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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 Ringsend 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 has been incorporated, where appropriate.

17.2 Methodology

17.2.1 Study Area

The Proposed Scheme will be located to the east of Dublin City Centre running along the north and south quays for 1.6 kilometres (km) from Talbot Memorial Bridge to Tom Clarke East Link Bridge, continuing for another 1.1km as a cycle route through Ringsend and Irishtown to Sean Moore Road via Pembroke Cottages, Cambridge Park, Ringsend Park, Strand Street and Beach Road.

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

The primary study area is a boundary-to-boundary road / street corridor along the Proposed Scheme, which incorporates the River Liffey corridor, immediately adjoining landscapes, including open spaces, parks, gardens, and other land use areas, together with amenity, landscape / townscape and visual planning considerations. This study area also extends, where required, to incorporate wider viewpoints to the Proposed Scheme (e.g. views along the River Liffey and views from Grand Canal Dock).

17.2.2 Relevant Guidelines, Policy and Legislation

This assessment has been carried out with reference to the following legislation, 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 (hereafter referred to as the Environmental Impact Assessment (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

- Dublin City Development Plan 2022 – 2028 (DCC 2022);
- Dublin City Tree Strategy 2016-2020 (DCC 2016);
- Dublin City Parks Strategy 2019-2022 (DCC 2019a);
- North Lotts & Grand Canal Dock Strategic Development Zone (SDZ) Planning Scheme (DCC 2014);
- Poolbeg West SDZ Planning Scheme (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 provide a general methodology, impact ratings and assessment structure applicable across all environmental assessments, the GLVIA provides specific guidance for landscape and visual impact assessments. The TCA is a resource for the application of landscape character assessment to townscape. Therefore, in this Chapter, a combination of the approaches outlined in the EPA Guidelines and in the GLVIA, supported by the TCA and the professional experience and expertise of the assessor, is utilised in the landscape and visual assessment.

17.2.2.4 Key Definitions

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

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

Townscape: *'the landscape within the built-up area, including the buildings, the relationship between them, the different types of urban open spaces, including green spaces and the relationship between buildings and open spaces'* (Landscape Institute and IEMA 2013). Different combinations and spatial distribution of these elements create variations in townscape character. In this assessment 'Townscape' is used to describe built-up areas of 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 ODPW 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*' (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*' (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 *impact* vs. landscape *effect*: '*Impact*' is defined as the action being taken, whilst '*effect*' is defined as the 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 in 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);
- North Lotts & Grand Canal Dock SDZ Planning Scheme (DCC 2014);
- Poolbeg West SDZ Planning Scheme (DCC 2019b)
- Dublin City Tree Strategy 2016-2020 (DCC 2016);
- Dublin City Parks Strategy 2019-2022 (DCC 2019a);
- Historical and current mapping and aerial photography (e.g. Ordnance Survey Ireland, Google Earth, Google Maps);
- Mapping of the Proposed Scheme;
- General Arrangement Drawings (refer to BCIDD-ROT-ENV_LA-0016_XX_00-DR-LL-9001 in Volume 3 of this EIAR), including chainages referenced throughout this Chapter;
- Other reports and documents relating to the baseline environment, including other chapters of this EIAR and in particular, Chapter 4 (Proposed Scheme Description), Chapter 5 (Construction), Chapter 12 (Biodiversity), Chapter 15 (Archaeological & Cultural Heritage) and Chapter 16 (Architectural Heritage);
- Review of baseline information, including road infrastructure audits, Tree Survey Plans and Arboricultural Impact Assessment Report, and drone survey imagery; and

- Review of contextual information relating to the development of the Proposed Scheme - Urban Realm Concept Designs (NTA 2020).

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

- Full walkover surveys of the route of the Proposed Scheme;
- Further field surveys 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 and field surveys has been collated and presented in Section 17.3 of this Chapter.

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

Table 17.1: Publicly Available Datasets

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

17.2.4 Appraisal Method for the Assessment of Impacts

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

The EPA Guidelines provide a generalised methodology suitable for guiding the range of environmental assessments that are carried out under the EIA process, whereas GLVIA provides guidance that is specifically relevant to landscape and visual impact assessment. GLVIA has been used in this assessment to inform the methodology in direct relation to assessing landscape and visual sensitivity, magnitude of change and effects. In order to provide an assessment of effects which is comparable to other types of environmental assessment it is necessary to use the significance criteria specified in the EPA Guidelines. A matrix showing the relationship between sensitivity, magnitude and effect significance has been adapted from Figure 3.4 in the EPA Guidelines and is shown in Diagram 17.1. This matrix differs from the EPA Guidelines in that a 'very high' level of both magnitude and sensitivity has been provided, 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 impacts be classified as positive / beneficial, neutral, or negative / adverse.

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 EIA Directive 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 (DoT 2007):

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

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

17.2.4.2 Methodology for Assessment of Townscape Effects

Assessment of potential townscape effects involves:

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

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

17.2.4.2.1 Methodology for Assessment of Townscape Sensitivity

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

Table 17.2: Townscape Sensitivity

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

As adapted from GLVIA (Landscape Institute and IEMA 2013)

17.2.4.2.2 Methodology for Assessment of Magnitude of Change in the Townscape

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

Table 17.3: Magnitude of Townscape Change

Magnitude of Change	Description
Very High	Change that is large in extent, resulting in the loss of or major alteration to key elements, features or characteristics of the townscape, and / or introduction of large elements considered totally uncharacteristic in the context. Such development may result in a fundamental change in the character of the townscape and / or streetscape.
High	Change that is moderate to large in extent, resulting in major alteration to key elements, features or characteristics of the townscape, and / or introduction of large elements considered uncharacteristic in the context. Such development may result in a notable change to the character of the townscape and / or streetscape.
Medium	Change that is moderate in extent, resulting in partial loss or alteration to key elements, features or characteristics of the townscape, and / or introduction of elements that may be prominent but not necessarily substantially uncharacteristic in the context. Such development may result in a moderate change to the character of the townscape and / or streetscape.
Low	Change that is moderate or limited in scale, resulting in minor alteration to key elements, features or characteristics of the townscape, and / or introduction of elements that are not uncharacteristic in the context. Such development may result in a minor change to the character of the townscape and / or streetscape.
Negligible	Change that is limited in scale, resulting in no alteration to key elements features or characteristics of the townscape, and / or introduction of elements that are characteristic of the context. Such development results in no change to the townscape character.
As adapted from GLVIA (Landscape Institute and IEMA 2013)	

17.2.4.2.3 Methodology for Assessment of Significance of Effects

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

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

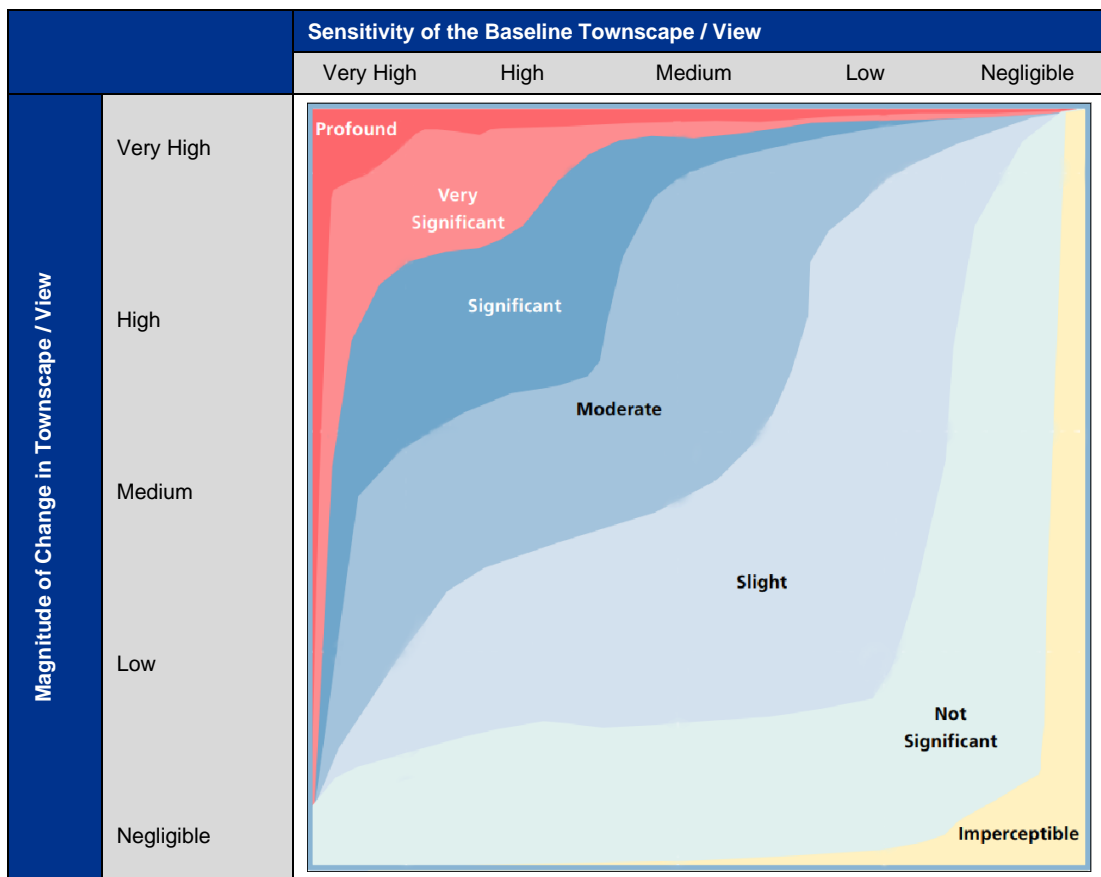


Diagram 17.1: Guide to the Classification of Significance of Townscape and Visual Impacts, as Adapted from EPA Guidelines (EPA 2022)

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

17.2.4.2.5 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 non-recreational pedestrians and cyclists whose activity is not dependant on appreciation of the views but may have a greater awareness of the townscape by virtue of their slower speed and people engaged in outdoor recreation where the surrounding landscape does not influence the experience, and people in their place of work or shopping. Visual receptors least susceptible to change include travellers on road, rail and other transport routes generally travelling at speed (unless on recognised scenic routes); and
- Value attached to the view: This depends to a large extent on the subjective opinion of the visual receptor but also on factors such as policy and designations which indicate a shared social value (e.g. scenic routes, protected views), or the view or setting being associated with a heritage asset, visitor attraction, place of congregation, or having some other cultural status.

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

Table 17.4: Categories of Viewpoint / Visual Receptor Sensitivity

Sensitivity	Description
Very High	Views or viewpoints (views towards or from a townscape feature or area) that are recognised in policy or otherwise designated as being of national value. Designed views which may be from or be directed towards a recognised heritage asset or other important designated feature, where a key management objective for the view is its protection from change. Visual receptors using national trails or nationally recognised public rights of way. Views recognised in art or literature may also be of very high value. The principal management objective for the view is its protection from changes which would affect the valued or designated features of the view.
High	Viewpoints or views that are recognised in policy or otherwise designated as being of value, or viewpoints that are highly valued by people that experience them regularly (e.g. views from houses or outdoor recreation amenities focused on the townscape). The composition, character and quality of the view may be such that it is likely to have high value for people

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 in Table 17.5.

Table 17.5: Categories of Magnitude of Visual Change

Magnitude	Description
Very High	Full or extensive intrusion of the development in the view, or partial intrusion that obstructs valued features or characteristics, or introduction of elements that are completely out of character in the context, to the extent that the development becomes dominant in the composition and defines the character of the view and the visual amenity.
High	Extensive intrusion of the development in the view, or partial intrusion that obstructs valued features, or introduction of elements that may be considered uncharacteristic in the context, to the extent that the development becomes co-dominant with other elements in the composition and affects the character of the view and the visual amenity.
Medium	Partial intrusion of the development in the view, or introduction of elements that may be prominent but not necessarily uncharacteristic in the context, resulting in change to the composition but not necessarily the character of the view or the visual amenity.
Low	Minor intrusion of the development into the view, or introduction of elements that are not uncharacteristic in the context, resulting in minor alteration to the composition and character of the view but no change to visual amenity.
Negligible	Barely discernible intrusion of the development into the view, or introduction of elements that are characteristic in the context, resulting in slight change to the composition of the view and no change in visual amenity.
As adapted from GLVIA (Landscape Institute and IEMA 2013)	

17.2.4.4.3 Methodology for Assessment of Significance of Visual Effects

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

17.2.4.5 Quality of Effects

In addition to predicting the significance of the effects, EIA methodology (EPA 2022) requires that the quality of the effects be classified as positive, neutral, or negative / adverse. For townscape to a degree, but particularly for visual effects, this will involve a degree of subjectivity. This is because townscape and visual amenity are perceived by people and are therefore subject to variations in the attitude and values, including aesthetic preferences of the receptor. One person's attitude to the Proposed Scheme may differ from another person's, and thus their response to the effects on the townscape or a view may vary.

