

# **Planning Statement**

**Grand Canal Storm Water Outfall Extension** 

**Client:** Dublin City Council May 2022

Connecting people.
Connecting places.

# **Contents**

Introduction	2
1.1 Site Location and Description	2
1.2 Application Details	3
Project Context	5
2.1 Planning History	5
2.2 Existing Conditions	5
Proposed Development	7
3.1 Development Description	7
3.2 Commissioning and Construction	8
Legislative & Planning Policy Context	10
4.1 European Context	10
4.2 National Context	11
4.3 Regional Policy	12
4.4 Local Policy	13
4.5 Other Reports & Support Studies	15
Key Planning Considerations	17
5.1 Principle of Development	17
5.2 Environmental Impact Assessment Report	18
5.3 Water Quality	20
5.4 Air Quality	20
5.5 Noise and Vibration	21
5.6 Traffic and Transport	21
5.7 Archaeology and Cultural Heritage	22
5.8 Appropriate Assessment	23

# Introduction

Dublin City Council (DCC) are seeking planning permission from An Bord Pleanála (ABP) for the Grand Canal Storm Water Outfall Extension (GCSWOE) under the provisions of Section 226 of the Planning and Development Act 2000 (as amended). This planning statement has been prepared in support of the project and sets out the background context for the proposals in question, a description of the planned works, summary of key guiding policy and objectives, as well as an overview of key planning matters. This statement should be read in conjunction with the submitted Environmental Impact Assessment Report (EIAR), Natura Impact Statement (NIS) and other submitted plans and particulars.

# Legend Grand Canal Tunnel Storm Water Outfall Extension Existing Proposed Dubin Dubin

# 1.1 Site Location and Description

Figure 01 Overview of Grand Canal Storm Water Outfall Extension

The subject application relates to proposed stormwater upgrade works in the vicinity of the Grand Canal Dock Basin. The basin consists of an enclosed harbour where the Grand Canal terminates before it meets the River Liffey in Dublin City. The subject site extends from a southern point in the Grand Canal Basin at the existing Grand Canal Tunnel Outfall running northwards underneath McMahon Bridge and extending through the outer basin parallel to Grand Canal Quay, through a section of Hanover Quay, Asgard Road, and Sir John Rogerson's Quay (SJRQ) to a new outfall on the southern side of the River Liffey.

The south docks in this area were historically the focus of heavy industry which gave way to dereliction and contamination issues when these industries declined. The area has experienced considerable redevelopment since the late 1990s and is now a hub of modern apartment buildings and office space, with a strong presence of multi-national organisations and indigenous corporate headquarters. This is supplemented strongly by entertainment, cultural, and recreational activities. Adventure and water-based recreation activities have come to the fore as part of the rejuvenation of the area, with the Grand Canal Docks becoming the focus for wakeboarding, wind surfing, kayaking and paddle boarding activities. The site is located within the North Lotts and Grand Canal Dock Strategic Development Zone (SDZ), with this planning scheme and preceding policies directly shaping the regeneration of the area.

# 1.2 Application Details

#### 1.2.1 Section 226 of the Planning and Development Act 2000 (as amended)

The majority of the proposed development is located inward of the foreshore line. However, the works to the outfall to the River Liffey lie within the defined foreshore area. This has been verified through engagement with the Department of Housing, Planning and Local Government. Accordingly, this application is being made in accordance with Section 226(1) of the Planning and Development Act 2000 on the basis that it relates to a Local Authority proposed development which is intended to be carried out wholly or partly on the foreshore and which requires environmental impact assessment.

#### 1.2.1 Other Consents

In addition to planning permission, the following consents and considerations are also required for construction and operation of the proposed development.

#### The Waste Water Discharge (Authorisation) (WWDA) Regulations 2007 (as amended)

The project will be constructed in the area licenced (WWDA) for the Ringsend Agglomeration. The Ringsend agglomeration had a licence issued in 2010 (Licence D0034-01). The combined sewer overflows spilling to the Grand Canal Tunnel Sewer were listed in the original WWDA application documents. Irish Water are in process of submitting a license review for the Ringsend agglomeration to account for the numerous overflows and the upgrade project at the plant. The proposed project will be included in the license review.

## **Foreshore License**

The location of the proposed outfall structure on the Sir John Rogerson's Quay Wall is between the high and low water marks and hence a foreshore license under the Foreshore Act 1933 (as amended) will be obtained for the works to be undertaken.

A Foreshore Licence dated 18/04/2002 and extended to 17/04/2008 had been obtained for the proposed development. The status and validity of this licence was reviewed, and it was concluded that a new application for a licence will need to be made. The application process for the foreshore license will be initiated following the planning application and will take account of the planning conditions attached to the permission if approved.

#### 1.2.1 Environmental Impact Assessment Report (EIAR)

The subject application is accompanied by an EIAR. Prior to lodgment of this application, the Department of Housing, Planning and Local Government has been notified of this and of the locations at which the EIAR can be viewed along with the application plans and particulars. An

acknowledgement of this submission to the Department is enclosed with this application to An Bord Pleanála.

# 1.2.1 Stakeholder Engagement

#### **Prescribed Bodies**

A copy of this application, including the plans and particulars and EIAR, has been issued to the following 'relevant' prescribed bodies, prior to its submission to An Bord Pleanála.

Minister for Housing, Local Government and

Heritage

Minister for Environment, Climate and

Communications

Minister for Transport
Minister for Tourism, Culture, Arts, Gaeltacht,

Sport and Media

Minister of Agriculture, Food and the Marine

National Transport Authority
Transport Infrastructure Ireland

Córas Iompair Éireann An Taisce

Inland Fisheries

Commission for Railway Regulation.

Arts Council (An Chomhairle Ealaíon)

The Heritage Council

Health Service Executive Health & Safety Authority

Geological Survey of Ireland Environmental Protection Agency Eastern and Midland Regional Assembly

Fáilte Ireland Irish Water

Waterways Ireland

In addition to making hard copies of the application plans and particulars and the EIAR available for public inspection at the offices of An Bord Pleanala and Dublin City Council, the application, drawings, NIS and EIAR are also available to view and download at the following website address:

#### www.dublincity.ie/GrandCanalOutfall

## **Other Engagement**

As part of the preparation of this EIAR, Irish Water and Dublin City Council undertook consultation with the public, interested parties, and prescribed bodies in respect of the proposed development. A list of key stakeholders is set out under Section 3.8 of the EIAR.

