

# EIA SCREENING ASSESSMENT

Royal Canal Greenway – Phase 3 Binns Bridge

Dublin City Council

Project No. D542/1

July 2023



## OCSC

O'CONNOR | SUTTON | CRONIN

Multidisciplinary  
Consulting Engineers



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### DOCUMENT CONTROL & HISTORY

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## 1 INTRODUCTION

### 1.1 Project Contractual Basis & Parties Involved

This report has been prepared by O'Connor Sutton Cronin & Associates Ltd. (OCSC) at the request of their Client, Dublin City Council. The proposal is for a revised layout of a section of the previously approved Royal Canal Greenway Phase 3 "granted permission under Planning Register Ref. 2870/15)". located near the Binns Bridge. The Royal Canal Greenway Phase 3 consists of a proposed walking/cycling route between Ossory Road, North Strand to Westmoreland Bridge, Phibsborough. The project will be constructed under a Part 8 application. The regulatory authority for the site is Dublin City Council.

The purpose of this report is to determine whether the project requires the preparation of an Environmental Impact Assessment Report (EIAR). This report documents the screening completed to provide a summarised overview of the potential impacts on the receiving environment whilst taking cognisance of the relevant statutory requirements.

A Stage 1 Screening for Appropriate Assessment has also been prepared for the project by OCSC. A Stage 1 Screening exercise assesses the likely significant effects of the development on Natura 2000 sites within the zone of influence of the proposed project. This project was not foreseen to give rise to any significant adverse effects on any designated European sites, alone or in combination with other plans or projects. Therefore, it has been screened out at Stage 1.

This report was completed by Bruna Guasti, BEng, MIEI, Environmental Consultant with input from Dr Luis Iemma, BSc, MSc, Ph. D, CEcol, MCIEEM, Principal Ecologist, reviewed by Glenda Barry, BSc, MSc, PGeo, Eurgeol, Principal Consultant with OCSC, and approved by Eleanor Burke, BSc, MSc, DAS, MIEnvSc, CSci, the OCSC Environmental Division Manager.

### 1.2 Study Area

The previously approved Royal Canal Greenway Phase 3 project is located between Ossory Road, North Strand and Westmoreland Bridge, Phibsborough. The particular study area for this report consists of an area of 1,063.64m<sup>2</sup> and is located to the east of Binns Bridge as shown in Figure 1.1.

The dominant habitat along the length of the greenway is the man-made structure of the Royal Canal and its towpaths and banks which are included in the boundary of a proposed Natural Heritage Area (pNHA). Within the canal, there are small stands of reed and sedges, while the banks of the canal are dominated by either built surfaces or mown amenity grassland and planted treelines. The areas of stonework adjoining bridges and lock gates support limited flora. Some sections of the northern bank of the canal near Croke Park remain unmanaged and support areas of dry meadows and grassy verges.

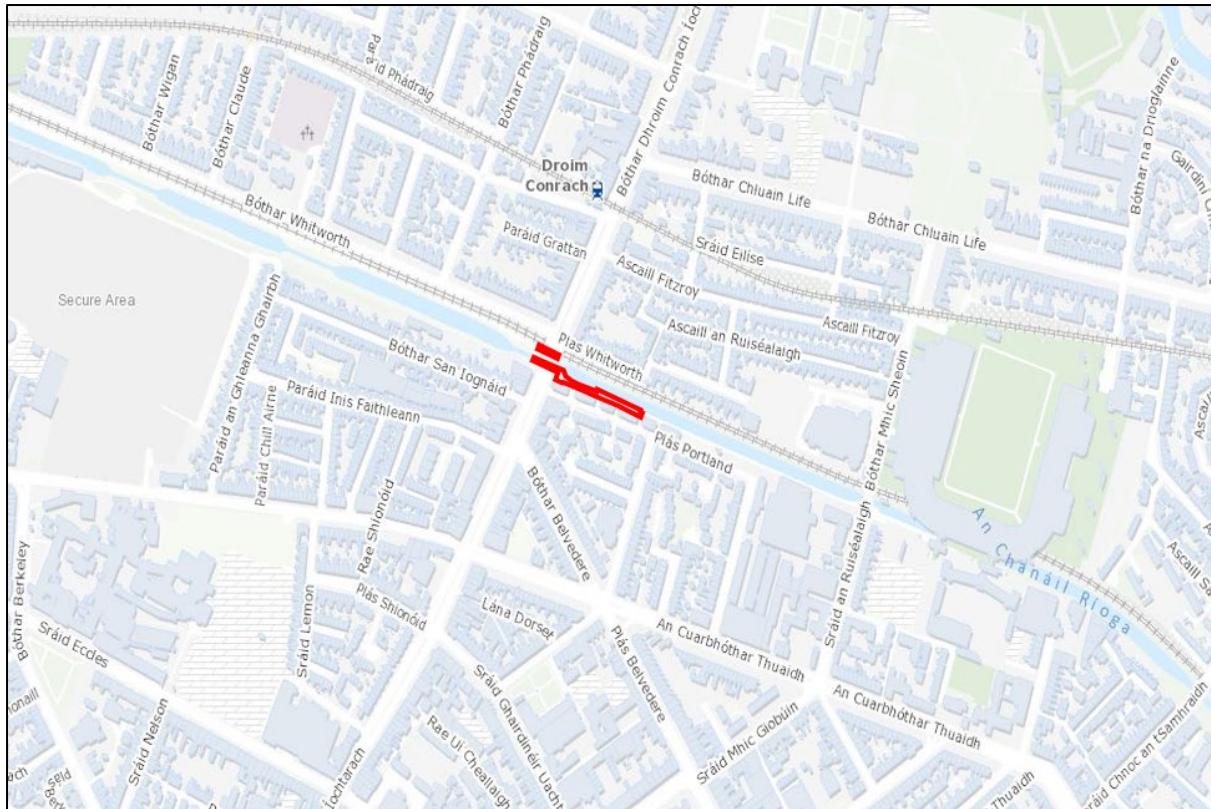


Figure 1.1: Study Area; site location indicated by red outline (Source: OSI, 2023)

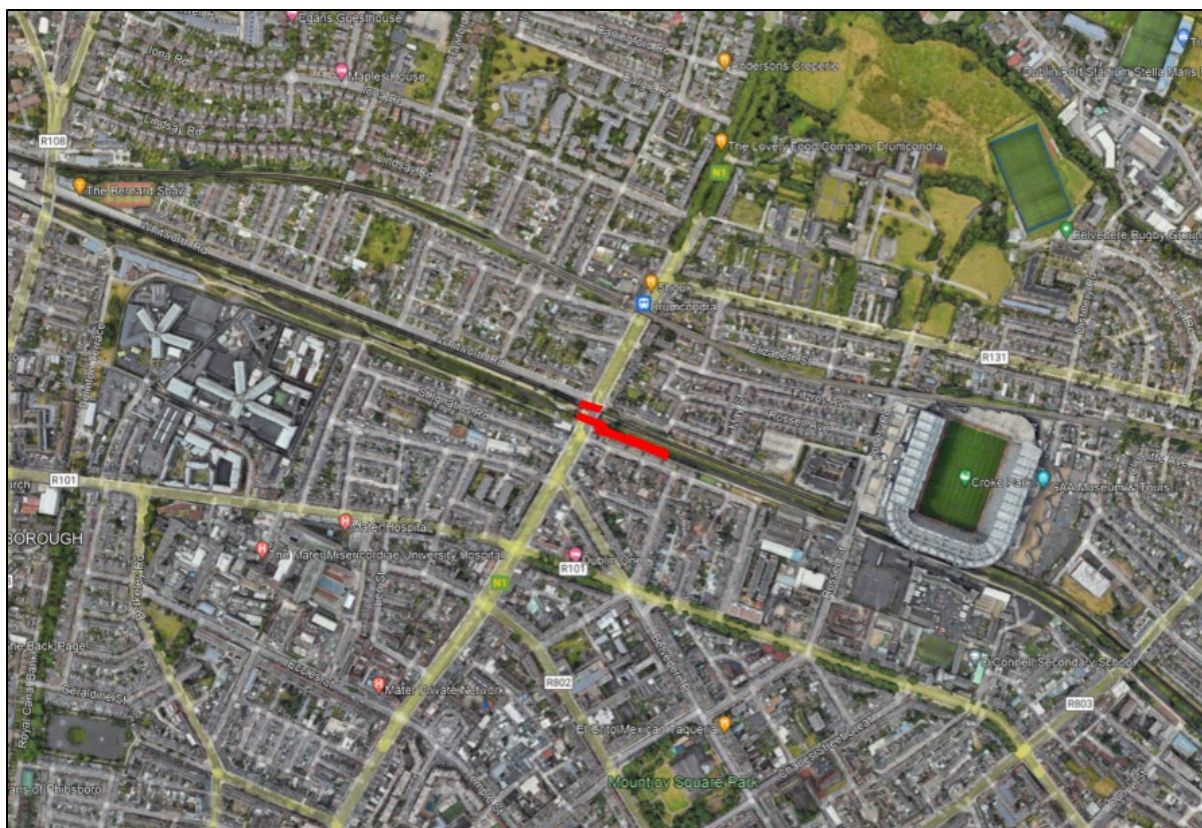
### 1.3 Surrounding Land Use

The immediately surrounding area is in residential, commercial, recreational, and community use as shown in Figure 1.2. The site is bounded by two rail lines owned by Irish Rail, a treeline, Whitworth Place, and commercial and residential structures to the north. To the south are commercial and residential structures. To the east are the Royal Canal, residential premises, and community space including Croke Park. To the west are the Royal Canal and residential and commercial structures. See Table 1.1 for adjacent land uses.

Table 1.1: Adjacent Land Uses

Boundary	Land Use
North	Rail lines
South	Residential areas
East	The Royal Canal
West	The Royal Canal





**Figure 1.2: Surrounding Land Use; site location indicated by red outline (Google Earth, 2023)**

## 1.4 Project Description

This Environmental Impact Assessment (Screening) Report has been prepared as part of a Part 8 permission application for a modification to the previously approved 2.1km Royal Canal Greenway Phase 3 project. The study area consists of an area of 1,063.64m<sup>2</sup>.

The proposed works includes the following elements:

- Demolition of a section of the existing tow path which ramps up to Binns Bridge;
- Construction of a new tow path ramp in accordance with the National Cycle Manual requirements to form part of the permitted Royal Canal Greenway Phase 3 project (Planning Register Reference: 2870/15). The new path will involve sheet piling and retaining structures to widen the existing towpath.
- Provision of shared and segregated pedestrian and cycle facilities;
- Provision of appropriate cladding and railings designed specifically to compliment Binns Bridge;
- Provision of soft and hard landscaping features including public realm improvements to the Second Lock below Binns Bridge along with revisions to the access arrangements for same;
- Relocation of the existing canal jetty at this location;
- All associated site works including the potential relocation of existing services and the provision of new services including public lighting, CCTV etc.

It is anticipated that the above works will commence in Q1 2024 and will be completed within 6 months.

## 1.5 Screening Report

This screening report includes the following elements:

- a description of the physical characteristics of the whole project;
- a description of the location of the project with particular regard to the environmental sensitivity of geographical areas likely to be affected;
- description of the aspects of the environment likely to be significantly affected by the project; and
- a description of any likely significant effects, to the extent of the information available on such effects, of the project on the environment resulting from a) the expected residues and emissions and the production of waste, where relevant and b) the use of natural resources, in particular soil, land, water, and biodiversity.

## 1.6 Methodology and Approach

The methodology and approach used in the preparation of this desktop EIA Screening is based on the following guidance documents and has been undertaken in accordance with applicable legislation:

- Guidelines on the Information to be contained in Environmental Impact Assessment Reports, Irish Environmental Protection Agency, May 2022.
- European Commission (2015) Environmental Impact Assessment – EIA, Over, Legal Context
- European Union EIA Directive (85/337/EEC) and its amendments in 1997, 2003, and 2009
- 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
- Planning and Development Act 2000 (as amended)
- Planning and Development Regulations 2001 (as amended)
- Directive 2014/52/EU
- Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licensing Systems – Key Issues Consultation Paper (2017; DoHPCLG)
- Preparation of guidance documents for the implementation of EIA directive (Directive 2011/92/EU as amended by 2014/52/EU) – Annex I to the Final Report (COWI, Milieu; April 2017)
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018)
- Environmental Impact Assessment – Guidance for Consent Authorities regarding Sub-threshold Development (2003; DoEHLG)

## 1.7 Scope of Works

To meet the project objectives, the following scope of works was completed:

- Present a discussion of the current site status and key environmental influences around the site;
- Undertake and present a historical site and area review, primarily referring to old Ordinance Survey Ireland maps but utilising other sources as appropriate and readily available;
- Present a discussion of the general soil and groundwater conditions within the topographical and area context; and
- Present an overview if any significant negative environmental impacts can arise from the proposed project.

## 1.8 Limitations

This Environmental Impact Assessment Screening Report has been prepared for Dublin City Council (“the Client”) as part of a Part 8 application. No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by OCSC.

This assessment is based on a review of available historical information, environmental records, consultations, relevant guidance information, and reports from third parties. All information received has been taken in good faith as being true and representative.

This report has been prepared in line with best industry standards. The methodology adopted and the sources of information used by OCSC in providing its services are outlined in this Report. The assessment undertaken by OCSC and described was undertaken in March and April 2023 and is based on the information available during that period. The scope of this Report and the services are accordingly factually limited by these circumstances.

OCSC disclaim any undertaking or obligation to advise any person of any change in any matter affecting the Report which may come or be brought to OCSC’s attention after the date of the Report.

The conclusions presented in this report represent OCSC’s best professional judgement based on review of the relevant information available at the time of writing. The opinions and conclusions presented are valid only to the extent that the information provided was accurate and complete.

The findings of the EIA screening assessment prepared for the project has informed our professional opinion as to whether an EIAR is warranted for the proposed project, with due regard to all relevant statutory requirements and technical guidance. However, it is ultimately the responsibility of the relevant planning authority to determine whether an EIAR is required for a particular project based on screening conducted by the planning authority.

## 2 EIA SCREENING PROCESS

### 2.1 Introduction

This section of the report discusses the legislative basis for screening used to decide if the proposed project requires the preparation of an EIAR. It also sets out the project in terms of planning context.

This project has been screened in accordance with Section 3.2 of the 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports' (EPA, 2022), the Environmental Impact Directive (85/337/EEC) and all subsequent relevant amendments, and Planning and Development regulations (2001-2018) as amended, including S.I. No. 296 of 2018 - European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, which came into operation on 1<sup>st</sup> September 2018.