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

17.2.4.6 Presentation of Construction Effects

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

17.2.4.7 Presentation of Operational Effects

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

The Operational Phase effects are presented as follows:

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

17.2.4.8 Photomontage Methodology

The methodology for the preparation of Photomontages has had 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). The method follows five main steps:

- Photography;
- Survey;
- 3D Modelling and Camera Matching;
- Rendering and Finishing of Photomontages; and
- Presentation.

17.2.4.8.1 Photography

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.

Camera and Camera Set-Up

Baseline photographs have been taken using a digital single-reflex lens (SLR) camera with a full frame sensor. At each viewpoint the camera is 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.

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° (degrees). This relatively wide field of view is preferred as it shows more of the landscape / townscape context in urban settings. For some viewpoints considering middle to distant intervention, a 50mm prime lens may have been used, capturing a 39° horizontal field of view.

17.2.4.8.2 Survey

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

17.2.4.8.3 3D Model and Camera Matching

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.

3D Camera Positions

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

17.2.4.8.4 Rendering of 3D Model and Finishing Photomontages

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

17.2.4.8.5 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. The 'as proposed' version of the photomontages present a representation of the Proposed Scheme approximately 10 to 15 years after completion of the Construction Phase.

17.3 Baseline Environment

17.3.1 City Context

The Proposed Scheme is located to the east of Dublin City Centre running along the north and south quays for 1.6km from Talbot Memorial Bridge to Tom Clarke East Link Bridge, continuing for another 1.1km as a cycle route through Ringsend and Irishtown to Sean Moore Road via Pembroke Cottages, Cambridge Park, Ringsend Park, Strand Street and Beach Road.

The Proposed Scheme is sub-divided into three sections, as follows :

- Section 1 - Talbot Memorial Bridge to Tom Clarke East Link Bridge;
- Section 2 – Dodder Public Transport Opening Bridge (DPTOB)); and
- Section 3 - Tom Clarke East Link Bridge to Sean Moore Road.

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 4.3km (2 x 1.6km along the north and south quays of the River Liffey between Talbot Memorial Bridge and Tom Clarke East Link Bridge and 1.1km of cycle route through Ringsend and Irishtown to Sean Moore Road). The 1.6km section of the River Liffey is located immediately east of the City Centre at the core of the former docklands. In contrast to the more western City Centre, the River Liffey broadens east of Talbot Memorial Bridge and the environment is increasingly influenced by the more coastal / port-related character of the area east of Tom Clarke East Link Bridge.

The River Liffey is framed by North Wall Quay and a section of Custom House Quay on the north side and by Sir John Rogerson's Quay and City Quay on the south side. As well as the two general traffic bridges at either end (Talbot Memorial Bridge and the Tom Clarke East Link Bridge), this section of the river also includes two modern bridges (Seán O'Casey Bridge (2005), a pedestrian and cycle swing bridge, and the landmark Samuel Beckett Bridge (2009), a rotating bridge open to all general traffic). This section of the River Liffey also provides for sea-lock access to the Royal Canal on the north side and to Grand Canal Dock / Canal on the south side of the confluence of the River Liffey and River Dodder. This section of the Proposed Scheme is covered in Figure 17.1, (Sheet 1 to 3 of 5) in Volume 3 of this EIAR.

As well as having a number of significant historic buildings and structures (e.g. The 3Arena, former London and North Western (Railway) Hotel, former North Wall Railway Station, CHQ Building, St. Mary's Church, former Warehouse (30-32 Sir John Rogerson's Quay)), the former docklands continue to experience significant regeneration as a new residential, office and mixed use extension of the City Centre. As such, the former derelict quays are increasingly framed by modern buildings, including a 22-storey landmark tower at Capital Dock at the corner of Sir John Rogerson's Quay and Britain Quay on the south side of the river.

In tandem with on-going redevelopment in the area, the Campshires have been regenerated and enhanced as an important component of the urban realm of the docklands and the river corridor. This has provided for paving, seating, tree planting, provision of sculptures (e.g. The Famine Memorial, Matt Talbot Statue, The Linesman), incorporation of elements of docklands heritage (e.g. The Jeanie Johnston, The Diving Bell), and for access to the river. The Old Liffey Ferry transports people across the river between North Wall Quay and Sir John Rogerson's Quay.

The second section encompasses the confluence of the River Liffey and River Dodder and the immediate surrounding areas, contained between Britain Quay / Capital Dock to the west, the River Liffey to the north, Tom Clarke East Link Bridge / R131 / York Road / Thorncastle Street to the east and Grand Canal Sea Locks to the south. This section of the Proposed Scheme is covered in Figure 17.1 (Sheet 3 of 5) in Volume 3 of this EIAR.

The third section of the Proposed Scheme will be south of the River Liffey (Dublin Port) and east of the River Dodder and will encompass part of the urban residential villages of Ringsend and Irishtown. The port-related section of the River Liffey / Dublin Port with its active commercial and cruise shipping and the heavily trafficked R131 East Link Toll Road dominates at the northern end. The significant open space amenity of Ringsend Park and Irishtown Stadium sits at the centre of the area and connects via a linear open space through to Sean Moore Park. Ringsend and Irishtown comprise a traditional mix of one and two-storey cottages and houses generally with small front gardens and on-street parking, though some larger properties with off-street parking are also present. This section is covered in Figure 17.1 (Sheet 3 to 5 of 5) in Volume 3 of this EIAR.

17.3.3 Landscape, Townscape and Visual Planning Policy

Landscape, townscape and visual planning policy is set out in the following Section 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 Dublin City Development Plan 2022 - 2028

The Dublin City Development Plan 2022 – 2028 (hereafter referred to as the DCDP) (DCC 2022) is the overarching county level planning framework applicable to the Proposed Scheme.

Chapter 8 Sustainable Movement and Transport within the DCDP sets out policies relating to the provision of sustainable transport infrastructure (DCC 2022). Relevant policies include:

- Policy SMT08 – This aims *‘To improve existing cycleways and bicycle priority measures and cycle parking infrastructure throughout the city and villages, and to create protected cycle lanes, where feasible.’*;
- Policy SMT09 – This aims *‘To support the development of a connected cycling network in the City through the implementation of the NTA’s Greater Dublin Area Cycle Network Plan, subject to environmental assessment and route feasibility.’*;
- Policy SMT16 – This aims *‘To prioritise the development of safe and connected walking and cycling facilities and prioritise a shift to active travel for people of all ages and abilities, in line with the city’s mode share targets.’*; and
- Policy SMT027 – Includes the aim to *“establish the Dodder Public Transport Bridge, linked with BusConnects 16 proposals.”*

Figure 8-2 indicates the north and south quays as forming the Civic Spine / Liffey Corridor.

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. The strategic green network, as indicated on Figure 10-1 of the DCDP highlights the River Liffey east to Tom Clarke East Link Bridge, The Grand Canal and the River Dodder as a 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 (DCC) has also prepared separate overarching strategies for the protection, management and improvement of trees (DCC 2016) and parks (DCC 2019) within the city.

Chapter 11 Built Heritage and Archaeology of the same document also sets out policies relating to preservation, protection and improvement of built heritage, protected structures (RPS), Architectural Conservation Areas (ACA) and Conservation Areas, trees in ACAs, zones of archaeological interest and industrial heritage, monuments and Dublin’s cultural assets (DCC 2022). There are many sites, buildings and features of historic and heritage interest located along the corridor of the Proposed Scheme, including Conservation Areas along the River Liffey corridor and southern quays, as well as Residential Conservation Areas and protected structures. 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) of this EIAR.

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

- Objective Z9: *‘To preserve, provide and improve recreational amenity and open space and ecosystem services’*, (e.g. Campshires along River Liffey, and Ringsend Park); and
- Objective Z11: *‘To protect and improve canal, coastal and river amenities’*.

Other land use zonings include:

- Objective Z1: *'To protect, provide and improve residential amenities'*;
- Objective Z2: *'To protect and / or improve the amenities of residential conservation area'*; and
- Objective Z15: *'To protect and provide for institutional and community uses'* (e.g. St. Patrick's School and Ringsend College).

The north and south dockland areas of Dublin are identified as Special Development Regeneration Area No. 6 (SDRA No. 6): Docklands (including SDZ area and Poolbeg West). The DCDP states that *'SDRAs have substantial development capacity, not only for residential uses, and a series of detailed guiding principles incorporating urban design and green infrastructure guidance'* (DCC 2016a). The Proposed Scheme will pass through the North Lotts & Grand Canal Dock SDZ and will terminate adjacent to the western edge of the Poolbeg West SDZ.

Map E of the DCDP indicates specific objectives for 'Roads Schemes and Bridges' including a new bridge across the confluence of the River Liffey and River Dodder, as well as new bridges across the River Liffey between Forbes Street (Sir John Rogerson's Quay) and Park Lane (North Wall Quay), and between Sir John Rogerson's Quay and Castleforbes Street (North Wall Quay).

17.3.3.1.1 North Lotts & Grand Canal Dock SDZ Planning Scheme, 2014

The vision for the North Lotts & Grand Canal Dock SDZ (DCC 2014) is that the area will become a world-class maritime quarter with a distinctive Dublin character. It will be a model of sustainable inner-city regeneration incorporating socially inclusive urban neighbourhoods, a diverse, green innovation-based economy contributing to the prosperity of the locality, the city and the country, all supported by exemplary social and physical infrastructure and a quality public realm integrated with the wider city.

Since 2014, the North Lotts & Grand Canal Dock SDZ has overseen significant redevelopment of former docklands areas into modern commercial and residential areas. The Planning Scheme notes, inter alia, the following plans and programmes:

- **Dublin Port Masterplan 2012-2040** is a non-statutory plan which sets out a vision for the operations of the port. It acknowledges the importance of the emerging cruise liner tourism and potential of the natural amenities of Dublin Bay;
- **The River Regeneration Strategy 2001** aims to maximise the amenity potential of the River Liffey with a series of initiatives for river-based projects, a number of which have been successfully implemented including the upgrading of the Dublin City Moorings and the Docklands Maritime Festival;
- **The Campshire Vision 2007** looks at how the River Liffey, with its water, waterfront and docks has the potential to become a new centre for employment, leisure, culture and the arts and assesses how connections from the City Centre and surrounding areas can make the Campshires more accessible and inviting. The strategy is based on three pillars: 'Making Connections, Creating Destinations and Animating the Water'; and
- **The City Canals Plan 2010** was prepared on a partnership basis between DCC, the Docklands Authority and Waterways Ireland. The plan relates to the canals and associated docks within the city boundary area. It identifies the recreational and tourism potential for specific sections of the canals, including the Royal Canal and Grand Canal at the Docklands.

Following preparation of the North Lotts & Grand Canal Dock SDZ Planning Scheme, DCC subsequently prepared the Public Realm Masterplan for the North Lotts and Grand Canal Dock SDZ Planning Scheme 2018 (DCC 2018). The Public Realm Masterplan encourages a wide mix of recreational activities and events to attract residents, workers and visitors to the area and provides guidance to design the urban environment for an exemplary world-class maritime quarter with a distinctive Dublin character.

17.3.3.1.2 Poolbeg West SDZ Planning Scheme, 2019

The vision for Poolbeg West seeks to connect with the transport infrastructure and social and economic fabric of the city, to create a new high quality 'place' that is unique, and to protect the surrounding environment and ongoing functions of the port and municipal facilities. The vision is elaborated with the themes of 'Connect', 'Create' and

'Protect' encompass a holistic set of values that form the basis of a new three-tiered vision for the development of Poolbeg West.

As with the Planning Scheme for the North Lotts & Grand Canal Dock SDZ, the Planning Scheme notes the Dublin Port Masterplan 2012-2040 and its acknowledgement of the importance of the emerging cruise liner tourism and the potential of the natural amenities of Dublin Bay.

The Planning Scheme notes that a public realm masterplan is due to be produced *'to guide the design of socially inclusive and universally accessible urban spaces and streets encouraging pedestrian movement and sustainable transport uses, and facilitate improved connectivity between Poolbeg, the adjacent urban villages and the wider city.'*

17.3.3.1.3 The Heart of Dublin – City Centre Public Realm Masterplan 2016

The Heart of Dublin – City Centre Public Realm Masterplan (DCC 2016b) for Dublin City Centre was published by DCC in 2016. The overall vision is one of a pedestrian friendly core within the City Centre, so that the city can be easy, comfortable, and enjoyable to move within, the strategy will require the full completion of the planned public transport network. The Heart of Dublin – City Centre Public Realm Masterplan includes the part of the Proposed Scheme from City Quay and the Talbot Memorial Bridge as well as sections of Memorial Road and Custom House Quay. In addition, the Dublin Docklands SDZ Public Realm Plan is one of the original projects that DCC identified as one the most important streets and spaces in the city to focus on.

