the Development indicates Key Views and Prospects south along Richmond Street South towards Church of Mary Immaculate Refuge of Sinners, and east along Dame Street. Figure 7-1 of the Development Plan highlights South Great George's Street as one of the principal shopping streets in the city centre retail core. Figure 8-2 of the Development Plan indicates that Rathmines Road / Camden Street corridor is one of the historic approaches to the City. The strategic green network as indicated on Figure 10-1 of the Development Plan highlights the River Dodder and the Grand 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 and Parks within the city.

Chapter 11 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 (CA), trees in ACAs, zones of archaeological interest and industrial heritage, monuments and Dublin's cultural assets. There are a number of sites, buildings and features of historic and heritage interest located along the corridor of the Proposed Scheme, including an Architectural Conservation Area along South Great George's Street and Conservation Areas along the River Dodder corridor, the Grand Canal and along the R114 from Rathmines Road Lower / Grand Canal through to South Great George's Street, and at Dame Street. There are a significant number of Residential Conservation Areas along the Proposed Scheme, at Rathfarnham Road / Rathdown Park, along Templeogue Road, along Harold's Cross Road, along Terenure Road East, Rathgar Road and Rathmines Road. Likewise there are a significant number of Protected Structures along Terenure Road East, Rathgar Road, Rathmines Road, Richmond Hill South, Camden Street, Aungier Street and South Great George's Street. 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 the Dublin City area are:

- 'Objective Z1: To protect, provide and improve residential amenities';
- 'Objective Z2: To protect and / or improve the amenities of residential conservation areas';
- 'Objective Z4: To provide for and improve mixed-services facilities' (Terenure Village, Rathgar Village, Rathmines, and Richmond Hill South / Camden Street);
- 'Objective Z5: To consolidate and facilitate the development of the central area, and to identify, reinforce, strengthen and protect its civic design character and dignity (e.g. city centre area); and
- 'Objective Z9: To preserve, provide and improve recreational amenity and open space and ecosystem services, (e.g. Bushy Park, landscape area at Rathdown Drive, CDETB Sports Ground Terenure, River Dodder Corridor, St. Mary's Sports Ground (Rathmines), Grand Canal corridor).

Other land use zonings to either side of the Proposed Scheme within the Dublin City area include:

- 'Objective Z3: To provide for and improve neighbourhood facilities' (e.g. Rathgar Road / Frankfort Avenue Junction, Rathmines Road Lower / Grove Road Junction); and
- 'Objective Z15: To protect and provide for community uses and social infrastructure (e.g. Terenure College grounds, St. Joseph's Church grounds Terenure).

17.3.3.3 Dún Laoghaire-Rathdown 2022 - 2028

The Proposed Scheme extends slightly into the Dún Laoghaire–Rathdown County area, where there will be changes to short section of Nutgrove Avenue.

Chapter 4 Open Space, Parks and Recreation sets out policies relating to open space and recreation including the protection of existing green infrastructure and development of new green infrastructure, the protection and provision of parks and open spaces, the preservation of trees and woodlands (supported by the objectives and policies of 'dlr TREES: A Tree Strategy for Dún Laoghaire-Rathdown 2011-2015') (DLRCC 2011)), greenway networks, sports and recreation facilities and play facilities. The Proposed Scheme extends into an area of designated open space associated with Rathfarnham Wood residential estate. The designated open space of Castle Golf Course which includes several tree protection objectives, is present nearby but outside the Proposed Scheme, beyond the residential open space and to the north of housing along Nutgrove Avenue.

Chapter 8 Green Infrastructure and Biodiversity sets out policies relating to landscape, natural heritage and biodiversity. Policies in relation to natural heritage and biodiversity as they relate to the Proposed Scheme are discussed in greater detail in Chapter 12 (Biodiversity) of this EIAR.

In relation to landscape, sub-section 8.4 of Chapter 8 of the Development Plan sets out policies in relation to preservation of landscape character areas, conservation and enhancement of high amenity areas, protection and enjoyment of views and prospects. There are no high amenity areas or protected views and prospects along the corridor of the Proposed Scheme.

Chapter 11 Heritage and Conservation sets out policies relating to protection of archaeological and architectural heritage, including the Record of Monuments and Places (RMP), historic burial grounds, Record of Protected Structures (RPS), National Inventory of Architectural Heritage (NIAH), nineteenth and twentieth century buildings, estates and features, historic street furniture, industrial heritage and Architectural Conservation Areas (ACA). There are no features of archaeological or architectural heritage designated in the Development Plan along the corridor of the Proposed Scheme. Policies in relation to archaeological and architectural heritage 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 Proposed Scheme will interface with the following zoning designation in the development plan:

- Objective A: To provide residential development and improve residential amenity while protecting the existing residential amenities
- Objective F: To preserve and provide for open space with ancillary active recreational amenities.

17.3.4 Townscape / Streetscape Character

The townscape and streetscape character of the Proposed Scheme is described in Table 17.6: Analysis of Baseline Townscape and Visual Environment of the Proposed Scheme, with reference to landscape, townscape and visual characteristics, features, designations, and sensitivities. The key features are identified on Figures 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.

Proposed Scheme	Baseline Description	Baseline
Character Areas		Sensitivity
Tallaght Road to Rathfar	nham Road	
		1
Subsection: Tallaght Road to Old Bridge Road / Cypress Grove Road	Townscape Character: This section has a peri-urban character. Outer suburban / city edge townscape which is predominantly composed of rural / recreational landscapes transitioning to residential suburbs.	Low
Junction.	Streetscape Character: Significant dual carriageway road corridor leading from the M50 Motorway. Streetscape is relatively open landscape corridor to the west, becoming gradually more enclosed in the residential suburban edge approaching Templeogue Village to east.	
	There are recreational / open space landscapes with a natural river valley and rural hedgerows to south and shared public park / recreational grounds with mixed planting and some mature trees at Tymon park and Spawell sports centre to north. Managed tree-lined hedgerow present in carriageway medians.	
	Residential suburbs exist to either side of the dual carriageway east of Spawell Roundabout. A graveyard and church ruin are openly situated in open space adjacent to the road. The road corridor is generally enclosed by young tree planting on the northern side. Mix of planting and residential / institutional (Cheeverstown Care Centre) boundary walls present to the south. A managed hedgerow is located in the median. Historic stone arch (Templeogue Arch, a Protected Structure) was previously lost in heavy vegetation to immediate north of road, but has recently been cleared. New infill residential development to south of road approaching Templeogue Village.	
	Key Townscape Features: Major dual carriageway in a suburban city edge location. Open space to either side to the west. Tree and hedgerow present (in median) planting.	
	Amenity Designations: Open spaces present at Tymon Park, Spawell Centre, and along northern side of road corridor at Spawell Roundabout. Rural landscape exists along River Dodder Valley to south of the road corridor.	
	Tree Preservation Order (TPO): None.	
	Tree / Woodland Preservation Objectives: None.	
	Protected Views: None.	
	Protected Structures: No.265: Old Bella Vista Paper Mills, No.260: Spawell House, No.249 Church (ruin) and graveyard, No.244: Stone Archway (Old Stone Archway Over Part Of Old City Watercourse), No.242: Cheeverstown House, No.239: Mill, Weir.	
	Other: N/A	
Subsection: Old Bridge Road / Cypress Grove Road Junction to	Townscape Character: This character of this section is outer city village to inner city village via historic city road corridor. Primarily residential areas with local retail uses / services at the village centres.	High
Templeogue Village to Rathfarnham Road	Streetscape Character: Major road corridor – a historic city access route via historic villages. Contains a mix of local services and residential uses.	
	There is limited street tree planting but major open spaces and mature trees along substantial sections.	
	Areas of educational / institutional uses present at Terenure College Our Lady's Secondary School.	
	Key Townscape Features: Features include historic road corridor and villages, mature public parks and educational facilities, and period residential properties.	
	Amenity Designations: No Architectural Conservation Areas or Conservation Areas. River Dodder located south of Road corridor, Bushy Park Regional Park, mature tree-lined landscape area at Rathdown Drive, pedestrian link to ETB Sports Ground. Residential Conservation Areas along sections of Templeogue Road.	
	Tree Preservation Order (TPO): None.	
	Tree / Woodland Preservation Objectives: None.	
	Protected Views: None.	
	Protected Structures: Nos. 245 and 291 Templeogue Road, The Old Forge Terenure.	
	Other: Mature trees within many properties and along Templeogue Road East.	
Nutgrove Avenue Junction to Terenure Road North.	Townscape Character: An outer residential suburb character, of predominantly two- storey buildings, with traditional urban village mainly along a historic road corridor. Rathfarnham Bypass is significant infrastructure / modern intrusion in the background fabric of area.	High
	Streetscape Character: Suburban road predominantly lined by two-storey terraces, most of redbrick or redbrick and render with established front gardens – with driveways. Some semi-detached properties with single-storey terraces are present. Many properties are	



Proposed Scheme	Baseline Description	Baseline
Character Areas		Sensitivity
	elevated above the road. Modern infill with larger apartment development is present at Rathfarnham.	
	There is a mix of property boundaries including some brick walls and piers, rendered walls, railings, stone copings, and combination of the same. Limited / no street tree planting.	
	There are areas of significant open space – linked to Rathfarnham Castle, and the corridors of the Owendoher River and the River Dodder – with stands of early mature and mature trees. Limited tree planting within road corridor.	
	Key Townscape Features: Mainly historic road corridor through residential suburbs with high quality open space at Rathfarnham Castle and River Dodder.	
	Amenity Designations: Architectural Conservation Area at Rathfarnham Village. Conservation Area at River Dodder. Open Space / Amenity areas at Rathfarnham Castle grounds, Owendoher River corridor, Springfield Avenue / Brookvale, Outstanding Character / Amenity of River Dodder. Residential Conservation Areas along sections of Rathfarnham Road.	
	Tree Preservation Order (TPO): None.	
	Tree / Woodland Preservation Objectives: None.	
	Protected Views: None.	
	Protected Structures: No. 193 Pearse Bridge, No. 212 Rathfarnham Castle Lodge, No. 213 Ecclesiastical Remains, Stone Church (Ruin), Church 'Site Of', Graveyard, Grave-Slab(s) (RM), No. 221 Rathfarnham Castle (also a National Monument), No. 231 Yellow House, Rathfarnham, No. 236 Church Of Annunciation, Rathfarnham, No. 7019: Rathfarnham War Memorial Hall.	
	Other: Significant public amenities / park based on historic Rathfarnham castle grounds and River Dodder corridor.	
Terenure Road North to Charleville Road.	Townscape Character: Character is of a residential inner-city suburb, of predominantly two-storey buildings, including a traditional urban village centre.	Very High
	Streetscape Character: Suburban road which is predominantly lined by two-storey / three-storey terraces, most of redbrick or redbrick and render with established front gardens with driveways, and mature trees.	
	There is a mix of property boundaries including some brick walls and piers, rendered walls, railings, stone copings and combination of same. Short sections of historic granite kerbs are present. There is no street tree planting but large trees are present on the boundaries between footpaths and residential properties.	
	Key Townscape Features: Traditional road corridor through residential suburbs. Small sections of local services with outer city village and small city park at Terenure and Rathgar. Prominent mature specimen trees along Terenure Road East which contribute strongly towards the streetscape character.	
	Amenity Designations: None.	
	Tree Preservation Order (TPO): None.	
	Tree / Woodland Preservation Objectives: None.	
	Protected Views: None.	
	Protected Structures: There are a significant number and continuous sections of protected structures along Terenure Road East and Rathgar Road.	
	Other: Attractive residential street corridors; a key village centre at Rathgar; and an important urban street corridor along Rathgar Avenue running to the north of this section.	
Charleville Road to	Townscape Character: Inner city village and urban townscape character.	Very High
Dame Street.	Streetscape Character: Suburban and urban road lined by two-storey terraces and urban terraces. There is some limited modern infill with larger recent apartment development.	
	There is a mix of property boundaries including some brick walls and piers, rendered walls, railings, stone copings and combination of same. Short sections of historic granite kerbs. Wide concrete footpaths. No street tree planting.	
	Key Townscape Features: Traditional historic road corridor through residential and city centre suburbs.	
	Amenity Designations: Architectural Conservation Area along George's Street Great (South City Retail Quarter ACA). Conservation Area at the Grand Canal and along full corridor of Proposed Scheme from the Grand Canal to Dame Street. The Grand Canal corridor is a designated open space.	
	Tree Preservation Order (TPO): None.	
	Tree / Woodland Preservation Objectives: None.	
	Protected Views: None.	