### 2.2 EIA Applicable Legislation

The Environmental Impact Assessment (EIA) Directive 85/337/EEC has been in force across the European Union since 1985 and applies to a wide range of defined public and private projects which are defined in Annexes I (Mandatory EIA) and II (Screening-Discretion of Member States) of the directives. The EIA Directive of 1985 has been amended three times: 97/11/EC, 2003/35/EC, and 2009/31/EC. These amended directives have been coded and replaced by Directive 2011/92/EU of the European Parliament and Council on the assessment of the effects of certain public and private projects on the environment (and as amended by Directive 2014/52/EU). Directive 2014/52/EU has been transposed in 2018 in Irish law under the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (SI 296 of 2018).

### 2.3 Mandatory EIAR Review

Annex I of the European Communities (EIA) Directive lists the activities for which an EIA is required. The proposed project is not listed in Annex I; therefore, it is not mandatory for an EIA to be carried out.

Where a project is listed on Annex II or is a development that is not exempted, the national authorities of the member state must decide whether an EIA is needed for a proposed project. This is done by the "screening procedure" which determines the effects of project on the basis of thresholds/criteria or a case-by-case examination.

The project would be considered sub-threshold under Schedule 5 Part 2 (10b)

*(iv) Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere. (In this paragraph, "business district" means a district within a city or town in which the predominant land use is retail or commercial use.)*

However, the works proposed under the Part 8 would be considered to be sub threshold under this class. Annex III of the Directive outlines the specific criteria that must be considered when a sub-threshold project is being examined for Environmental Impact Assessment.

The screening procedure investigates whether the project has significant potential negative impact on the environment using different criteria including:

- Characterisation of the proposed development
- Location of proposed development
- Type and Characteristics of the potential impact

The relevant Information [to be provided] for the Purposes of Screening Sub-threshold Development for Environmental Impact Assessment include:

1. A description of the proposed development, including in particular—
  - (a) A description of the physical characteristics of the whole proposed development and, where relevant, of demolition works and
  - (b) A description of the location of the proposed development with regard to the environmental sensitivity of geographical areas likely to be affected.
2. A description of the aspects of the environment likely to be significantly affected by the proposed development.
3. A description of any likely significant effects, to the extent of the information available on such effects, of the proposed development on the environment resulting from—
  - (a) The expected residues and emissions and the production of waste, where relevant, and
  - (b) The use of natural resources, in particular soil, land, water, and biodiversity.
4. The compilation of the information in paragraphs 1 to 3 shall consider, where relevant, the criteria set out in Schedule 7”.

### 3 PLANNING CONTEXT

#### 3.1 National Policy

##### 3.1.1 National Planning Framework

The National Planning Framework (NPF) is the Government's high-level strategic plan for shaping the future growth and development of Ireland to 2040, this was released in tandem with the National Development Plan (NDP), which sets out the budget for national infrastructure investment for the next 10 years.

The NPF is considered a new approach, that aims to improve the different areas of our lives, while bringing the various government departments, agencies, State owned enterprises and local authorities together behind a shared set of strategic objectives for rural, regional and urban development.

Of relevance to the proposed greenway, the NPF states;

*“The development of greenways, blueways and peatways offer a unique alternative means for tourists and visitors to access and enjoy rural Ireland. The development of a strategic national network of these trails is a priority and will support the development of rural communities and job creation in the rural economy, as well as the protection and promotion of natural assets and biodiversity.”*

Furthermore, the NPF refers to key planning and development and place-making policy priorities for the Eastern and Midland Region and specifically,

*“Building on the progress made in developing an integrated network of greenways, blueways and peatways, that will support the diversification of rural and regional economies and promote more sustainable forms of travel and activity-based recreation utilising canal and former rail and other routes.”*

The NPF has identified 10 National Strategic Outcomes. These NSOs represent the overarching priorities which the NPF is designed to achieve. The most applicable of these NSOs, within the context of the Proposed Development, are the following;

##### National Strategic Outcome 3: Strengthened Rural Economies and Communities

*“A strong start has also been made in the development of a national long-distance Greenway/ Blueway Network. Such a network, including rural walking, cycling and water-based recreation routes, as well as ‘peatways’, has demonstrated major potential to bring new life to regional and rural locations through the “win-win” scenario of increased tourism activity and healthier travel. Developing this network further will diversify our rural economy by embracing the potential for a major expansion in the demand for activity-based tourism.”*

## National Strategic Outcome 7: Enhanced Amenities and Heritage

*“Attractive places include a combination of factors, including vitality and diversity of uses, ease of access to amenities and services supported by integrated transport systems and green modes of movement such as pedestrian and cycling facilities. Appealing places are also defined by their character, heritage and sense of community. This includes attractive buildings and street layouts, civic spaces and parks and regeneration of older areas and making places feel safe through active use and design.”*

The following National Policy Objectives which set the context for regional/ local planning policy and are supportive of the proposed Greenway.

*NPO 22 Facilitate tourism development and in particular a National Greenways, Blueways and Peatways Strategy, which prioritises projects on the basis of achieving maximum impact and connectivity at national and regional level.*

*NPO 26 Support the objectives of public health policy including Healthy Ireland and the National Physical Activity Plan, though integrating such policies, where appropriate and at the applicable scale, with planning policy.*

*NPO 27 Ensure the integration of safe and convenient alternatives to the car into the design of our communities, by prioritising walking and cycling accessibility to both existing and proposed developments and integrating physical activity facilities for all ages.*

*NPO 54 Reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions.*

*NPO 62 Identify and strengthen the value of greenbelts and green spaces at a regional and city scale, to enable enhanced connectivity to wider strategic networks, prevent coalescence of settlements and to allow for the long-term strategic expansion of urban areas.*

*NPO 64 Improve air quality and help prevent people being exposed to unacceptable levels of pollution in our urban and rural areas through integrated land use and spatial planning that supports public transport, walking and cycling as more favourable modes of transport to the private car, the promotion of energy efficient buildings and homes, heating systems with zero local emissions, green infrastructure planning and innovative design solutions.*

The proposal is in accordance with the above National Policy Objectives and will enhance the existing amenities of the area and provide high quality designed facilities to boost physical activity as well as social interaction and associated wellbeing benefits for all users. The proposal will help to provide a segregated off- road experience improving accessibility and connectivity, linking neighbourhoods, along a beautiful urban canal landscape. These are the building blocks required to boost a culture of cycling and walking as an alternative transport mode while contributing to lower emissions and a reduced carbon footprint.

### 3.1.2 National Development Plan 2018 – 2027

The National Development Plan 2018-2027 (NDP) came into effect in February 2018, in tandem with the National Planning Framework (NPF). The purpose of the NDP aims to drive Ireland's economic, environmental and social progress over the next decade. The key role of the NDP is to set out the updated configuration for public capital investment over the next 10 years in order to achieve the National Strategic Outcomes as set out within the NPF.

The NDP outlines initiatives that aim to enhance the economic growth for rural areas (NSO 3), of specific relevance;

*The Outdoor Recreation Infrastructure Scheme will continue to support the further development of the outdoor recreation sector with funding for new infrastructure (walking routes, blueways etc.) and the enhancement of existing facilities.*

This proposal supports the development and enhancement of the proposed greenway. It will result in an amenity asset that encourages active outdoor recreation for local residents in addition to being a tourism asset that can attract visitors. The proposal amenity will promote a culture of cycling and walking as a sustainable transport mode for everyday life.

### 3.1.3 Smarter Travel: A New Transport policy for Ireland 2009-2020

This Policy sets out a vision of sustainable travel and transport in Ireland by 2020. It recognises cycling and walking as the transport modes with the least environmental impacts and a realistic alternative to the private car. The policy envisages cycling and walking facilities that form a coherent network. In addition, the policy considers cycling and walking as pivotal to achieving the goals in national health policies that seek to promote physical activity.

The Policy states that “actions aimed at ensuring that alternatives to the car are more widely available, mainly through a radically improved public transport service and through investment in cycling and walking”.

Furthermore, under Action 17, states.

*“Many State properties are used for recreation and leisure. We will ensure that, where feasible, areas of State-owned lands such as canal towpaths, former rail lines, Coillte estates, etc. are made available for the development of walking and cycling trails.”*

The Smarter Travel: A New Transport policy for Ireland 2009-2020 represents a commitment to promote cycling and walking in Ireland and strengthen its culture. The proposal has the potential to directly assist in achieving these targets supporting the overall vision of the Policy.

### 3.1.4 National Cycle Policy Framework 2009 – 2020

The National Cycling Policy Framework (NCPF) is Ireland's first cycling framework. With influence taking from international experiences, the NCPF sets out an integrated basis for the long-term development and implementation of cycling policies among various sectors and



levels of government. The NCPF is a direct contribution to a sustainable travel vision for Ireland.

The NCPF sets out 19 objectives developed to enhance a cycling culture. The proposed greenway supports the following objectives.

*Objective 1 - Support the planning, development and design of towns and cities in a cycling and pedestrian friendly way.*

*Objective 2 Ensure that the urban road infrastructure (with the exception of motorways) is designed / retrofitted so as to be cyclist-friendly and that traffic management measures are also cyclist friendly.*

*Objective 4 - Provide cycling-friendly routes to all schools, adequate cycling parking facilities within schools, and cycling training to all school pupils.*

*Objective 5 - Ensure that all of the surfaces used by cyclists are maintained to a high standard and are well lit.*

*Objective 6 - Ensure that all cycling networks - both urban and rural - are signposted to an agreed standard.*

### **3.1.5 The Climate Action Plan (CAP) 2021**

The Climate Action Plan (CAP) 2021 sets out proposals for reducing greenhouse gas emissions over all sectors in Ireland. The aim of this plan is to set Ireland on a path to become one of the leading countries tackling climate change. The CAP outlines the importance of sustainable development and planning when tackling climate breakdown.

The CAP specifically highlights the need to provide good public transport, cycling and walking infrastructure, and to become less reliant on their cars, as one approach to tackle congested area. The CAP also addresses that policies need to be aligned better to achieve the ambitious targets for a modal shift.

The CAP in relation to transport states that,

*“The goal is to successfully reduce emissions from the transport sector while maximising the benefits of the transition, without negatively damaging economic wellbeing, and without adversely impacting different social groups. The pandemic has also shown us that large scale behaviour change is achievable and that new patterns of mobility and working can play a part in the transition to a cleaner, safer and more sustainable transport system for all.”*

The CAP lists a number of actions that are supportive of the proposal.

*Action Number – Action*

*231 - Continue the improvement and expansion of the Active Travel and Greenway Network*

*232 - Development of a coherent and connected National Cycle Network Strategy*

233 - Construct an additional 1,000km of cycling and walking infrastructure

234 - Encourage an increased level of modal shift towards Active Travel (walking and cycling) and away from private car use

235 - Accelerate sustainable mobility plans for schools

236 - Legislate to improve the Active Travel environment in urban centres

It should be recognised that the proposed greenway is an essential segment of public infrastructure that will support and assist in reaching the CAP key target of 500,000 extra walking, cycling and public transport journeys per day by 2030.

## 3.2 Regional Policy

### 3.2.1 Regional Spatial Economic Strategy 2019 - 2031 (EMRA)

There are three regional assemblies in Ireland, with a main function to identify regional policies and coordinate initiatives that support the delivery of national planning policy. The primary driver for this is the implementation of the Regional Spatial and Economic Strategies (RSES). The RSES provides regional level strategic planning and economic policy in support of the implementation of the National Planning Framework (NPF) and provides a greater level of focus around the National Policy Objectives (NPO) and National Strategic Outcomes (NSO) of the NPF.

The RSES identifies the Eastern and Midland region's challenges as the need to sustain economic growth whilst transitioning to a low carbon society and the requirement to align population growth with the location of homes and jobs whilst creating healthy attractive places and an enhanced quality of life. In response, the RSES is underpinned by three key principles: placemaking, climate action and sustainable economic opportunity and growth.

The strategic vision is:

*“To create a sustainable and competitive Region that supports the health and wellbeing of our people and places, from urban to rural, with access to quality housing, travel and employment opportunities for all.”*

The NTA Greater Dublin Area Cycle Network Plan sets out a strategy to enhance the urban network and develop the primary urban cycle arteries, which include the Royal Canal and Grand Canal ring and the Rivers Liffey, Tolka and Dodder.

Royal Canal Greenway from Spencer Dock through the northern inner suburbs along the canal to Maynooth and Mullingar with potential to link into the Dublin to Galway Eurovelo route.

The RSES includes a more detailed Dublin Metropolitan Area Strategic Plan (MASP) which identifies strategic development and employment areas for population and employment growth, in addition to more generalised consolidation and re-intensification of infill, brownfield and underutilised lands within Dublin City and its suburbs. The requirement for a Metropolitan Area Strategic Plan (MASP) to be prepared for Dublin as part of the Regional Spatial and

Economic Strategy is set out in Project Ireland 2040 – National Planning Framework (NPF). The MASP provides, for the first time, a 12 to 20 year strategic planning and investment framework for the Dublin metropolitan area. The MASP is aligned with a number of Regional Strategic Outcomes in the RSES which include managing the sustainable and compact growth of Dublin, the regeneration of cities and better use of under-used land, integrated transport and land use and the promotion of Dublin as a global city region.

Metropolitan Scale Amenities – To enhance provision of regional parks and strategic Green Infrastructure, to develop an integrated network of metropolitan scale amenities, and to develop greenways/blueways along the canals, rivers and coast, as part of the implementation of the National Transport Authority's Cycle Network Plan for the Greater Dublin Area

The principle of the proposed Greenway accords with these objectives.

*RPO 5.3: Future development in the Dublin Metropolitan Area shall be planned and designed in a manner that facilitates sustainable travel patterns, with a particular focus on increasing the share of active modes (walking and cycling) and public transport use and creating a safe attractive street environment for pedestrians and cyclists.*

*RPO 5.7: Co-ordinate across local authority boundaries to identify, manage, develop and protect regional Green Infrastructure, to enhance strategic connections and develop a Green Infrastructure policy in the Dublin Metropolitan Area.*

*RPO 5.8: Support the promotion and development of greenway infrastructure and facilities in the Dublin metropolitan area and to support the expansion and connections between key strategic cycle routes and greenways as set out in the NTA Greater Dublin Area Cycle Network Plan.*

*RPO 7.24 Promote the development of a sustainable Strategic Greenway Network of national and regional routes, with a number of high-capacity flagship routes that can be extended and /or linked with local greenways and other cycling and walking infrastructure, notwithstanding that capacity of a greenway is limited to what is ecologically sustainable.*

*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.*

*RPO 8.7 To promote the use of mobility management and travel plans to bring about behaviour change and more sustainable transport use.*

*RPO 9.10 In planning for the creation of healthy and attractive places, there is a need to provide alternatives to the car and to prioritise and promote cycling and walking in the design of streets and public spaces.*

### 3.3 Local Policy

#### 3.3.1 Dublin City Development Plan 2022-2028

The Dublin City Development Plan 2022 – 2028, which came into effect on 14<sup>th</sup> December 2022, is the operative statutory plan for the area. The proposed modification to the previously approved 2.1km Royal Canal Greenway Phase 3 project is consistent with the Development Plan.