17.3.3.1.4 Your City Your Space – Dublin City Public Realm Strategy

The Your City Your Space – Dublin City Public Realm Strategy (DCC 2012) was published in 2012. It seeks to co-ordinate the approach to the public realm and to address its many existing challenges through a series of actions. The Strategy includes the part of the Proposed Scheme along North Wall Quay, Britain Quay, Sir John Rogerson's Quay, City Quay, Talbot Memorial Bridge, Custom House Quay and the East Link Bridge which are defined as the Liffey Corridor.

17.3.4 Townscape / Streetscape Character

The townscape and streetscape character of the Proposed Scheme is described in Table 17.6 with reference to landscape, townscape and visual characteristics, features, designations, and sensitivities. The key features are identified on Figure 17.1 in Volume 3 of this EIAR. Protected structures are generally described within groups (e.g. a number of buildings lining a road), but are noted individually where they form unique and prominent features in the townscape or streetscape, or form a less noticeable but intrinsic part of the fabric of the streetscape. Refer to Chapter 15 (Archaeological & Cultural Heritage) and Chapter 16 (Architectural Heritage) of this EIAR, for full details and definitions of protected structures.

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

Proposed Scheme Character Areas	Baseline Description	Baseline Sensitivity
<p>Talbot Memorial Bridge to Tom Clarke East Link Bridge.</p> <p>(for baseline features refer to Figure 17.1, (Sheet 1 to 3 of 5) in Volume 3 of this EIAR)</p>	<p>Townscape Character: Former docklands to east of the City Centre subject to significant office and residential redevelopment. Wide open urban streetscape and riverside quays.</p> <p>Streetscape Character: Historic dockland arrangement along riverside quays with modern and emerging development defining a new urban corridor. Notable views west towards the city and east towards the port and industrial lands and iconic Poolbeg Towers. Samuel Beckett (road) Bridge and Seán O’Casey (cycle and pedestrian) Bridge are landmark structures across the River Liffey.</p> <p>High quality riverside quays at the Campshires, progressively upgraded and enhanced over many years, with stone paving, feature sections of rail sidings, tree planting, occasional café outlets, including on-boat options, and various art installations. Concrete flood defence walls have also been installed along the south quays.</p> <p>Key Townscape Features: Riverfront City Centre location, with emerging modern city developments, including 22-storey Capital Dock development on the corner of Sir John Rogerson’s Quay and Britain Quay. Views from the Campshires and bridges across and east to west along the river. Presence of notable historic buildings, such as the 3 Arena, former British Railway Hotel, former North Wall Rail Station, the CHQ Building and various former dockland warehouses and houses, together with historic structures such as the Royal Canal and George’s Docks and associated sea locks, the Scherzer Bridges, the Grand Canal Dock and its three sister-locks (Westmoreland, Buckingham, Camden Locks – No. 987) at the mouth of the River Dodder.</p> <p>Amenity Designations: North and south quays are part of the Liffey Quays Conservation Area, which overlaps with the Royal Canal Conservation Area at the Sea Lock at Guild Street, and the Dodder Valley and Grand Canal Conservation Area between Britain Quay and Ringsend. The Campshires on the north and south quays are zoned as open space.</p> <p>Tree Preservation Order (TPO): None.</p> <p>Tree / Woodland Preservation Objectives: None.</p> <p>Protected Views: Views east and west along the River Liffey / Campshires and bridges.</p> <p>Protected Structures: Selection of buildings on North Wall Quay / Custom House Quay, including: the 3 Arena (former British goods shed – No. 5843)), No. 73 (No. 5840), former British Railway Hotel (No. 5838 & 5839), former Wool Store (No. 5837), former North Wall Station (No. 5836), CHQ building (No. 2094), quay walls and two sets of Scherzer Bridges (one at Royal Canal sea lock (No. 912), and a second at George’s Dock sea lock (No. 896)).</p> <p>Selection of buildings on City Quay, Sir John Rogerson’s Quay and Britain Quay, including: a Presbytery Church (No. 1853), St. Mary’s Church, boundary walls and railings (No. 1854), Quayside Warehouses (including ‘The Hub’ Warehouse elevation (No. 7543), Columbia Mills (No. 7546), Tropical Fruit Co. (No. 7548) and The Ferryman Public House (Nos. 7549 & 7550).</p> <p>Other: The Campshires are within the North Lotts & Grand Canal Dock SDZ Planning Scheme area. The River Liffey quay walls, Campshires and associated art (e.g. Famine Memorial, Matt Talbot statue), structures (e.g. Triumphal Arch and a diving bell (Sir John Rogerson’s Quay)) and tree planting are important urban realm features. The Samuel Beckett Bridge and pedestrian Seán O’Casey Bridges are landmark bridges on the quays. (Refer to Chapter 16 (Architectural Heritage) for full details).</p>	<p>High / Very High</p>
<p>Dodder Public Transport Opening Bridge (DPTOB)</p> <p>(for baseline features refer to Figure 17.1 (Sheet 3 of 5) in Volume 3 of this EIAR)</p>	<p>Townscape Character: Dynamic City Centre-edge, with amenity uses surrounded by modern mixed-use development.</p> <p>Streetscape Character: Commercial and residential uses fronting onto the river confluence. Areas of public open space to both sides. Open water comprising the majority of the area. Views up the Dodder corridor and to sea-locks at the entrance of Grand Canal Docks.</p> <p>Key Townscape Features: St. Patrick’s Rowing Club (SPRC) and jetty situated within open space. York Road is a minor road accessing residential development, with some adjacent semi-mature trees. Open spaces overlooking the water.</p> <p>Amenity Designations: Mouth of Grand Canal Dock and the confluence of the River Liffey and River Dodder are included in River Liffey Conservation Area and Dodder Valley and Grand Canal Conservation Area.</p> <p>Tree Preservation Order (TPO): None.</p> <p>Tree / Woodland Preservation Objectives: None.</p> <p>Protected Views: Views east and west along the River Liffey / Campshires and bridges.</p> <p>Protected Structures: The Lock Keeper’s Cottage (No. 986) adjoining triple lock (Westmoreland, Buckingham, Camden Locks – No. 987) at Grand Canal Dock and the River Liffey quay walls (Refer to Chapter 16 (Architectural Heritage) for full details).</p> <p>Other: The River Liffey quay walls are an important landscape feature. Views to Dublin Docks and associated shipping, boating and yachting is a notable feature of the area, and this section includes SPRC.</p>	<p>High</p>

Proposed Scheme Character Areas	Baseline Description	Baseline Sensitivity
<p>Tom Clarke East Link Bridge to Sean Moore Road.</p> <p>(for baseline features refer to Figure 17.1, Sheets 3 to 5 of 5 in Volume 3 of this EIAR)</p>	<p>Townscape Character: Dynamic City Centre-edge, port-related edge with established residential dockland suburbs.</p> <p>Streetscape Character: Open water / port-edge coastal character, backed by established residential dockland suburbs. Typically of one or two-storey terraced and semi-detached traditional properties, often framing attractive narrow streets with small or no front gardens. Developed along port / coast edge and enclosing large suburban parkland.</p> <p>Key Townscape Features: Open views across coastal / port section of River Liffey to Dublin Port with active commercial and cruise shipping. Lifting section of Tom Clarke East Link Bridge allows for boating / shipping access to the city section of river. Leisure and recreational boating and related activities. Major road infrastructure – East Link Road, Toll Plaza and Tom Clarke East Link Bridge is a heavily trafficked road corridor.</p> <p>Terraced streets, traditional one and two-storey residential properties. Large urban park with major athletics stadium.</p> <p>Amenity Designations: South quays, Ringsend Park and connections through to Sean Moore Park are zoned open space. Residential Conservation Areas along Pigeon House Road, Ringsend Park, Cambridge Avenue, Pembroke Cottages, Irishtown Road, Strand Street, Pembroke Street.</p> <p>Tree Preservation Order (TPO): None.</p> <p>Tree / Woodland Preservation Objectives: None.</p> <p>Protected Views: None.</p> <p>Protected Structures: Drinking fountain in a garden wall at the junction of Cambridge Road / Ringsend Park (No. 7376). (Refer to Chapter 16 (Architectural Heritage) for full details).</p> <p>Other: Views to Dublin Docks and associated shipping, boating and yachting is a notable feature of the area. Ringsend Park is an important mature park, providing for a wide range of amenity and recreation facilities, including Irishtown Athletics Stadium. Irish Mercantile Marine Memorial is located in the landscaped island on R131 Sean Moore Road.</p>	<p>Medium / High</p>

17.4 Potential Impacts

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

17.4.1 Characteristics of the Proposed Scheme

17.4.1.1 General

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

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

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

17.4.1.2 Development of the Proposed Scheme Design

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

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

- It is proposed to change the orientation of the pair of Scherzer Bridges at George's Dock, to limit the impact on daylight to the adjacent office building, and to maximise its visibility in the streetscape; and
- Due to significant local opposition to the proposed cycle track along Pigeon House Road as part of the Emerging Preferred Route, a number of alternative options were considered. The consideration of alternative options concluded with the adoption of the two cycle routes, with a shared (with traffic) on-road facility along Pigeon House Road (which was closed to through-traffic in 2020), as well as an enhanced pedestrian / cycle path through Ringsend Park to Sean Moore Road.

17.4.1.3 Construction Phase

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

- Amendment and adaption of the 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.;
- Amendment and adaption of areas of existing grassed areas, widening of foot / cycle tracks and loss of tree planting;
- Temporary and permanent land take from properties along the Proposed Scheme;
- In addition to those areas / properties directly affected through temporary or permanent acquisition, the Construction Phase of the Proposed Scheme will also result in visual impacts for other areas / properties located along, fronting and viewing the Proposed Scheme. Impacts will arise from the general disturbance, demolition, excavation and construction works associated with the DPTOB and general public road corridor / amenities along the Proposed Scheme; and
- Establishment / use of Construction Compounds.

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

17.4.1.3.1 Specific Works from Talbot Memorial Bridge to Tom Clarke East Link Bridge (for baseline features refer to Figure 17.1 (Sheet 1 to 3 of 5) in Volume 3 of this EIAR)

- Works along the north quays, including the provision of a new two-way cycle track along the full length of the quays, with a direct impact on the existing urban realm paving scheme and on the urban realm area on the quays in front of The Convention Centre (Figure 17.1 (Sheet 2 of 5) in Volume 3 of this EIAR). Some removal and replacement of existing young trees, most notably between Samuel Beckett Bridge and Sean O'Casey Bridge;
- Removal and local relocation of the existing Scherzer Bridges (Figure 17.1 (Sheet 1 and 2 of 5) in Volume 3 of this EIAR) from road corridor over the Royal Canal (Ch.A870 to Ch.A890) and from over the lock into George's Dock, necessitating temporary land acquisition from adjacent open spaces, and the construction of new road carriageway bridge crossings over the canal and the entrance to George's Dock (Ch.A1410 to Ch.A1460);
- Construction of a new section of boardwalk along Custom House Quay (Figure 17.1 (Sheet 1 of 5) in Volume 3 of this EIAR) (adjacent to the former DCC Docklands Office) (Ch.A1230 to Ch.A1360);
- Construction of a new section of boardwalk along the quays adjacent to the junction of Excise Walk and North Wall Quay (Ch.A1050 to Ch.A1120);
- Construction along the north quays will require temporary acquisition of land to accommodate Construction Compounds R1 and R2 at George's Dock and the Royal Canal, respectively (Ch.A1400 to Ch.A1470; Ch.A860 to Ch.A910) (Figure 17.1, Sheet 1 of 5 in Volume 3 of this EIAR);
- Works on the north quays will require removal of 124 trees, mainly early-mature and semi-mature Lime (*Tilia* species);
- Works along the south Campshires (Figure 17.1 (Sheets 1 to 3) in Volume 3 of this EIAR), including the provision of a new two-way cycle track east of Samuel Beckett Bridge to extend the existing

cycle track along the full length of the quays, with a direct impact on existing urban realm paving and temporary land acquisition from Sir John Rogerson's Quay. Construction works along the south quays (Figure 17.1 (Sheet 3 of 5) in Volume 3 of this EIAR) will require temporary acquisition of land to accommodate Construction Compound R3; and

- Minor works at the junction of Mayor Street Upper / The Convention Centre Dublin with the introduction of a new eastbound traffic lane into an area of hard surfacing currently allocated as footpath.