Proposed Scheme Character Areas	Baseline Description	Baseline Sensitivity
	Protected Structures: Significant number and sections of protected structures are present along the road corridor. Other: Important historic city road corridors.	

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 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:

- It is proposed to amend the layout of the Templeogue Road / Cypress Grove Road junction in order to improve alignment for inbound buses and reduce the impact on trees and minimise land acquisition from adjacent properties;
- Removal of land-take at inbound bus gate on Templeogue Road at Olney Grove and at properties just north of the Springfield Avenue junction;
- Signal-controlled priority proposed between Rathdown Park and Bushy Park Road, reducing land-take along this section from residential properties and Rathfarnham War Memorial Hall;
- Signal-controlled priority proposed through Terenure Cross to minimise impacts on parking and loading, which will also allow urban realm improvements;
- Additional alternative cycle facilities proposed on Bushy Park Road, Wasdale Park, Wasdale Grove, Victoria Road, Zion Road and Orwell Road. No cycle facilities proposed on Terenure Road East, and one-way traffic regime plus 1.5m cycle tracks proposed on Rathgar Road. This will reduce the impact on trees and properties on these roads whilst maintaining a high level of service for cyclists travelling to and from the city centre;
- Two general traffic lanes, and 2m cycle track in each direction proposed between Castlewood Avenue and Grove Road with a Bus Gate provided between Richmond Hill and Lissenfield in order to ensure priority for buses. This will allow for wider footpaths and urban realm improvements through the village; and

 Development of the landscape design to incorporate enhancements to streetscape at key locations, such as the improvements to the setting of Templeogue Arch and provision of a plaza space at the junction of Rathmines Road and Rathgar Road.

17.4.1.3 Construction Phase

The key characteristics of the Proposed Scheme of particular relevance to the 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.

Other key characteristics along sections of the Proposed Scheme of particular relevance to the townscape and visual assessment during the Construction Phase are outlined in the following sections.

17.4.1.3.1 Tallaght Road to Rathfarnham Road.

- Minor works to R137 Tallaght Road, and more substantial works at Spawell Roundabout with the conversion to a signalised cross junction with removal of existing central and island and splitter islands and removal of associated vegetation with limited tree loss (three small trees). There will be removal of existing hardstanding to provide expanded roadside open spaces and SUDS features. (Ch.J100 to J800);
- Reuse of existing compound area south of Spawell Roundabout, within High Amenity Designation with potential for accidental impact on surrounding mature trees (Off-chainage);
- Generally modest works to Templeogue Road between Spawell Roundabout and Cypress Grove Road junction, including works at the historic folly of Templeogue Arch to remove existing boundaries, create public access, secure the structure, and improve the setting with installation of new paving and landscaping. (Ch.J800 to J1400);
- Modest changes to Templeogue Road / Cypress Grove Road junction with impact on surrounding landscape areas including some limited loss of area, changes to footpaths, excavation of SUDS and limited loss of some small trees. There will be works at the short parallel residential street to the east of the junction to construct the shared street treatment with removal of existing asphalt and replacement with proposed sett paving (Ch.J1400 to Ch.J1580);
- Works along Templeogue Road on the southwest approach to Templeogue Village Centre (Ch.J1580 to Ch.J1840). Associated temporary and permanent acquisition and tree removal from residential properties (13no.) at:
 - \circ Nos. 317, 319, 321, 323, 325 and 327 Templeogue Road (6no.);
 - Nos. 311, 313 and 315 Templeogue Road West (3no.); and
 - Nos. 44 and 45 Templeogue Road (3no.); and
 - No. 11 Fortrose Park (1no.).
- Works to Templeogue Road northeast of Templeogue Village, including some impact on roadside verge and mature trees, changes to junction with Templeville Road / Springfield Avenue and junction with Fortfield Road / Bushy Park House with impacts on existing landscape areas including change to their extents and excavation of SUDS attenuation features. There will be removal of trees to the north side of the entrance to Bushy Park House (Ch.J2000 to H000);
- Works to Templeogue Road along Bushy Park, including introduction of a new two-way cycle path parallel to the existing footpath, with removal of five early mature trees, and potential for accidental

impact on mature trees, although no-dig construction will be used to protect tree rootzones (Ch.J2500 to J2800); and

- Works to open space between Templeogue Road and Rathdown Drive for provision of self-binding gravel surface to existing informal paths which run through the space. Construction to be no-dig to limit impacts on roots of the numerous trees in this area. Creation of short section of footpath (Ch.J2800 to J3280).
- 17.4.1.3.2 Nutgrove Avenue to Terenure Road North.
 - Works to car park at Grange Road for changes to layout of parking, adjoining open spaces, footpaths and the relocation of the existing bin centre and secure cycle parking (Ch.030 to Ch.A120);
 - Works along Grange Road including temporary and permanent acquisition from rear gardens of (5no.) residential properties at Rathfarnham Wood and from grounds of Rathfarnham Castle to Butterfield junction with loss of boundaries and existing trees, (Ch.A100 to A580); as follows:
 - Nos. 8, 9, 10, 11 and 12 Rathfarnham Wood (5no.);
 - Up to 10m width from an approximately 400m long section of existing roadside grounds at Rathfarnham Castle, including removal of roadside trees, boundary wall and entrance to grounds / park opposite Yellow House.
 - Works along Rathfarnham Road to Main Street / Castleside Drive junction including removal of early mature street trees and trees in road median, (Ch.A580 to A820);
 - Works along Rathfarnham Road from Main Street / Rathfarnham Drive junction to Springfield Avenue / Dodder Park Road, (Ch.A820 to A1260). Associated land acquisition, including some tree removal, from residential properties at:
 - o Nos. 141, 143, 145, 149 and 153 Rathfarnham Road (5no.);
 - Works at the following non-residential properties with some removal of vegetation from private areas (Ch.A820 to Ch.A1720):
 - Centra Texaco;
 - o Rathfarnham Dental Practice (No. 151 Rathfarnham Road);
 - Rathfarnham Orthodontics (No. 147 Rathfarnham Road); and
 - Terenure Synagogue (32a Rathfarnham Road).
 - Limited works within open space at the River Dodder corridor at Dodder Park Road / Rathfarnham Road junction, for extension of footpath, landscaping works and siting of construction compound within existing compound area (Ch.A1200 to Ch.A1250);
 - Works along Rathfarnham Road between the River Dodder and Terenure Road including removal of several semi-mature street trees (Ch.A1350 to Ch.H000);
 - Works and land acquisition for footpath works within private landing of Terenure Enterprise Centre; and
 - Land acquisition, with impact on property boundaries, established garden vegetation and removal of trees, from residential properties (20no.) at:
 - o Nos. 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71 Rathfarnham Road (11no.); and
 - o Nos. 34, 36, 38, 40, 42, 44, 46, 48, 50 Rathfarnham Road (9no.).
- 17.4.1.3.3 Terenure Road North to Charleville Road.
 - Works along Terenure Road East from Terenure to Charleville Road (A1850 to A3660). Associated acquisition with impact on property boundaries, including established gardens and removal of some mature trees from residential properties (23no.) at:
 - No. 80 Earls Court, Terenure Road East (1no.);
 - Nos. 74, 74A and 76 Terenure Road East (3no.);
 - o Nos. 1, 2, 3, 4, 5, 6, 7, 8 and 9 Town Houses, Terenure Road East (9no.);
 - Nos. 59, 61, 65, 67 and 69 Terenure Road East (5no.); and
 - Nos. 52, 54, 56, 58, 60 and 62 Terenure Road East (6no.)

- 17.4.1.3.4 Charleville Road to Dame Street.
 - Works to road corridor along full length within this section; largely changes to existing road / footpath layout and surfacing with minimal impacts on key streetscape features (Ch.A3630 to A6285);
 - Land acquisition from a number of private landings along Richmond Street South, Richmond Row, Camden Street and Harrington Street for footpath works; and
 - Offline sections with minor works limited to changes to traffic management measures and signage.
- 17.4.1.3.5 Construction Compound Areas

Construction Compounds are to be located as follows:

- Construction Compound TR1: To be located south of the Spawell roundabout, at the Tallaght Road / Spawell Link Road junction (Ch.J620 to Ch.J650);
- Construction Compound TR2: Will be located north-west of Terenure Road North, between Eaton Road and Eagle Hill Avenue (Ch.H230 to H260);
- Construction Compound TR3: To be located along Dodder View Road, in the open space area between Dodder View Road, Woodview Cottages and Church Lane. Site extents are limited to avoid any direct impacts on existing trees. (off-chainage);
- Construction Compound TR4: To be located on Military Road, perpendicular to Rathmines Road Lower, south of St Marys College;
- Construction Compound TR5: To be located on Richmond Street South, on the slip road between Richmond Street South and Harcourt Road; and
- Construction Compound TR6: To be located on Spawell Link Road, between Spawell Roundabout and Firhouse Road (off-chainage).

17.4.1.4 Operational Phase

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

- Changes to traffic movements along Proposed Scheme and on adjoining roads where traffic management measures are proposed; and
- Changes in streetscape elements, including the reallocation of carriageway space, provision of cycle and footpath facilities, signage, lighting, surfacing, road marking, etc. along the Proposed Scheme.

Other key characteristics along sections of the Proposed Scheme of particular relevance to the townscape and visual assessment during the Operational Phase, are outlined in the following sections:

17.4.1.4.1 Tallaght Road to Rathfarnham Road.

- Substantial change to Spawell junction including revised layout of surrounding landscape areas (Ch.J100 to Ch.J800);
- Generally modest changes to road infrastructure along the rest of this section with the primary impacts resulting from land take from the following residential properties (15no.) at:
 - o Nos. 317, 319, 321, 323, 325 and 327 Templeogue Road (6no.);
 - Nos. 311, 312 and 315 Templeogue Road West (3no.); and
 - Nos. 44 and 45 Templeogue Road No. 11, 14 and 15 Fortrose Park (6no.).
- There will be some localised change to streetscape amenity in various locations between Templeogue Village and Bushy Park House resulting from loss of trees removed during the Construction Phase from the above properties, and generally from within the road corridor and adjacent open spaces (Ch.J1560 to Ch.J3200).

The following key landscape measures are proposed in this section:

 Provision of an enhanced landscape scheme at the reconfigured Spawell Roundabout including provision of new tree planting, provision of Irish native species-rich grass and wildflower mixture (Ch.J600 to Ch.J700);

- Provisions of landscape measures to incorporate the mid-18th century stone archway at Templeogue Road, a Protected Structure (SDD RPS 244). Following conservation and repair works, and soft and hard landscaping with tree planting, the old archway will be opened to the public and will contribute to the character of the area through the reintegration of this historic landmark into the urban realm. There will be provision of a high-quality paving scheme which is sympathetic to the aesthetic of the arch. Areas of seating and ornamental planting will be provided to enhance sense of place and provide opportunities for passive recreation.
- Provision of new tree and hedge planting into the central median and verges along Templeogue Road between M50 Junction 11 and Cypress Grove Road (Ch.J100 to Ch.J1450);
- Changes at Templeogue Road / Cypress Grove Road junction with new tree planting and provision
 of ornamental planting to SUDS areas (Ch.J1400 to Ch.J1480);
- Provision of a shared street treatment at short parallel residential section of Templeogue Road east of Templeogue Road / Cypress Grove Road junction, comprising concrete sett paving and tree planting to the adjacent verge (Ch.J1480 to Ch.J1540);
- Provision of replacement tree planting to streets west and east of Templeogue Village Centre (Ch.J1720 to Ch.J2110);
- Provision of landscape enhancements at junction of Templeville Road, Springfield Avenue and Templeogue Road, including retention and enhancement of setting of existing statue, with new tree planting and provision of ornamental planting to SUDS areas (Ch.J2120 to Ch.J2180);
- Improvement to Templeogue Road / Rathdown Avenue junction with provision of raised table with stone / concrete sett paving (Ch.J2790 to Ch.J2810); and
- Improvement of access through Rathdown Drive open space with provision of new self-binding gravel surfaces to existing informal paths (Ch.J2800 to Ch.A3250);
- Provision of replacement trees for those lost during the Construction Phase, as well as some additional street trees, along Templeogue Road / Terenure Road West (Ch.J1580 to Ch.J3730);
- Provision of improved paving to the junctions of Templeogue Road with Terenure Road West and Rathfarnham Road, including high quality concrete paving edged with granite kerbs (Ch.J3640 to Ch.H000).
- 17.4.1.4.2 Nutgrove Avenue to Terenure Road North.
 - Substantial changes to existing road corridor most notably at Rathfarnham Castle (with permanent land acquisition, continued effects from loss of trees and plantings removed during the Construction Phase, and setting back of section of boundary walls and railings (Ch.A150 to Ch.A600);
 - Substantial changes from permanent acquisition and at residential properties, including permanent loss of trees removed during the Construction Phase (29no.):
 - Nos. 8, 9, 10, 11 and 12 Rathfarnham Wood (5no.);
 - o Nos. 141, 143, 145, 149 and 153 Rathfarnham Road (4no.);
 - o Nos. 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71 Rathfarnham Road (11no.); and
 - o Nos. 34, 36, 38, 40, 42, 44, 46, 48, 50 Rathfarnham Road (9no.).
 - There will also be changes resulting from permanent land take at the following non-residential properties:
 - Centra Texaco (Rathfarnham Road);
 - Rathfarnham Dental Practice (No. 151 Rathfarnham Road);
 - Rathfarnham Orthodontics (No. 147 Rathfarnham Road);
 - o Terenure Enterprise Centre (private landing); and
 - Terenure Synagogue (32a Rathfarnham Road).
 - There will be some localised change to streetscape amenity in various locations throughout this
 section resulting from loss of trees removed during the Construction Phase, both in the form of
 garden trees at the above properties and street trees within the road corridor (Ch.A100 to Ch.J1700).