The plan sets out how the city will develop to meet the needs of all residents, workers, and visitors. The aim of the plan is to improve the quality of life for its citizens and make sure that Dublin City is an attractive place to live, work, and visit. The plan's policies and objectives are to guide growth and development; provide a strategy to achieve proper planning; and achieve sustainable development that meets the city's needs now and won't compromise future generations meeting their needs. A key element in successfully achieving this integration is through the provision of high-quality pedestrian and cycling infrastructure and permeability links to encourage the use of sustainable modes to access the public transport station.

The overarching strategic approach of the plan is to develop a low carbon, sustainable, climate resilient city. It is envisaged that by 2050, Dublin will be a zero-carbon city with all of its energy coming from renewable energy sources. All of the city's buildings will have been built or retrofitted to near zero energy building standards, which will provide comfortable, warm, living and working environments. The use of 'conventionally-fuelled' cars in urban transport will be halved by 2030 and phased out by 2050 and we will achieve essentially CO2-free city logistics in Dublin by 2030.

The following relevant strategic principles flow throughout the plan:

*c) Sustainable Movement – helping to build an integrated transport network and encouraging the provision of greater choice of public transport and active travel including walking and cycling.*

*e) Urban Form – creating a connected, legible and liveable city with a distinctive sense of place, based on active streets, quality public spaces and adequate community and civic infrastructure.*

*f) Healthy Placemaking - ensuring quality architecture, urban design and green spaces to provide quality of life and good health and wellbeing for all.*

The following core strategy policies are of relevance:

*CA4 Improving Mobility Links in Existing Areas To support retrofitting of existing built-up areas with measures which will contribute to their meeting the objective of a low-carbon city, such as reopening closed walking and cycling links or providing new links between existing areas.*

*CA29 Climate Action and Green Infrastructure To protect, connect and expand the city's Green Infrastructure while optimising the climate change adaptation and mitigation services it provides.*

**SC2 City's Character** To develop the city's character by (non-exhaustive list):

- *developing a sustainable network of safe, clean, attractive streets, pedestrian routes and large pedestrian zones lanes and cycleways in order to make the city more coherent and navigable and creating further new streets as part of the public realm when the opportunities arise;*
- *protecting the grain, scale and vitality of city streets and encouraging the development of appropriate and sustainable building heights to ensure efficient use of resources, services and public transport infrastructure and that protects the heritage and natural assets of the city;*

**SC8 Development of the Inner Suburbs** To support the development of the inner suburbs and outer city in accordance with the strategic development areas and corridors set out under the Dublin Metropolitan Area Strategic Plan and fully maximise opportunities for intensification of infill, brownfield and underutilised land where it aligns with existing and pipeline public transport services and enhanced walking and cycling infrastructure.

**SC13 Green Infrastructure** To recognise and promote Green Infrastructure and landscape as a key mechanism to address climate change and as an integral part of the form and structure of the city, including streets and public spaces.

**SC19 High Quality Architecture** To promote development which positively contributes to the city's built and natural environment, promotes healthy placemaking and incorporates exemplar standards of high-quality, sustainable and inclusive urban design and architecture befitting the city's environment and heritage and its diverse range of locally distinctive neighbourhoods.

**QHSN11 15-Minute City** To promote the realisation of the 15-minute city which provides for liveable, sustainable urban neighbourhoods and villages throughout the city that deliver healthy placemaking, high quality housing and well designed, intergenerational and accessible, safe and inclusive public spaces served by local services, amenities, sports facilities and sustainable modes of public and accessible transport where feasible.

**QHSN12 Neighbourhood Development** To encourage neighbourhood development which protects and enhances the quality of our built environment and supports public health and community wellbeing. Promote developments which (non-exhaustive list):

- *build on local character as expressed in historic activities, buildings, materials, housing types or local landscape in order to harmonise with and further develop the unique character of these places;*
- *integrate active recreation and physical activity facilities including community centres and halls as part of the 15-minute city;*
- *encourage sustainable and low carbon transport modes through the promotion of alternative modes and 'walkable communities' whereby a range of facilities and services will be accessible within short walking or cycling distance;*
- *promote and implement low traffic neighbourhoods to ensure a high-quality built environment and encourage active travel in delivering the 15 minute city model.*
- *promote sustainable design through energy efficiency, use of renewable energy and sustainable building materials and improved energy performance;*

- *promote the development of healthy, liveable and attractive places through public realm and environmental improvement projects;*
- *cater for all age groups and all levels of ability / mobility and ensuring that universal design is incorporated to maximise social inclusion;*
- *have regard to the Guiding Principles for 'Healthy Placemaking' and 'Integration of Land Use and Transport' as set out in the Regional Spatial and Economic Strategy and national policy as set out in 'Sustainable Residential Development in Urban Areas' and the 'Design Manual for Urban Roads and Streets (DMURS)';*
- *are designed to promote safety and security and avoid anti-social behaviour.*

*QHSN13 Healthy Dublin City Framework and the Healthy Ireland Framework 2019-2025 To support the Healthy Dublin City Framework and the Healthy Ireland Framework 2019-2025 in promoting a long-term vision of improving the physical and mental health and well-being of the population at all stages of life.*

*QHSN16 Accessible Built Environment To promote built environments and outdoor shared spaces which are accessible to all. New developments must be in accordance with the seven principles of Universal Design as advocated by the National Disability Authority, Building For Everyone: A Universal Design Approach 2012 and consistent with obligations under Article 4 of the United Nations Convention on the Rights of People with Disabilities.*

*CEE12 Transition to a Low Carbon, Climate Resilient City Economy To support the transition to a low carbon, climate resilient city economy, as part of, and in tandem with, increased climate action mitigation and adaptation measures*

*CEE14 Quality of Place To recognise that 'quality of place', 'clean, green and safe', is crucial to the economic success of the city, in attracting foreign and domestic investment, and in attracting and retaining key scarce talent, residents and tourists.*

*CEE22 New Growth Sectors To support the growth of innovative new growth sectors as identified in the National Economic Recovery Plan relating to the digital transformation, Artificial Intelligence (AI), to the decarbonisation of society, and to the circular economy.*

*CEE26 Tourism in Dublin (i) To promote and facilitate tourism as one of the key economic pillars of the city's economy and a major generator of employment and to support the appropriate, balanced provision of tourism facilities and visitor attractions. (ii) To promote and enhance Dublin as a world class tourist destination for leisure, culture, business and student visitors and to promote Dublin as a setting for conventions and cultural events. (iii) To improve the accessibility of tourism infrastructure to recognise the access needs of all visitors to our city.*

*SMT1 Modal Shift and Compact Growth To continue to promote modal shift from private car use towards increased use of more sustainable forms of transport such as active mobility and public transport, and to work with the National Transport Authority (NTA), Transport Infrastructure Ireland (TII) and other transport agencies in progressing an integrated set of transport objectives to achieve compact growth.*

**SMT8 Public Realm Enhancements** To support public realm enhancements that contribute to place making and liveability and which prioritise pedestrians in accordance with Dublin City Council's Public Realm Strategy ('Your City – Your Space'), the Public Realm Masterplan for the City Core (The Heart of the City), the Grafton Street Quarter Public Realm Plan and forthcoming public realm plans such as those for the Parnell Square Cultural Quarter Development and the City Markets Area.

**SMT11 Pedestrian Network** To protect, improve and expand on the pedestrian network, linking key public buildings, shopping streets, public transport points and tourist and recreational attractions whilst ensuring accessibility for all, including people with mobility impairment and/or disabilities, older persons and people with children.

**SMT12 Pedestrians and Public Realm** To enhance the attractiveness and liveability of the city through the continued reallocation of space to pedestrians and public realm to provide a safe and comfortable street environment for pedestrians of all ages and abilities.

**SMT13 Urban Villages and the 15-Minute City** To support the role of the urban villages in contributing to the 15-minute city through improvement of connectivity in particular for active travel and facilitating the delivery of public transport infrastructure and services, and public realm enhancement.

**SMT14 City Centre Road Space** To manage city centre road-space to best address the needs of pedestrians and cyclists, public transport, shared modes and the private car, in particular, where there are intersections between DART, Luas and Metrolink and with the existing and proposed bus network.

**SMT16 Walking, Cycling and Active Travel** 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.

**SMT18 The Pedestrian Environment** To continue to maintain and improve the pedestrian environment and strengthen permeability by promoting the development of a network of pedestrian routes including laneway connections which link residential areas with recreational, educational and employment destinations to create a pedestrian environment that is safe, accessible to all in accordance with best accessibility practice.

**SMT19 Integration of Active Travel with Public Transport** To work with the relevant transport providers, agencies and stakeholders to facilitate the integration of active travel (walking/cycling etc.) with public transport, ensuring ease of access for all.

**SI42 Light Pollution** To not allow unnecessary, inappropriate or excessive artificial lighting and to ensure that the design of public and external lighting proposals minimises light spillage or pollution and has due regard to the character, environmental sensitivity and residential amenity of the surrounding area.

**G11 Green Infrastructure Assets** To identify and protect the integrity of the city's GI assets, as appropriate, and to enhance and expand the connectivity, multi-functionality, and accessibility of the city's green infrastructure network, while addressing gaps in the network. **G12 Connectivity** To develop an interconnected green infrastructure network of strategic natural

*and semi-natural areas with other environmental features including green spaces, rivers, canals, the coastal and marine area and other physical features including streets and civic spaces that supports ecological, wildlife, and social connectivity.*

*G13 Multi-functionality (GI) To ensure delivery of multifunctional green and civic spaces that meet community needs, support biodiversity, promote active and passive recreation, flood and surface water management and local habitat improvements. The multi-functionality of spaces will be balanced against the need to protect and enhance local habitat and the recreational and functional requirements of parks.*

*G14 Accessibility To ensure universal design for access for all to the green infrastructure network. Priority of access is to be given to pedestrians over all other users. In line with the Parks Strategy, access to facilities and to public parks and open spaces will be provided equally to all citizens and inequalities of access shall be identified and addressed.*

*G17 Connecting Greening Elements in Site Design To avoid the fragmentation of green spaces in site design and to link green spaces /greening elements to existing adjacent green infrastructure / the public realm where feasible and to provide for ecological functions.*

*G19 European Union Natura 2000 Sites To conserve, manage, protect and restore the favourable conservation condition of all qualifying interest/special conservation interests of all European sites designated, or proposed to be designated, under the EU Birds and Habitats Directives, as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) (European / Natura 2000 sites).*

*G110 Flora and Fauna Protected under National and European Legislation Located Outside Designated Areas To adequately protect flora and fauna (under the EU Habitats and Birds Directives), the Wildlife Acts 1976 (as amended), the Fisheries Acts 1959 (as amended) and the Flora (Protection) Order 2022 S.I No. 235 of 2022, wherever they occur within Dublin City, or have been identified as supporting the favourable conservation condition of any European sites.*

*G111 Proposed Natural Heritage Areas To protect and enhance the ecological functions and connectivity of habitats and species of proposed Natural Heritage Areas (pNHAs) to be designated by the National Parks and Wildlife Service (NPWS).*

*G112 National and International Sites for Nature Conservation To protect sites for nature conservation as designated under the Ramsar Treaty for wetland sites, National Special Amenity Areas, National Nature Reserves, Important Bird Areas and Flora Protection Order Sites.*

*G113 Areas of Ecological Importance for Protected Species To ensure the protection, conservation and enhancement of all areas of ecological importance for protected species, and especially those listed in the EU Birds and Habitats Directives, including those identified as supporting the favourable conservation condition of any European sites, in accordance with development standards set out in this plan.*

*G114 Ecological / Wildlife Corridors To maintain and strengthen the integrity of the city's ecological corridors and stepping stones which enable species to move through the city, by*



*increasing their connectivity [to be shown in the proposed Green Infrastructure Strategy] under Article 10 of the EU Habitats Directive. Development proposals should not compromise their ecological functions and should realise opportunities to contribute to enhancing the nature conservation value of them by landscaping that provides complementary habitats. An Ecological Impact Assessment will be required for any proposed development likely to have a significant impact on habitats and species of interest on or adjacent an ecological corridor.*

*G116 Habitat Creation and New Development That new developments (as appropriate) will be required to support local biodiversity and incorporate biodiversity improvements through urban greening and the use of nature-based infrastructural solutions that are of particular relevance and benefit in an urban context. Opportunities should be taken as part of new development to provide a net gain in biodiversity and provide links to the wider Green Infrastructure network. All suitable new buildings will be required to incorporate swift nesting blocks into the building fabric.*

*G118 Minimise Impact – Light and Noise To minimise the environmental impact of external lighting and noise at sensitive locations to achieve a sustainable balance between the needs of an area, the safety of walking and cycling routes and the protection of sensitive species such as bats (see also Section 9.5.9 Public & External Lighting).*

*G121 Promote City Landscape To promote the city landscapes, including rivers, canals, Dublin Mountains and Dublin Bay, as a major resource for the city and forming core areas of the green infrastructure network*

*G122 Managed Access To provide managed access to landscape and amenity areas of Dublin city while ensuring their long-term protection and maintenance to limit degradation.*

*G123 European Landscape Convention To continue to protect and enhance landscape, including existing green spaces through sustainable planning and design for both the existing community and for future generations in accordance with the principles of the European Landscape Convention.*

*G132 Linear Parks and Recreational Use of Waterways Aspects To develop linear parks, sustainable riverine access, walkways, cycleways and water focused recreational, sporting and tourism amenities which enhance appreciation of rivers in a manner that ensures that any adverse environmental effects are avoided and ecological enhancements, where appropriate, are employed to ensure a net biodiversity gain. Where lands along the waterways are in private ownership, it shall be policy in any development proposal to secure public access along the waterway.*

*G145 National Physical Activity Plan 2016 To improve the health and well-being of communities by increasing access to participation in sports, recreation and healthy activity in line with the National Physical Activity Plan 2016, the Healthy Ireland Framework 2019 – 2025 and the Sport Ireland Participation Plan 2021 – 2024.*

*G153 Public Rights of Way To protect public rights of way.*

The proposal is shown in the Dublin City Development Plan as within a 'Conservation Area'. The Dublin City Development Plan supports and facilitates the provision of cycling/walking

infrastructure and greenways that will provide a more comfortable and attractive environment for pedestrians and cyclists. The development plan acknowledges the individual and community benefits of active travel which encourages an active lifestyle, improve fitness levels and facilitate greater social interaction between people.