Alongside this, a pre-application meeting was held with the Foreshore Licensing Unit, a consultation meeting was held with Dublin City Council Transport Department regarding traffic management in the area during construction phase, with focused engagement with other departments and bodies also completed by design team members for the purposes of preparing individual chapters of the EIAR. Consultations were carried out with Dublin Port Company and regular meetings have been undertaken with Waterways Ireland regarding works within the basin.

A number of communications tools and channels were utilised including:

- A Frequently Asked Questions (FAQ) document;
- Project information pages on Irish Water and Dublin City Council website;
- Press release to regional newspapers; and
- Public Information Day Webinar. List of invitees included local organisations and businesses. A
  full list of invitees to the webinar is attached in the Volume 3, Part 2, Appendix 3B.

# **Project Context**

# 2.1 Planning History

In the early 1990's, arising from development and upgrading of the Grand Canal Docks and its environs, the Office of Public Works (who had responsibility for dock maintenance/operation) requested that the storm water discharge from the Grand Canal Tunnel be removed from the Grand Canal Basin. A study carried out by J. B. Barry and Partners in 1992 identified possible alternative options for re-routing the storm water discharge away from the Docks into the River Liffey. A preferred option was identified, cost estimates were prepared, and a report was submitted recommending implementation of the proposed project outlined herein.

In October 2000 Dublin Corporation instructed J. B. Barry and Partners to carry out a review of the extension of the Grand Canal Surface Water Outfall through the Grand Canal Docks to a new outfall at the River Liffey.

Phase 1 was completed in 2002 which saw the construction of a 170m long 4.0x2.7m box culvert underneath Asgard Road, between Hanover Quay and Sir John Rogerson's Quay. Phase 2 of this project, as it relates to the subject proposal, involves the connection of the Grand Canal Tunnel to the box culvert completed as part of Phase 1, and the construction of the outlet structure in the River Liffey at Sir John Rogerson's Quay. In 2008/ 2009 the design prepared for Phase 2 proceeded to tender and a Section 25 certificate was granted by the Dublin Docklands Development Authority (DDDA). However, the project was put on hold in 2012 and was not progressed primarily due to the economic downturn. In 2015 the DDDA dissolved, and the Section 25 certificate became void. In 2017 a feasibility study was completed to consider three more alternative pipeline routes through the basin and assess the most appropriate option. It was concluded that the original option was the optimal solution.

# 2.2 Existing Conditions

The Grand Canal Tunnel in Dublin City Centre was constructed in the early 1970's (Figure 2) in order to:

- Convey foul sewerage from the newly expanding suburbs in the west of the city to Ringsend Wastewater Treatment Plant;
- Provide a conduit for the overflows from the existing combined foul and storm sewers; and
- To convey storm relief flows from the Poddle and Swan Rivers thereby reducing the risk of flooding in those areas.

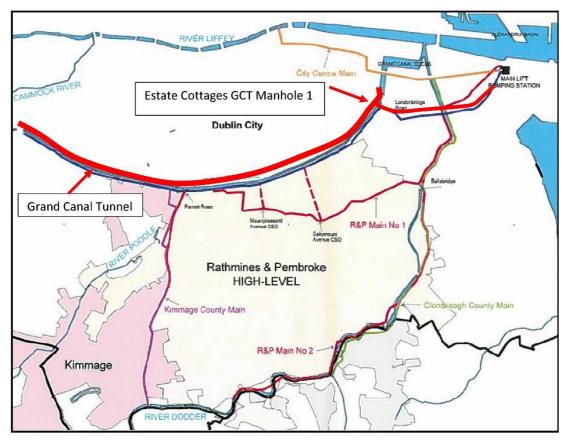


Figure 02 Grand Canal Tunnel

The existing tunnel is 4.8km in length and has a diameter of 3.6m. The tunnel is partitioned into two separate sections. The smaller compartment caters for foul wastewater and the larger compartment caters for stormwater. At Estate Cottages, Northumberland Road (Manhole 1) the tunnel splits, with the foul component being conveyed to Ringsend Wastewater Treatment Plant and the stormwater component being conveyed to the Grand Canal Basin via a 3.2m diameter pipe.

After heavy rainfall, combined sewer overflows in the catchment spill into the stormwater component and discharges sewage contaminated flows into the Grand Canal Basin. Periodic bacteriological contamination of the water in the Basin (in excess of the bathing water standards) after heavy rainfall events has been identified by Waterways Ireland from water quality testing and they have urged Irish Water/ Dublin City Council to extend the outfall to the River Liffey as proposed.

A Joint Working Group comprising Irish Water, Dublin City Council, and Waterways Ireland has been examining the issue of periodic bacteriological contamination in the Basin. Extensive water quality analysis and monitoring of the impact of the surface water overflows into the Basin from the Irish Water combined sewer network for a period of one year has been undertaken. It has been demonstrated that the primary source of pollution of the waters in the Basin is the discharge from the storm water section of the Grand Canal Tunnel.

Since the discharge cannot be closed off, the best solution is to relocate the discharge point to a location outside the Basin. The most preferred location for the discharge point is the River Liffey. Since its construction, it was always intended that the Grand Canal Tunnel would be extended into the River Liffey.

# **Proposed Development**

# 3.1 Development Description

Chapter 2 of the submitted EIAR includes a detailed description of the proposed works and the associated construction methodology. The proposed extension to the Grand Canal Storm Water Outfall will comprise the construction of pipework, transition chambers, floating platforms and a new outfall structure to the River Liffey consisting of the following:

- Construction of Transition Chamber 1 at chainage Ch.+0m (Starting at southernmost point of development at existing storm water outfall);
- Construction of 5 no. 1.5m diameter pipes from chainage Ch.+7.26 Ch.+310.00m;
- Construction of Transition Chamber 2 at chainage Ch.+310.00 Ch.+320.00m;
- Construction of Twin 2.4m dimeter pipes from chainage Ch.+320.00 Ch.+490.00m;
- Construction of Transition Chamber 3 at chainage Ch.+490.00m;
- Construction of 4m wide 2.7m high (internal diameter) culvert on Hanover Quay;
- Construction of new outfall structure at Sir John Rogerson's Quay into the River Liffey, and
- Construction of a permanent floating platform along Grand Canal Quay.

The total length of the pipeline to be constructed is 550m. The proposed works involve 450m of development on the silt bed of the Grand Canal Basin, and 100m along existing road and pedestrian infrastructure, as illustrated in Figure 03. The route is proposed to traverse underwater through the centre of the southern portion of the Basin, pass underneath the MacMahon Bridge, then bear close to the western wall of the Basin. The pipeline will enter Transition Chamber 3 at Hanover Quay and will run underground along the quay before connecting with the existing pipeline on Asgard Road. Please refer to the submitted site layout plans, sections and technical detail drawings by J. B. Barry and Partners.