The following key landscape measures are proposed in this section:

- Provision of landscape enhancements at junction of Nutgrove Avenue including tree planting and provision of Irish native species-rich grass and wildflower mixture (Ch.A000 to Ch.A120);
- Provision of replacement boundary, and tree / woodland planting to the edge of Rathfarnham Castle grounds where the existing boundary and trees were removed during the Construction Phase (Ch.A170 to Ch.A750);
- Provision of landscape enhancements to junction of Grange Road and Willbrook Road with an improvement to the setting of to the Church of the Annunciation and The Yellow House public house (Ch.A320 to Ch.A390);
- Provision of enhancements to the streetscape along Rathfarnham Road with tree planting to medians, footpaths and other roadside landscape areas, as well as improvements to paving at junctions, footpaths and parking spaces using high quality concrete paving (Ch.A50 to Ch.A1160);
- Provision of enhancements to junction with Dodder Park Road, including new tree planting and species rich grassland to roadside landscape area to the south-west and provision of improved paving to the north-west (Ch.A1200 to Ch.A1250).
- 17.4.1.4.3 Terenure Road North to Charleville Road.
 - Changes to road corridor along Terenure Road East together with permanent acquisition from established gardens with tree removal from residential properties (23no.) at:
 - No. 80 Earls Court, Terenure Road (1no.);
 - Nos. 74, 74A and 76 Terenure Road East (3no.);
 - o Nos. 1, 2, 3, 4, 5, 6, 7, 8 and 9 Town Houses, Terenure Road East (9no.);
 - \circ Nos. 59, 61, 65, 67 and 69 Terenure Road East (5no.); and
 - Nos. 52, 54, 56, 58, 60 and 62 Terenure Road East (6no.).
 - There will also be permanent land acquisition from non-residential properties at:
 - R&D Dental Practice (No. 74a Terenure Road East);
 - The Roslin Lodge (No. 63 Terenure Road East); and
 - Private landing at Terenure enterprise Centre.

The following key landscape measures are proposed in this section:

- Provision of enhancements to junction of Rathfarnham Road with Terenure Road North / East, including high-quality concrete paving to active frontage areas and stone / concrete paving setts to pedestrian crossings. Pedestrian crossings will be arranged to be more direct and existing pedestrian guardrails to be omitted;
- Provision of enhancements to the streetscape along Terenure Road East with replacement street tree planting to footpaths, as well as improvements to paving at side junctions, parking spaces and sections of footpath using high quality concrete paving (Ch.A1880 to Ch.A2480);
- Provision of enhancements to junction of Terenure Road East / Rathgar Avenue / Rathgar Road, Orwell Road and Highfield Road. There will be provision of high-quality concrete paving to active frontage areas, block paving to parking bays, new tree and low-level ornamental planting, as well as provision of new Sheffield cycle stands (Ch.A2480 to Ch.A2600);
- Improvements to Rathgar Road, with provision of new street trees where feasible, as well as
 provision of stone / concrete sett paving to pedestrian crossing points at all side roads (Ch.A2600
 to Ch.A3600);
- Provision of new street trees to the southern side of Bushy Park Road and east side of Orwell Road (Ch.A1550 to Ch.A2500; off-chainage);
- Provision of buff or coloured asphalt to junctions along Quiet Street route along Bushy Park Road, Wasdale Park, Wasdale Grove and Victoria Road (Ch.A1550 to Ch.A2500; off-chainage); and
- Improvements to Terenure Road North, Harold's Cross Road with provision of replacement and additional street trees, as well as provision of high-quality concrete paving to active frontages and stone / concrete sett paving to pedestrian crossing points at all side roads (Ch.A2600 to Ch.A3600).

17.4.1.4.4 Charleville Road to Dame Street.

- Changes to carriageway, junctions and footpaths along road corridor throughout this section (Ch.A3630 to Ch.A6285);
- Land acquisition from a number of private landings along Richmond Street South, Richmond Row, Camden Street and Harrington Street for footpath provision; and
- Offline sections with non-material changes, limited to changes to traffic management measures and signage.

The following key landscape measures are proposed in this section:

- Provision of enhancements to junctions of Rathgar Road with Grosvenor Road, Rathmines Road / Rathmines Road Upper, including provision of a new public plaza space to the front of 302 to 312 Rathmines Road. There will be provision of high-quality stone paving to the plaza area, high-quality concrete paving to active frontage areas, block paving to parking bays, new tree and ornamental planting, as well as provision of new Sheffield cycle stands. Existing granite kerbs are to be reinstated (Ch.A3600 to Ch.A3800);
- Provision of enhancements to the streetscape along Rathmines Road with new street tree planting to footpaths, as well as improvements to paving to footpaths, at side junctions, parking spaces and sections of footpath using high quality concrete paving. Sections of stone paving to be provided to match existing to frontage of Church of Mary Immaculate Refuge of Sinners (Ch.A3800 to Ch.A4670);
- Reinstatement of natural stone paving to La Touche Bridge (Ch.A4680 to Ch.A4710);
- Provision of enhancements to the streetscape along Richmond Street South, Camden Street Upper / Lower, Wexford Street, Cuffe Street, Redmond's Hill, Aungier Street and South Great Georges Street, with new street tree planting to footpaths where feasible, as well as improved paving to footpaths, at side junctions, parking spaces using concrete paving. Where granite paving flags and kerbing are existing these will be reinstated, and original coal-hole covers will be retained throughout (Ch.A4710 to Ch.A6285); and
- Change from a hard median on Cuffe Street to a planted median using an ornamental mixture of species (Ch.A5530; off-chainage).

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 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 on-going 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 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 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 (1 to 2 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, 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 construction of new carriageways, kerbings, footpaths and cycleways, bus stops and signage, lighting, changes to ground levels (including within private garden areas), excavation of SUDS, reinstatement of boundaries / provision of new boundaries, and landscape reinstatement works / provision of new landscape elements and street furniture; 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 the Proposed Scheme is sub-divided into four townscape / streetscape character areas:

- Tallaght Road to Rathfarnham Road;
- Nutgrove Avenue to Terenure Road North;
- Terenure Road North to Charleville Road; and
- Charleville Road to Dame Street.

17.4.3.1.1 Tallaght Road to Rathfarnham Road

The baseline townscape is of low sensitivity west of Templeogue Village to high sensitivity through Templeogue Village to Terenure. The Proposed Scheme involves the reconstruction and resurfacing of the roads, footpaths, and cycle track pavements. New kerbs will also be provided following the realignment of the existing kerb lines. Construction activities will also consist of the installation of additional signage, new road markings, new and amended traffic signal infrastructure, new road lighting, new street furniture (rubbish bins, seats, lighting, benches, planters, bollards, cycle racks, bus stop (including shelters and information displays etc.)), landscape works and localised removal of trees and planting. There will be land take from 15 residential properties on Templeogue Road involving permanent loss of garden area, setting back of boundaries, construction of retaining wall, and removal of trees hedges and other garden planting. There will be substantial works to Spawell roundabout where the existing roundabout junction will be upgraded to a four-arm signalised junction. The central island and splitter islands and associated vegetation of the roundabout will be removed and there will be a rearrangement and general expansion of the outer landscape areas. There will be more minor works to verges and other roadside landscape areas throughout this section with some limited loss of trees to accommodate new or realigned cycle tracks. There will be works to the surrounds of the historic folly of Templeogue Arch for the purposes of permanently enhancing the setting of the structure and providing public access. The construction works will not alter the overall townscape character along this section of the Proposed Scheme but there will be temporary disturbance to the landscape and visual amenity of the streetscape. The magnitude of change in the baseline environment is high.

The townscape / streetscape impact of the Construction Phase is assessed to be **Negative, Moderate Temporary / Short-Term**, west of Templeogue and **Negative, Significant / Very Significant and Temporary / Short-Term** through Templeogue to Rathfarnham Road.

17.4.3.1.2 Nutgrove Avenue to Terenure Road North

The baseline townscape is of high sensitivity and the Proposed Scheme involves the reconstruction and resurfacing of the roads, footpaths, and cycle track pavements. New kerbs will also be provided following the realignment of the existing kerb lines. Construction activities will also consist of the installation of additional signage, new road markings, new and amended traffic signal infrastructure, new road lighting, new street furniture (rubbish bins, seats, lighting, benches, planters, bollards, cycle racks, bus stop (including shelters and information displays etc.)), landscape works and substantial removal of sections of trees and planting. Sections of the existing boundary walls along the eastern side of Grange Road and Rathfarnham Road, adjacent to Rathfarnham Castle Park, will be realigned and reconstructed due to the proposed widening of the carriageway. The low height wall at the junction with Rathfarnham Wood will also be realigned and reconstructed to accommodate the upgrade of the traffic signalised junction. The Construction Phase involves substantial acquisition from residential properties along Rathfarnham Road, and from Rathfarnham Castle grounds with associated removal of a substantial section of mature woodland edge as well as garden hedges and other plantings. This element of works will result in considerable changes along this section of the Proposed Scheme. Construction Compound TR3 will be located along Dodder View Road, across the road from Bushy Park, in the greenfield area between Dodder View Road, Woodview Cottages and Church Lane, and will result in some short-term removal of grassland but no impact on the surrounding mature trees or woodland The construction works will not alter the overall townscape character along this section of the Proposed Scheme, however, the works will detract from the streetscape character and amenity. The magnitude of change in the baseline environment is very high.

The townscape / streetscape impact of the Construction Phase is assessed to be **Negative, Very Significant** and **Temporary / Short-Term**.

17.4.3.1.3 Terenure Road North to Charleville Road

The baseline townscape is of **very high sensitivity** and the Proposed Scheme involves the reconstruction and resurfacing of the roads, footpaths, and cycle track pavements. New kerbs will also be provided following the realignment of the existing kerb lines. Construction activities will also consist of the installation of additional signage, new road markings, new and amended traffic signal infrastructure, new road lighting, new street furniture (rubbish bins, seats, lighting, benches, planters, bollards, cycle racks, bus stop (including shelters and information displays etc.)) and landscape works. Although the design of the schemes has sought as far as practicable to limit impacts on private properties and trees, the works will involve acquisition from several residential properties with

associated removal of boundaries, trees and other plantings. There will be a substantial impact on the streetscape of Terenure Road East from the loss of several prominent specimen trees. These element of works will result in considerable changes along the Terenure to Rathgar section of the Proposed Scheme, but other sections of the scheme will involve relatively modest changes. The construction works will not alter the overall townscape character along this section of the Proposed Scheme, however, the works will detract from the streetscape character and amenity, particularly between Terenure and Rathgar. The magnitude of change in the baseline environment is **high**.