### 3.3.2 Dublin City Biodiversity Action Plan 2021-2025

Since their construction in the early 19th Century, the Grand and Royal Canals have been a feature of the city, both of which are designated as proposed Natural Heritage Areas. These waterways form important ecological corridors for both aquatic and terrestrial species and allow for the dispersal of a range of flora and fauna, which is particularly vital in an urban environment. The Dublin City Biodiversity Action Plan 2021-2025 identifies that:

*'The banks of the city's canals also provide important habitat, while the slow flow rate and relatively unpolluted waters of the canals has allowed the establishment of extensive benthic vegetation communities, including the protected Opposite-leaved Pondweed, Glutinous snail, and coarse fish species, including Pike, Rudd, Bream and Tench.'*

In particular the Dublin City Biodiversity Action Plan identifies the Opposite-leaved Pondweed *Groenlandia densa* (L.) present on both the Royal and Grand Canals.

Objective 4 from the Action Plan identified:

*4.7 Implement the recommendations of the Dublin City Otter Survey (2019) and update the survey to include Dublin canals 2023-2025*

### 3.3.3 Greater Dublin Area Transport Strategy 2022 2042

Walking, as defined by the Census, is an important mode of travel, accounting for 18% of trips to work and education in the GDA in 2016, and 13% of trips to work in Dublin. In addition, most people who travel are pedestrians for some part of their journey, and adequate provision for pedestrians is therefore a matter of general relevance. A high-quality network of footpaths and crossings should be safe, coherent, direct, attractive and comfortable.

*Measure WALK2 – Improved Footpaths The NTA, in conjunction with local authorities, will implement footpath improvement schemes across the GDA where required throughout the period of the Transport Strategy in order to ensure that they are of sufficient width, adequately lit, serve both sides of the road in urban areas (in most cases), are of good quality surfacing, provide for seating at appropriate locations, and are free of unnecessary clutter. Footpaths will also be maintained and improved in a manner which contributes positively to the public realm.*

In 2013 the NTA published the Greater Dublin Area Cycle Network Plan. The purpose of the Plan was to guide investment in cycle infrastructure by the NTA and other related agencies, by developing a network of cycle routes for the GDA. The route network comprises Primary, Secondary, Feeder, Greenway and Inter-urban routes for the region, including dedicated town networks for all settlements. The network also incorporates those elements of the Dublin-Galway Euro-Velo 2 route that are within the GDA.

*Measure CYC1 – GDA Cycle Network It is the intention of the NTA and the local authorities to deliver a safe, comprehensive, attractive and legible cycle network in accordance with the updated Greater Dublin Area Cycle Network.*

### **3.3.4 Greater Dublin Area Cycle Network 2022**

The Greater Dublin Area Cycle Network was published alongside the Greater Dublin Area Transport Strategy 2022-2042. Drawings associated with that plan illustrate the route as a 'Primary Orbital Route'.

## 4 CHARACTERISTICS OF PROPOSED DEVELOPMENT

Schedule 7 of SI 296 of 2018 requires that the characteristics of proposed development are identified. In particular, it references the following sections.

### 4.1 Size and Design

The proposed works comprises a Part 8 permission application for a modification to the previously approved 2.1km Royal Canal Greenway Phase 3 project. The study area consists of an area of 1,063.64m<sup>2</sup>.

The works includes the following elements:

- Demolition of a section of the existing tow path which ramps up to Binns Bridge;
- Construction of a new tow path ramp in accordance with the National Cycle Manual requirements to form part of the permitted Royal Canal Greenway Phase 3 project (Planning Register Reference: 2870/15). The new path will involve sheet piling and retaining structures to widen the existing towpath.
- Provision of shared and segregated pedestrian and cycle facilities;
- Provision of appropriate cladding and railings designed specifically to compliment Binns Bridge;
- Provision of soft and hard landscaping features including public realm improvements to the Second Lock below Binns Bridge along with revisions to the access arrangements for same;
- Relocation of the existing canal jetty at this location;
- All associated site works including the potential relocation of existing services and the provision of new services including public lighting, CCTV etc.

### 4.2 Cumulation with other Existing Developments/Development the Subject of a Consent

Grants of planning in the vicinity of the site were reviewed to identify works of a significant scale which may produce in-combination effects with the proposed works. Three Consented planning applications pertaining to works of a significant scale were identified: 2935/20 - Clonliffe Road, Drumcondra, Dublin 3; Temple Street Children's Hospital, Temple Street, Dublin 1 (3156/17, 3244/17, 4430/17, and 4165/19); and Mater Misericordiae University Hospital, Eccles Street, Dublin 7 (3616/20, 3617/20, WEB1513/22, 2900/19, and 3400/21). Other granted planning permissions in the vicinity of the site pertain primarily to small-scale extensions or alterations or to retention of works.

It is likely that a portion of the larger projects listed above have already been undertaken and will not pose a risk of cumulative impact with the proposed works. Despite the granted permissions in the vicinity of the site, the cumulative impact of the proposed works in conjunction with these committed developments is considered to be unlikely and not significant due to the small scale and short duration of the proposed project.

### **4.3 The Nature of Any Associated Demolition Works**

There are no buildings or other structures within the study area which will require demolition. However, demolition of a section of the existing tow path which ramps up to Binns Bridge will occur during the proposed works.

### **4.4 The Use of Natural Resources, in Particular Land, Soil, Water and Biodiversity**

Due to the nature of the proposed works, there will be no natural resource requirements that would be additional to existing requirements.

### **4.5 Production of Waste**

Any waste generated during the construction will be reused on-site where possible, e.g., topsoil generated will be reused to provide landscaping and excavated material will be reused for backfill where this material meets acceptable construction criteria. However, if offsite disposal is required for any material, it will be managed in accordance with all relevant waste management legislation. There will be no generation of the waste following the completion of the works.

### **4.6 Pollution and Nuisances**

There will be a temporary increase in noise during the proposed works. However, noise levels will not exceed levels typical of construction works. There will be a slight increase in traffic disturbance during the construction activities, i.e., bringing supplies to the site and removing material if required. However, this disturbance will be short-term. Some dust will likely be generated during the works; however, this nuisance will also be short-term and will be managed in line with best practice. There will be no pollution or nuisance after following the completion of works.

Potential surface water pollution via runoff, including pollution by silt or hydrocarbons, will be managed in accordance with best practices. The risk of surface water pollution during the construction stage is considered to be not significant due to the small scale of the project and subject to implementation of mitigation measures. The appointed contractor will be required to prepare a site-specific Construction Environmental Management Plan (CEMP) which will clearly detail all necessary environmental control measures.

### **4.7 The Risk of Major Accidents or Disasters Including Those Caused by Climate Change**

There is minimal risk of major accidents or disasters including those caused by climate change given the small-scale and short duration of the construction works. Any risks that are present are associated with typical construction activities including working with machinery. However, the appointed contractor will be required to prepare a site-specific CEMP clearly detailing all necessary environmental control measures.

There will be no risks following construction above that which would be expected for pedestrian and cycle traffic.

#### **4.8 Risks to Human Health – e.g., Water Contamination/Air Pollution**

Risks to surface water during the construction phase will be minimised via engineering design in line with best practice. In addition, contractors will be required to implement construction methods in line with best practices regarding surface water runoff, fuel and chemical storage, excavation, waste storage, and use on the site of any items that may pose a risk to water.

Works within the canal, including sheet piling, will be undertaken within a drained lock and no direct discharge will be permitted.

There are no reported groundwater source protection zones (SPZs) within a 15km radius of the proposed site. SPZ delineation provides an assessment of the land area that contributes groundwater to a borehole or spring. The purpose of SPZs is to provide additional protection to safeguard drinking water quality through constraining the proximity of an activity that may impact upon a drinking water abstraction. Further information on the nearest SPZs is included in section 4.15.

There are five wells identified on the Geological Survey of Ireland (GSI) database within a 1.5km radius of the site; however, none are located within the site boundary. Further information of nearby wells and springs is included in section 4.15.

Given the relatively short duration of the proposed works, it is not anticipated that the works will pose a risk to groundwater quality during either the construction or the operations phase subject to the works being undertaken in accordance with best practised guidelines. These guidelines will apply to all construction works to mitigate risks associated with typical construction nuisances such as dust and noise as well as risks to groundwater associated with fuel storage and usage. Overall, the risk to human health considered to be not significant.

## 5 LOCATION OF THE PROPOSED DEVELOPMENT

### 5.1 Information Sources

An understanding of the site setting and history was gained by undertaking a review of the following primary sources including:

- A review of available extracts of historical Ordnance Survey of Ireland (OSI) maps;
- National Monuments Service (NMS) viewer;
- A review of information held by the Environmental Protection Agency (EPA) EnVision online Mapping;
- Aerial images available of the site (OSI and Google);
- The GSI and GeoHive online mapping tools; and
- The National Parks and Wildlife Service (NPWS) online map tool.

### 5.2 Abundance, Availability, Quality, and Regenerative Capacity of Natural Resources

Limited natural resources will be required to complete the work. It is proposed that any material generated during the works will be reused on site or removed from site for recycling or reuse where possible. The relevant natural resources have been looked at in more detail in the following sections.

### 5.3 The Absorption Capacity of the Natural Environment

In the description of the site, the absorption capacity of the natural environment has been screened in accordance with Regulations paying particular attention to:

- (i) wetlands, riparian areas, river mouths;
- (ii) coastal zones and the marine environment;
- (iii) mountain and forest areas;
- (iv) nature reserves and parks;
- (v) areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive;
- (vi) areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure;
- (vii) densely populated areas; and
- (viii) landscapes and sites of historical, cultural, or archaeological significance.

### 5.4 Surrounding Land Use

The terrestrial environment is characterized not only by its physical land cover but also from a human/social perspective by its land use which is distinguished by its designated or identifiable purpose (EPA, 2008).

The immediately surrounding area is comprised of residential, commercial, recreational, and community use and the Royal Canal. Refer to section 1.3 for a full list of adjacent land uses.

## 5.5 Site Development

A review of the OSI historical maps dataset has found that the study area has been developed to its current use since at least 1813. The following section outlines the historically mapped features on and in the immediate environs of the study area.

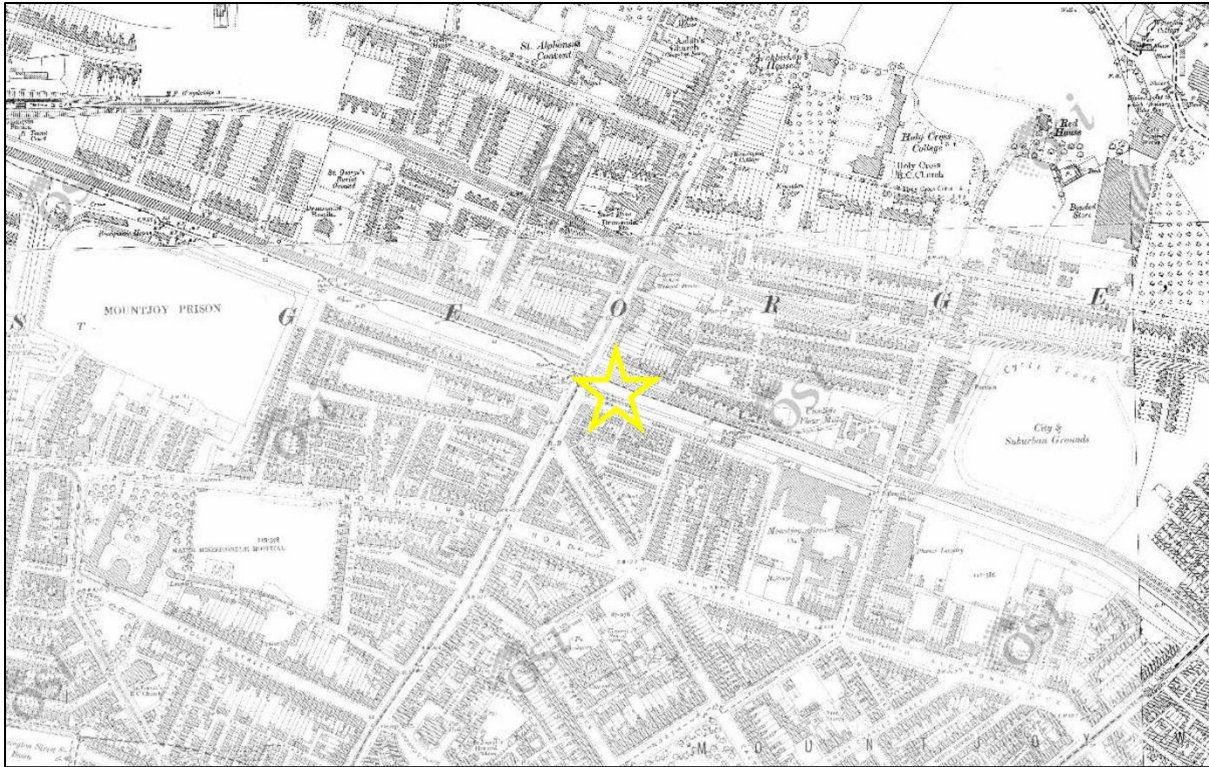
The 6" inch map (1837-1842) shows the site as undeveloped. To the north of the site were the Royal Canal, residences, a school, a "widows retreat", Clonliff House, and undeveloped land. To the south of the site were residences and other urban development, several churches, Mountjoy Square, and undeveloped land. To the east were the Royal Canal, residences, and undeveloped land. To the west were Binns Bridge, the Royal Canal, several residences, a school, Whitworth (later Drumcondra) Hospital, a graveyard, and undeveloped land.