17.4.1.3.2 Specific Works for the Proposed DPTOB (for baseline features refer to Figure 17.1 (Sheet 3 of 5) in Volume 3 of this EIAR)

- Construction of the DPTOB across the confluence of the River Liffey and River Dodder from Britain Quay on the west side to Thorncastle Street / York Road on the east side (Ch.B11420 to Ch.B11628). Works on the east side will directly impact on the existing open space and associated features and art pieces. Works will also require land reclamation of a section of the River Liffey / Liffey Estuary, including the construction of retaining structures in front of the existing quay walls, obscuring them from view and burying them permanently, as well as the demolition of the existing SPRC clubhouse and construction of new facilities. River access and operational facilities will be maintained throughout the proposed works;
- Temporary land acquisition on the west side of the River Dodder of small areas of urban realm to accommodate Construction Compound R4 on the south side of the Tom Clarke East Link Bridge (Ch.B11270 to Ch.B11450); and
- Construction of an ESB substation within the public open space to the north of the junction of York Road / Thorncastle Street.

17.4.1.3.3 Specific Works from Tom Clarke East Link Bridge to Sean Moore Road (for baseline features refer to Figure 17.1 (Sheet 3 to 5 of 5) in Volume 3 of this EIAR)

- Modest works providing for quiet streets along York Road, Pigeon House Road, Pembroke Cottages, and Cambridge Park (Ch.E40000 to Ch. E41019; and Ch.F50000 to F50992); and
- Temporary land acquisition from open spaces for the provision of a widened path for shared use by pedestrians and cyclists from:
 - Cambridge Park through Ringsend Park (Ch. F50270 to F50650);
 - The open space adjacent to Irishtown Stadium (Ch.H70000 to Ch.H70233); and
 - The open space along Strand Street and Pembroke Street and on to the Sean Moore Road / Beach Road Junction (Ch.F50680 to Ch.F50950).

17.4.1.3.4 Construction Compounds Areas:

The following Construction Compounds and locations will be required as part of the Construction Phase of the Proposed Scheme:

- Construction Compound R1: Small compound at the Scherzer Bridges at George's Dock;
- Construction Compound R2: Small compound at the Scherzer Bridges at Royal Canal;
- Construction Compound R3A/R3B: Compound at the west side of the DPTOB; and
- Construction Compound R4: Compound at the east side of the DPTOB.

17.4.1.4 Operational Phase

The key characteristics of the Proposed Scheme of particular relevance to the landscape (townscape) and visual assessment during the Operational Phase, are outlined in the following sections:

- Changes to traffic movements along the Proposed Scheme and on adjoining roads where traffic management measures are proposed; and
- Changes in streetscape elements, including replacement / new street trees, the re-allocation of carriageway space, parking, provision of cycle and footpath facilities, signage, lighting, surfacing, road markings, etc. along the Proposed Scheme.

17.4.1.4.1 Specific Works from Talbot Memorial Bridge to Tom Clarke East Link Bridge (for baseline features refer to Figure 17.1 (Sheet 1 to 3 of 5) in Volume 3 of this EIAR)

- Changes to the existing road corridor with principal changes including:
 - At both sets of Scherzer Bridges (Ch.A870 to Ch.A890) (Ch.A1400 to Ch.A1460) (Figure 17.1 (Sheet 1 and 2 of 5) in Volume 3 of this EIAR), which are proposed to be separated and relocated locally on either side of the carriageway within a new urban realm / paved setting, and associated changes to the road corridor, including localised raising and tie-in at the Convention Centre; and
 - Along the north quays (Figure 17.1 (Sheet 1 to 3) in Volume 3 of this EIAR), including the introduction of sections of pedestrian quayside boardwalks on Custom House Quay (Ch.A1230 to Ch.A1360) and at the junction of Excise Walk and North Wall Quay (Ch.A1050 to Ch.A1120).

The following key landscape measures proposed in this section are:

- Retention and refurbishment of the existing Scherzer Bridges at new positions, as local landmarks which will be set within areas of appropriate high quality paving (Ch.A840 to Ch.A910 & Ch.A1400 to Ch.1470); and
- Local planting of new street trees to replace those removed on the Campshires, plus additional tree planting along the north quays to the east of the existing groups of trees.

17.4.1.4.2 Specific Works for the Proposed DPTOB (for baseline features refer to Figure 17.1 (Sheet 3 of 5) in Volume 3 of this EIAR)

- Significant changes at the confluence of the River Liffey and River Dodder with the provision of the DPTOB, which will span the opening to the River Liffey and changes to the setting of the river bank uses (i.e. local amenity and SPRC) on the east side. The DPTOB will incorporate an opening span to allow for navigation of larger vessels to / from Grand Canal Dock.

The following key landscape measures proposed in this section are:

- A high-quality urban realm / landscape scheme will be provided at either end of the proposed DPTOB, and especially on open space and around the relocated rowing club facilities at the eastern end of the bridge (Ch.B11550 to Ch.B11628). The proposed bridge will also incorporate planters for trees and other planting. There will be provision of a new ESB substation within this space which will be adequately screened with proposed hedging (Ch.B11400 to Ch.B11550).

17.4.1.4.3 Specific Works from Tom Clarke East Link Bridge to Sean Moore Road (for baseline features refer to Figure 17.1 (Sheet 3 to 5) in Volume 3 of this EIAR)

- Modest changes to existing roads, with increased quiet street measures, widened pedestrian / cycle path through Ringsend Park and the grounds of Irishtown Stadium.

17.4.1.4.4 General Landscape (Townscape) and Visual Measures

In addition to the above specific measures, the following general landscape (townscape) and visual measures are included within the Proposed Scheme:

- Where paving, existing trees, hedges, and / or plantings are removed from temporary acquisition areas, new planting and paving replacements will be provided, as appropriate. Where practicable, new plants will be the same species to those removed. Replacement plant sizes will be those that are readily available, and therefore, will be unlikely to match the maturity of plants removed (especially in the case of larger trees). However, where practicable, semi-mature trees will be used in the replanting works throughout the Proposed Scheme. Where the same or similar species are provided, maturity similar to that of the existing can be achieved in time;
- The Proposed Scheme will provide for the planting of new semi-mature street trees to replace removed trees, where practicable, and for the 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 impacts 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 the provision of biodiversity and of Chapter 13 (Water) in relation to opportunities for the 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 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 urban context of the Proposed Scheme, it is considered likely that the road corridor of the Proposed Scheme will continue to experience pressure for the reallocation of carriageway space and associated traffic movements in direct response to the increasing demand for alternative modes of transport (i.e. away from the private car). In addition, the delivery of the DPTOB is also an objective of the DCDP (DCC 2016a) and of the North Lotts and Grand Canal Dock SDZ Planning Scheme (DCC 2014).

There would be a Neutral impact on 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 (one to two years) townscape, streetscape and visual impacts through the following:

- Site mobilisation and establishment, fencing and hoarding of Construction Compounds and works areas, including within private areas / gardens;
- Site demolition, including the 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 the operation of construction machinery both within the site and at the Construction Compounds;
- Construction works involving diversion of existing underground / overground services and utilities, provision of new services and utilities, drainage features and connections, etc.;
- Site activity and construction works involved in the construction of new carriageways, kerbings, footpaths and cycle tracks, bus stops and signage, reinstatement of boundaries / provision of new boundaries and landscape reinstatement works / provision of new landscape, etc.; and
- Decommissioning of works areas and the Construction Compounds.

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

17.4.3.1 Impacts on Townscape and Streetscape Character

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

- Section 1 - Talbot Memorial Bridge to Tom Clarke East Link Bridge;
- Section 2 - DPTOB; and
- Section 3 - Tom Clarke East Link Bridge to Sean Moore Road.

17.4.3.1.1 Talbot Memorial Bridge to Tom Clarke East Link Bridge (for baseline features refer to Figure 17.1 (Sheet 1 and 2 of 5) in Volume 3 of this EIAR)

The baseline townscape is of high / very high sensitivity. The Proposed Scheme will involve construction works of sections of kerbs, road carriageways, sections of footpaths, sections of quayside, junctions, surfacing and parking, drainage features, installation of cantilevered (and piled) boardwalks and the localised removal of (mainly young) street trees. However, the most prominent works involve the removal, separation, and relocation of both sets of Scherzer Bridges at George's Dock and the Royal Canal.

While the construction works will not alter the overall townscape character along this section of the Proposed Scheme, the works will detract from the local streetscape character. The magnitude of change in the baseline environment is medium / high.

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

17.4.3.1.2 DPTOB (for baseline features refer to Figure 17.1 (Sheet 3 of 5) in Volume 3 of this EIAR)

The baseline townscape is of high sensitivity. There are substantial works associated with the construction of the DPTOB across the confluence of the River Liffey and River Dodder. The works will require land reclamation, demolition (and reconstruction) of the clubhouse serving SPRC and construction works on the existing landscape amenity area at York Road / Thorncastle Street and Tom Clarke East Link Bridge with minor loss of trees. Continuous access to the river jetty and boathouse facilities will be maintained throughout the works. While the works are significant, this is an area of significant recent and on-going change, as described and envisaged in the North Lotts and Grand Canal Dock SDZ Planning Scheme (DCC 2014). In this regard, Capital Dock, a landmark 22-storey mixed-use development, was completed on the junction of Sir John Rogerson's Quay and Britain Quay in 2018.

The Construction Phase will impact on the townscape and streetscape character along this section of the Proposed Scheme. The magnitude of change in the baseline environment is very high.

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

17.4.3.1.3 Tom Clarke East Link Bridge to Sean Moore Road (for baseline features refer to Figure 17.1 (Sheet 4 and 5 of 5) in Volume 3 of this EIAR)

The baseline townscape is of medium / high sensitivity and the Proposed Scheme involves generally modest changes in excavation and construction works to sections of kerbs, road carriageways, footpaths, junctions, surfaces, drainage features, and includes the minor loss of trees.

The Construction Phase will not alter the overall townscape but there will be some change to the streetscape character along this section of the Proposed Scheme. The magnitude of change in the baseline environment is medium.

The townscape / streetscape effect 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 (ACAs)

There are no ACAs located along the Proposed Scheme.

17.4.3.2.2 Conservation Areas

The full extent of the north and south quays, including the confluence of the River Liffey and River Dodder, is designated within the Liffey Quays Conservation Area. There is also overlap with Royal Canal Conservation Area at Sea Lock and Guild Street, and with The Dodder Valley and Grand Canal Conservation Area between Britain

Quay and Ringsend. The Proposed Scheme will involve substantial works within the conservation areas, most notably, the relocation of both sets of Scherzer Bridges at George's Dock and the Royal Canal (refer to Figure 17.1 (Sheet 1 and 2 of 5) in Volume 3 of this EIAR), and the construction of the DPTOB across the confluence of the River Liffey and River Dodder (see Figure 17.1 (Sheet 3 of 5) in Volume 3 of this EIAR), which requires land reclamation in the River Liffey / Liffey Estuary, relocation of SPRC and impacts on the open space at York Road / Tom Clarke East Link Bridge (see Figure 17.1 (Sheet 3 of 5) in Volume 3 of this EIAR). The magnitude of change in the baseline environment is very high for the Liffey Quays Conservation Area. The magnitude of change in the baseline environment is medium for the Royal Canal Conservation Area and the Dodder Valley and Grand Canal Conservation Area.

The townscape / streetscape and visual effect of the Construction Phase on the Liffey Quays Conservation Area is assessed to be Negative, Very Significant and Temporary / Short-Term.

The townscape / streetscape and visual effect of the Construction Phase on the Royal Canal Conservation Area and the Dodder Valley and Grand Canal Conservation Area is assessed to be Negative, Moderate and Short-Term.

17.4.3.2.3 Residential Conservation Areas

Residential Conservation Areas, which are of high sensitivity, are located along sections of Pigeon House Road, Pembroke Cottages, and through Irishtown (see Figure 17.1 (Sheet 3 to 5 of 5) in Volume 3 of this EIAR). The construction of the Proposed Scheme will entail very limited works for some street crossings through these areas with limited impact. The magnitude of change in the baseline environment is low.

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

17.4.3.2.4 Protected Structures

A number of protected structures, which are of very high sensitivity, are located along the Proposed Scheme, mainly along the north and south quays. These include the Scherzer Bridges and lock walls at George's Dock and the Royal Canal, Custom House Quay, North Wall Quay and Sir John Rogerson's Quay, and the seawalls at Britain Quay, Thorncastle Street and York Road which will all be directly impacted by the works (see Figure 17.1 (Sheet 1 to 4 of 5) in Volume 3 of this EIAR). Otherwise, no other protected structures will be directly impacted, but some are in the vicinity of the proposed works and will experience indirect visual impacts, most notably, The Lock Keeper's Cottage (No. 986) and adjoining triple lock (Westmoreland, Buckingham, Camden Locks (No. 987)) (see Figure 17.1 (Sheet 3 of 5) in Volume 3 of this EIAR), which are adjacent to the DPTOB. The magnitude of change is high / very high. (Refer also to Chapter 16 (Architectural Heritage)).