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

17.4.3.1.4 Charleville Road to Dame Street

The baseline townscape is of **very high sensitivity** and construction of the Proposed Scheme involves demolition, excavation and construction works of sections of kerbs, carriageways, sections of footpaths, junctions, surfacing and parking areas, drainage features and utilities along but within the road corridor. No carriageway widening works or new boundary treatment is expected within this section, and there would only be very limited removal of trees (three young street trees). The construction works will not alter the overall townscape character along this section of the Proposed Scheme, but there will be a short-term reduction in streetscape amenity. The magnitude of change in the baseline environment is **medium**.

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

17.4.3.2 Impact on Streetscape Elements and Visual Impacts

17.4.3.2.1 Architectural Conservation Areas

There will be substantial works at the edge Rathfarnham ACA involving road widening and impacts on boundaries and trees at Rathfarnham Castle. The affected boundary walls to Grange Road and Rathfarnham Road are replacement boundaries built as part of previous road schemes. The boundary treatment to the Rathfarnham Road is poor, consisting of concrete block walling. The boundary treatment to the Grange Road is of higher quality and consists of coursed granite rubble, with railings and brick dressings near the pedestrian entrance to the park. The wide modern road corridor in this location has locally degraded the character of the ACA. The works will impact on the setting of the ACA through removal of mature trees within the castle grounds but the majority of the woodland group within the grounds will be retained thus retaining the strong edge to the ACA. The works will disrupt the amenity of the ACA in the short-term but will have limited impacts on the key characteristics. The sensitivity is **very high**, and the magnitude of change is **medium**.

The potential townscape / streetscape impact of the Construction Phase on Rathfarnham ACA is assessed to be **Negative, Significant and Temporary / Short-Term**

The works will result in limited changes at South Great George's Street (South City Retail Quarter ACA). The sensitivity is **very high**, and the magnitude of change is **low**.

The potential townscape / streetscape impact of the Construction Phase on ACA at George's Street Great South is assessed to **be Negative, Moderate and Temporary / Short-Term**.

17.4.3.2.2 Conservation Areas

Conservation Areas are located at the River Dodder and Grand Canal and along the Proposed Scheme from the Grand Canal north to Dame Street.

The Construction Phase will involve works of minimal intensity and extent, limited to changes to road corridor layout / surfacing on bridges within the River Dodder and Grand Canal conservation areas. There will be a short-term disruption to the amenity of these areas, but the key characteristics and character of the areas will not be impacted. 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 River Dodder and Grand Canal conservation areas is assessed to be **Negative**, **Moderate and Temporary / Short-Term**.

The operation of the Proposed Scheme will result in changes over a large extent of the conservation areas between the Grand Canal and Dame Street. The works will be largely limited to changes to street surfacing with minimal impact on key characteristics. 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 conservation areas between the Grand Canal and Dame Street will be **Negative, Moderate and Temporary / Short-Term**.

17.4.3.2.3 Residential Conservation Areas

Residential conservation areas are located along significant sections of Templeogue Road west of Terenure, along Rathfarnham Road north of the River Dodder and along the Proposed Scheme from Terenure through Rathgar and Rathmines. The construction of the Proposed Scheme will directly impact on properties located within residential conservation areas with impact on garden boundaries, entrances, gardens, loss of trees and other plantings. The buildings will not be impacted. The sensitivity is **very high** and the magnitude of change in the baseline environment is **high**.

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

17.4.3.2.4 Protected Structures and National Monuments

While a number of Protected Structures are located along the outer sections of the Proposed Scheme, significant numbers of protected structures frame the Proposed Scheme from Terenure through to Dame Street.

Rathfarnham Castle is a Protected Structure and a National Monument. The existing boundaries to Rathfarnham Road and Grange Road are not original to the castle and were constructed as part of recent road widening works. The materials used for these boundaries varies in quality and there is no consistent use of material types resulting in an inharmonious boundary to the demesne. The Construction Phase will result in the removal of the modern boundary features and construction of a new roughcast render boundary wall at a setback location. There will be removal of substantial numbers of trees from the edge of the woodland which encompasses the castle demesne, for an approximately 400m long by 10m wide section, however, the bulk of the trees on the edge of the demesne will be retained, thus preserving the setting of the Castle and its immediate grounds. The sensitivity is **very high**, and the magnitude of change is **medium**. (Refer also to Chapter 16 (Architectural Heritage)).

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

The Proposed Scheme has direct impact on the property boundaries of protected structures at residences along Terenure Road East. There will be loss of private area and removal of prominent mature garden trees, which will have a detrimental impact on the setting of the structures. The sensitivity is **very high**, and the magnitude of change is **high / very high**. (Refer also to Chapter 16 (Architectural Heritage)).

The potential townscape / streetscape and visual impact of the Construction Phase on Protected Structures at Terenure Road East is assessed to be **Negative, Significant / Very Significant and Temporary / Short-Term**.

17.4.3.2.5 Amenity Designations

A number of amenities are located along the Proposed Scheme. These include the Spawell golf grounds and outer sections of the River Dodder corridor, as well as major formal amenities of Bushy Park, Rathfarnham Castle, and the River Dodder corridor, the latter being an area of outstanding character and amenity.

The Construction Phase will result in changes to Rathfarnham Castle Demesne, as described in Section 17.4.3.2.4. Most notably the works will result in the removal of mature trees and the loss of a section of woodland amenity space to enable road widening. There will be temporary removal of the boundary walls separating the space from the adjacent roads and this will impact on the amenity of the open space through an increase in traffic

noise and visibility, until the boundary is reinstated at a setback location. In addition, the presence of construction activity within the space will also be detrimental. The sensitivity is **high**, and the magnitude of change is **high**.

The potential townscape / streetscape and visual impact of the Construction Phase on open space at Rathfarnham Castle Demesne is assessed to be **Negative, Significant and Temporary / Short-Term**.

The Construction Phase will have minimal direct impacts on the designated high amenity areas of Bushy Park and the River Dodder Corridor. Works will involve construction of footpaths / cycle tracks. There will be the siting of Compound TR6 in an area of high amenity currently used as a construction compound; This area is well enclosed by mature trees with limited indirect impacts on other parts of the amenity designation. There will some limited disruption of amenity but no adverse impact on the key features of these spaces. The sensitivity is very high, and the magnitude of change is **Iow**.

The potential townscape / streetscape and visual impact of the Construction Phase on Bushy Park and The River Dodder Corridor is assessed to be **Negative, Slight and Temporary / Short-Term**.

There will be a direct construction impact on the open space area between Dodder View Road, Woodview Cottages and Church Lane Park, where TR4 compound TR3 will be sited. The space comprises a sloping area of amenity grassland bounded by roads and groups of mature trees. There is no formalised access across the space and no amenity features are present. This location has previously been used as a construction compound area for construction of a nearby bridge by others, and a carparking area has since been introduced into a portion of the space. The sensitivity of this space is lesser than that of other nearby open spaces within the corridor of the River Dodder. The works will result in a temporary loss of the space to users and there will be a short-term loss of amenity until the site is reinstated. The sensitivity is **medium / high**, and the magnitude of change is **high**.

The potential townscape / streetscape and visual impact of the Construction Phase the open space area between Dodder View Road, Woodview Cottages and Church Lane Park is assessed to be **Negative, Significant and Temporary / Short-Term**.

17.4.3.2.6 Tree Preservation Orders / Tree Preservation Objectives

There are no tree preservation orders (TPO) or specific objectives along the Proposed Scheme.

17.4.3.2.7 Preserved Views / Scenic Views, etc.

There are no specific preserved views along the Proposed Scheme.

17.4.3.2.8 Properties

Construction of the Proposed Scheme will require the acquisition from 72no. residential properties:

- Nos. 317, 319, 321, 323, 325 and 327 Templeogue Road (6no.);
- Nos. 311, 313 and 315 Templeogue Road (3no.);
- Nos. 44 and 45 Templeogue Road (2no.);
- 11, 14 and 15 Fortrose Park (3no.);
- Nos. 8, 9, 10, 11 and 12 Rathfarnham Wood (5no.);
- Nos. 141, 143, 145, 147, 149, 151 and 153 Rathfarnham Road (7no.);
- Nos. 51, 53, 55, 57, 59, 61, 63, 65, 67, 69 and 71 Rathfarnham Road (11no.);
- Nos. 34, 36, 38, 40, 42, 44, 46, 48, 50 Rathfarnham Road (9no.);
- No. 80 Earls Court, Terenure Road (1no.);
- Nos. 74, 74A, 76, 76A and 78 Terenure Road East (5no.);
- Nos. 1, 2, 3, 4, 5, 6, 7, 8 and 9 Town Houses, Terenure Road East (9no.);
- Nos. 59, 61, 65, 67 and 69 Terenure Road East (5no.); and
- Nos. 52, 54, 56, 58, 60 and 62 Terenure Road East (6no.).

The houses have mature established gardens with boundary railings / walls, entrances / gates and associated lawns, trees and plantings. Construction works will result in the removal of the existing boundaries including walls and entrance gates, portions of gardens, private property, associated plantings and some mature trees. Access to properties will be retained as far as practicable; some limitations for access to grounds will be unavoidable with
likely temporary restrictions on vehicle access, however, pedestrian access to buildings will be maintained throughout. Construction works adjacent to and within these private and adjoining public areas will be openly visible from these properties. The sensitivity is **high** and magnitude of change is **very high**.

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

Construction of the Proposed Scheme will require the acquisition from a number of non-residential properties with some removal of boundaries, trees and areas of landscape:

- Centra Texaco (Rathfarnham Road);
- Rathfarnham Dental Practice (No. 151 Rathfarnham Road);
- Rathfarnham Orthodontics (No. 147 Rathfarnham Road);
- Terenure Synagogue (32a Rathfarnham Road);
- Terenure Enterprise Centre (private landing);
- R&D Dental Practice (No. 74a Terenure Road East);
- The Roslin Lodge (No.63 Terenure Road East); and
- A number of private landings along Richmond Street South, Richmond Row, Camden Street and Harrington Street for footpath works.

The sensitivity is **medium / high** and magnitude of change is **very high**. The potential townscape / streetscape and visual impact of the Construction Phase on these non-residential properties is assessed to be **Negative Very Significant and Temporary / Short-Term**.

In addition to those properties directly effected through 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 public road corridor of the Proposed Scheme. Construction works will be generally openly visible from these properties, or filtered by intervening vegetation. The sensitivity is **high**, and the magnitude of change is **medium / high**.

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

17.4.3.2.9 Trees

Construction of the Proposed Scheme will require removal of existing trees and other plantings at specific locations along the road corridor. These include trees and plantings around Rathfarnham Castle, some street trees and from many properties along the corridor of the Proposed Scheme, including loss of prominent mature specimens. The sensitivity is **high**, and the magnitude of change is **high / very high**.