**Figure 5.5.1: 1837-1842 6-inch OS Map; site location shown by yellow star (Source: GeoHive, 2023)**

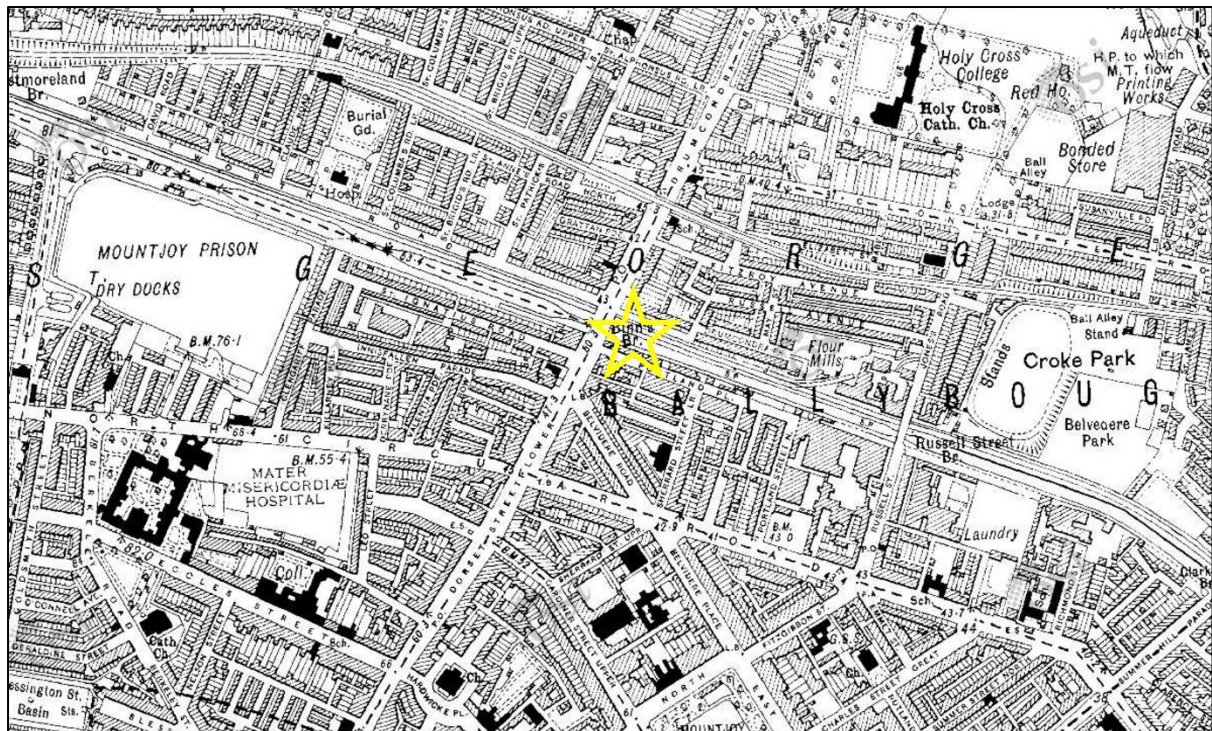
The 25-Inch map (1888-1913) shows the site as undeveloped. The railway line had been constructed along north side of the Royal Canal along with significant residential development and the construction of churches, a convent, Sacred Heart Home, a second rail line, a tramway along Lower Drumcondra Road, and Holy Cross College further to the north. Construction of structures along the southern site boundary and as well as construction of St. Joseph's Hospital, the Mater Misericordiae Hospital, extensive residential development, and a tramway further had occurred to the south since the 6-inch mapping. New development to the east included significant residential construction and the construction of Clonliffe Flour Mills, the Mountjoy Brewery, the Phoenix Laundry, and the City and Suburban Grounds on the site of the future Croke Park. New development to the west included significant residential construction and the construction of Mountjoy Prison.





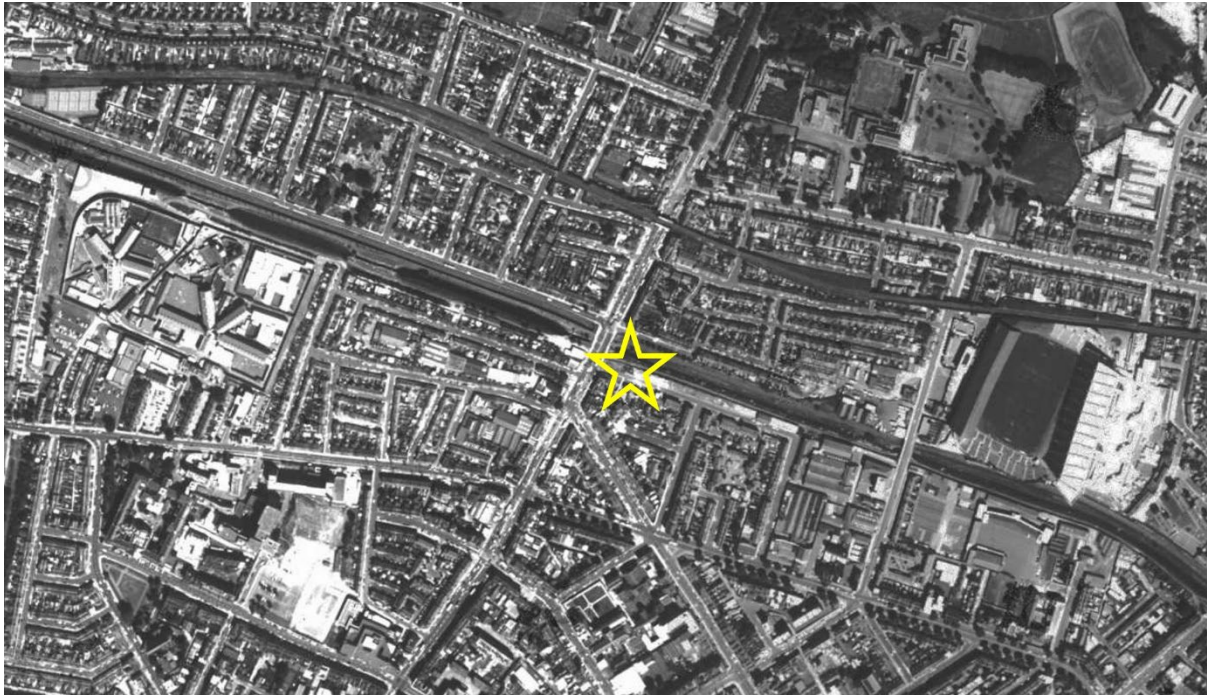
**Figure 5.5.2: 1888-1913 25 inch OSI Map; site location shown by yellow star (Source: GeoHive, 2023)**

The Cassini map (1830s to 1930s) no significant changes to the site or areas to the north other than the removal of the tramline. Limited infill construction and expansion of existing buildings, particularly at the Mater Misericordiae Hospital had occurred to the south since the previous mapping. Expansion of the laundry and construction of stands at Croke Park had occurred to the east along with limited infill construction to the west.



**Figure 5.5.3: Cassini Map; site location shown by the yellow star (Source: GeoHive, 2023)**

The 1995 aerial photograph no change to the site. Limited infill construction and redevelopment had occurred to the north since the Cassini mapping. Redevelopment had occurred on adjacent land to the south as well as on sites further to the south. To the east, demolition and partial redevelopment had occurred on the sites of the former flour mill and laundry and within the grounds of the brewery. The houses to the west of Croke Park had been removed and the stadium constructed. To the west, redevelopment and infill construction had occurred at the Mater Misericordiae Hospital and to the east of and within Mountjoy Prison.



**Figure 5.5.4: 1995 aerial photograph; site location shown by the yellow star (Source: GeoHive, 2023)**

The 1999-2003 aerial photo shows no significant changes to the site or to the north or south other than the ongoing redevelopment of a site along Dorset Street. Further construction had occurred to the east at Croke Park and to the west at Mountjoy Prison.



**Figure 5.5.5: 1999-2003 aerial photograph; site location shown by the yellow star (Source: GeoHive, 2023).**

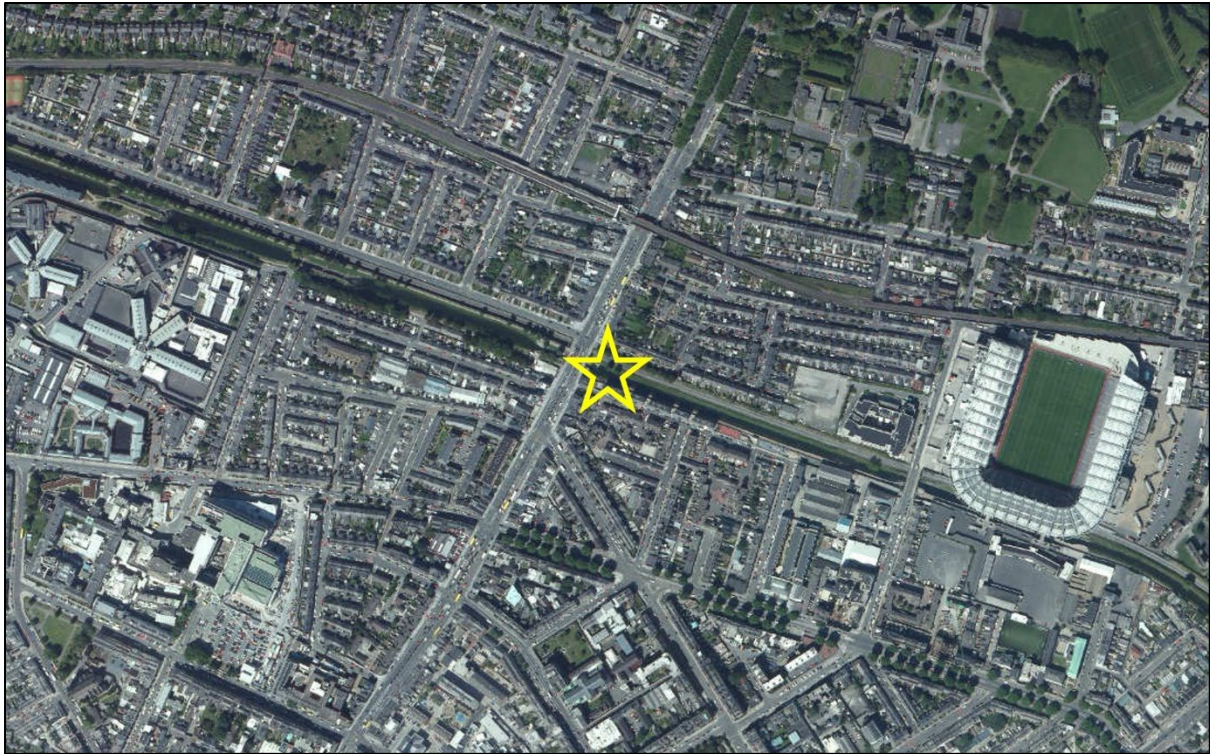
The 2004-2006 aerial photo shows the development of the adjoining site to the south. No significant changes were observed to the north, west, or south other than the completion of

redevelopment to the south along Dorset Street. To the east, works at Croke Park had been completed and demolition and partial site redevelopment had occurred on the site of the former flour mills.



**Figure 5.5.6: 2004-2006 Aerial Photograph; site location shown by yellow star (Source: GeoHive, 2023).**

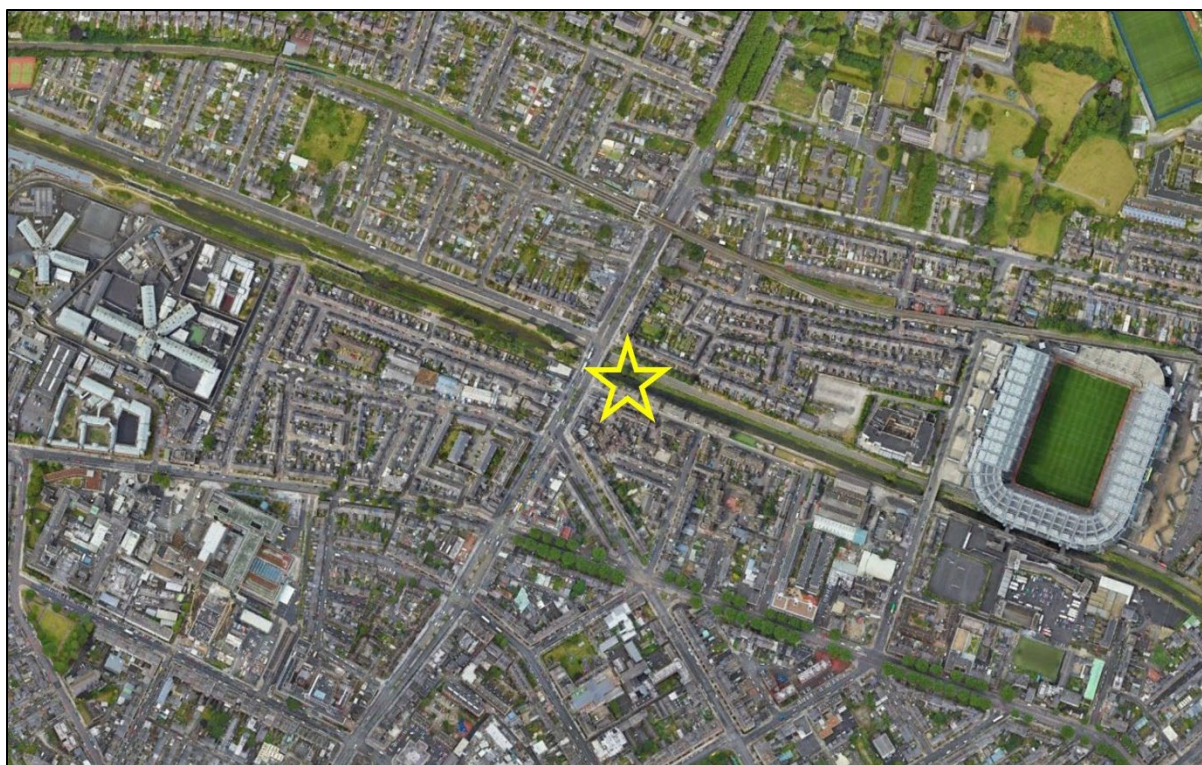
The 2011-2013 aerial photo shows no significant changes to the site or adjacent lands to the north or south since the previous aerial photo. Partial redevelopment had occurred on the site of the former brewery to the east as well as the construction of the Croke Park Hotel on the site of the former flour mills. Extensive development had also occurred within the grounds of the Mater Misericordiae Hospital to the west.



**Figure 5.5.7: 2011-2013 Aerial Photograph; site location shown by yellow star (Source: GeoHive, 2023).**

The 2013-2018 aerial photo shows no significant changes to the site or adjacent lands since the 2011-2013 aerial photo.

The 2022 aerial photo shows no significant changes to the site or adjoining lands since the 2013-2018 aerial photo other than additional development within the grounds of the Mater Misericordiae Hospital to the west.



**Figure 5.5.8: 11/2022 Aerial Photograph; site location shown by yellow star (Source: Google Earth, 2023).**

## 5.6 Site Physical Setting

Information regarding the site topography, hydrology, geology, hydrogeology, and ecology of the area has been obtained from records held by the GSI, EPA Envision online mapping tool, OSI, GeoHive, Water Framework Directive Maps, and NPWS databases.

## 5.7 Protected Sites

A standalone Appropriate Assessment (AA) Screening Report was prepared by OCSC (2023) which concluded that there is no potential for adverse impacts to the nearest designated European site, the South Dublin Bay and River Tolka Estuary SPA. Although there is no overlap between the site and this SPA, there is an indirect hydrological link between the proposed development to the protected area.