To facilitate the proposed construction works, three temporary cofferdams will be built at each of the transition chambers including:

- Transition Chamber 1 at the existing Grand Canal Tunnel Outfall;
- Transition Chamber 2 at the transition point from the 5 No. 1.5m diameter pipeline to the 2 No.
   2.4m diameter pipeline; and
- Transition Chamber 3 at Hanover Quay.

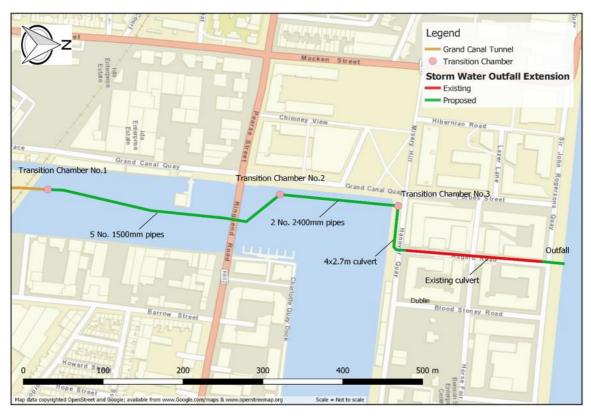


Figure 03 Grand Canal Storm Water Outfall pipeline within the Grand Canal Docks

As set out in the submitted EIAR, the connection to the existing Grand Canal Tunnel will be made at Transition Chamber No.1. The works in question will require the temporary removal of the existing moorings in the dock owned by Waterways Ireland for the duration of the construction phase.

# 3.2 Commissioning and Construction

The proposed works will be undertaken on the basis of a construction contract which will be awarded following a full procurement process, to be undertaken pursuant to any grant of planning permission.

The duration of the construction phase for the civil works on the subject lands is 24 months and will be subject to a strict phasing programme reflecting the central urban location of the site and a desire to minimise any potential for negative impacts in the local environment. This process will be governed by strict environmental controls, as well as health and safety procedures. A Construction and Environmental Management Plan (CEMP) accompanies this application. It sets out a detailed suite of environmental protection measures to be implemented on site during the construction phase. The CEMP identifies all the potential issues which are relevant to the project, such as construction safety; traffic management; environmental risk assessment and management; waste management; and environmental management. The CEMP specifically outlines how to address these and to provide solutions which are satisfactory to all concerned. Having regard to this, contract-specific CEMPs will be further prepared by the Contractor (subject to Client approval) at construction stage.

To facilitate the works areas, 3 no. construction compounds will be used by the contractor. The location of these construction compounds are shown below for reference. The locations in question

have been derived at following discussions between Dublin City Council, Waterways Ireland and other stakeholders. Proposed access to the works areas for the project are as follows:

- Hanover Quay- Access to Hanover Quay is via Forbes Street and SJRQ. Both of these streets are currently two-way streets;
- SJRQ Access to SJRQ is from City Quay or Pearse Street (via Macken Street and Cardiff Lane)
   all of which are two-way streets. Boat access to the agreed working area in the River Liffey shall
   be in accordance with the navigation rules and as agreed with the Dublin Port Company; and
- Grand Canal Docks- Boat access in the Grand Canal Dock shall be in accordance with the navigation rules and as agreed with Waterways Ireland.

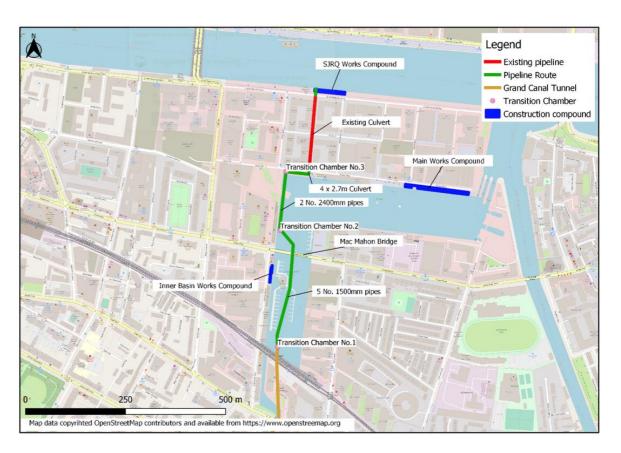


Figure 04 Location of construction compounds in contex of the proposed development

# **Legislative & Planning Policy Context**

Chapter 3 of the accompanying EIAR sets out in detail the legislative context governing the planning and development of the proposed project. This section of the statement provides a summary of key guiding provisions.

# **4.1 European Context**

#### 4.1.1 EU Water Framework Directive (2000/60/EC)

The Water Framework Directive (WFD) established a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater with the objective to protect and improve water quality in all waters to achieve good ecological status by 2015 or, at the latest, by December 2027. Specifically, the WFD aims to, inter alia, prevent further deterioration of and enhance the status of aquatic ecosystems; promote sustainable water use based on a long-term protection of available water resources; enhance, protect and improve the aquatic environment through measures such as the progressive reduction of discharges, emissions and losses of priority substances and the cessation or phasing-out of discharges, emissions and losses of the priority hazardous substances.

# 4.1.2 Environmental Impact Assessment Directive (Consolidated 2011/92/EU and 2014/52/EU)

Transposed into Irish Legislation, through the European Union (Planning and Development) (Environmental Impact Assessment) Regulations (S.I. 296 of 2018), the sub-threshold EIAR that accompanies this application has been prepared in accordance with the provisions of this directive, which has been transposed into Irish legislation by the Planning and Development Acts 2000 to 2019 (the "Planning Acts"), the Planning and Development Regulations, 2001 (as amended) and the European Union (Planning and Development) (Environmental Impact Assessment) Regulations (S.I. 296 of 2018).

## 4.1.3 Birds and Natural Habitats Directives

Adopted in 1992, the Council Habitats Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora aims to promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements. It establishes the EU wide Natura 2000 ecological network of protected areas, safeguarded against potentially damaging developments. An Appropriate Assessment (AA) Screening Report carried out for the proposed development, in line with this legislative requirement, concluded that there was a possibility of significant effects to Natura 2000 sites and that a Natura Impact Statement (NIS) should be prepared. The accompanying NIS was carried out in accordance with the Directive.

#### 4.1.4 Public Participation Directive (2003/35/EC)

The public participation part of the Aarhus Convention has been implemented by Directive 2003/35/EC. Under this, the general public has a right to participate effectively in decision-making in environmental matters. The requirements under the directive have been transposed into Irish planning law and legislation governing other environmental licenses and consents. All associated statutory obligations have been considered in full as part of the preparation of the subject application.