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

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

Table 17.7: Summary of Predicted Construction Phase Impacts

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts	
Townscape a	Townscape and Streetscape Character				
Tallaght Road to Rathfarnham Road For proposed changes see Section 17.4.3.1.1		Low / High	High	Negative Moderate	



Townscape	Proposed Change	Baseline	Magnitude	Significance & Quality of
Receptor		Townscape	of Change	Townscape / Streetscape / Visual
		Sensitivity		Effects / Impacts
				Temporary / Short-Term (west of Templeogue)
				Negative
				Significant / Very Significant
				Temporary / Short-Term (Templeogue to Rathfarnham Road)
Nutgrove Ave	nue to Terenure Road North			Negative
For proposed	changes see Section	High	Very High	Very Significant Temporary / Short-Term
Terenure Roa	d North to Charleville Road			Negative
For proposed	changes see Section 17.4.3.1.2	Very High	High	Very Significant Temporary / Short-Term
Charleville Ro	oad to Dame Street			Negative
For proposed	changes see Section 17.4.3.1.3	Very High	Medium	Moderate
				Temporary / Short-Term
Streetscape C	Characteristics and Visual Impacts	1		
	Rathfarnham ACA			Negative
Architectural	For proposed changes see Section 17.4.3.2.1	Very High	Medium	Significant
Conservatio				Temporary / Short-Term
n Areas (ACA)	South Great George's Street (South City			Negative
. ,	Retail Quarter ACA)	Very High	Low	Moderate
	For proposed changes see Section 17.4.3.2.1			Temporary / Short-Term
	River Dodder and Grand Canal			Negative
	For proposed changes see Section 17.4.3.2.2	Very High	Low /	Moderate
		5, 5	Medium	Temporary / Short-Term
Conservatio				
n Areas	Between Grand Canal and Dame Street			Negative
	For proposed changes see Section 17.4.3.2.2	Very High	Low /	Moderate
		1 01 y 1 1 g 1	Medium	Temporary / Short-Term
	For proposed changes see Section 17.4.3.2.3			
Residential				Negative
Conservatio n Areas		Very High	Very High	Very Significant Temporary / Short-Term
				remporary / Short-rem
	Rathfarnham Castle			
	For proposed changes see Section 17.4.3.2.4			Negative
		Very High	Medium	Significant
Protected				Temporary / Short-Term
Structures				
and National Monuments	For proposed changes see Section 17.4.3.2.4			
	(Refer also to Chapter 16 (Architectural Heritage)).		High / Very	Negative
		Very High	High	Significant / Very Significant
				Temporary / Short-Term
	Rathfarnham Castle Demesne			
Amenity	For proposed changes see Section 17.4.3.2.5			Negative
Designation		High	High	Significant
S		1	1	Temporary / Short-Term



Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
	Bushy Park and River Dodder (High Amenity) For proposed changes see Section 17.4.3.2.5	Very High	Low	Negative Moderate Temporary / Short-Term
	Area between Dodder View Road, Woodview Cottages and Church Lane Park For proposed changes see Section 17.4.3.2.5	Medium / High	High	Negative Significant Temporary / Short-Term
Tree Preservation Orders / tree Protection Objectives	There are no tree preservation orders (TPO) or specific objectives along the Proposed Scheme.	N/A	N/A	N/A
Preserved Views / Scenic Views etc.	There are no specific preserved views along the Proposed Scheme.	N/A	N/A	N/A
	Part of residential property with land acquisition during the Construction PhaseFor proposed changes see Section 17.4.3.2.8	High	Very High	Negative Very Significant Temporary / Short-Term
Properties	Non-residential properties with land acquisition during the Construction Phase For proposed changes see Section 17.4.3.2.8	Medium / High	Very High	Negative Very Significant Temporary / Short-Term
	Properties located along, fronting and viewing the Proposed Scheme For proposed changes see Section 17.4.3.2.8	High	Medium / High	Negative Moderate / Significant Temporary / Short-Term
Trees and Vegetation	For proposed changes see Section 17.4.3.2.9	High	High / Very High	Negative Significant / Very 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 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 allocation and traffic movements are a common and regular aspect of active road and traffic management for urban roads and streets. Therefore, such changes may also be considered as part and parcel of any urban streetscape environment.

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 17.2.1 the Proposed Scheme is sub-divided into four townscape / streetscape character areas:

- Tallaght Road to Rathfarnham Road;
- Nutgrove Avenue to Terenure Road North;
- Terenure Road North to Charleville Road; and
- Charleville Road to Dame Street.

17.4.4.1.1 Tallaght Road to Rathfarnham Road

The sensitivity of this section is **low / high**. The Operational Phase of the Proposed Scheme involves changes to the existing layout of roads and junctions. Section of the route will have experienced widening of the road corridor, and this will result in permanent land-take from a number of residential properties, including loss of private outdoor area, reinstatement of boundaries at a setback alignment and permanent loss of garden trees and other vegetation removed during the Construction Phase. However, there will be substantial tree planting throughout this section, to medians, roadside open spaces and streets which will more than compensate for the impact from removed trees. There will be a notable improvement at Templeogue Arch where the setting of this historic landmark public access will be provided, and an appropriate public realm scheme will be provided. There will be improvements to open space at Bushy Park and Rathdown Drive with provision of upgraded pedestrian and cycle access. The Operational Phase will not alter the overall townscape character along this section of the Proposed Scheme but there will be an overall improvement to streetscape amenity which will become more pronounced as proposed planting matures. The magnitude of change in the baseline environment is **medium / high**.

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

17.4.4.1.2 Nutgrove Avenue to Terenure Road North

The sensitivity of this section is **high**. The Operational Phase of the Proposed Scheme involves substantial changes along the corridor of the Proposed Scheme. Most notably there will be continuing negative effects from loss of trees removed during the Construction Phase at Rathfarnham Castle and along sections of residential properties along Rathfarnham Road. There will be the provision of a new boundary wall to the castle demesne in roughcast render which, while less aesthetically pleasing than the sections of existing stone boundary wall, will represent a neutral change when compared to the overall inharmonious boundary treatment which varies in quality and condition of materials used.

There will be provision of substantial new tree planting within the castle demesne to consolidate the new edge to the woodland group and ensure the amenity of the open space is restored. There will also be substantial replacement and additional street tree planting throughout this section, including medians, footpaths and roadside spaces. There will be an improvement to the setting of the Yellow House and the Church of the Annunciation in Willbrook with provision of stone paving to existing concrete footpaths. There will be a notable improvement to an existing grassland space within the River Dodder corridor with provision of new tree planting and species-rich grassland. An enhanced paving scheme will be provided at numerous locations throughout this section, most notably with the provision of stone paving to the frontages of the Church of the Annunciation and the Yellow House public house, as well as the provision concrete paving to footpaths at major junctions and sett paving to pedestrian crossing points at side roads. The Operational Phase will not alter the overall townscape character of this section but will result in substantial localised changes to the streetscape character of the section. The magnitude of change in the baseline environment is **very high**.

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

17.4.4.1.3 Terenure Road North to Charleville Road

The sensitivity of this section is **very high**. The Operational Phase of the Proposed Scheme involves substantial changes along the corridor of the Proposed Scheme between Terenure and Rathgar. Although land take has been minimise through design iteration, Terenure Road East will be widened in parts which will requires permanent land acquisition from sections of residential properties, some of which are protected structures, and others which have mature trees that are prominent features of the streetscape. There will be a change to the alignment of historic boundary features and loss of several prominent mature garden trees which are located on the edge of the street. There will be provision of several new street trees along Terenure Road which over time will neutralise the negative effects associated with loss of trees removed during the Construction Phase.

There will be a substantial improvement of the junctions to each end of Terenure Road East; a new paving scheme will be provided to the junctions including high-quality concrete paving to active frontages, stone / concrete sett paving to pedestrian crossings, sett paving to formalised parking bays, as well as a narrowing of crossing distances to reduce crossing times and allow removal of detracting features such as pedestrian guardrails and traffic bollards. There will also be tree planting and some new ornamental planting areas provided.

The Operational Phase will not alter the overall townscape character of this section but will result in both substantial localised negative and positive changes to the streetscape character. Despite the adverse impacts on trees and properties there will be a substantial localised improvement in some areas of streetscape and the effect across the overall section will become positive over the long-term as proposed planting matures. The magnitude of change in the baseline environment is **medium / high**.

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

17.4.4.1.4 Charleville Road to Dame Street

The sensitivity of this section is **very high**. The Operational Phase of the Proposed Scheme involves very minimal negative changes and substantial positive changes throughout this section. There will be the provision of a new paving scheme, including high-quality concrete paving to active frontages, stone / concrete sett paving to pedestrian crossings, sett paving to formalised parking bays, as well as provision of numerous new street trees throughout this section. The proposals will improve the streetscape character along the full length of this section of the Proposed Scheme. The magnitude of change in the baseline environment is **medium / high**.

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

17.4.4.2 Impact on Streetscape Elements and Visual Impacts

17.4.4.2.1 Architectural Conservation Areas

There will be substantial works at the edge of Rathfarnham ACA involving road widening and impacts on boundaries and trees at Rathfarnham Castle. The affected boundary walls to Grange Road and Rathfarnham Road are replacement boundaries built as part of previous road schemes. The boundary treatment to the Rathfarnham Road is poor, consisting of concrete block walling. The boundary treatment to the Grange Road is of higher quality and consists of coursed granite rubble, with railings and brick dressings near the pedestrian entrance to the park. The entrance gate itself is of dressed stone blocks with a segmental arched lintel. The proposed land take presents an opportunity to reinstate a more consistent boundary treatment which is in keeping with the Castle. Some trees will be removed as a result of the land take but the bulk of the trees on the edge of the demesne will be retained, thus preserving the setting of the Castle. The sensitivity is **very high** and the magnitude of change is **medium / high**.

The potential townscape / streetscape impact of the Construction Phase on Rathfarnham ACA is assessed to be **Negative, Significant and Short-Term** becoming **Positive, Slight and Long-Term**.

There will be positive changes to South Great George's Street (South City Retail Quarter) where there will be an improvement to the streetscape with a revised paving scheme and the introduction of new street trees. The

positive effect will become more pronounced over time as the proposed trees mature. The sensitivity is **very high** and the magnitude of change is **medium**.

The townscape / streetscape impact of the Operational Phase on the ACA at South Great George's Street is assessed to be **Positive, Slight / Moderate and Short-Term** becoming **Positive, Moderate and Long-Term**.

17.4.4.2.2 Conservation Areas

Conservation Areas are located at the River Dodder and Grand Canal and along the Proposed Scheme from the Grand Canal north to Dame Street.

There will be very minimal changes at these conservation areas. There will be some improvement of their settings with tree planting to surrounding areas which will result in a positive effect in the long-term. 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 River Dodder and Grand Canal conservation areas is assessed to be **Neutral, Slight and Short-Term** becoming **Positive, Slight and Long-Term**.

The operation of the Proposed Scheme will result in positive changes to conservation areas from the Grand Canal through to Dame Street where there will be an improvement to the streetscape with a revised paving scheme and the introduction of new street trees. The positive effect will become more pronounced over time as the proposed trees mature. 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 conservation areas from the Grand Canal through to Dame Street is assessed to be **Positive, Moderate and Short-Term** becoming **Positive, Moderate / Significant and Long-Term.**

17.4.4.2.3 Residential Conservation Areas

Residential conservation areas are located along significant sections of Templeogue Road west of Terenure, along Rathfarnham Road north of the River Dodder and along the Proposed Scheme from Terenure through Rathgar and Rathmines. There will be continued effects during operation from impacts on properties located within residential conservation areas – particularly from loss of trees and other plantings which were removed during the Construction Phase. However, there will be like-for-like reinstatement of boundaries, planting and, in most cases, the planting of new street trees in similar locations to those removed, which will negate negative effects over the long-term. 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 Operational Phase on residential conservation areas is assessed to be **Negative, Significant and Short-Term** becoming **Neutral, Moderate and Long-Term**.

17.4.4.2.4 Protected Structures and National Monuments

There will be a change at Rathfarnham Castle, a National Monument and Protected Structure, most notably there will be continuing adverse effects from loss of land and from trees removed during the Construction Phase. However, there will be provision of substantial tree planting to consolidate the woodland edge to the demesne, which will reduce the negative effects over the long-term. The provision of a new cohesive boundary wall in a material sympathetic to the construction of the castle itself will be a positive impact. Overall the effect will be initially negative in the short-term becoming neutral over the long-term. The sensitivity is **high** and the magnitude of change is **high**.

The potential townscape / streetscape and visual impact of the Operational Phase on Rathfarnham Castle is assessed to be **Negative, Significant and Short-Term** becoming **Neutral, Moderate / Significant and Long-Term**.

While a number of Protected Structures are located along the outer sections of the Proposed Scheme, significant numbers of protected structures frame the Proposed Scheme from Terenure through to Dame Street. The Proposed Scheme has direct impact on the property boundaries of protected structures along Terenure Road

East. However, there will be like-for-like reinstatement of boundaries, planting and, in most cases, the planting of new street trees in similar locations to those removed, which will aid in reducing negative effects over the long-term. The sensitivity is **very high** and the magnitude of change is **high / very high**. (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 **Negative, Significant / Very Significant and Short-Term** becoming **Negative, Moderate / Significant and Long-Term**.

17.4.4.2.5 Amenity Designations

There will be a change at Rathfarnham Castle Demesne, most notably there will be continuing adverse effects from loss of land and from trees removed during the Construction Phase. However, there will be provision of substantial tree planting to consolidate the woodland edge to the demesne and restore the recreational amenity, which will reduce the negative effects over the long-term. Overall the effect will be initially negative in the short-term becoming neutral over the long-term. The sensitivity is **high** and the magnitude of change is **high**.