There are eight SPAs within 15km of the proposed scheme as shown on Figure 4.9: South Dublin Bay and Tolka Estuary SPA (2 km east); North Bull Island SPA (5 km east); Baldoyle Bay SPA (11.4 km northeast); Malahide Estuary SPA (12 km northeast); Ireland's Eye SPA (13.4 km northeast); Howth Head Coast SPA (13.5 km east); Dalkey Islands SPA (14 km southeast); and Wicklow Mountains SPA (14.3 km south). There is an indirect hydrological link between the proposed development to the South Dublin Bay and River Tolka Estuary SPA (5.6 km downstream) and the North Bull Island SPA (8.4 km downstream).

There are nine SACs within the 15km of the proposed scheme as shown on Figure 4.9: South Dublin Bay SAC (4 km southeast); North Dublin Bay SAC (5 km east); Baldoyle Bay SAC (9.7 km northeast); Howth Head SAC (10.5 km east); Rockabill to Dalkey Islands SAC (11.4 km

east); Malahide Estuary SAC (12 km northeast); Ireland's Eye SAC (13.6 km northeast); Wicklow Mountains SAC (13.8 km south); and Glenasmole Valley SAC (14 km southwest). The SACs with an indirect hydrological link to the site are South Dublin Bay SAC (6.4 km downstream) and North Dublin Bay SAC (7.6 km downstream).

There are no Natural Heritage Areas (NHAs) and 19 proposed Natural Heritage Areas (pNHAs) within 15km of the site as shown on Figure 5.9. The proposed site is located within Royal Canal pNHA (Site Code 002103). This is an area considered important for the habitats present or which holds species of plants and animals whose habitat needs protection. The pNHAs were published on a **non-statutory** basis in 1995, but have not since been statutorily proposed or designated. These sites are of significance for wildlife and habitats. The Site Synopsis (1995) indicates that '*The Rare and legally protected Opposite-leaved Pondweed (Groenlandia densa) (Flora Protection Order 1987) is present at one site in Dublin, between Locks 4 and 5. Tolypella intricata (a stonewort listed in the Red Data Book as being Vulnerable) is also in the Royal Canal in Dublin, the only site in Ireland where it is now found.*' Therefore, there is a direct connectivity from the area of the proposed works to this pNHA.

Given the scale, the duration of the proposed works and the distance to nearest designated European site, the South Dublin Bay and River Tolka Estuary SPA, both direct (2km) and via the Royal Canal and River Liffey (5.6km), impact to this and other European sites within the ZOI is considered to be unlikely and not significant. Given the scale and duration of the proposed works, impact to the Royal Canal and other pNHAs is considered to be unlikely and not significant, subject to implementation of pollution mitigation measures during the construction phase.

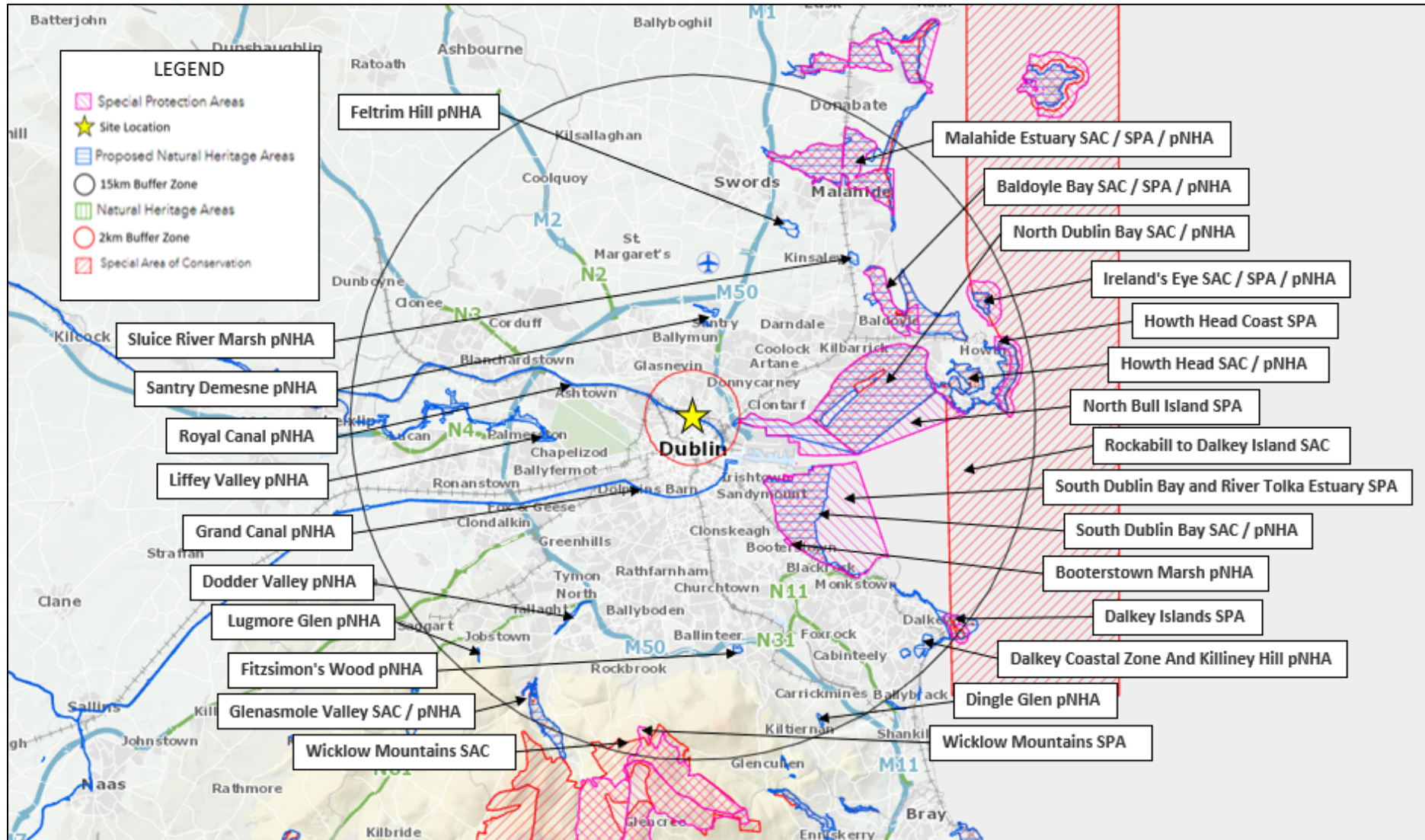


Figure 5.5.9: Designated Sites within 15km of the site; site location indicated by a yellow star (Source: NPWS Maps, 2023)



## 5.8 Baseline Ecological Information

A number of ecological reports were completed and formed the baseline information.

### **Faith Wilson Ecological Consultant (2017) Flora, Fauna and Habitats of The Royal Canal Premium Cycling Route. Ossary Road, North Strand to Westmoreland Bridge Phibsborough**

An Ecology report (2014) was completed by Faith Wilson BSc, CEnv, MCIEEM where they compared the occurrence of *Groenlandia densa* throughout the years near Binns bridge. The report also listed some invasive species near the bridge, including Japanese Knotweed (*Reynoutria japonica*) and listed flora and fauna found in a large area of the Royal Canal, including Binns Bridge.

### **Faith Wilson Ecological Consultant (2017) Royal Canal Cycleway Phase 3 – from North Strand to Phibsborough Invasive Species Survey.**

An Invasive Species Report (2017) was completed by Faith Wilson BSc, CEnv, MCIEEM where the author added some new species to the flora list and checked the areas where Japanese knotweed has been found previously, noticing that the stems now were barely visible (but still possibly active) near Binns bridge.

### **McCarthy Keville O'Sullivan Ltd (2018) A Survey of the Royal Canal from Spencer Dock to Blanchardstown, Co Dublin**

Ecological Assessment: A Survey of the Royal Canal from Spencer Dock to Blanchardstown, Co Dublin (2018) was completed by McCarthy Keville O'Sullivan Ltd where they found evidence of otter (*Lutra lutra*) along the route of the watercourse within the study. An otter spraint was recorded east of Binns Bridge (Grid. Ref. ITM 715924, 735961). In the same report they recorded Japanese knotweed near the bridge but outside of the boundary of the site area.

### **Ash Ecology and Environmental (2020) Bat Survey Report The Royal Canal Premium Cycling Route Ossory Road, North Strand to Westmoreland Bridge, Phibsborough**

A Bat Survey report (2020) was completed by Ash Ecology and Environmental showed that there's an area of high activity for bats to the northwest of Binns Bridge but not the bridge itself, nor did it identify signs of roosting near or at the bridge.

### **Enviroguide Consulting (2021) Otter Survey Report for Royal Canal Greenway – Phase 3 at Royal Canal – Newcomen Bridge, North Strand to Westmoreland Bridge, Phibsborough**

An Otter Survey (2021) was completed by Enviroguide Consulting where they found no otter signs along the canal during the survey. The surrounding habitats of the canal were largely anthropogenic, consisting mainly of amenity grassland and built surfaces. The environs were heavily urbanised. As such, the surveyed section of the Royal Canal (including Binns Bridge) was considered to provide poor potential for Otters.

### **Macklin, R., Brazier, B. & Sleeman, P. (2019). Dublin City otter survey. Report prepared by Triturus Environmental Ltd. for Dublin City Council as an action of the Dublin City Biodiversity Action Plan 2015-2020.**

Additional detailed otter surveys have been undertaken by Triturus (2019) on behalf of Dublin City Council as an action from the Dublin City Biodiversity Action Plan 2015-2020. The baseline otter surveys, conducted over 2018 and 2019, helped to identify the presence of otters within Dublin City boundaries by identifying the occurrence of otter field signs (i.e. holts, spraints, couches, prints & other signs). The Grand Canal was not covered under this study.

The Site Synopsis of The Royal Canal pNHA (Site Code 002103) provides important information about protected or endangered species such as *Groenlandia densa* and *Tolypella intricata* and their occurrence within the area.

## 5.9 Survey Results

Chartered Ecologist Dr. Luis Iemma BSc, MSc, Ph. D, CEcol, MCIEEM, Principal Ecologist with OCSC completed an ecological site walkover in April 2023. The purpose of this walkover was to confirm the habitats present bearing in mind the available baseline information. It is understood that additional surveys will be completed pre-construction to include bats and otters.

Habitats were identified, described, and classified to level 3 (where possible) to the standard Heritage Council classification scheme (Fossitt, 2000) during the walkover survey (see Figure 5.10 and 5.11). Features of ecological interest, if present, were noted and the dominant plant species present in each habitat type were recorded. This is not a comprehensive list of plant species but is sufficient to broadly describe the botanical interest of the site. Species nomenclature follows Parnell & Curtis (2012) for scientific and English names of vascular plants.

The dominant habitat along the length of the greenway is the man-made structure of the Royal Canal and its towpaths and banks. The habitats present within the site are described, classified, and evaluated in this section of the report and shown on Figure 5.10 and Figure 5.11.