#### 4.2 National Context

## 4.2.1 Water Services Policy Statement 2018-2025

Setting out the government's expectations for the delivery and development of water and wastewater services, it includes amongst its priorities, investment in urban wastewater management to support the protection of high-status waters and to achieve water quality improvements in other water bodies to support the achievement of objectives for designated shellfish-growing and bathing waters

The policy objectives outlined include:

- 'Bringing and maintaining public water and wastewater services to acceptable international benchmarks, verified by independent monitoring and reporting';
- Achieving improved outcomes in quality in respect of drinking water and in wastewater in relation to rural and private water services;
- Adopting forward planning and risk management approaches to minimise the impact of noncompliances with all relevant EU Directives and to safeguard against future compliance risks'.

# 4.2.2 River Basin Management Plan for Ireland 2018-2021

The River Basin Management Plan outlines the approach that Ireland will take for the protection of waters over the period to 2021, including investment in wastewater treatment to help improve water quality and implementation of local measures to address water quality issues. The Plan contains an extensive list of key actions, which include the following:

- 'Investment in wastewater treatment by Irish Water to help improve water quality and prevent deterioration of quality in targeted water bodies;
- Scientific assessments of water bodies and implementation of focused local implementation measures to address water quality issues;
- The development of water and planning guidance for local authorities to help consider the risks to water quality during planning and development decision-making'.

# 4.2.3 Project Ireland 2040 - National Planning Framework

The National Planning Framework (NPF) is the principal national planning policy document for the country. The purpose of the document is to create the conditions to successfully accommodate growth and positive change. The NPF includes a list of 'shared goals' across the country framed as 10 National Strategic Outcomes (NSOs). This includes NSO 9 related to 'Sustainable Management of Water, Waste and Other Environmental Resources'. Water Infrastructure is listed as a strategic investment priority in the NPF.

A key focus of the NPF is the achievement of 'compact, smart, sustainable growth' In the case of Dublin, the framework identifies some key future growth enablers to achieve same, inclusive of:

- 'Improving sustainability in terms of energy, waste and water, to include district heating and water conservation';
- Public realm and urban amenity projects, focused on streets and public spaces, especially in the area between the canals and where linked to social regeneration projects;
- Delivery of the metropolitan cycle network set out in the Greater Dublin Area Cycle Network Plan inclusive of key commuter routes and urban greenways on the canal, river and coastal corridors'.

The protection and enhancement of water resource and development of green ecosystems are key focuses in the NPF, as reflected in a number of dedicated objectives.

National Policy Objective 57:

• 'Ensuring that River Basin Management Plan objectives are fully considered throughout the physical planning process'.

National Policy Objective 60:

• 'Conserve and enhance the rich qualities of natural and cultural heritage of Ireland in a manner appropriate to their significance'.

National Policy Objective 63:

 'Ensure the efficient and sustainable use and development of water resources and water services infrastructure in order to manage and conserve water resources in a manner that supports a healthy society, economic development requirements and a cleaner environment'.

## 4.3 Regional Policy

# 4.3.1 Regional Spatial and Economic Strategy for the Eastern and Midland Region (RSES)

The Regional Spatial and Economic Strategy for the Eastern and Midland Region (RSES) is a 12-year strategic regional development framework to guide development in the region. It establishes a broad framework for the way in which society, environment, economy and the use of land should evolve. The primary aim of the RSES is to implement Project Ireland 2040 at the regional tier.

The Strategy indicates that collaboration between national, regional and local public bodies is crucial to ensuring our water and environmental resources are managed properly for the future, including incorporating a circular economic approach.

The RSES seeks the provision of infrastructure and services in a sustainable, planned and infrastructure led manner to ensure the sustainable management of water, waste and other environmental resources. The key Regional Policy Objectives (RPOs) relating to the sustainable management of water and the achievement of water quality include:

RPO 7.10: 'Support the implementation of the Water Framework Directive in achieving and maintaining at least good environmental status for all water bodies in the Region and to ensure alignment between the core objectives of the Water Framework Directive and other relevant Directives, River Basin Management plans and local authority land use plans'.

RPO 7.25: 'Support local authorities and state agencies in the delivery of sustainable strategic greenways, blueways, and peatways projects in the Region under the Strategy for the Future Development of National and Regional Greenways'.

Within this, the strategy identifies the potential 'to position Dublin Docklands as a significant water-focussed amenity and develop the Grand Canal and Spencer Docks as the urban gateways to the Grand and Royal Canals'.

RPO 10.10: 'Support Irish Water and the relevant local authorities in the Region to eliminate untreated discharges from settlements in the short term, while planning strategically for long term growth in tandem with Project Ireland 2040 and in increasing compliance with the requirements of the Urban Waste Water Treatment Directive from 39% today to 90% by the end of 2021, to 99% by 2027 and to 100% by 2040'.

RPO 10.15: 'Support the relevant local authorities (and Irish Water where relevant) in the Region to improve storm water infrastructure to improve sustainable drainage and reduce the risk of flooding in the urban environment and in the development and provision at a local level of Sustainable Urban Drainage solutions'.

# 4.4 Local Policy

## 4.4.1 Dublin City Development Plan 2016-2022

The current Dublin City Development Plan (2016-2022) sets out policies and objectives to guide how and where development will take place in the city over the lifetime of the Plan.

Chapter 4 of the Plan establishes the shape and structure for Dublin City in planning terms. In relation to the continued development of Dublin Docklands, it states that the key challenge is ensuring that that character is retained and enhanced and that the Docklands is seen as being an integral part of the city centre. It notes, inter alia, that 'the active use of the public realm in the Docklands to host events and the use of the waterbodies, such as the Grand Canal Dock, for active leisure or recreational uses significantly enhances the vitality of this evolving urban environment'.

The Plan identifies the North Lotts and Grand Canal Dock SDZ as the principal scheme for the focused development of the Docklands, where the development of recreation and leisure amenities, and public realm are identified as key supporting infrastructure to be delivered commensurate with employment and housing development.

Chapter 9 of the Plan identifies that pollution of water sources, including from surface water, poses a significant environmental risk. The Plan includes a number of polices and objectives to address this, including:

- SI14: 'To promote and maintain the achievement of at least good status in all water bodies in the city'.
- Sl16: 'To promote the protection and improvement of the aquatic environment, including through specific measures for the progressive reduction or cessation of discharges and emissions'.

<sup>&</sup>lt;sup>1</sup> Chapter 7 underlines the importance of developing a clean and well-protected environment to support human health and wellbeing, whilst providing a natural resource for tourism.