The potential townscape / streetscape and visual impact of the Operational Phase on open space at Rathfarnham Castle Demesne assessed to be **Negative, Significant and Short-Term** becoming **Neutral, Moderate / Significant and Long-Term**

The operation of the Proposed Scheme will have minimal Operational Phase impacts on other open spaces. There will be some improvements to pedestrian and cycle access in some locations as well as some tree planting to part of the River Dodder corridor. There will be a positive short-term effect which will become more pronounced as proposed planting matures. The sensitivity is **high** and the magnitude of change is **low**.

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

17.4.4.2.6 Tree Preservation Orders / Tree Preservation Objectives

There are no tree preservation orders (TPO) or specific objectives along the Proposed Scheme.

17.4.4.2.7 Preserved Views / Scenic Views, etc.

There are no specific preserved views along the Proposed Scheme.

17.4.4.2.8 Properties

Operation of the Proposed Scheme will require the permanent acquisition from 72no. residential properties:

- Nos. 317, 319, 321, 323, 325 and 327 Templeogue Road (6no.);
- Nos. 311, 313 and 315 Templeogue Road (3no.);
- Nos. 44 and 45 Templeogue Road (2no.);
- 11, 14 and 15 Fortrose Park (3no.);
- Nos. 8, 9, 10, 11 and 12 Rathfarnham Wood (5no.);
- Nos. 141, 143, 145, 147, 149, 151 and 153 Rathfarnham Road (7no.);
- Nos. 51, 53, 55, 57, 59, 61, 63, 65, 67, 69 and 71 Rathfarnham Road (11no.);
- Nos. 34, 36, 38, 40, 42, 44, 46, 48, 50 Rathfarnham Road (9no.);
- No. 80 Earls Court, Terenure Road (1no.);
- Nos. 74, 74A, 76, 76A and 78 Terenure Road East (5no.);
- Nos. 1, 2, 3, 4, 5, 6, 7, 8 and 9 Town Houses, Terenure Road East (9no.);
- Nos. 59, 61, 65, 67 and 69 Terenure Road East (5no.); and
- Nos. 52, 54, 56, 58, 60 and 62 Terenure Road East (6no.).

The houses have mature established gardens with boundary railings / walls, entrances / gates and associated lawns and plantings. There will be continuing effects from permanent loss of land area and trees which were removed during the Construction Phase. However, there will be like-for-like reinstatement of boundaries, planting and, in most cases, the planting of new street trees in similar locations to those removed, which will reduce negative effects over the long-term. The sensitivity is **high** and the magnitude of change is **very high**.

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

The Operational Phase of the Proposed Scheme will require the permanent acquisition from a number of nonresidential properties including a number of private landings for provision of footpaths. The sensitivity is **medium** *I* high and the magnitude of change is high.

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

In addition to those properties directly effected through acquisition (permanent) of areas, the Operational Phase 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 general change in the road corridor, public realm and traffic patterns which will be generally positive with an increase in the positive effect with the growth of proposed planting over time. The sensitivity is **high** magnitude of change is **medium**.

The townscape and visual impact of the Operational Phase on these properties is assessed to be **Positive**, **Moderate and Short-Term** becoming **Positive**, **Moderate / Significant and Long-Term**.

17.4.4.2.9 Trees

The design of the Proposed Scheme has sought to avoid impacts on trees as far as practicable, however, some trees will have been removed during the Construction Phase. The most significant loss occurs from sections of streets and gardens of residential properties. In some locations the loss will be particularly evident such as on Terenure Road East, where trees are mature and visually prominent in the streetscape. The Operational Phase of the Proposed Scheme will not impact directly on additional trees but there will be continuing effects resulting from the loss of trees lost during construction. The effect will become positive over the long-term as proposed tree planting matures resulting in a net gain in tree canopy coverage. The sensitivity **high** and the magnitude of change is **medium**.

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

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

17.4.4.2.10 Potential Benefits

Where the 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, improved or more visually appealing hard surfacing, street furniture, improvement to the setting of heritage features, and new tree / ornamental planting. In some cases, this will create a short-term net benefit compared to the baseline landscape, such as along the Tallaght Road to Rathfarnham Road and Charleville Road to Dame Street sections of the scheme, as well as for open spaces and visual amenity of adjacent properties generally across the scheme. There will also be long-term benefits to the Terenure Road North to Charleville Road section. Over the long-term, the negative effects associated with the removal of mature trees along many sections of the scheme will be reduced with the growth of replacement planting, and there will be an overall positive effect for trees across the entire route of the Proposed Scheme.

The Proposed Scheme also provides for a reduction in the car-centric design of the townscape with a substantially enhanced experience for pedestrians and cyclists through measures such as provision of raised crossing points to side junctions, paving schemes which indicate pedestrian priority and aid in reducing traffic speeds, and shorter or more direct crossing points at junctions.

The summary of the landscape and visual effect assessment at the early stage of the Operational Phase, (at 1year 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.

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
Townscape and	d Streetscape Character			
-	to Rathfarnham Road nanges see Section 17.4.4.1.1	Low / High	Medium / High	Positive Moderate / Significant Short-Term
-	ue to Terenure Road North hanges see Section 17.4.4.1.2	High	Very High	Negative Very Significant Short-Term
	North to Charleville Road nanges see Section 17.4.4.1.3	Very High	High	Negative Significant Short-Term
	d to Dame Street hanges see Section 17.4.4.1.4	Very High	Medium / High	Positive Moderate / Significant Short-Term
Streetscape Ch	aracteristics and Visual Impacts			
Architectural Conservation Areas	Rathfarnham ACA For proposed changes see Section 17.4.4.2.1	Very High	Medium / High	Negative Significant Short-Term
	South Great George's Street (South City Retail Quarter) For proposed changes see Section 17.4.4.2.1	Very High	Medium	Positive Slight / Moderate Short-Term
Conservation Areas	River Dodder and Grand Canal For proposed changes see Section 17.4.4.2.2	Very High	Negligible / Low	Neutral Slight Short-Term
	Grand Canal through to Dame Street For proposed changes see Section 17.4.4.2.2	Very High	Low / Medium	Positive Moderate Short-Term
Residential Conservation Areas	For proposed changes see Section 17.4.4.2.3	Very High	Medium / High	Negative Significant Short-Term
Protected Structures and National Monuments	Rathfarnham Castle For proposed changes see Section 17.4.4.2.4 (Refer also to Chapter 16 (Architectural Heritage)).	High	High	Negative Significant Short-Term
	Other Protected Structures For proposed changes see Section 17.4.4.2.4 (Refer also to Chapter 16 (Architectural Heritage)).	Very High	High / Very High	Negative Significant / Very Significant Short-Term
Amenity Designations	Rathfarnham Castle Demesne For proposed changes see Section 17.4.4.2.5	High	High	Negative Significant Short-Term

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



Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
	Other Open Spaces For proposed changes see Section 17.4.4.2.5	High	Low	Positive Slight Short-Term
Tree Preservation Orders / tree Protection Objectives	There are no tree preservation orders (TPO) or specific objectives along the Proposed Scheme.	N/A	N/A	N/A
Preserved Views / Scenic Views etc.	There are no specific preserved views along the Proposed Scheme	N/A	N/A	N/A
Properties	Part of residential property in permanent acquisition For proposed changes see Section 17.4.4.2.8.	High	Very High	Negative Very Significant Short-Term
	Non-residential properties included in permanent or temporary acquisition (e.g. open space at Bushy Park, Rathfarnham Castle, River Dodder) For proposed changes see Section 17.4.4.2.8	Medium / High	High	Negative Moderate / Significant Short-Term
	Properties not included in permanent or temporary acquisition or with minimal direct contact For proposed changes see Section 17.4.4.2.8	High	Medium	Positive Moderate Short-Term
Trees and Vegetation	For proposed changes see Section 17.4.4.2.9	High	Medium	Negative 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 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 (BCIDC-ARP-ENV_LA-1012_XX_00-DR-ES-0001 in the Arboricultural Impact Assessment)
- 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 Tree Protection Plans (BCIDC-ARP-ENV_LA-1012_XX_00-DR-ES-0001 in the Arboricultural Impact Assessment and Landscape General Arrangements (BCIDC-ARP-ENV_LA-1012_XX_00-DR-LL-9001 in 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 on-going 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 17.4.4.3.8), 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 features 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 Impacts Following the Implementation of Mitigation and Monitoring Measures

Townscape	Proposed Change	Baseline	Magnitude	Significance &
Receptor		Townscape	of Change	Quality of
		Sensitivity	U U	Townscape /
		, i i i i i i i i i i i i i i i i i i i		Streetscape /
				Visual Effects /
				Impacts
Townscape an	d Streetscape Character		•	
Tallaght Road	to Rathfarnham Road			Negative
For proposed cl	nanges see Section 17.4.3.1.1			Moderate
				Temporary / Short-Term (west of Templeogue) Negative
		Low / High	High	Significant / Very Significant
				Temporary / Short-Term (Templeogue to Rathfarnham Road)
Nutgrove Aven	ue to Terenure Road North			Negative
For proposed changes see Section		High	Very High	Very Significant
				Temporary / Short-Term
	North to Charleville Road			Negative
For proposed cl	nanges see Section 17.4.3.1.2	Very High	High	Very Significant
		Very riigh	riigii	Temporary /
				Short-Term
Charleville Roa	ad to Dame Street			Negative
For proposed cl	nanges see Section 17.4.3.1.3	Very High	Medium	Moderate
				Temporary / Short-Term
Streetscape Cl	naracteristics and Visual Impacts		1	1
	Rathfarnham ACA			Negative
	For proposed changes see Section 17.4.3.2.1	Very High	Medium	Significant
Architectural Conservation				Temporary / Short-Term
Areas (ACA)	South Great George's Street (South City Retail Quarter ACA)			Negative
	For proposed changes see Section 17.4.3.2.1	Very High	Low	Moderate
				Temporary / Short-Term
	River Dodder and Grand Canal			Negative
Conservation	For proposed changes see Section 17.4.3.2.2	Very High	Low / Medium	Moderate Temporary / Short-Term
Areas	Between Grand Canal and Dame Street			Negative
	For proposed changes see Section 17.4.3.2.2	Manullish	Low /	Moderate
		Very High	Medium	Temporary / Short-Term



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	Very High	Very High	Negative Very Significant Temporary / Short-Term
Protected Structures and	Rathfarnham Castle For proposed changes see Section 17.4.3.2.4	Very High	Medium	Negative Significant Temporary / Short-Term
National Monuments	For proposed changes see Section 17.4.3.2.4 (Refer also to Chapter 16 (Architectural Heritage)).	Very High	High / Very High	Negative Significant / Very Significant Temporary / Short-Term
	Rathfarnham Castle Demesne For proposed changes see Section 17.4.3.2.5	High	High	Negative Significant Temporary / Short-Term
Amenity Designations	Bushy Park and River Dodder (High Amenity) For proposed changes see Section 17.4.3.2.5	Very High	Low	Negative Moderate Temporary / Short-Term
	Area between Dodder View Road, Woodview Cottages and Church Lane Park For proposed changes see Section 17.4.3.2.5	Medium / High	High	Negative Significant Temporary / Short-Term
Tree Preservation Orders / tree Protection Objectives	There are no tree preservation orders (TPO) or specific objectives along the Proposed Scheme.	N/A	N/A	N/A
Preserved Views / Scenic Views etc.	There are no specific preserved views along the Proposed Scheme.	N/A	N/A	N/A
	Part of residential property with land acquisition during the Construction Phase For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Very Significant Temporary / Short-Term
Properties	Non-residential properties with land acquisition during the Construction Phase For proposed changes see Section 17.4.3.2.8	Medium / High	Very High	Negative Very Significant Temporary / Short-Term
	Properties located along, fronting and viewing the Proposed Scheme For proposed changes see Section 17.4.3.2.8	High	Medium / High	Negative Moderate / Significant

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
				Temporary / Short-Term
Trees and Vegetation	For proposed changes see Section 17.4.3.2.9	High	High / Very High	Negative Significant / Very 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 17.4.4.1.4 and 17.4.4. Therefore, while no mitigation or monitoring measures are proposed for the Operational Phase, the scheme will become established and increasingly integrated within its landscape (townscape) setting, and the potential negative operational 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.

However, 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.