The townscape / streetscape and visual effect of the Construction Phase on protected structures is assessed to be Negative, 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 Campshires (see Figure 17.1 (Sheet 1 to 3 of 5) in Volume 3 of this EIAR), existing open space at York Road / Tom Clarke East Link Bridge (see Figure 17.1 (Sheet 3 of 5) in Volume 3 of this EIAR), Ringsend Park (see Figure 17.1 (Sheet 3 to 5 of 5) in Volume 3 of this EIAR), the open space adjacent to Irishtown Stadium (see Figure 17.1 (Sheet 4 to 5 of 5) in Volume 3 of this EIAR), and open spaces at Sean Moore Road (see Figure 17.1 (Sheet 5 of 5) in Volume 3 of this EIAR).

The construction of the Proposed Scheme will have direct impacts along large sections of the Campshires. There will be direct impacts on the open space at York Road / Tom Clarke East Link Bridge with the construction of the DPTOB, the loss of open water on the River Liffey, burying of the quay wall, relocation of SPRC, construction of a new ESB substation, tree removal, landscaping works and general visual disturbance and loss of open views. The magnitude of change is high / very high.

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

The construction of the Proposed Scheme will have direct impacts on Ringsend Park, the open space adjacent to Irishtown Stadium and the open spaces at Sean Moore Road, with very minor impacts on landscape fabric and tree planting. The magnitude of change is low.

The townscape / streetscape and visual effect of the Construction Phase on these amenities will be Negative, Slight 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 specific preserved views east and west along the River Liffey / Campshires (Figure 17.1 (Sheet 1 to 3 of 5) in Volume 3 of this EIAR). While the construction of the Proposed Scheme will have direct impacts on the corridor of the quays, these will not detract from the expansive nature of the cityscape in these views. It is also noted that the section of the Proposed Scheme west of Tom Clarke East Link Bridge (see Figure 17.1 (Sheet 3 of 5) in Volume 3 of this EIAR) is located within an area of on-going change and development. The magnitude of change is medium.

The townscape / streetscape and visual effect of the Construction Phase on these views is assessed to be Negative, Moderate and Short-Term.

17.4.3.2.8 Properties

Construction of the Proposed Scheme will require the temporary acquisition of landscape areas from the Campshires (Figure 17.1 (Sheet 1 to 3 of 5) in Volume 3 of this EIAR), and the confluence of the River Dodder and River Liffey (Figure 17.1 (Sheet 3 of 5) in Volume 3 of this EIAR). SPRC and floating jetty (Figure 17.1 (Sheet 3 of 5) in Volume 3 of this EIAR) is to be relocated during the construction of the Proposed Scheme. The SPRC clubhouse will be relocated on the reclaimed land north of its current location. Access to the clubhouse will be maintained throughout the construction works until the premises of the new clubhouse are fully developed. Trinity College Dublin (Stack B Building) will also be impacted by temporary land take as a result of the Proposed Scheme. Located on Custom House Quay, temporary land take is required within the car park to the east of the building in order to accommodate Construction Compound R1 and the changes to the Scherzer Bridges at George's Dock. The magnitude of change is high.

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

In addition to those areas / properties directly effected through temporary acquisition or direct impact, the Construction Phase of the Proposed Scheme will also result in visual impacts for other areas / properties located along, fronting and viewing the Proposed Scheme. Impacts will arise from the general disturbance, demolition, excavation and construction works associated with the DPTOB and general public road corridor / amenities along the Proposed Scheme. The magnitude of change is medium / high.

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

17.4.3.2.9 Trees

The Construction Phase of the Proposed Scheme will require the removal of 135 trees from specific locations along the Proposed Scheme. This includes the removal of 123 early-mature or semi-mature lime trees from along the north quays, and twelve other early-mature or mature trees from Ringsend Park and the existing amenity area at York Road / Tom Clarke East Link Bridge. The magnitude of change is medium / high.

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

17.4.3.3 Summary of Potential Construction Phase Impacts

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

Table 17.7: Summary of Potential Construction Phase Impacts

Townscape Receptor		Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
Townscape and Streetscape Character				
Talbot Memorial Bridge to Tom Clarke East Link Bridge For proposed changes see Section 17.4.3.1.1		High / Very High	Medium / High	Negative, Moderate / Significant and Temporary / Short-Term
DPTOB For proposed changes see Section 17.4.3.1.2		High	Very High	Negative, Very Significant and Temporary / Short-Term
Tom Clarke East Link Bridge to Sean Moore Road For proposed changes see Section 17.4.3.1.3		Medium / High	Medium	Negative, Moderate and Temporary / Short-Term
Streetscape Characteristics and Visual Impacts				
Architectural Conservation Areas (ACA)		N/A - There are no ACAs located along the Proposed Scheme		
Conservation Areas	The Liffey Quays Conservation Area For proposed changes see Section 17.4.3.2.2	High	Very High	Negative, Very Significant and Temporary / Short-Term
	Royal Canal Conservation Area, and Dodder Valley and Grand Canal Conservation Area For proposed changes see Section 17.4.3.2.2	High	Medium	Negative, Moderate and Temporary / Short-Term
Residential Conservation Areas For proposed changes see Section 17.4.3.2.3		High	Low	Negative, Slight and Temporary / Short-Term
Protected Structures For proposed changes see Section 17.4.3.2.4		Very High	High / Very High	Negative, Very Significant and Temporary / Short-Term
Amenity Designations	The Campshires and open space at York Road / Tom Clarke East Link Bridge For proposed changes see Section 17.4.3.2.5	High	High / Very High	Negative, Very Significant and Temporary / Short-Term
	Ringsend Park, open space adjacent to Irishtown Stadium and open spaces at Sean Moore Road For proposed changes see Section 17.4.3.2.5	High	Low	Negative, Slight and Temporary / Short-Term
Tree Preservation Orders / Tree Protection Objectives		N/A - There are no TPO or specific objectives along the Proposed Scheme.		
Preserved Views / Scenic Views etc. For proposed changes see Section 17.4.3.2.7		High	Medium	Negative, Moderate and

Townscape Receptor		Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
				Temporary / Short-Term
Properties	Non-residential properties included in temporary acquisition For proposed changes see Section 17.4.3.2.8	High	High	Negative, Significant and Temporary / Short-Term
	Properties along, fronting and viewing the Proposed Scheme not included in temporary acquisition. For proposed changes see Section 17.4.3.2.8	High	Medium / High	Negative, Moderate / Significant and Temporary / Short-Term
Trees and Vegetation For proposed changes see Section 17.4.3.2.9		High	Medium / High	Negative, Moderate / Significant and 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 the location and presentation of the Scherzer Bridges;
- Introduction of the pedestrian boardwalks to North Wall Quay;
- Introduction of the DPTOB across the confluence of the River Liffey and River Dodder;
- Modifications in areas of amenities, tree plantings, properties, boundaries; and
- Changes in traffic, pedestrian and cycle movements.

These effects may be temporary, short-term, medium-term, long-term or permanent.

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

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

17.4.4.1 Impact on Townscape and Streetscape Character

As set out in Section 17.3.1, the Proposed Scheme is sub-divided into three townscape / streetscape character areas:

- Section 1 - Talbot Memorial Bridge to Tom Clarke East Link Bridge;
- Section 2 - DPTOB; and
- Section 3 - Tom Clarke East Link Bridge to Sean Moore Road.

17.4.4.1.1 Talbot Memorial Bridge to Tom Clarke East Link Bridge

For the most part, the Operational Phase of the Proposed Scheme will provide for minor changes along existing road corridors and the Campshires. However, the Operational Phase will involve substantial changes at specific locations, most notably in terms of the relocation of the Scherzer Bridges at George's Dock and the Royal Canal. While the changes will not alter the overall townscape character along this section of the Proposed Scheme, the Scherzer Bridges are important features of the road corridor and urban realm. The separation and repositioning of the structures within an altered high quality urban realm / landscape setting will retain the visual relationship of the structures with their original siting but negates their historic lifting bridge function on the main carriageway. In crossing the Royal Canal, the Proposed Scheme will also see alterations in the existing road, footpath and quayside levels and tie-ins on the north quays, particularly at the Convention Centre Dublin and the tie-in at the Samuel Beckett Bridge. However, the Proposed Scheme will also provide high quality stone paving on sections of the quays, and for replacement and new tree planting along the north quays and improved accessibility and new vantage points with the provision of the pedestrian boardwalks along Custom House Quay and North Wall Quay. The magnitude of change is medium. The significance of the effect will be reduced over time as the changes become more accepted elements of the townscape and as replacement planting matures.

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

17.4.4.1.2 DPTOB

The provision of the DPTOB across the confluence of the River Liffey and River Dodder will introduce a significant modern bridge structure along the south quays. The structure will be visually prominent within this section of the Campshires between Samuel Beckett Bridge and Tom Clarke East Link Bridge, from the mouth of the Grand Canal and associated sister locks, and along the River Dodder north from Ringsend Bridge.

It is noted that this area of the city is also subject to significant on-going development and re-development, including the relatively recent provision of a pedestrian bridge (the Sean O'Casey Bridge in 2005) and a general traffic bridge (the Samuel Beckett Bridge in 2009) across the River Liffey. The DPTOB, which will open to accommodate movement of higher vessels (to and from Grand Canal Dock), will include for seating and viewing areas, planters for trees and shrubs, and stone paving. The DPTOB will also provide for full pedestrian and cycle connectivity along the south quays and for attractive views of the River Dodder / Grand Canal Dock and the River Liffey. Facilities at SPRC will be reinstated along the River Liffey, and a small local park amenity will be provided at the eastern end of the DPTOB at York Road / Thorncastle Street. There will be the introduction of an ESB substation into this space which will be a relatively minor visual detractor, but screening hedge planting will be provided to the periphery which will reduce the negative effects. The significance of the effect will be reduced over time as the changes become more accepted elements of the townscape and as replacement planting matures.

The changes will alter the overall townscape and streetscape character along this section of the Proposed Scheme. The magnitude of change is very high.

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

17.4.4.1.3 Tom Clarke East Link Bridge to Sean Moore Road

The Operational Phase of the Proposed Scheme will involve minor changes along existing road corridors, and through Ringsend Park and the open space adjacent to Irishtown Stadium.

The changes will not alter the overall townscape or streetscape character along this section of the Proposed Scheme. The magnitude of change is low. The significance of the effect will be reduced over time as the changes become more accepted elements of the townscape.

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

17.4.4.2 Impact on Streetscape Elements and Visual Impacts

17.4.4.2.1 Architectural Conservation Areas

There are no ACAs located along the Proposed Scheme.

17.4.4.2.2 Conservation Areas

The full extent of the north and south quays, including the confluence of the River Liffey and River Dodder is designated within the Liffey Quays Conservation Area. There is also overlap with the Royal Canal Conservation Area at Sea Lock and Guild Street, and with The Dodder Valley and Grand Canal Conservation Area between Britain Quay and Ringsend. The Proposed Scheme will involve substantial changes within the conservation area, most notably in the relocation of both sets of Scherzer Bridges at George's Dock and the Royal Canal (Figure 17.1 (Sheet 1 and 2 of 5) in Volume 3 of this EIAR), and the provision of the DPTOB across the confluence of the River Liffey and River Dodder (Figure 17.1 (Sheet 3 of 5) in Volume 3 of this EIAR). However, the Scherzer Bridges will be retained adjacent to their original location and set within a high-quality paved landscape, and the DPTOB will provide for full connectivity on the south quays in an area of on-going change and development. The magnitude of change in the baseline environment is medium / high for the Liffey Quays Conservation Area. The magnitude of change in the baseline environment is medium for the Royal Canal Conservation Area and the Dodder Valley and Grand Canal Conservation Area. The significance of the effect will be reduced over time as the changes, particularly the DPTOB, become more accepted elements of the townscape and as replacement planting matures.

The townscape / streetscape and visual impact of the Operational Phase on the Liffey Quays Conservation Area is assessed to be Neutral, Moderate / Significant and Short-Term, becoming Neutral, Moderate and Long-Term.

The townscape / streetscape and visual impact of the Operational Phase on the Royal Canal Conservation Area and the Dodder Valley and Grand Canal Conservation Area is assessed to be Neutral, Moderate and Short-Term, becoming Neutral, Slight / Moderate and Long-Term.

17.4.4.2.3 Residential Conservation Areas

Residential Conservation Areas, which are of high sensitivity, are located along sections of Pigeon House Road, Pembroke Cottages, and through Irishtown (Figure 17.1 (Sheet 3 to 5 of 5) in Volume 3 of this EIAR). The Operational Phase of the Proposed Scheme, which will largely entail the provision of quiet streets through these areas will have limited impact. The magnitude of change in the baseline environment is negligible.

The townscape / streetscape and visual impact of the Operational Phase on residential conservation areas is assessed to be Neutral, Not Significant and Short-Term, remaining the same into the Long-Term.