- SI06: 'To implement the European Union Water Framework Directive through the implementation of the appropriate River Basin Management Plan and Programme of Measures'.
- SI013: 'To provide additional and improved surface water networks to both reduce pollution and allow for sustainable development'.

Chapter 10 of the Plan 'Green Infrastructure, Open Space & Recreation' recognises that landscape and key open spaces in Dublin City provide for critical amenity, sense of identity and place. It is Council policy to promote and develop these as key resources.

- GI07: 'To promote the city landscapes, including rivers, canals and bay, as a major resource for the city and forming core areas of green infrastructure network'.
- GI017: 'To seek the continued improvement of water quality, bathing facilities and other recreational opportunities in the coastal, estuarine and surface waters in the city and to protect the ecology and wildlife of Dublin Bay'.

# 4.4.2 Draft Dublin City Development Plan 2022-2028

Dublin City Council is presently reviewing the current Dublin City Development Plan 2016-2022 and preparing a new City Development Plan for the period 2022-2028<sup>2</sup>.

Section 10.5.5 of the Draft Plan emphasises the importance of the city's rivers and canals as an integral part of the green infrastructure network. It highlights that the city's rivers are not achieving 'good ecological status' as per the Water Framework Directive. This is due to a number of factors including upstream pollution, sewer overflows / misconnections and urban runoff.

• Gl29: 'To protect, maintain, and enhance the watercourses and their river corridors in the city and to ensure that development does not cover or encroach upon rivers and their banks. To maintain natural river banks and restore them as part of any new development. The creation and/or enhancement of river corridors will be required and river restoration opportunities where possible will be supported to help improve water quality, and ecology, provide natural flood relief as well as providing amenity and leisure benefits'.

The Draft Plan includes a focused objective to deliver on the Water Animation Strategy for the Docklands.

• Gl034: 'To support the implementation of the North Lotts and Grand Canal Dock SDZ Docklands Water Animation Strategy 2018 to promote the Dublin Docklands as a significant water focussed amenity and the sustainable use of the waterways as an integral part of the vitality and experience of Dublin Dock - lands, that enhances the area as a world class destination for living, doing business, tourism, leisure and cultural activities'.

# 4.4.3 North Lotts and Grand Canal Dock Strategic Development Zone (SDZ) Planning Scheme 2013

Part of the Dublin Docklands' area, including the Grand Canal Docks is located within an area designated as the North Lotts and Grand Canal Dock Strategic Development Zone (SDZ). The

<sup>&</sup>lt;sup>2</sup> The pre-draft consultation ended on the 22<sup>nd</sup> February 2021 and it is envisaged that the new plan will be adopted in Q4 2022.

planning scheme for the area was approved by An Bord Pleanála on the 16th May 2014 and has directly shaped the planning and development of the 66 hectare area over the intervening years.

In addition to a number of policies relating to the protection of surface water quality, the Planning Scheme includes specific policy objective SI3 which sets out to:

'To complete, as a priority, the relocation of the Grand Canal Surface Water Outfall from the Grand Canal Dock Basin to the River Liffey'.

It is key policy focus of the Scheme to leverage the unique maritime qualities and city centre location of the Docklands to further develop the areas' tourism and leisure offer. Within this, it is noted that the historic character of the Docklands is 'embodied in its vital relationship with the water bodies', but that maximising the recreational, tourism and cultural use of these in the area remains a challenge due to heritage and environmental sensitivities. The Planning Scheme encourages the use of the waterfront and water bodies for family attractions, outdoor activities, sports events and the development of waterside facilities.

- TL1: 'To promote the water bodies as part of Docklands' identity and ensure water-based leisure, business, tourist and sporting activities are encouraged and supported in a sustainable manner'.
- TL2: 'To promote the SDZ area as a destination for cultural tourism and encourage the use of Grand and Royal Canals for leisure and recreational purposes'.
- TL6: 'To support retention of existing leisure and sports activities in the area and encourage new facilities for the Docklands community and visitors to the area, and that they meet the needs of all members of the existing and future communities'.
- TL9: 'To promote the recreational use of the water including the rowing, paddling and boating club activities in the area and to seek to ensure that any new infrastructure is provided in a manner which safeguards and protects these recreational resources'.

The theme of promoting water-based recreation and events is emphasized also in Chapter 4.12 of the Scheme related to 'Public Realm', which includes the following focused objectives:

- PR2: 'To promote water-based recreation and events'.
- PR10: 'To support the development of flexible and moveable publicly accessible leisure facilities on the water space and the campshires to facilitate changes in demand'.

# 4.5 Other Reports & Support Studies

#### 4.5.1 Dublin Docklands Social Infrastructure Audit 2015

A supporting evidence base document for the North Lotts and Grand Canal Dock SDZ, this report was commissioned to examine the current context with respect to social infrastructure provision in the Dublin Docklands, to determine future requirements and make recommendations on priority areas for investment. The report highlights that more could be done to utilise the valuable water-based amenities of the area, particularly during summer months. This would engender important quayside vibrancy and help expand the recreational sports offer in the Docklands. It identifies the need for the formal development of an improved programme of water-based activities.

# 4.5.1 North Lotts and Grand Canal Dock SDZ Water Animation Strategy 2018

In 2018, Dublin City Council prepared this strategy in consultation in Waterways Ireland and Dublin Port Company.

The strategy positions Grand Canal Dock as a vibrant area which has emerged as one of the busiest in the city and that this has been complemented "on-water by a range of tourist and leisure craft and water sports activities". It notes that due to water quality issues, immersive water sports are not currently permitted, with the following opportunity identified:

'Improved water quality to improve user experience and enhance biodiversity. Creation of a 'Blue Playground' within the Grand Canal Dock that allows for the delivery of an all year around local, national and international immersive water based events and animation program'.

The Implementation section of the strategy includes 6 planned actions to be advanced by the Council in partnership with Waterways Ireland, Dublin Port Company and Irish Water, with listed action 3 stating the following:

'Proceed with planning application and detailed engineering design for the extension of the surface water outfall from into Grand Canal Dock to the Liffey to improve water quality in Grand Canal Dock'.

## 4.5.2 Waters Edge Tourism Framework for Docklands

Prepared as a joint initiative between CHQ/EPIC, Fáilte Ireland, Dublin City Council and Waterways Ireland with input from a range of existing businesses in the area, this document was prepared with a focus on developing a strong tourism plan for the Docklands. It includes three key clusters around which the appeal of the area is framed, one of which is Grand Canal Dock. The recommended actions of the report include the following:

- Capital investment to remedy the water quality issue to achieve all year bathing water quality to deliver Grand Canal Dock as The Blue Playground in Dublin.
- Creation of a water sports hub on Charlotte Quay.
- Develop a year round programming and animation strategy to provide an exciting and balanced range of heritage, cultural, sports, recreational and wellbeing activities.