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts (at 1 year post- construction)	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts (at 15 years post- construction)
Townscape and Str	eetscape Character				
Tallaght Road to Ra For proposed change	athfarnham Road es see Section 17.4.4.1.1	Low / High	Medium / High	Positive Moderate / Significant Short-Term	Positive Significant Long-Term
•	D Terenure Road North es see Section 17.4.4.1.2	High	Very High	Negative Very Significant Short-Term	Neutral Moderate Long-Term
	th to Charleville Road es see Section 17.4.4.1.3	Very High	Medium / High	Negative Significant Short-Term	Positive Moderate Long-Term
Charleville Road to For proposed change	Dame Street es see Section 17.4.4.1.4	Very High	Medium / High	Positive	Positive Significant



Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts (at 1 year post- construction)	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts (at 15 years post- construction)
				Moderate / Significant Short-Term	Long-Term
Streetscape Characte	eristics and Visual Impacts	1			1
Architectural Conservation Areas	Rathfarnham ACA For proposed changes see Section 17.4.4.2.1	Very High	Medium / High	Negative Significant Short-Term	Positive Slight Long-Term
	South Great George's Street (South City Retail Quarter) For proposed changes see Section 17.4.4.2.1	Very High	Medium	Positive Slight / Moderate Short-Term	Positive Moderate Long-Term
Conservation Areas	River Dodder and Grand Canal For proposed changes see Section 17.4.4.2.2	Very High	Negligible / Low	Neutral Slight Short-Term	Positive Slight Long-Term
	Grand Canal through to Dame Street For proposed changes see Section 17.4.4.2.2	Very High	Low / Medium	Positive Moderate Short-Term	Positive Moderate / Significant Long-Term
Residential Conservation Areas	For proposed changes see Section 17.4.4.2.3	Very High	Medium / High	Negative Significant Short-Term	Neutral Moderate Long-Term
Protected Structures and National Monuments	Rathfarnham Castle For proposed changes see Section 17.4.4.2.4 (Refer also to Chapter 16 (Architectural Heritage)).	High	High	Negative Significant Short-Term	Neutral Moderate / Significant Long-term
	Other Protected Structures For proposed changes see Section 17.4.4.2.4 (Refer also to Chapter 16 (Architectural Heritage)).	Very High	High / Very High	Negative Significant / Very Significant Short-Term	Negative Moderate / Significant Long-Term
Amenity Designations	Rathfarnham Castle Demesne For proposed changes see Section 17.4.4.2.5	High	High	Negative Significant Short-Term	Neutral Moderate / Significant Long-Term
	Other Open Spaces For proposed changes see Section 17.4.4.2.5	High	Low	Positive Slight Short-Term	Positive Slight / Moderate Long-Term
Tree Preservation Orders / tree Protection Objectives	There are no tree preservation orders (TPO) or specific objectives along the Proposed Scheme.	N/A	N/A	N/A	N/A
Preserved Views / Scenic Views etc.	There are no specific preserved views along the Proposed Scheme	N/A	N/A	N/A	N/A
Properties	Part of residential property in permanent acquisition	High	Very High	Negative Very Significant Short-Term	Negative Moderate / Significant



Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts (at 1 year post- construction)	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts (at 15 years post- construction)
	For proposed changes see Section 17.4.4.2.8. Non-residential properties included in permanent or temporary acquisition (e.g. open space at Bushy Park, Rathfarnham Castle, River Dodder) For proposed changes see Section 17.4.4.2.8	Medium / High	High	Negative Moderate / Significant Short-Term	Long-Term Negative Moderate Long-Term
	Properties not included in permanent or temporary acquisition or with minimal direct contact For proposed changes see Section 17.4.4.2.8	High	Medium	Positive Moderate Short-Term	Positive Moderate / Significant Long-Term
Trees and Vegetation	For proposed changes see Section 17.4.4.2.9	High	Medium	Negative Moderate Short-Term	Positive 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 scheme. The proposed views are shown with proposed planting at approximately 10 to 15 years post-completion of the Construction Phase. 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 17.2.4.7 and are included in Figure A17.2 in Volume 3 of this EIAR.

17.5.2.1.1 Photomontage View 1: Grange Road at Saint Mary's Boys National School

View 1: Existing

Figure 17.2.1.1 shows the existing view from Grange Road at Saint Mary's Boys National School. The view looks across the road from the west towards the tall rubble masonry wall which separates the road from back gardens of Rathfarnham Wood residential estate. Several mature trees are present in gardens forming a boundary to the road and the view.

View 1: As Proposed

Figure 17.2.1.2 shows the proposed view from Grange Road at Saint Mary's Boys National School. The primary change in the view is the widening of the road corridor and the setting back of part of the boundary wall in the middle distance, with associated loss of some mature garden trees. The wall is reinstated in a roughcast render finish. There is an increase in dominance of the road corridor and a reduction in the visual amenity of the view.

17.5.2.1.2 Photomontage View 2: Grange Road at Willbrook Road

View 2: Existing

Figure 17.2.2.1 shows the existing view from Grange Road at Willbrook Road. The view looks north across the road towards Rathfarnham Castle Demesne, which is bounded by a sections of boundary wall and railings in a mixture of stone and brick, and a prominent group of mature woodland trees within the demesne. A stone archway

marks the entrance to the demesne in the middle distance. On the left of the view is the Yellow House public house sited on the Willbrook Road junction. The boundary railings of the Church of the Annunciation are visible on the far left.

View 2: As Proposed

Figure 17.2.2.2 shows the proposed view from Grange Road at Willbrook Road. The primary change is the widening of the road corridor with land take from Rathfarnham Castle Demesne. The boundary of the demesne is set back, and the boundary wall and railing reinstated in roughcast render. New trees are provided in the street and replacement trees are provided within the demesne to consolidate the woodland edge. There is an increase in dominance of the road corridor and a reduction in the visual amenity of the view.

17.5.2.1.3 Photomontage View 3: Rathfarnham Road at Willbrook Road

View 3: Existing

Figure 17.2.3.1 shows the existing view from Grange Road / Willbrook Road junction. The view looks south-east across the road towards Rathfarnham Castle Demesne, which is bounded by a sections of boundary wall and railings in a mixture of stone and brick, and a prominent group of mature woodland trees within the demesne. A stone archway marks the entrance to the demesne in the middle distance. The boundary railings of the Church of the Annunciation are visible on the far right.

View 3: As Proposed

Figure 17.2.3.2 shows the proposed view from Grange Road at Willbrook Road. The primary change is the widening of the road corridor with land take from Rathfarnham Castle Demesne. The boundary of the demesne is set back, and the boundary wall and railing reinstated in roughcast render. New trees are provided in the street and replacement trees are provided within the demesne to consolidate the woodland edge. There is an improvement to the setting of the church with proposed stone paving to the footpaths of the junction. There is a positive change in the visual amenity of the view.

17.5.2.1.4 Photomontage View 4: Rathfarnham Road at Crannagh Road

View 4: Existing

Figure 17.2.4.1 shows the existing view from Rathfarnham Road at Crannagh Road looking north. The road is lined by mid-twentieth century residences on the far (west) side which have some established garden vegetation, including a single prominent mature cordyline, but there are no street trees in the view and the road infrastructure is visually dominant.

View 4: As Proposed

Figure 17.2.4.2 shows the proposed view from Rathfarnham Road south of the junction with Crannagh Road looking north. The primary change is the widening of Rathfarnham Road with land take from the residential properties to the left (west) side, including the setting back of the boundary alignment, like-for-like reinstatement of property boundaries and limited loss of some garden vegetation including the mature cordyline. Although the road is widened there is provision of new street trees on the west side of the road which help to soften the streetscape and reduce the visual dominance of the road corridor. This would be an improvement to the visual amenity of this view.

17.5.2.1.5 Photomontage View 5: Rathfarnham Road at Brookvale

View 5: Existing

Figure 17.2.5.1 shows the existing view from Rathfarnham Road opposite the junction with Brookvale Road looking north. The road is lined by mid-twentieth century residences on the far (west) side which have some established garden vegetation, but there are no street trees in the view and the road infrastructure is visually dominant.

View 5: As Proposed

Figure 17.2.5.2 shows the proposed view from Rathfarnham Road opposite the junction with Brookvale Road looking north. The primary change is the provision of new street trees on the west side of the road which help to soften the streetscape and reduce the visual dominance of the road corridor. This would be a notable improvement to the visual amenity of this view.

17.5.2.1.6 Photomontage View 6: Rathfarnham Road at Westbourne Road

View 6: Existing

Figure 17.2.6.1 shows the existing view from Rathfarnham Road at Westbourne Road looking north along Rathfarnham Road, which is bounded by tall, rendered walls defining the edge of large front gardens belong to adjacent residential properties. The gardens have a range of established garden vegetation including some mature trees.

View 6: As Proposed

Figure 17.2.6.2 shows the proposed view from Rathfarnham Road at Westbourne Road looking north. The primary change is the widening of Rathfarnham Road with land take from the residential properties to the left (west) side, including the setting back of the boundary alignment, like-for-like reinstatement of property boundaries and the loss of several trees. New street trees are provided within the footpath on the west side of the road at similar locations to those lost. There would be a neutral change to the visual amenity of this view.

17.5.2.1.7 Photomontage View 7: Rathfarnham Road at Bushy Park Road

View 7: Existing

Figure 17.2.7.1 shows the existing view from Rathfarnham Road at Bushy Park Road looking north across the street towards modern residential properties on the far (north) side of the junction with Bushy Park Road. The properties are separated from the road by large front gardens with rendered boundary walls and groups of mature trees, which form a prominent feature in the streetscape. The road is bounded to all side by similar residential development.

View 7: As Proposed

Figure 17.2.7.2 shows the proposed view from Rathfarnham Road at Bushy Park Road. The primary change is the widening of Rathfarnham Road with land take from the residential properties to the north of the junction with Bushy Park Road, including the setting back of the boundary alignment, like-for-like reinstatement of property boundaries and the loss of several trees including one prominent mature tree. However, the most prominent mature trees on the junction are retained and there is provision of new street trees to each side of Rathfarnham Road. There is a change to the signalisation of the junction with large, cantilevered traffic signals provided which are more visually prominent than the existing signalling. There is some reduction in the visual amenity of the view, but this will be negated over time as the proposed street trees mature.

17.5.2.1.8 Photomontage View 8: Terenure Road East at St. Joseph's Terenure

View 8: Existing

Figure 17.2.8.1 shows the existing view from Terenure Road East at St. Joseph's Church, looking north-east towards historic residential properties (protected structures) on the far (north) side of the road, which are separated from the street by front gardens containing moderately sized trees and bounded by tall stone / render walls. There is an existing bus shelter on the footpath to the front of the properties.

View 8: As Proposed

Figure 17.2.8.2 shows the proposed view from Terenure Road East at St. Joseph's Church looking east. The primary change to the view is the widening of the road to the north, with land take from the residential properties, setting back of boundary alignment, like-for-like reinstatement of property boundaries and the loss of several trees. New street trees are provided within the footpath at similar location and size to those lost. The bus stop has been moved slightly along the road, and a new pedestrian crossing has been provided across the street in the

foreground and surfaced with block paving. A small portion of the proposed paving scheme to Terenure centre is visible to the footpath in the bottom right of the view. There is a neutral change to the visual amenity of the view.

17.5.2.1.9 Photomontage View 9: Terenure Road East at Healthfield Road

View 9: Existing

Figure 17.2.9.1 shows the existing view from Terenure Road East at Healthfield Road looking east across the street towards modern residential properties on the far side. There are a number of large mature trees along the property boundary with the street. Boundaries are composed of a mixture of brick and railings. The junction with Healthfield Road is visible on the left.

View 9: As Proposed

Figure 17.2.9.2 shows the proposed view from Terenure Road East at Healthfield Road. The primary change to the view is the widening of the road to the south, with land take from the residential properties, setting back of boundary alignment, like-for-like reinstatement of property boundaries and the loss of several large mature trees. New street trees are provided at similar location to those lost but there is an overall loss of tree canopy volume in the view. A raised pedestrian crossing surfaced with sett paving is provided to the junction with Healthfield Road. There is a notable reduction to the visual amenity of the view, however, this will be negated through growth of the street trees over time.

17.5.2.1.10 Photomontage View 10: Terenure Road East at Ferrard Road looking east.

View 10: Existing

Figure 17.2.10.1 shows the existing view from Terenure Road East at Ferrard Road looking east towards Rathgar. The road is lined with large historic residences bounded by a range of boundary features. The view is centred on a recessed gated entrance to No.59 Terenure Road East (a protected structure) which is framed by railings, tall granite piers and ashlar walls. A large mature beech is situated on the edge of the property within the recessed entrance.