17.4.4.2.4 Protected Structures

A number of protected structures, which are of very high sensitivity, are located along the Proposed Scheme, mainly along the north and south quays. These include the Scherzer Bridges and lock walls at George's Dock and the Royal Canal, Custom House Quay, North Wall Quay and Sir John Rogerson's Quay, and the seawalls at Britain Quay, Thorncastle Street and York Road which are all directly impacted by the works (Figure 17.1 (Sheet 1 to 4 of 5) in Volume 3 of this EIAR). The Lock Keeper's Cottage (No. 986) and adjoining triple lock (Westmoreland, Buckingham, Camden Locks (No. 987)) at Grand Canal Dock are located close to the proposed DPTOB (Figure 17.1 (Sheet 3 of 5) in Volume 3 of this EIAR). The DPTOB will partly sever the visual connection between the locks / cottage and the River Liffey but the functionality of both will not be affected by the DPTOB, and the visual link between these and the rest of the Grand Canal Docks will not be disturbed. Otherwise, protected structures will not be directly impacted. The magnitude of change is medium. The significance of the effect is predicted to be reduced over time as the changes, particularly the DPTOB, become more accepted elements of the townscape.

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

Refer also to Chapter 16 (Architectural Heritage) for the assessment of impacts from a heritage perspective.

17.4.4.2.5 Amenity Designations

A number of amenities are located along the Proposed Scheme. These include the Campshires (Figure 17.1 (Sheet 1 to 3 of 5) in Volume 3 of this EIAR), the open space at the confluence of the River Dodder and River Liffey at York Road / Thorncastle Street (Figure 17.1 (Sheet 3 of 5) in Volume 3 of this EIAR), Ringsend Park (Figure 17.1 (Sheet 3 to 5 of 5) in Volume 3 of this EIAR), the grounds around Irishtown Stadium (Figure 17.1 (Sheet 4 to 5 of 5) in Volume 3 of this EIAR), and the open spaces at Sean Moore Road (Figure 17.1 (Sheet 5 of 5) in Volume 3 of this EIAR). The Operational Phase of the Proposed Scheme will have limited impacts on the Campshires, Ringsend Park, open spaces at Irishtown Stadium and Sean Moore Road while providing for replacement and new tree planting.

The Proposed Scheme will involve substantial changes in the relocation of both sets of Scherzer Bridges at George's Dock and the Royal Canal. However, the Scherzer Bridges will be retained adjacent to their original location and set within a high-quality paved landscape / urban realm, and they will accommodate new footpaths and cycle tracks improving access along the Campshires. There will be substantial removal of young trees along the Campshires, however, sections of the north Campshires will benefit from new tree planting in areas previously devoid of vegetation. The provision of the DPTOB will result in substantial changes at SPRC, which will be relocated to a new clubhouse / facility on the edge of the River Liffey, and for the adjoining open space at York Road / Thorncastle Street and Tom Clarke East Link Bridge, which will be reconfigured at the eastern end of the DPTOB with improved amenity and an increased number of trees. The reclamation of land from the River Liffey will increase the amount of open space available for amenity use. The rowing club will have no interruption to access or facilities, and the DPTOB will provide for full connectivity on the south Campshires and a new opportunity for viewing of the River Dodder / Grand Canal Dock, associated locks and the River Liffey. There will be the introduction of an ESB substation into this space which will be a relatively minor visual detractor, but screening hedge planting will be provided to the periphery which will reduce the negative effects. The magnitude of change is medium. The effect will change from neutral to positive as the changes, particularly the DPTOB, become more accepted elements of the townscape and as replacement planting matures.

The townscape / streetscape and visual impact of the Operational Phase on the Campshires and the open space at York Road / Thorncastle Street and Tom Clarke East Link Bridge is assessed to be Neutral, Moderate and Short-Term, becoming Positive, Moderate / Significant and Long-Term.

The townscape / streetscape and visual impact of the Operational Phase on Ringsend Park, the open space adjacent to Irishtown Stadium and Sean Moore Road, will have very minor impacts on the landscape fabric and tree planting. The magnitude of change is negligible.

The townscape / streetscape and visual impact of the Operational Phase on these amenities is assessed to be Neutral, Not Significant and Short-Term, remaining the same into the 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 specific preserved views east and west along the River Liffey / Campshires (Figure 17.1 (Sheet 1 to 3 of 5) in Volume 3 of this EIAR). Although the DPTOB will be visible, it will be seen in the context of an area of on-going change and development. The Operational Phase of the Proposed Scheme will not have notable impacts on the corridor of the River Liffey as they will form a generally small proportion of views when seen within the expansive nature of the protected views. The proposals are not uncharacteristic in a setting which already contains a high level of urbanisation and many notable bridge structures. The magnitude of change is low. The significance of the effect will increase over time as the changes, particularly the DPTOB, become more accepted elements of the townscape and as replacement planting matures.

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

17.4.4.2.8 Properties

The existing clubhouse of SPRC will need to be relocated as part of the Proposed Scheme. However, it is noted that demolition of the existing premises will not be undertaken until the new accommodation is completed, or alternative interim accommodation is agreed with and provided for SPRC. The Operational Phase of the Proposed Scheme will provide for a relocated clubhouse / facilities for SPRC. The magnitude of change is medium.

The townscape / streetscape and visual impact of the Operational Phase on these properties is assessed to be Neutral, Moderate and Short-Term, remaining the same into the Long-Term.

In addition to those properties directly affected, the Operational Phase of the Proposed Scheme will also result in visual impacts for other properties located along, fronting and viewing the Proposed Scheme. Impacts will arise from the general change in the road corridor, urban realm and traffic patterns. The magnitude of change is low. The significance of the effect will decrease over time, as the changes become more accepted elements of the townscape and as replacement planting matures.

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

17.4.4.2.9 Trees

The vast majority of the trees to be removed are only early-mature or semi-mature, and the Proposed Scheme will provide for replacement and new tree planting with a similar number of new trees (135 removed and 131 proposed). The magnitude of change is low.

The townscape and visual impact of the Operational Phase on trees and plantings will be Negative, Slight and Short-Term, becoming Neutral, Slight and Long-Term.

17.4.4.3 Potential Benefits

With the landscape measures incorporated into the design of the Proposed Scheme, there will be 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. These include new or improved footpath and cycle routes, improved or more visually appealing hard surfacing, street furniture and planting. These will result in minor localised improvements to streetscape character across the Proposed Scheme, such as at junctions with improved pedestrian and cycle access and the provision of new planting areas, trees and high-quality paving. In some cases, this can create a net benefit compared to the baseline landscape. This is the case for areas of the Campshires where there will be new tree planting in areas previously devoid of vegetation, improved foot and cycle access, and new high-quality surfacing. The amenity area at York Road / Thorncastle Street and Tom Clarke East Link Bridge will also experience a positive effect due to improved amenity, increased tree planting and better connectivity to the Campshires on the west side of the River Dodder via the DPTOB. Over the long-term, the negative effects associated with the removal of trees along many sections of the Proposed Scheme will reduce with the growth of replacement planting.

17.4.4.4 Summary of Potential Operational Phase Impacts

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

Table 17.8: Summary of Potential Operational Phase Impacts (at 1-Year Post Construction Phase)

Townscape Receptor		Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
Townscape and Streetscape Character				
Talbot Memorial Bridge to Tom Clarke East Link Bridge For proposed changes see Section 17.4.4.1.1		High / Very High	Medium	Neutral, Moderate and Short -Term
Dodder Public Transport Opening Bridge For proposed changes see Section 17.4.4.1.2		High	Very High	Neutral, Very Significant and Short-Term
Tom Clarke East Link Bridge to Sean Moore Road For proposed changes see Section 17.4.4.1.3		Medium / High	Low	Neutral, Slight and Short-Term
Streetscape Characteristics and Visual Impacts				
Architectural Conservation Areas (ACA)		N/A - there are no ACAs located along the Proposed Scheme		
Conservation Areas	Liffey Quays Conservation Area For proposed changes see Section 17.4.4.2.2	High	Medium / High	Neutral, Moderate / Significant and Short-Term
	Royal Canal Conservation Area, and Dodder Valley and Grand Canal Conservation Area For proposed changes see Section 17.4.4.2.2	High	Medium	Neutral, Moderate and Short-Term
Residential Conservation Areas For proposed changes see Section 17.4.4.2.3		High	Negligible	Neutral, Not Significant and Short-Term
Protected Structures For proposed changes see Section 17.4.4.2.4		Very High	Medium	Neutral, Moderate / Significant and Short-Term
Amenity Designations	The Campshires and open space at York Road / Tom Clarke East Link Bridge For proposed changes see Section 17.4.4.2.5	High	Medium	Neutral, Moderate and Short-Term
	Ringsend Park, open space adjacent to Irishtown Stadium and open spaces at Sean Moore Road For proposed changes see Section 17.4.4.2.5	High	Negligible	Neutral, Not Significant and Short-Term
Tree Preservation Orders / tree Protection Objectives		N/A - there are no TPO or specific objectives along the Proposed Scheme.		
Preserved Views / Scenic Views etc. For proposed changes see Section 17.4.4.2.7		High	Low	Neutral, Slight / Moderate and Short-Term
Properties	Non-residential properties included in temporary acquisition For proposed changes see Section 17.4.4.2.8	High	Medium	Neutral, Moderate and Short-Term

Townscape Receptor		Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
	Properties not included in permanent or temporary acquisition or with minimal direct contact For proposed changes see Section 17.4.4.2.8	High	Low	Neutral, Slight and Short-Term
Trees and Vegetation For proposed changes see Section 17.4.4.2.9		High	Low	Negative, Slight and Short-Term

17.5 Mitigation and Monitoring Measures

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

17.5.1 Construction Phase

A series of mitigation and management measures are proposed to avoid, reduce or remediate, wherever practicable, significant negative landscape (townscape) and visual effects of the Construction Phase of the Proposed Scheme. These measures are to be applied across the Proposed Scheme wherever necessary to avoid disturbance of landscape features or characteristics to be retained. Generally, the effect rating post-mitigation will be the same as pre-mitigation. However, the measures proposed should still be applied as necessary to manage the potential effects of construction activities. A summary of predicted Construction Phase impacts 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 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 / approved by a professional qualified arborist. For details of trees to be retained refer to Tree Protection Plans which are contained within Appendix A17.1 Arboricultural Impact Assessment in Volume 4 of this EIAR);
- Wherever practicable, trees and vegetation will be retained within the Proposed Scheme. This is of particular note where trees are a prominent and valuable asset within the urban realm such as along the Campshires and within the grounds of Ringsend Park and around Irishtown Stadium;
- 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 which are contained within Appendix A17.1 Arboricultural Impact Assessment in Volume 4 of this EIAR, and the Landscape General Arrangement drawings (BCIDD-ROT-ENV_LA-0016_ML_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 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 the commencement of construction works;
- Where properties are subject to permanent and / or temporary acquisition (as listed in Section 17.4.3.2.8 and 17.4.4.2.8), appropriate measures will be put in place by the appointed contractor to provide for protection of features, trees and vegetation to be retained, for continued access during construction, and for adequate security and screening of construction works;

- All temporary acquisition areas will be fully decommissioned and reinstated at the end of the Construction Phase or at the earliest time after the reinstatement works are completed to the satisfaction of the NTA. Where boundary features, gates, railings, archways of heritage importance (and which contribute to landscape value) are to be affected by the works, mitigation measures should follow those outlined in Chapter 16 (Architectural Heritage); and
- Appropriate access to amenities and public open spaces including the Campshires, Ringsend Park, and areas of open space at Irishtown Stadium and Sean Moore Road 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 CEMP in Volume 4 of the EIAR). This provides the environmental management framework to be adhered to during construction of the Proposed Scheme.