# **Key Planning Considerations**

# **5.1 Principle of Development**

As outlined in the submission documentation, the subject application is being brought forward to address pollution issues in Grand Canal Basin arising specifically from the existing stormwater outfall discharging combined/foul sewerage into the southern end of the Basin (also known as the Inner Docks) during periods of high rainfall. The long retention time and low throughput of water through the Basin make it vulnerable to pollution after these events. It has resulted in severe instances of microbiological contamination and associated complaints to the EPA. The application is the culmination of the work of a Joint Working Group comprising Irish Water, Dublin City Council and Waterways Ireland to examine the issue, with extensive water quality analysis and monitoring confirming that the primary source of the periodic pollution of the waters in the Basin is the discharge from the surface water section of the Grand Canal Tunnel. The proposed development represents a direct intervention which will reduce pollution and improve the water quality in Grand Canal Basin.

The proposed development is supported by statutory provisions and policy objectives, as evidenced in Section 04 of this statement. A failure to act on the existing pollution issue will mean that the water in the basin will not be able to achieve the desired Water Framework Directive objective to achieve 'Good' status. The proposed development will enhance, protect and improve the aquatic environment in accordance with the Water Services Policy Statement 2018-2025 and National Planning Framework including NSO 9 'Sustainable Management of Water, Waste and Other Environmental Resources' and National Policy Objective 63 to manage and conserve water resources in a manner that supports a healthy society, economic development requirements and a cleaner environment. At a local level, the requirement to achieve 'Good' status in water bodies and take a progressive approach to discharges is further underlined under policy objectives S114 and S116 of the Dublin City Development Plan 2016-2022. The importance of the subject project in this regard is underlined through a dedicated policy objective in the planning scheme for the North Lotts and Grand Canal Dock Strategic Development Zone 'to complete, as a priority, the relocation of the Grand Canal Surface Water Outfall from the Grand Canal Dock Basin to the River Liffey'.

Alongside environmental considerations, the promotion of water-based amenities, recreational and tourism activities is a foremost aim of adopted policy. Immersive watersports are not currently permitted in Grand Canal Dock due to water quality issues. Grand Canal Dock is an amenity of great importance to wider Dublin City and it is an objective to promote and positively develop such resources as well as improve water quality/bathing facilities under Gl07 and Gl17 of the Dublin City Development Plan 2016-2022. The development of recreation and leisure amenities is a key cornerstone of the North Lotts and Grand Canal Dock SDZ, as supported by a multitude of policies which include TL1, TL2, TL6, TL9, PR2 and PR10 of the planning scheme. As part of the Water Animation Strategy for the Docklands, it is the aim to position Grand Canal Dock as a vibrant area complemented 'on-water by a range of tourist and leisure craft and water sports activities' and deliver a 'Blue Playground' that allows for the delivery of an all year around local, national and international immersive water based events and animation program. The proposed development is

critical to the achievement of this, which is re-emphasised in the Draft Dublin City Development Plan 2022-2028 under Gl034 'to support the implementation of the North Lotts and Grand Canal Dock SDZ Docklands Water Animation Strategy 2018 to promote the Dublin Docklands as a significant water focused amenity and the sustainable use of the waterways as an integral part of the vitality and experience of Dublin Dock - lands, that enhances the area as a world class destination for living, doing business, tourism, leisure and cultural activities'.

# **5.2 Environmental Impact Assessment Report**

The subject application is accompanied by an EIAR. The decision to prepare an EIAR was taken following a screening exercise in 2020 whereby it could not be concluded that there is no real likelihood of significant effects on the environment associated with the proposed development. Consequently, the screening report advocated adopting the precautionary principle, and in the interests of providing a quantified statement of any impacts to the Board, recommended that the project be subject to a full EIA as prescribed under the EIA Directive 2014/52/EU).

#### 5.2.1 EIAR Team

Article 5(3)(a) of amended EIA Directive (2014/52/EU) (EIA Directive) states that 'the developer shall ensure that the environmental impact assessment report is prepared by competent experts'. The Draft Guidelines on the Information to be contained in Environmental Impact Assessment Reports issued by the EPA in August 2017 highlights the need for competent experts to be involved in the EIA process and in the preparation of the EIAR.

The EIAR for this project has been prepared by J. B. Barry & Partners with additional specialist input provided by competent experts in a variety of disciplines. Responsibility for individual sections of the EIAR is as listed in the table below. A description of experts who have contributed to this EIAR, their qualifications, experience and any other relevant credentials is provided in each individual section of the accompanying EIAR.

EIAR Section	Consultant	
Non-Technical Summary	J.B. Barry and Partners Ltd.	
Introduction	J.B. Barry and Partners Ltd.	
Description of Proposed Development	J.B. Barry and Partners Ltd.	
Legislative Context	HW Planning	
Assessment of Alternatives	J.B. Barry and Partners Ltd.	
Population and Human Health	HW Planning	
Biodiversity	JBA Consulting	

Water Quality and Hydrology	J.B. Barry and Partners Ltd./ DHI Water Environments (UK) Ltd.	
Land, Soils, Geology and Hydrogeology	J.B. Barry and Partners Ltd.	
Air Quality and Climate	AWN Consulting (A Trinity Consultants Company)	
Noise and Vibration	AWN Consulting (A Trinity Consultants Company)	
Traffic and Transport	J.B. Barry and Partners Ltd.	
Archaeology and Cultural Heritage	Archaeological Consultancy Services Unit (ACSU), The Archaeological and Commercial Diving Company (ADCO)	
Waste Management	J.B. Barry and Partners Ltd.	
Material Assets	J.B. Barry and Partners Ltd.	
Landscape and Visual Impact	JBA Consulting	
Summary of Interactions	J.B. Barry and Partners Ltd.	
Summary of Mitigation	J.B. Barry and Partners Ltd.	
Summary of Residual Impacts	J.B. Barry and Partners Ltd.	
Cumulative Impacts	J.B. Barry and Partners Ltd.	
Overall Co-ordination and Management of EIAR	J.B. Barry and Partners Ltd.	

# 5.2.1 EIAR Findings

Please refer to the EIAR, supporting appendices and non-technical summary for the environmental report's key findings. On the basis of the assessment of potential impacts and the recommended mitigation measures in the EIAR, it has been determined that the proposed development is not likely to impose any significant adverse effects on the environment. The majority of impacts on the environment are either non-existent or of imperceptible/slight significance.