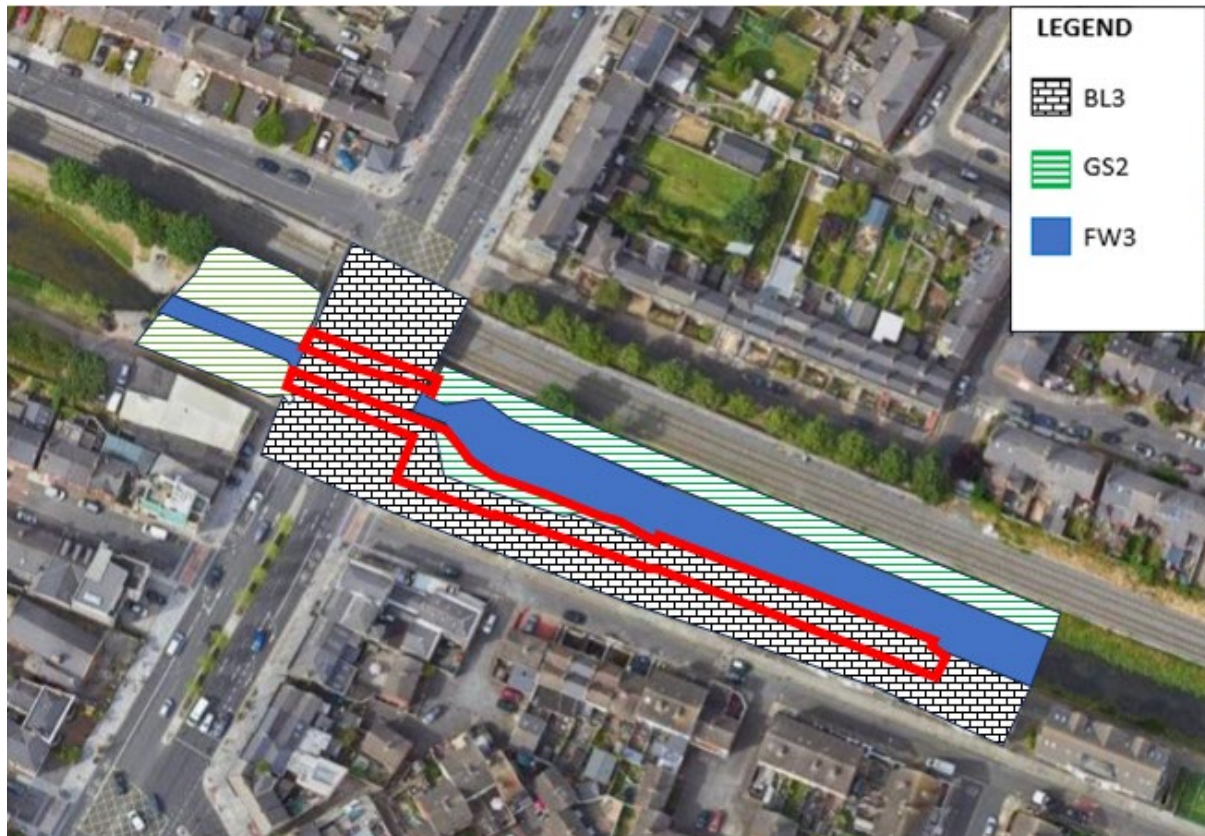


Figure 5.10: Habitat Map

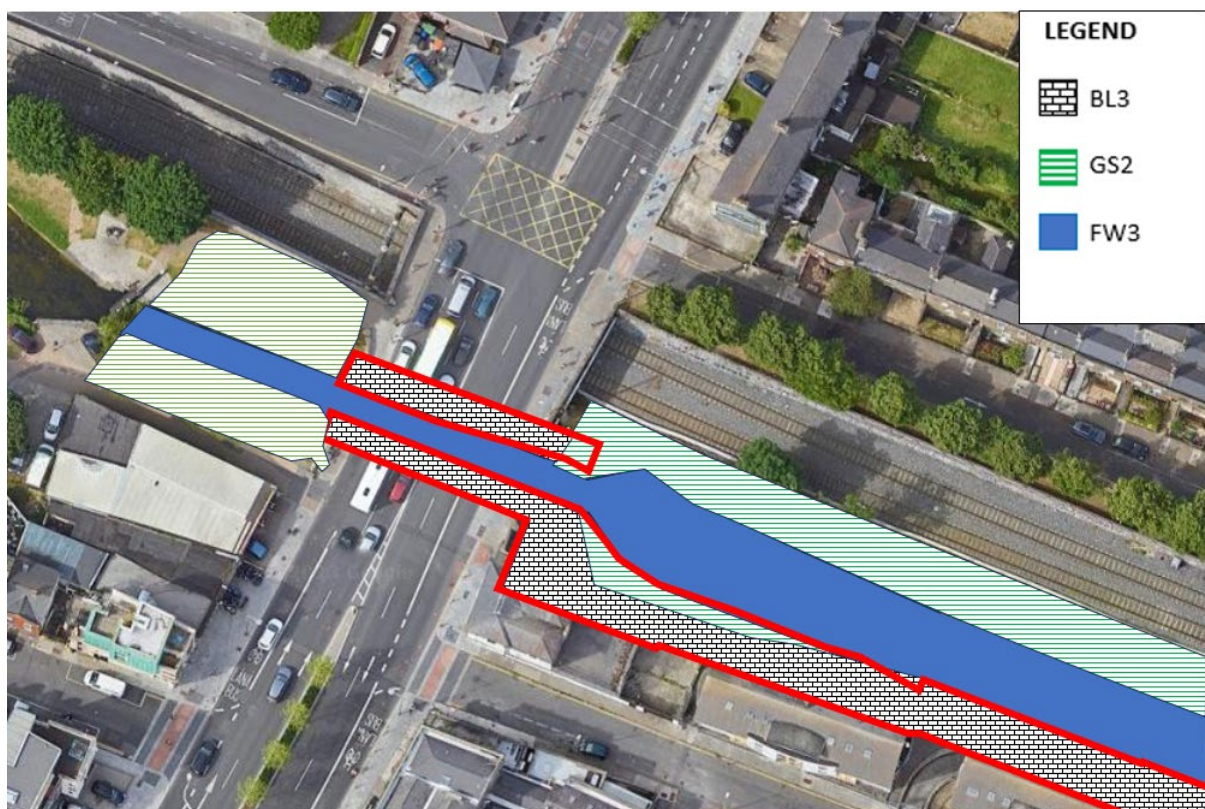


Figure 5.11: Habitat Map including section under the bridge.

### ❖ Buildings and artificial surfaces – BL3

This broad category incorporates areas of built land that do not fit elsewhere in the classification. It includes all buildings (domestic, agricultural, industrial and community) other than derelict stone buildings and ruins (see stone walls and other stonework - BL1). It also includes areas of land that are covered with artificial surfaces of tarmac, cement, paving stones, bricks, blocks or astroturf (e.g. roads, car parks, pavements, runways, yards, and some tracks, paths, driveways and sports grounds). The site area comprises a tarmacadam track running alongside of the canal and the bridge itself (Binns Bridge). During site visit on the 18th of April 2023, despite the fact that there were grass growing in some broken patches along the track, no invasive species were found. An Ecological report from 2014 completed by Faith Wilson BSc, CEnv, MCIEEM, found Japanese knotweed (*Reynoutria japonica*) stems and roots near the site area but in this survey, no plants or signs of infestation were found.



Figure 5.11. BL3 tarmacadam track running alongside of the canal.



**Figure 5.12. Closer look of the tarmacadam track with grass growing in some broken patches.**

#### ❖ **Dry meadows and grassy verges – GS2**

Dry meadows that are rarely fertilised or grazed and are mown only once or twice a year for hay are now rare in Ireland. Most have been improved for agriculture and this type of grassland is now best represented on grassy roadside verges, on the margins of tilled fields, on railway embankments, in churchyards and cemeteries, and in some neglected fields or gardens. These areas are occasionally mown (or treated with herbicides in the case of some railway embankments), and there is little or no grazing or fertiliser application. There's a small patch of GS2 near the bridge (southside) where the grass is not well maintained. No invasive or protected species were found on this patch.



Figure 5.13. Grassy verges present near the bridge.

### ❖ Canals – FW3

Canals are artificial linear bodies of water that were originally constructed for the purpose of navigation. They typically lack strong currents and any significant channel bank erosion. This means that canals tend to have closer affinities with ponds than rivers. Surveying the canal (from the track) no invasive species were found. In previous reports, there were records of Tassel stonewort (*Tolypella intricata*) near this bridge. During this survey, no signs of this species have been found.



Figure 5.14. An overview of the area (Canal plus associated grassy verges and track).



**Figure 5.15. Binns Bridge (view from the sidewalk).**

### 5.9.1 Fauna

Mammal tracks, signs, or direct observations were recorded during the walkover survey of the site. Incidental sightings of birds, mammals, amphibians and invertebrates were noted during the walkover survey. The habitats present were also evaluated in terms of suitability to support foraging bats. Trees with features such as areas of loose, flaking bark; splits; cavities; etc. that could provide suitable roost sites for bats, where present, were also noted during the ground level survey. The suitability of the habitats for roosting and commuting and foraging bats was evaluated using the Bat Conservation Trust guidelines (Collins 2016).

The overall assessment of bat habitats for the current study area is given as 18.89, a low score. On site, no suitable foraging or roosting areas around the bridge were found.

There were no amphibians recorded during the site visit.

Glutinous snail (*Myxas glutinosa*) an endangered species, has also been reported in areas near the bridge, but no signs of this species were found in this survey.

The area has also been surveyed for otters since they are present near Broombridge station and in other areas of the Royal Canal. No signs or evidence of their presence within the footprint of the bridge and surroundings were found.



According to the Biodiversity maps (NBDC maps), the 2km squares (O13N, O13M, O13S) where the site is located, no endangered or protected fish species occur in the area. Although fish was not the primary focus of the survey, when observing the area, the surveyor checked the canal from ground level, but no fish could be seen. That corroborates other reports and the Site Synopsis for the Royal Canal pNHA where no protected or endangered fish species are found in this area.

## 5.9.2 Flora

The flora survey focused within the boundary of the proposed site and the species found on site are listed below:

**Table 5.1. Plant species recorded on site.**

English Name	Scientific Name
Garden Bluebell	<i>Hyacinthoides x massartiana</i>
Small-flowered Cranesbill	<i>Geranium pusillum</i>
Common Willowgrass	<i>Draba verna</i>
Square-stalked Willowherb	<i>Epilobium tetragonium</i>
Grass-wrack Pondweed	<i>Potamogeton compressus.</i>
Rue-leaved Saxifrage	<i>Saxifraga tridactylites</i>
Creeping Buttercup	<i>Ranunculus repens</i>
Stinging nettle	<i>Urtica urens</i>
Hogweed	<i>Heracleum sibiricum</i>
Railway bramble	<i>Rubus elegantispinosus</i>
Climbing Corydalis	<i>Ceratocarpus claviculata</i>
Winter Cress	<i>Barbarea vulgaris</i>
Field Mustard	<i>Brassica rapa</i>

The vegetation along the canal near the bridge is mainly composed of Grass-wrack Pondweed and no species of interest (found in some other areas of the canal in previous reports) were found on site.

The Royal Canal pNHA Site Synopsis (1995) indicates that '*The Rare and legally protected Opposite-leaved Pondweed (Groenlandia densa) (Flora Protection Order 1987) is present at one site in Dublin, between Locks 4 and 5. Tolypella intricata (a stonewort listed in the Red Data Book as being Vulnerable) is also in the Royal Canal in Dublin, the only site in Ireland where it is now found.*' There are no protected fish species listed under this pNHA. No evidence of the aforementioned species was found on site.

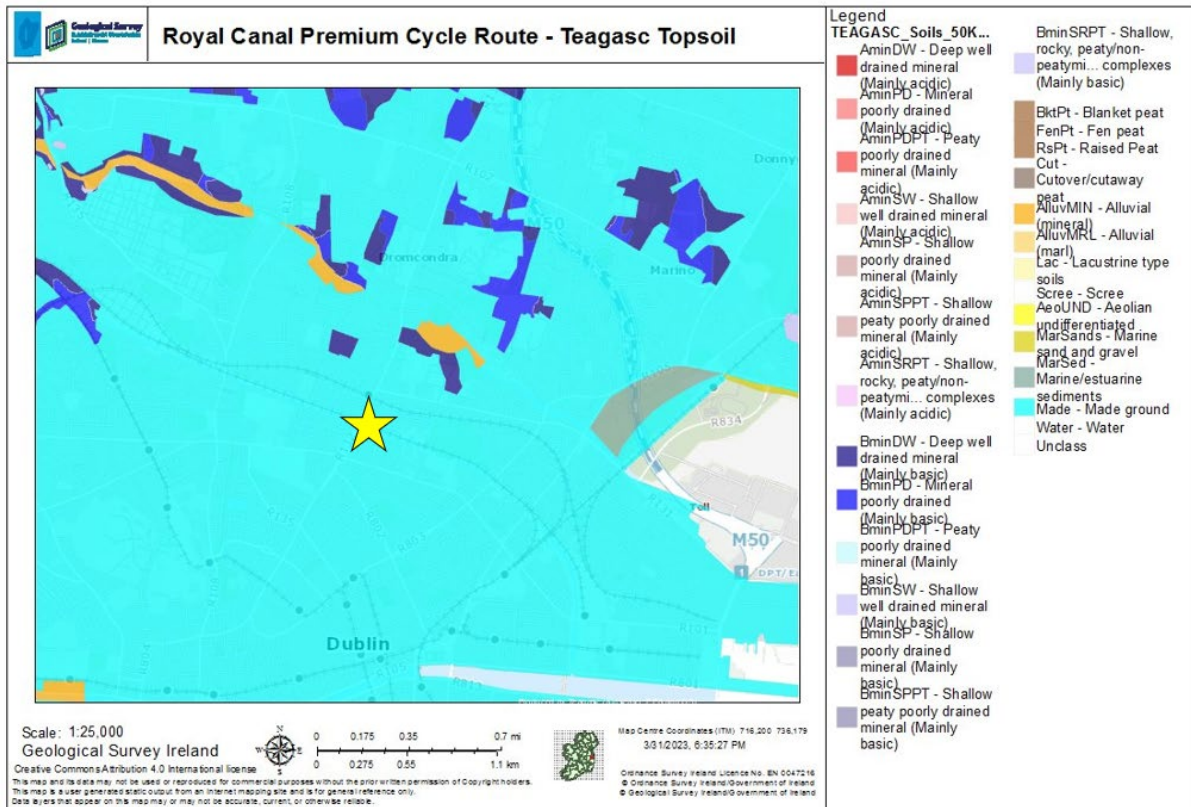
No other endangered or protected species were found on site during the survey.

## 5.10 Topography

The topography of the site is relatively flat with a slight gradient toward the Royal Canal.

### 5.11 Unconsolidated Geology

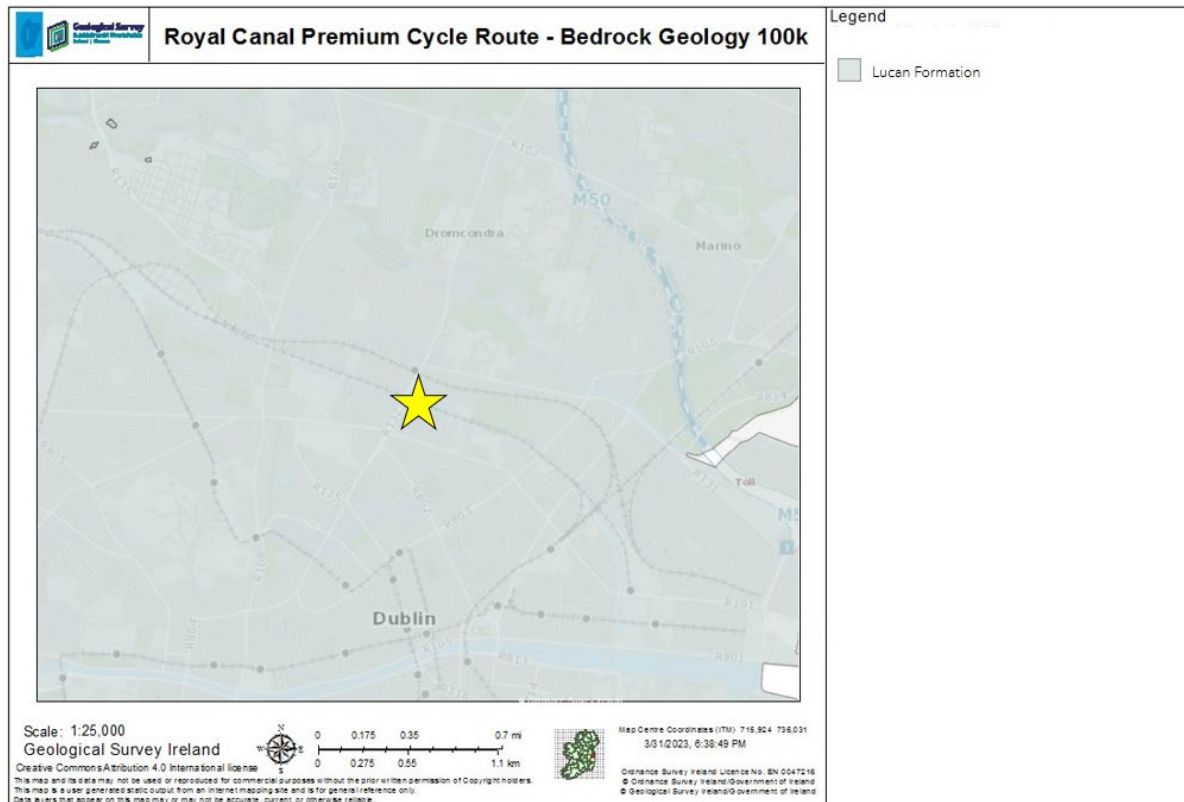
The site is comprised of made ground as seen in Figure 5.16.