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

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
Townscape and Streetscape Character				
	Talbot Memorial Bridge to Tom Clarke East Link Bridge For proposed changes see Section 17.4.3.1.1	High / Very High	Medium / High	Negative, Moderate / Significant and Temporary / Short-Term
	Dodder Public Transport Opening Bridge For proposed changes see Section 17.4.3.1.2	High	Very High	Negative, Very Significant and Temporary / Short-Term
	Tom Clarke East Link Bridge to Sean Moore Road For proposed changes see Section 17.4.3.1.3	Medium / High	Medium	Negative Moderate Temporary / Short-Term
Streetscape Characteristics and Visual Impacts				
Architectural Conservation Areas (ACA)	There are no ACAs located along the Proposed Scheme	N/A		
Conservation Areas	The Liffey Quays Conservation Area: For proposed changes see Section 17.4.3.2.2	High	Very High	Negative, Very Significant and Temporary / Short-Term
	Royal Canal Conservation Area, and Dodder Valley and Grand Canal Conservation Area: For proposed changes see Section 17.4.3.2.2	High	Medium	Negative, Moderate and Temporary / Short-Term
Residential Conservation Areas	For proposed changes see Section 17.4.3.2.3	High	Low	Negative, Slight and Temporary / Short-Term
Protected Structures	For proposed changes see Section 17.4.3.2.4	Very High	High / Very High	Negative, Very Significant and Temporary / Short-Term

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts
Amenity Designations	The Campshires and open space at York Road / Tom Clarke East Link Bridge For proposed changes see Section 17.4.3.2.5	High	High / Very High	Negative, Very Significant and Temporary / Short-Term
	Ringsend Park, open space adjacent to Irishtown Stadium and open spaces at Sean Moore Road For proposed changes see Section 17.4.3.2.5	High	Low	Negative, Slight and 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		
Preserved Views / Scenic Views etc.	For proposed changes see Section 17.4.3.2.7	High	Medium	Negative, Moderate and Temporary / Short-Term
Properties	Non-residential properties included in temporary acquisition For proposed changes see Section 17.4.3.2.8	High	High	Negative, Significant and Temporary / Short-Term
	Properties not included in permanent or temporary acquisition or with minimal direct contact For proposed changes see Section 17.4.3.2.8	High	High	Negative, Moderate / Significant and Temporary / Short-Term
Trees and Vegetation For proposed changes see Section 17.4.3.2.9		High	Medium / High	Negative, Moderate / Significant and 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 Section 17.4.1.4 and Section 17.4.4. Therefore, while no mitigation or monitoring measures are proposed for the Operational Phase, the Proposed Scheme will become established and increasingly integrated within its landscape (townscape) setting, and the potential negative operational effects will be reduced. A comparative summary of predicted Operational Phase effects, at both 1 year post-Construction Phase and following the establishment of landscape measures at 15 years post-Construction Phase, is presented in Table 17.10.

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

Table 17.10: Summary of Predicted Operational Phase Impacts (at 1 and 15 Years Post-Construction Phase)

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change (with establishment of landscaping at 15 years post-construction)	Significance & Quality of Townscape / Streetscape / Visual Effects / Effects (at 1 year post-construction)	Significance & Quality of Effects (with establishment of landscaping at 15 years post-construction)
Townscape and Streetscape Character					
Talbot Memorial Bridge to Tom Clarke East Link Bridge For proposed changes see Section 17.4.4.1.1		High / Very High	Medium	Neutral, Moderate and Short-Term	Neutral, Slight / Moderate and Long-Term
Dodder Public Transport Opening Bridge For proposed changes see Section 17.4.4.1.2		High	Very High	Neutral, Very Significant and Short-Term	Neutral, Significant and Long-Term
Tom Clarke East Link Bridge to Sean Moore Road For proposed changes see Section 17.4.4.1.3		Medium / High	Low	Neutral, Slight and Short-Term	Neutral, Imperceptible / Slight and Long-Term
Streetscape Characteristics and Visual Impacts					
Architectural Conservation Areas (ACA)	There are no ACAs located along the Proposed Scheme	N/A			
Conservation Areas	Liffey Quays Conservation Area For proposed changes see Section 17.4.4.2.2	High	Medium / High	Neutral, Moderate / Significant and Short-Term	Neutral, Moderate and Long-Term
	Royal Canal Conservation Area, and Dodder Valley and Grand Canal Conservation Area For proposed changes see Section 17.4.4.2.2	High	Medium	Neutral, Moderate and Short-Term	Neutral, Slight / Moderate and Long-Term
Residential Conservation Areas For proposed changes see Section 17.4.4.2.3		High	Negligible	Neutral, Not Significant and Short-Term	Neutral, Not Significant and Long-Term
Protected Structures For proposed changes see Section 17.4.4.2.4		Very High	Medium	Neutral, Moderate / Significant and Short-Term	Neutral, Moderate and Long-Term
Amenity Designations	The Campshires and open space at York Road / Tom Clarke East Link Bridge For proposed changes see Section 17.4.4.2.5	High	Medium	Neutral, Moderate and Short-Term	Positive, Moderate / Significant and Long-Term
	Ringsend Park, open space adjacent to Irishtown Stadium and open spaces at Sean Moore Road For proposed changes see Section 17.4.4.2.5	High	Negligible	Neutral, Not Significant and Short-Term	Neutral, Not Significant and Long-Term
Tree Preservation Orders / tree Protection Objectives	There are no tree preservation orders (TPO) or specific objectives along the Proposed Scheme.	N/A			

Townscape Receptor		Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change (with establishment of landscaping at 15 years post-construction)	Significance & Quality of Townscape / Streetscape / Visual Effects / Effects (at 1 year post-construction)	Significance & Quality of Effects (with establishment of landscaping at 15 years post-construction)
Preserved Views / Scenic Views etc. For proposed changes see Section 17.4.4.2.7			High	Low	Neutral, Slight / Moderate and Short-Term	Neutral, Slight and Long-Term
Properties	Non-residential properties included in permanent acquisition For proposed changes see Section 17.4.4.2.8		High	Medium	Neutral, Moderate and Short-Term	Neutral, Moderate and 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	Low	Neutral, Slight and Short-Term	Neutral, Negligible / Slight and Long-Term
Trees and Vegetation For proposed changes see Section 17.4.4.2.9			High	Low	Negative, Slight and Short-Term	Neutral, Slight and Long-Term

17.5.2.1 Review of Photomontages

Photomontages have been prepared from key or illustrative viewpoints to give an indication of changes and potential effects resulting from the Proposed Scheme during the Operational Phase after the implementation of the Proposed Scheme. The proposed views are shown with proposed planting at approximately 10 to 15 years post-completion of the Construction Phase. The existing view available from the chosen viewpoint and the Proposed Scheme changes, as illustrated in the photomontages, are described. The photomontages have been prepared in accordance with the methodology set out in Section 17.2.4.8 and are included in Figure 17.2 in Volume 3 of this EIAR.

17.6.2.1.1 Views G2a and G2x – West from Convention Centre Towards Scherzer Bridge

View G2a and G2x: Baseline

Figure 17.2.1.1 and Figure 17.2.2.1 show the existing view taken from the west of the Convention Centre Dublin on North Wall Quay. In the centre of the view are two Scherzer Bridges carrying the road over the entrance to the Royal Canal. The road in this location is comprised of four lanes for general traffic which merge into two lanes, one crossing each bridge. Various railings and wall boundaries border the road separating it from a two-way cycle track to the left and a footpath and the Royal Canal to the right. The Samuel Beckett Bridge and buildings along the southern side of the River Liffey can be seen in the background of the view on the left. To the right, the background is formed by an office block at 30 North Wall Quay. Buildings, street trees and ornamental lighting columns can be seen in the distance further along North Wall Quay. The character is of an urban river-side road corridor with landmark structures in the form of the quays and the Samuel Beckett Bridge and Scherzer Bridges.

17.6.2.1.2 Views G2a and G2x – West from Convention Centre Towards Scherzer Bridge

View G2a and G2x: As Proposed

Figure 17.2.1.2 and Figure 17.2.2.2 show the proposed view from the same viewpoint during the Operational Phase. The primary change to the view is the overall raising of the road level, the widening of the road and the separation and relocation of the Scherzer Bridges. The bridges are relocated to either side of the widened road

to provide pedestrian and cycle access, and two-way cycle access is provided on the south side of the road. Footpaths are resurfaced with block paving. There is a change to the character of the view resulting from the widened road corridor and the relocation of the bridges. However, there is no impact on overall visual amenity.

17.6.2.1.3 View 3 – North-East from Samuel Beckett Bridge Towards Scherzer Bridge

View 3: Baseline

Figure 17.2.3.1 shows the existing view taken from the Samuel Beckett Bridge looking north-east towards North Wall Quay and the Scherzer Bridges at the Royal Canal. The bridges and central gantry structure occupy the centre of the views and the Convention Centre Dublin fills the background to the right of the frame. In the foreground is the northern edge of the River Liffey, defined by the quay wall along North Wall Quay intersected by the entrance to the Royal Canal. The quay wall is finished in fine brown stone ashlar, topped by a layer of light-coloured masonry retaining the ramp up to the Samuel Beckett Bridge. The two Scherzer Bridges and a small pedestrian bridge to the south side are visible crossing the canal entrance. Guild Street is visible to the left of the frame receding into the distance on the other side of North Wall Quay, with various buildings, lighting and street furniture. The character is of an urban waterside townscape with historic features and prominent modern development.

View 3: As Proposed

Figure 17.2.3.2 shows the proposed view from the same viewpoint during the Operational Phase. The primary changes to the view are the separation and relocation of the Scherzer Bridges to the outer edges of a widened road corridor and gantry relocated to the south (near) side of the road. There is an increase in the level of North Wall Quay and the approach ramp to the Samuel Beckett Bridge, with a greater expanse of light-coloured stonework to the top of the quay wall. The pedestrian bridge over the canal is removed and the function is carried out by the southernmost Scherzer Bridge. A new cycle track is provided to Guild Street which is visible passing into the distance on the left of the view. There will be a notable change to the character of the view although this will not be negative. The greater visibility of the Scherzer Bridges from the viewpoint and the reduction of visual clutter in the scene slightly improves the visual amenity of the view.

17.6.2.1.5 View 4 – South-East from Open Space Towards the Scherzer Bridge

View 4: Baseline

Figure 17.2.4.1 shows the existing view looking south-east from the open space at Guild Street towards the Scherzer Bridges crossing the Royal Canal. In the foreground is grassland and a number of small trees within the open space. This is divided from North Wall Quay by a masonry wall. The Scherzer Bridges and central gantry structure are visible above the wall in the centre of the frame, partly screened by the small trees in the foreground. The background is composed of large blocks of mixed development along the south side of the River Liffey at Sir John Rogerson's Quay. The character is of a small open space with substantial historic bridge structures set within an urban riverside context.

View 4: As Proposed

Figure 17.2.4.2 shows the proposed view from the same viewpoint during the Operational Phase. The primary changes in the view are the relocation of the Scherzer Bridges with the northern bridge moving closer in the view and becoming slightly more visually prominent. The central gantry structure and southern bridge have moved further from the viewpoint but remain visible. The masonry wall bordering North Wall Quay is raised in height and slightly realigned. There are minor changes to various boundary railings and walls. There would be no notable change to the character or visual amenity.

17.6.2.1.7 View 6 – East Along Liffey Quay at North Wall Quay

View 6: Baseline

Figure 17.2.5.1 shows the existing view looking east along the Liffey Quays at North Wall Quay. The River Liffey is a prominent feature in the view filling the bottom right of the view. The foreground on the left is occupied by a

commercial retail building located on the quays with a curved elevation facing the river. The Samuel Beckett Bridge is a landmark element crossing the river in the middle distance against a backdrop of large-scale modern mixed development along Sir John Rogerson's Quay. The road along North Wall Quay is barely visible in the far left of the frame, but an adjacent hotel block is visible framing the view to the left. The character is of an extensive urban riverside townscape / waterscape with open views and prominent modern development.

View 6: As Proposed

Figure 17.2.5.2 shows the proposed view from the same viewpoint during the Operational Phase. The primary change to the view is the introduction of a new pedestrian boardwalk cantilevered over the river from the edge of the quay. The existing iron railing to the quay edge is removed along the length of the proposed boardwalk. Bollards to North Wall Quay are removed but this is not particularly visible in the view. The proposed boardwalk will provide for improved accessibility along the quay with no notable change to the character or visual amenity of the view.

17.6.2.1.9 View 7 – East Along Liffey Quay at North Wall Quay

View 7: Baseline

Figure 17.2.6.1 shows the existing view from the Sean O'Casey Bridge looking north-west towards the Scherzer Bridges at the entrance to George's Dock from the River Liffey. The railings and structural elements to the edge of the bridge fill the foreground of the view. The River Liffey is visible to the left of the view defined by the quay walls along Custom House Quay, the historic buildings of Custom House and the CHQ Building, and the tall modern commercial development around George's Dock (including the IFSC) are prominent features in the background of the view. Small trees along the quay help soften the streetscape. The character is of an extensive urban riverside townscape / waterscape with open view and prominent historic and modern development.

View 7: As Proposed

Figure 17.2.6.2 shows the proposed view from the same viewpoint during the Operational Phase. The primary change to the view is the relocation and 180 degree rotation of the Scherzer Bridges. The main vertical structure of the bridges is closer and more prominent, and there is a widening of the road carriageway along Custom House Quay and various changes to the layout and surfacing which are barely visible. There would be no change to the character or visual amenity of the view.

17.6.2.1.11 View 8 – West from CHQ Towards Scherzer Bridge

View 8: Baseline

Figure 17.2.7.1 shows the existing view taken from Custom House Quay looking west towards the Scherzer Bridges crossing the entrance to George's Dock. The bridges carry the road carriageway and are orientated with their elevated counterweights to the west. The bridges are prominent against the skyline and form the focal point of the view. Commercial buildings surrounding George's Dock and on the south side of the river, including the landmark George's Quay Plaza, are also prominent features. The road at this point is composed of two lanes for general traffic separated with a stone paved median, with an advisory cycle lane on the near (north) side. A pedestrian paved open space is present to the right of the view to the west of the CHQ Building, which is out of shot immediately to the right. An ornamental lighting post is present next to the road and there are several flag posts and trees within the paved space. There is a mixture of railing boundary treatments in the view. The character is of an urban riverside road corridor with prominent historic bridge structures and modern development.