# **5.3 Water Quality**

The proposed development is located within Liffey and Dublin Bay Catchment (WFD Catchment ID 09) and Dodder\_SC\_010 Sub-catchment (WFD Sub-catchment ID 09\_16). Grand Canal Basin is a contained waterbody in the Grand Canal Docks. Water quality in the Grand Canal Basin has been adversely affected over recent years by the existing stormwater outfall of the Grand Canal Tunnel which periodically contains combined/foul sewerage and discharges into the southern end of the Inner Basin after periods of high rainfall.

Based on the 2013-2018 EPA monitoring information and data, both the Liffey Estuary Lower and Dublin Bay have 'Good' WFD status classification. The WFD Status for Grand Canal Basin (Liffey and Dublin Bay) has downgraded from' Good' in the 2010-2015 WFD cycle to 'Moderate' in the 2013-2018 WFD assessment cycle and it identified under 'Risk' of failing to meet the WFD objectives by 2027. During the construction phase, there is potential for temporary impacts on water quality to occur due to the mobilisation of sediments or accidental releases into the water bodies. On implementation of the appropriate mitigation measures, it is expected that the potential impact during construction will be effectively mitigated. The residual impact during operation of the proposed development is assessed to be positive due to the improvement of water quality within the Grand Canal Basin. The principal operating impact of the extension of the stormwater outfall to River Liffey will be a localised change in the water quality of the receiving waters. The impact on the water quality within the River Liffey will be slight/imperceptible. The dilution and dispersal of contaminants will result in the change in concentration of water quality parameters 0.1-2% downstream of the mixing zone. It has been demonstrated that there will be no change in the WFD status of the Lower River Liffey or Dublin Bay and there will be no impact on the designated bathing waters of Dublin Bay.

During the operational phase, the water quality in the River Liffey will be monitored by the EPA (as part of the WFD). Dublin City Council will monitor the water quality from the new stormwater outfall. The water monitoring will enable comparison with the results of the modelling of the predicted water quality to ensure there will be no negative impact on River Liffey and downstream habitats and species.

# 5.4 Air Quality

The potential impact on air quality from this project arises during the construction phase with potential for dust emissions and nuisance dust. Chapter 9 of the submitted EIAR confirms that the local surrounding area is of medium sensitivity to dust soiling impacts and of low sensitivity to potential human health impacts as a result of dust emissions. Works will take place directly within a section of the Grand Canal Proposed Natural Heritage Area (pNHA) which is considered a low sensitivity area to potential dust related ecological impacts. Based on required excavation and pilling works, there is an overall low risk of dust soiling impacts and a negligible risk of dust related human health impacts and ecological impacts as a result of the proposed activities. A review of potential traffic emissions from the construction phase confirms that the proposed development will not significantly impact NO<sub>2</sub> concentrations in the vicinity of the site and concentrations will remain similar to background levels.

Due to the nature of the proposed development, there will be no emissions to atmosphere during the operational phase. No odorous emissions are predicted at the outfall pipe to the River Liffey during the operational phase due to the nature of the water passing through the outfall being stormwater, which is unlikely to contain particularly odorous components.

The EIAR includes a number of proactive mitigation measures for the control of dust which have been incorporated into the project CEMP.

#### 5.5 Noise and Vibration

An environmental noise survey has been conducted to determine baseline noise levels at the nearest noise sensitive locations to the proposed development. During the construction phase, noise and vibration considerations will extend principally to the establishment of cofferdams, some demolition of the existing outfall structure and quay walls and culvert construction. The impact assessment conducted for the construction activity has highlighted that the predicted construction noise levels will be within the adopted criteria. Nevertheless, it will be a requirement for the contractor to employ and implement best practice construction noise and vibration management techniques throughout the construction phase in order to further reduce the noise and vibration impact to nearby noise sensitive receptors.

During the operational development, the only mechanical plant that may be required is a small motor to operate the penstock gate. Mechanical noise from this motor will be completely inaudible at both the nearest noise sensitive location and the nearest public amenity area or walkway.

Noise and vibration monitoring will be undertaken during the construction phase at the nearest noise sensitive location to the works area. Noise and vibration monitoring will be undertaken in accordance with larnród Éireann requirement at Transition Chamber 1 near the railway line. Vibration monitoring will also be completed during piling work at the Outfall works area. This will be secured by means of the preparation of a Noise and Vibration Management Plan.

# **5.6 Traffic and Transport**

There are a series of local roads and streets linking the site with the Regional Road Network, which include Grand Canal Quay, Pearse Street, Macken Street, SJRQ and Samual Beckett Bridge. Due to the nature of the proposed development, the potential for traffic and transport impacts relate to the construction stage only. It is important to note that the temporary construction compounds for the project are located within the Dublin City Council HGV Cordon Area as per the Council's HGV Management Strategy. There is a ban on 5+ axle vehicles during the hours of 07.00-19.00 seven days a week from a designated cordon area. As a result of this, access to the site for such vehicles will be outside the hours of operation for the cordon or by approved permit to load/unload in the city centre area under the terms of the HGV Management Strategy.

During the construction phase, the exact sequence and programme of works will be determined by the contractor, however assuming an even distribution of deliveries throughout the construction period it has been estimated that 7 HGV arrivals and 7 HGV departures will occur daily. As set out in Chapter 11 of the submitted EIAR, an additional allowance has been made of 35% of the average daily HGV traffic occurring in the off-peak period, based on TII Project Appraisal Guidelines. Overall, the traffic model generated for the development illustrates that it will not result in any significant impact to the operation of the SJRQ/ Macken St junction in the AM or PM peak scenarios or the Pearse St (R802) /Grand Canal Quay/ Ringsend St junction in the PM peak scenario. While the proposed development may result in impacts to the Pearse St (R802) /Grand Canal Quay/ Ringsend St junction in the AM peak scenario, this is based on a worst-case estimate of traffic generation and will be short-term in duration.

A number of focused measures have been devised and will be put in place to ensure there are no adverse traffic impacts arising from the construction stage.