View 10: As Proposed

Figure 17.2.10.2 shows the proposed view from Terenure Road East at Ferrard Road looking east towards Rathgar. The primary change is the widening of the road corridor, land take from residential properties on the far (south) side of the road, with setting back and reinstatement of boundaries and removal of the large mature beech tree and other trees in the adjacent garden. There is a notable reduction in visual amenity of the view.

17.5.2.1.11 Photomontage View 11: Rathgar Road at Orwell Road

View 11: Existing

Figure 17.2.11.1 shows the existing view from Rathgar Road at Orwell Road looking north-east towards the junction of Rathgar Road with Highfield Road. The focal point of the view is the spire of Christ Church Rathgar (a protected structure) which is framed by mature trees within its grounds. The street is bounded by historic commercial properties which form the core of Rathgar Village. The junction has a left turn filter lane which doubles as a loading bay for the adjacent shops, which is separated from the rest of the road by a wide concrete traffic island. There are no formalised pedestrian crossings at this junction. A wide poured concrete footpath is present in the foreground on the south side of the junction.

View 11: As Proposed

Figure 17.2.11.2 shows the proposed view from Rathgar Road at Orwell Road looking north-east. The primary change is the narrowing of the Rathgar Road / Highfield Road junction to eliminate the filter lane and extend the pedestrian footpath out to create additional space to the commercial frontages, including a high-quality paving scheme, seating, new ornamental planting and tree planting. Signalised crossings are now provided to the junction and the traffic island has been removed resulting in a shorter crossing distance across Highfield Road. There is a notable positive change in the visual amenity of the view and an improvement to the setting of the church.

17.5.2.1.12 Photomontage View 12: Rathgar Road at Rathmines Road

View 12: Existing

Figure 17.2.12.1 shows the existing view from Rathgar Road at Rathmines Road junction looking north-east across the junction towards historic commercial properties lining Rathmines Road. The junction is interspersed with a number of traffic islands with associated barriers and traffic bollards.

View 12: As Proposed

Figure 17.2.12.2 shows the proposed view from Rathgar Road at Rathmines Road junction looking north-east. The primary change is the rearrangement of the junction to accommodate new cycle tracks, and the creation of a new plaza space on the far side of the junction, including seating, ornamental planting and tree planting. The traffic islands are removed and there is a reduction in street clutter. There is a notable positive change in the visual amenity of the view.

17.5.2.1.13 Photomontage View 13: View from Spawell Roundabout

View 13: Existing

Figure 17.2.13.1 shows the existing view from Spawell Roundabout looking north across the roundabout. The centre of the roundabout is landscaped with mown grass, some ornamental planting and some tree planting. Grassland areas, prominent groups of trees and some two-storey residential development can be seen in the surrounding area.

View 13: As Proposed

Figure 17.2.13.2 shows the proposed view from Spawell Roundabout looking north across the roundabout. The view is substantially changed with the conversion of the roundabout to a signalised junction including new pedestrian crossings. The central landscape area has been removed and the surrounding landscape areas extended, with the provision of new tree and ornamental planting. The view becomes less dominated by road infrastructure and there is a positive change to visual amenity of the view.

17.5.2.1.14 Photomontage View 14: View from Templeogue Road at Old Bridge Road looking north across the roundabout.

View 14: Existing

Figure 17.2.14.1 shows the existing view from Templeogue Road at Old Bridge Road looking north away from the junction with Old Bridge Road. The view is of a major road with residential properties to each side. The properties are generally well screened from the road by mature garden trees and other vegetation.

View 14: As Proposed

Figure 17.2.14.2 shows the proposed view from Templeogue Road at Old Bridge Road looking north away from the junction with Old Bridge Road. The primary change is the slight widening of the road with associated land take from properties on the far side of the road and a loss of some trees and other garden vegetation. Existing garden boundaries are reinstated at a setback alignment. There is a minimal loss of visual amenity of the view.

17.5.2.1.15 Photomontage View 15: View from Templeogue Road at Ashfield Place

View 15: Existing

Figure 17.2.15.1 shows the existing view from Templeogue Road at Ashfield Place looking west across the road towards residential properties on Templeogue Road and at Ashfield Place. The road is bounded by tall, curved stone walls and low wall and railings of these property boundaries. A notable feature in the view is the large mature tree which is present in the semi-private open space of Ashfield Place. The boundaries are reinstated at a setback alignment and a number of street trees have been provided.

View 15: As Proposed

Figure 17.2.15.2 shows the proposed view from Templeogue Road at Ashfield Place. The primary change in the view is the widening of the road corridor, land acquisition from Ashfield Place and adjacent residential properties, and the loss of the large mature tree. There is a decrease in visual amenity of the view, but this effect will be negated over time as the proposed trees mature further.

17.5.2.1.16 Photomontage View 16: Templeogue Road at Olney Crescent

View 16: Existing

Figure 17.2.16.1 shows the existing view from Templeogue Road at Olney Crescent looking north across the road towards residential properties on the far side. A rendered wall and several mature trees separate the properties from the road. Residential properties are also present on the right and the commercial centre of Terenure can be seen in the distance.

View 16: As Proposed

Figure 17.2.16.2 shows the proposed view from Templeogue Road at Olney Crescent looking north across the road towards residential properties on the far side. The primary change is the addition of a cycle track on the near side of the road and introduction of raised pedestrian crossing points in sett paving to side road junctions. Some new street tree planting is visible in the distance. There is an improvement in visual amenity of the view.

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. a construction compound). 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, construction stage 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 Impacts (Moderate or Higher)
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Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts	
Townscape and	d Streetscape Character				
•	to Rathfarnham Road hanges see Section 17.4.3.1.1	Low / High	High	Negative Moderate Temporary / Short-Term (west of Templeogue) Negative Significant / Very Significant Temporary / Short-Term (Templeogue to Rathfarnham Road)	
0	ue to Terenure Road North nanges see Section	High	Very High	Negative Very Significant Temporary / Short-Term	
	North to Charleville Road nanges see Section 17.4.3.1.2	Very High	High	Negative Very Significant	



Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
				Temporary / Short-Term
	d to Dame Street anges see Section 17.4.3.1.3	Very High	Medium	Negative Moderate Temporary / Short-Term
Streetscape Ch	aracteristics and Visual Impacts			
Architectural Conservation Areas (ACA)	Rathfarnham ACA For proposed changes see Section 17.4.3.2.1	Very High	Medium	Negative Significant Temporary / Short-Term
	South Great George's Street (South City Retail Quarter ACA) For proposed changes see Section 17.4.3.2.1	Very High	Low	Negative Moderate Temporary / Short-Term
Conservation Areas	River Dodder and Grand Canal For proposed changes see Section 17.4.3.2.2	Very High	Low / Medium	Negative Moderate Temporary / Short-Term
	Between Grand Canal and Dame Street For proposed changes see Section 17.4.3.2.2	Very High	Low / Medium	Negative Moderate Temporary / Short-Term
Residential Conservation Areas	For proposed changes see Section 17.4.3.2.3	Very High	Very High	Negative Very Significant Temporary / Short-Term
Protected Structures and National Monuments	Rathfarnham Castle For proposed changes see Section 17.4.3.2.4	Very High	Medium	Negative Significant Temporary / Short-Term
	For proposed changes see Section 17.4.3.2.4 (Refer also to Chapter 16 (Architectural Heritage)).	Very High	High / Very High	Negative Significant / Very Significant Temporary / Short-Term
Amenity Designations	Rathfarnham Castle Demesne For proposed changes see Section 17.4.3.2.5	High	High	Negative Significant Temporary / Short-Term
	Bushy Park and River Dodder (High Amenity) For proposed changes see Section 17.4.3.2.5	Very High	Negligible / Low	Negative Moderate Temporary / Short-Term
	Area between Dodder View Road, Woodview Cottages and Church Lane Park For proposed changes see Section 17.4.3.2.5	Medium / High	High	Negative Significant Temporary / Short-Term
Tree Preservation	There are no tree preservation orders (TPO) or specific objectives along the Proposed Scheme.	N/A	N/A	N/A

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts	
Orders / tree Protection Objectives					
Preserved Views / Scenic Views etc.	There are no specific preserved views along the Proposed Scheme.	N/A	N/A	N/A	
Properties	Part of residential property with land acquisition during the Construction Phase For proposed changes see Section 17.4.3.2.8	High	Very High	Negative Very Significant Temporary / Short-Term	
	Non-residentialpropertieswithlandacquisitionduring the ConstructionPhaseFor proposed changes seeSection 17.4.3.2.8	Medium / High	Very High	Negative Very Significant Temporary / Short-Term	
	Properties located along, fronting and viewing the Proposed Scheme For proposed changes see Section 17.4.3.2.8	High	Medium / High	Negative Moderate / Significant Temporary / Short-Term	
Trees and Vegetation	For proposed changes see Section 17.4.3.2.9	High	High / Very High	Negative Significant / Very Significant Temporary / Short-Term	

17.6.2 Operational Phase

Residual landscape / townscape and visual effects during the Operational Phase are further influenced by the on-going 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 Operational Phase Significant Residual Impacts

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
Townscape and	d Streetscape Character			
•	o Rathfarnham Road anges see Section 17.4.4.1.1	Low / High	Medium / High	Positive Significant Long-Term
Nutgrove Aven	ue to Terenure Road North			Neutral
For proposed changes see Section 17.4.4.1.2		High	Very High	Moderate Long-Term
Terenure Road	North to Charleville Road			Positive
For proposed changes see Section 17.4.4.1.3		Very High	Very High Medium / High	
Charleville Road to Dame Street				Positive
For proposed changes see Section 17.4.4.1.4		Very High	Medium / High	Significant Long-Term
Streetscape Ch	aracteristics and Visual Impacts			Long Telin



Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
Architectural Conservation Areas	South Great George's Street (South City Retail Quarter) For proposed changes see Section 17.4.4.2.1	Very High	Medium	Positive Moderate Long-Term
Conservation Areas	Grand Canal through to Dame Street For proposed changes see Section 17.4.4.2.2	Very High	Low / Medium	Positive Moderate / Significant Long-Term
Residential Conservation Areas	For proposed changes see Section 17.4.4.2.3	Very High	Medium / High	Neutral Moderate Long-Term
Protected Structures and National Monuments	Rathfarnham Castle For proposed changes see Section 17.4.4.2.4 (Refer also to Chapter 16 (Architectural Heritage)).	High	High	Neutral Moderate / Significant Long-term
	Other Protected Structures For proposed changes see Section 17.4.4.2.4 (Refer also to Chapter 16 (Architectural Heritage)).	Very High	High / Very High	Negative Moderate / Significant Long-Term
Amenity Designations	Rathfarnham Castle Demesne For proposed changes see Section 17.4.4.2.5	High	High	Neutral Moderate / Significant Long-Term
Properties	Part of residential property in permanent acquisition For proposed changes see Section 17.4.4.2.8.	High	Very High	Negative Moderate / Significant Long-Term
	Non-residential properties included in permanent or temporary acquisition (e.g. open space at Bushy Park, Rathfarnham Castle, River Dodder) For proposed changes see Section 17.4.4.2.8	Medium / High	High	Negative Moderate Long-Term
	Properties not included in permanent or temporary acquisition or with minimal direct contact For proposed changes see Section 17.4.4.2.8	High	Medium	Positive Moderate / Significant Long-Term
Trees and Vegetation	For proposed changes see Section 17.4.4.2.9	High	Medium	Positive Moderate Long-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 Compounds, return of temporary acquisition areas, and for additional tree and other planting where possible along the Proposed Scheme.

In the Operational Phase localised residual effects will remain for properties, including protected structures, experiencing permanent land acquisition. There will be overall positive effects for all sections of the scheme, excluding Nutgrove to Terenure Road North, which will have a neutral effect. The Proposed Scheme provides for improvements in the urban realm, which will provide positive long-term effects for the townscape and visual character, most notably at centres of Rathgar and Rathmines and along the route from Grand Canal to Dame Street. The restoration and reincorporation of Templeogue Arch into the streetscape will also be a notable improvement. The Proposed Scheme will also provide for a significantly enhanced level of service for public transport and for pedestrian / cycle connectivity.

17.8 References

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