View 8: As Proposed

Figure 17.2.7.2 shows the proposed view from the same viewpoint during the Operational Phase. The primary change to the view is the relocation to the edge of the road and a 180 degree rotation of the lifting bridges. The bridges are closer and more prominent, and the vertical counterweight structure is more imposing in the view. There is a widening of the road carriageway along Custom House Quay to provide two general traffic lanes and two bus lanes. Cycle tracks are provided to the southern side of the quay using the southern bridge. The character is notably changed by the increased visual extents and prominence of the bridges in the view. The bridges are

prominent but not overbearing and represent an interesting sculptural feature in the view. There is no change to visual amenity.

17.6.2.1.13 View 9 – North-East from the Quay at Custom House Quay Towards Scherzer Bridge

View 9: Baseline

Figure 17.2.8.1 shows the existing view taken from Custom House Quay looking north-east towards the Scherzer Bridges crossing the entrance to George's Dock. The bridges carry the road carriageway and are orientated with their elevated counterweights to the west. The bridges are prominent against the skyline and form the focal point of the view. Commercial buildings surrounding George's Dock are visible in the background. In the foreground is a paved public space with a stone roundel inset into the paving with inscriptions. There is a segregated cycle lane to the edge of the public space, but the road carriageway along the quay is only partly visible and is largely screened by the bridge parapets. A variety of railings and ornamental lighting poles can be seen throughout the view. The character is of an urban road with substantial historic bridge structures,

View 9: As Proposed

Figure 17.2.8.2 shows the proposed view from the same viewpoint during the Operational Phase. The primary change to the view is the relocation to the edge of the road and a 180 degree rotation of the Scherzer Bridges. The bridges are repositioned further from the viewpoint with their elevated counterweights on the far side which greatly reduces their visual prominence. The road is increased in width and buildings in the background are less screened becoming more visible. The CHQ and Triumphal Arch at George's Dock are considerably more visible. There is a notable change in the character with the reduction of the extents of the bridges in the view but there is no loss of visual amenity.

17.6.2.1.15 View 10 – North-East from Park / Plaza at Capital Dock

View 10: Baseline

Figure 17.2.9.1 shows the existing view east / north-east from the open space at Capital Dock looking over the confluence of the River Dodder and the River Liffey. The view is mainly filled by the expanse of water of the two rivers. In the middle of the view along the Liffey, is the Tom Clark East Link Bridge, as well as ships, cranes and other development at Dublin Port. The view is framed by tall residential or commercial development to each side. The existing SPRC building is partly visible across the channel and the access ramp to the water is present to the far bank. The foreground is occupied by a footpath, benches, and planting along the edge of the open space. The character is of an urban riverfront townscape / expansive waterscape with prominent port and built-up areas surrounding.

View 10: As Proposed

Figure 17.2.9.2 shows the proposed view from the same viewpoint during the Operational Phase. The introduction of the proposed DPTOB across the River Dodder, between Sir John Rogerson Quay and Thorncastle Street / York Road, occupies a large extent of the view. The DPTOB is of a contemporary design with a visually dynamic form. The deck is supported by two pier 'islands' at the centre of the river and is clad underneath in a distinctive red finish. Two trees are present to the top of the central pier and there is an overhanging pedestrian space to either side. The bridge is an attractive structure, however, open views to the River Liffey are screened. A new area of open space, replacing an existing space, is provided at the eastern (far) end of the bridge and the replacement clubhouse for SPRC is located on the north side of the DPTOB. The access ramp at Thorncastle Street to the River Dodder is retained. There would be a substantial change to the character of the view due to the loss of open views, but the DPTOB provides for connectivity along the southern quays and will not have a negative effect on the visual amenity.

17.6.2.1.19 View 12 – South-West from Tom Clarke East Link Bridge

View 12: Baseline

Figure 17.2.11.1 shows the existing view taken from Tom Clarke East Link Bridge looking south-west towards the mouth of the River Dodder and its confluence with the River Liffey. The confluence forms a large expanse of water in the foreground of the view. To the background are various commercial and residential developments in typically six to eight storey blocks, with the 22 storey tower of Capital Dock a prominent feature at corner of the quays. A small jetty with moored boats extending out from the south bank of the River Liffey is present on the left of the view. Several semi-mature trees along the south bank are adjacent to York Road on the left. The character is of an urban riverfront townscape / expansive waterscape with prominent built-up areas.

View 12: As Proposed

Figure 17.2.11.2 shows the proposed view from the same viewpoint during the Operational Phase. The primary change in the view is the introduction of a new area of land extending out into the River Liffey accommodating a new two-storey club replacement building for SPRC. The original jetty is removed and replaced on the northern edge of the new land extension and the new clubhouse is prominent in the view. The proposed DPTOB is visible to the right of the new club building. There would be a substantial change in the character and visual amenity of the view through the loss of visible extents of open water and loss of views of the mouth of the River Dodder. The new building and bridge are of an attractive design but there would be a notable effect on visual amenity.

17.6.2.1.17 View 12a – North from Ringsend Bridge

View 12a: Baseline

Figure 17.2.10.1 shows the existing view taken from Ringsend Bridge looking north along the River Dodder towards its confluence with the River Liffey. There is four storey residential development to the right (east) side of the river in an attractive early twentieth century style. To the left (west) is a footpath, high wall with street art bordering the overgrown graving docks at Grand Canal Dock. Modern mixed development surrounds Grand Canal Dock and the recently completed tall tower at Capital Dock is prominent in the background. Buildings along the north side of the River Liffey provide the background to the centre of the view. The character is of a major river corridor surrounded by a mixture of urban development.

View 12a: As Proposed

Figure 17.2.10.2 shows the proposed view from the same viewpoint during the Operational Phase. The primary change to the view is the introduction of the proposed DPTOB. The DPTOB represents a very prominent element in the view due to being located at the focal point of the mouth of the River Dodder and in the use of a distinctive red colouring on the underside of the deck. When the bridge is open, the upright deck also forms a prominent vertical element in the view. There would be a minor, but neutral, change to the character of the overall view or visual amenity.

17.6.2.1.21 View 13 – West from Thorncastle Street / Apartments

View 13: Baseline

Figure 17.2.12.1 shows the existing view taken from the access ramp to the River Dodder / River Liffey at Thorncastle Street looking north-west across the mouth of the River Dodder where it joins the River Liffey. The view is mainly filled by the expanse of water at the confluence of the two rivers. The mix of modern and on-going developments at North Wall Quay are visible in the centre of the view across the River Liffey. The view is framed by tall commercial development to each side. An access ramp to the water with railings and an ornamental historic lamp post is present in the foreground. The character is of an urban riverfront townscape / expansive waterscape with prominent built-up areas surrounding.

View 13: As Proposed

Figure 17.2.12.2 shows the proposed view from the same viewpoint during the Operational Phase. The primary change to the view is the introduction of the proposed DPTOB. The bridge occupies a large extent of the view. The bridge is of a contemporary design with a visually dynamic form. The deck is supported by two single pier ‘islands’ in the centre of the river and the underdeck is finished in red material. Planters and trees are incorporated on the bridge and on top of the pier where an overhanging pedestrian / seating space is also provided. The bridge is an attractive structure, however, open views of the River Liffey and buildings along North Wall Quay are screened out. There would be a substantial change to the character of the view due to the loss of open views with a notable effect on the visual amenity.

17.6 Residual Impacts

17.6.1 Construction Phase

Mitigation of landscape (townscape) and visual impacts during the Construction Phase is focused on ensuring protection of elements to be retained (e.g. mature trees) and providing for a degree of visual screening of particular aspects of the works (e.g. the Construction Compounds). Construction Phase effects are temporary or short-term in nature and the proposed mitigation measures will be effective at ensuring adequate protection to features that are not identified for permanent removal as part of the works. However, it is acknowledged that, for the most part, effective Construction Phase mitigation for the majority of 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, Construction Phase impacts remain unchanged in the post-mitigation and monitoring scenario, as set out in Table 17.11.

Table 17.11: Summary of Predicted Construction Phase Residual Impacts (Moderate or Higher)

Townscape Receptor		Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects
Townscape and Streetscape Character				
Talbot Memorial Bridge to Tom Clarke East Link Bridge For proposed changes see Section 17.4.3.1.1		High / Very High	Medium / High	Negative, Moderate / Significant and Temporary / Short-Term
Dodder Public Transport Opening Bridge For proposed changes see Section 17.4.3.1.2		High	Very High	Negative, Very Significant and Temporary / Short-Term
Tom Clarke East Link Bridge to Sean Moore Road For proposed changes see Section 17.4.3.1.3		Medium / High	Medium	Negative, Moderate and Temporary / Short-Term
Streetscape Characteristics and Visual Impacts				
Conservation Areas	The Liffey Quays Conservation Area For proposed changes see Section 17.4.3.2.2	High	Very High	Negative, Very Significant and Temporary / Short-Term
	Royal Canal Conservation Area, and Dodder Valley and Grand Canal Conservation Area For proposed changes see Section 17.4.3.2.2	High	Medium	Negative, Moderate and Temporary / Short-Term
Protected Structures For proposed changes see Section 17.4.3.2.4		Very High	High / Very High	Negative, Very Significant and Temporary / Short-Term

Townscape Receptor		Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects
Amenity Designations	The Campshires and open space at York Road / Tom Clarke East Link Bridge For proposed changes see Section 17.4.3.2.5	High	High / Very High	Negative, Very Significant and Temporary / Short-Term
Preserved Views / Scenic Views etc. For proposed changes see Section 17.4.3.2.7		High	Medium	Negative, Moderate and Temporary / Short-Term
Properties	Non-residential properties included in temporary acquisition For proposed changes see Section 17.4.3.2.8	High	High	Negative, Significant and Temporary / Short-Term
	Properties not included in permanent or temporary acquisition or with minimal direct contact For proposed changes see Section 17.4.3.2.8	High	High	Negative, Moderate/ Significant and Temporary / Short-Term
Trees and Vegetation For proposed changes see Section 17.4.3.2.9		High	Medium / High	Negative, Moderate / Significant and Short-Term

17.6.2 Operational Phase

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

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

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Effects (with establishment of landscaping at 15 years post-construction)
Townscape and Streetscape Character				
	Talbot Memorial Bridge to Tom Clarke East Link Bridge For proposed changes see Section 17.4.4.1.1	High / Very High	Low / Medium	Neutral, Slight / Moderate and Long-Term
	Dodder Public Transport Opening Bridge For proposed changes see Section 17.4.4.1.2	High	High	Neutral, Significant and Long-Term
Streetscape Characteristics and Visual Impacts				
Conservation Areas	Measures will ensure longer-term integration of Proposed Scheme albeit with significant changes in the relocation of both sets of Scherzer Bridges at the Royal Canal and George's Dock, and the provision of Public Transport Bridge across the mouth of the River Dodder. For proposed changes see Section 17.4.4.2.2	High	Medium	Neutral, Moderate and Long-Term

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Effects (with establishment of landscaping at 15 years post-construction)
	Royal Canal Conservation Area, and Dodder Valley and Grand Canal Conservation Area For proposed changes see Section 17.4.4.2.2	High	Low / Medium	Neutral, Slight / Moderate and Long-Term
Protected Structures	Measures will ensure longer-term integration of Proposed Scheme and changes to Protected Structures notably the Scherzer Bridges at the Royal Canal and George's Dock and the wider setting of the locks and lock-keeper's cottage at the DPTOB. For proposed changes see Section 17.4.4.2.4	Very High	Low / Medium	Neutral, Moderate and Long-Term
Amenity Designations	The Campshires and open space at York Road / Tom Clarke East Link Bridge For proposed changes see Section 17.4.4.2.5	High	Medium	Positive, Moderate / Significant and Long-Term
Properties	Non-residential properties included in permanent acquisition For proposed changes see Section 17.4.4.2.8	High	Medium	Neutral, Moderate and 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 large-scale construction works, such as at the Scherzer Bridges, the DPTOB, temporary and / or permanent acquisition of lands associated with properties including amenities, and where tree removal is required. The Proposed Scheme includes for replacement of disturbed landscaping, 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, due to the improvements to urban realm, replacement and additional planting, and improved access and amenity space, which negate any negative impacts, the Proposed Scheme would result in neutral residual townscape and visual effects. The Proposed Scheme would provide for improved urban realm at the Campshires and open space at York Road / Thorncastle Street and Tom Clarke East Link Bridge which would result in an overall positive effect for these amenity designations.

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