- Construction related HGV trips will adhere rigidly to the DCC HGV Management Strategy and associated cordon;
- A Preliminary Traffic Management Plan will be drafted by the Project Supervisor Design
  Process for the works in full consultation with Dublin City Council, An Garda Síochána, the Fire
  Service and the Ambulance service prior to the issuing of tender documents;
- Either a stop and go or a temporary traffic signal system will be utilised to maintain two-way traffic flow on SJRQ where possible;
- Delivery vehicles will not utilise Blood Stoney Road to access the works site.
- Tracked excavators will be moved to and from the site on low-loaders and will not be permitted to drive on the street pavements;
- The Contractor is to arrange for staff parking. Contractor's, subcontractor's or supplier's
  vehicles or staff vehicles, or any vehicles associated with the works are not permitted to park,
  idle or queue on the public road network;
- Wheel washers / judder bars will be placed at all site access points to minimise the migration of detritus onto the public roads, where appropriate. The roads will be inspected and cleaned on a regular basis;
- Haul vehicles will be covered after loading to ensure there is no risk of construction material falling or to any prevent any nuisance due to dust particles;
- Water bowsers will be deployed within the sites during periods of hot weather to damp down potential dust generation from unbound surfaces;
- An Application for an Abnormal Load Permit will be made to Dublin City Council in advance for any abnormal loads exceeding the thresholds laid out in the Road Traffic (Construction and Use of Vehicles) (S.I. No. 5/2003) Regulations 2003. Where possible abnormal load movements will be restricted to evening or night-time to minimise disruption to local traffic and traffic on strategic routes.

It is not anticipated that the proposed development will result in any trip generation in the operational phase.

# 5.7 Archaeology and Cultural Heritage

The Grand Canal Dock including Hanover Quay is listed in the National Inventory of Architectural Heritage. The north part of the site at SJRQ, is located within the banks of the River Liffey, that are within the Dublin City Zone of Archaeological Potential (DU018-020), and Sir John Rogerson's Quay (DU018-020201-). In addition, the site is located within the Grand Canal Docks Basin (NIAH Reg No. 50020499), that is listed in the National Inventory of Architectural Heritage and Dublin City Industrial Heritage Record and also forms a part of Canal Docks/ Britain Quay basin triple sea locks (RPS 987). There is a number of Protected Structures, architectural heritage structures as well as structures listed in the Dublin City Industrial Heritage Record (DCIHR) located along the Grand Canal Docks

Basin. The only DCIHR asset located within the site is represented by Victoria Draw Bridge/MacMahon Bridge<sup>3</sup>.

There are two direct impacts on sites of known archaeological and cultural heritage significance arising from the proposed development. The first is the proposed storm water outfall to the River Liffey which will have a moderate impact on a small section of SJRQ. Specifically, the proposed outfall will necessitate the removal of a small section (c. 13m) of the granite ashlar quay walls directly opposite Asgard Rd. This will be partially reinstated around the outfall. The second direct impact on a site of known cultural heritage significance is located along the north end of the Grand Canal Docks at Hanover Quay where the construction of the pipeline will require the removal of a small section (c. 7.3m) of the quay wall. Detailed pre-construction and construction phase mitigation is proposed in respect of these and other works areas. Archaeological monitoring of all ground disturbance associated with the proposed development with the provision for recording and excavation (if required) will mitigate any potential impact and preserve any archaeological, architectural and cultural heritage features identified by record.

# **5.8 Appropriate Assessment**

An Appropriate Assessment (AA) Screening Report was prepared by J. B. Barry & Partners in 2020 on behalf of the Applicant. It identified the presence of surface water pathway between the proposed project site and South Dublin and River Tolka Estuary SPA (004024), North Bull Island SPA (004006) and North Dublin Bay SAC (000206), with the potential for significant impact on these Natura 2000 sites. An AA Stage 2 Natura Impact Statement (NIS) has therefore been produced.

The NIS prepared by JBA Consulting assesses the screened-in Natura 2000 sites in more detail and examines where potentially adverse impacts may arise from the sources of impact identified. Where potentially adverse impacts are identified, avoidance and mitigation measures are proposed. The potential impact from the proposed project is posed during construction and relates to resuspension of sediment within the Grand Canal Basin when installing the new 450m pipeline and potential for surface water runoff from the construction works. This, along with the accidental spill of concrete and runoff of pollutants, such as hydrocarbons from machinery, has the potential to impair the water quality of the SPAs and SAC. A detailed suite of mitigation measures are proposed which include water quality and silt controls with the installation of a silt curtain around the area of works within the basin and the use of bunding around the works along Hanover Quay. It is concluded that provided that the mitigation measures outlined are strictly adhered to, adverse effects are not likely to occur from the works involved with the proposed Grand Canal Storm Water Outfall Extension at Grand Canal Docks, Dublin, either alone or in-combination with other projects and plans on any of the Natura 2000 sites.

During the operation of the project, untreated water from the stormwater, with intermittent overflow from combined sewer, will discharge to the River Liffey at Sir John Rogerson's Quay during periods of heavy rainfall. The discharge may sometimes contain concentrations of faecal coliforms, BOD, nutrients and suspended solids. The discharge is likely to be relatively small and intermittent when compared to the volume of the receiving waters, with further dilution effects when reaching Dublin

<sup>&</sup>lt;sup>3</sup> It is noted that two additions relevant to the site are listed in the Record of Protected Structures within the Draft Dublin City Development Plan 2022-2028; RPS ID 8844 Grand Canal Quay and RPS ID 8847 Hanover Quay.

Bay and the Irish Sea. Therefore, no significant impact is anticipated during the operation phase of the project.

# Conclusion

The subject application for the Grand Canal Storm Water Outfall Extension is being made by Dublin City Council under the provisions of Section 226 of the Planning and Development Act 2000 (as amended). The project will complete previously planned works to relocate stormwater currently being conveyed from the Grand Canal Tunnel to the Grand Canal Basin to a new discharge point at the River Liffey. It will directly address pollution issues in the basin related to the existing stormwater outfall discharging combined/foul sewerage during periods of high rainfall which has resulted in microbiological contamination. The application is the culmination of a detailed review of associated issues and consensus has been established that the proposed works represent the most appropriate and feasible option to remedy this problem. The proposed development has been subject to detailed environmental investigation and assessment, and it has been demonstrated that it will not give rise to any adverse impacts.

As outlined, the project is supported by a large number of European, national, regional and local policy objectives and it will ensure that water in the basin will be able to achieve 'Good' status under the Water Framework Directive. It will conserve and improve water resource in a manner that supports a healthy society, economic development and a cleaner environment. Dublin Docklands has been a focus for significant investment in renewal and regeneration over the last two decades. Grand Canal Dock is an amenity of great importance to wider Dublin City and it is a core objective to position it as a vibrant area complemented 'on-water by a range of tourist and leisure craft and water sports activities' that allows for the delivery of year round local, national and international immersive water based events and animation programs. The proposed development is a pre-requisite for the achievement of this and will contribute importantly to aspirations to enhance Dublin Docklands as a world class destination for living, doing business, tourism, leisure and cultural activities.