**Figure 5.16: Teagasc Topsoil Soil Classification; approximate site location indicated by the yellow star (Source: GSI, 2023)**

### 5.12 Geology

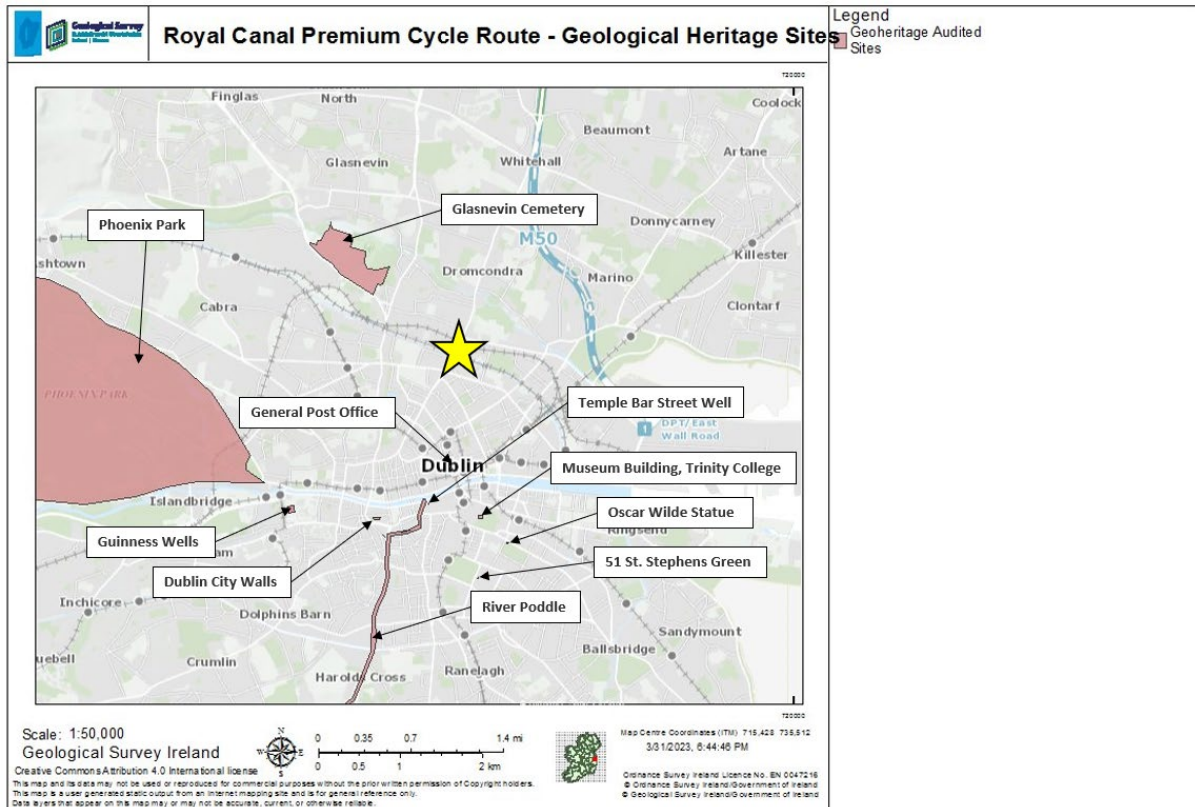
The site is underlain by Lucan Formation. The formation comprises dark grey to black, fine-grained, occasionally cherty, micritic limestones that weather paler, usually to pale grey. There are rare, dark, coarser-grained calcarenitic limestones, sometimes graded, and interbedded dark-grey calcar (GSI, 2023).



**Figure 5.17: Bedrock Geology; approximate site location indicated by the yellow star (Source: GSI, 2023)**

### 5.13 Areas of Geological Interest

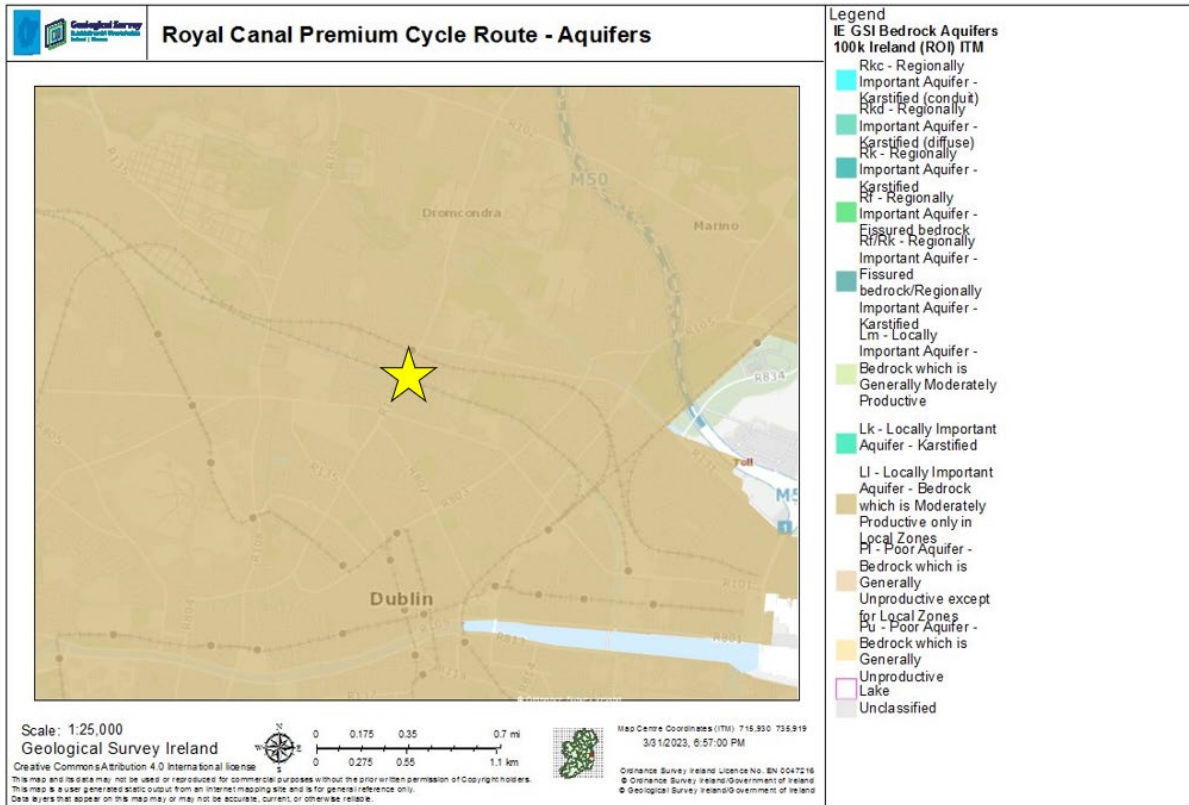
The GSI online mapping service was consulted regarding areas of geological interest in the vicinity of the site. The nearest areas of geological interest are Glasnevin Cemetery (DC004) which is located 1.3 km northwest of the site at its nearest point and General Post Office (DC003) which is located 1.3 km south of the site at its nearest point. Both are designated County Geological Sites (CGS). Glasnevin Cemetery is a very large cemetery of 120 acres dating from 1832 and is unique in the variety of rock types it contains and the ways in which they have been worked. The General Post Office doorways and marble panelled interior area for customers are of interest while the sole use of three classic Irish marble types is a good example of building stone use.



**Figure 5.18: Geological Heritage Sites; approximate site location indicated by the yellow star (Source: GSI, 2023).**

### 5.14 Aquifers

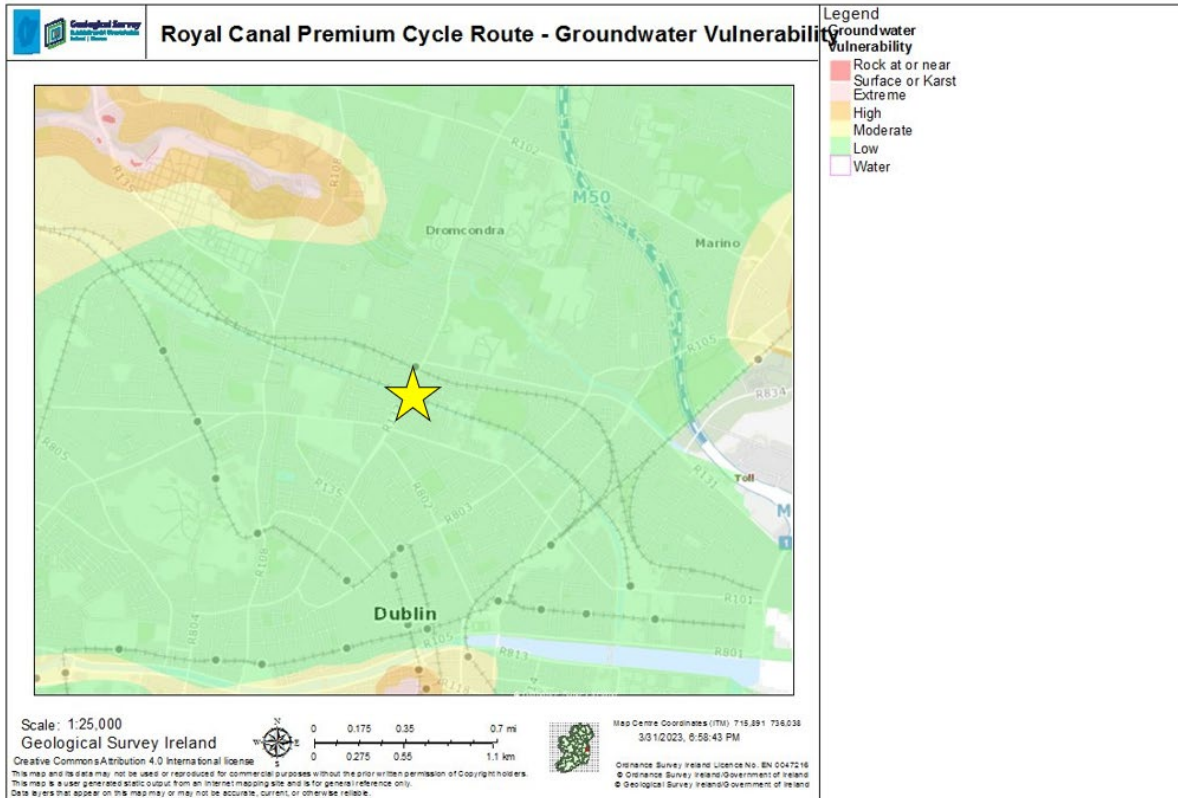
The GSI provides a methodology for aquifer classification based on resource value (regionally important, locally important, and poor) and vulnerability (extreme, high, moderate, or low). Resource value refers to the scale and production potential of the aquifer whilst vulnerability refers to the ease with which groundwater may be contaminated by human activities (vulnerability classification primarily based on the permeability and thickness of subsoils). The site is underlain by a Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones.



**Figure 5.19: Groundwater aquifer; approximate site location indicated by the yellow star (Source: GSI, 2023).**

### 5.15 Groundwater Vulnerability

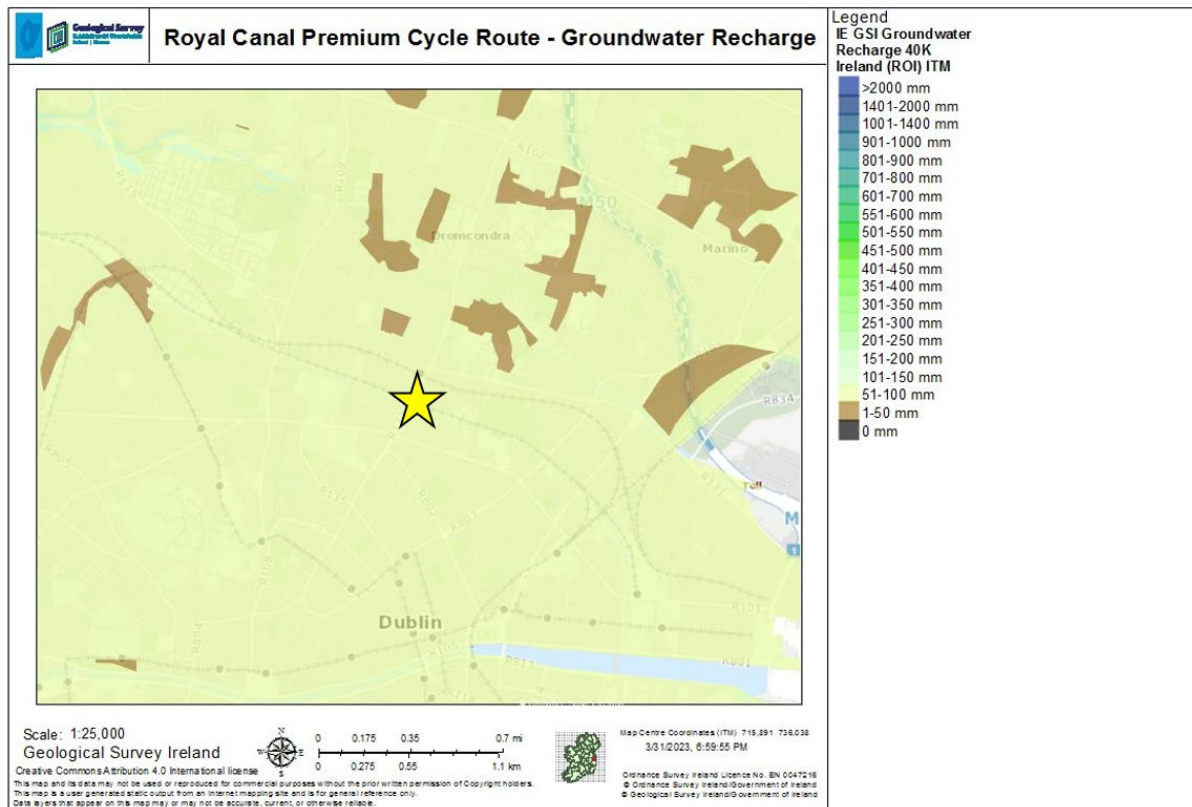
The GSI resources describes the site as having low groundwater vulnerability. Vulnerability ratings are related to a function of overburden thickness and permeability which might offer a degree of protection and/or attenuation to the underlying aquifer from surface activities and pollution.



**Figure 5.20: Groundwater Vulnerability; approximate site location indicated by the yellow star (Source: GSI, 2023).**

### 5.16 Groundwater Recharge

Diffuse groundwater recharge generally occurs via rainfall percolating through the subsoil with its rate being higher in areas where the subsoil is thinner and/or more permeable. The proportion of effective rainfall that recharges the aquifer is largely determined by the thickness and permeability of the soil and subsoil and by the slope. GSI groundwater recharge model parameters for these zones are summarised in Table 5.2.



**Figure 5.20: Groundwater Recharge; approximate site location indicated by the yellow star (Source: GSI, 2023).**

**Table 5.2: GSI Groundwater Recharge Parameters**

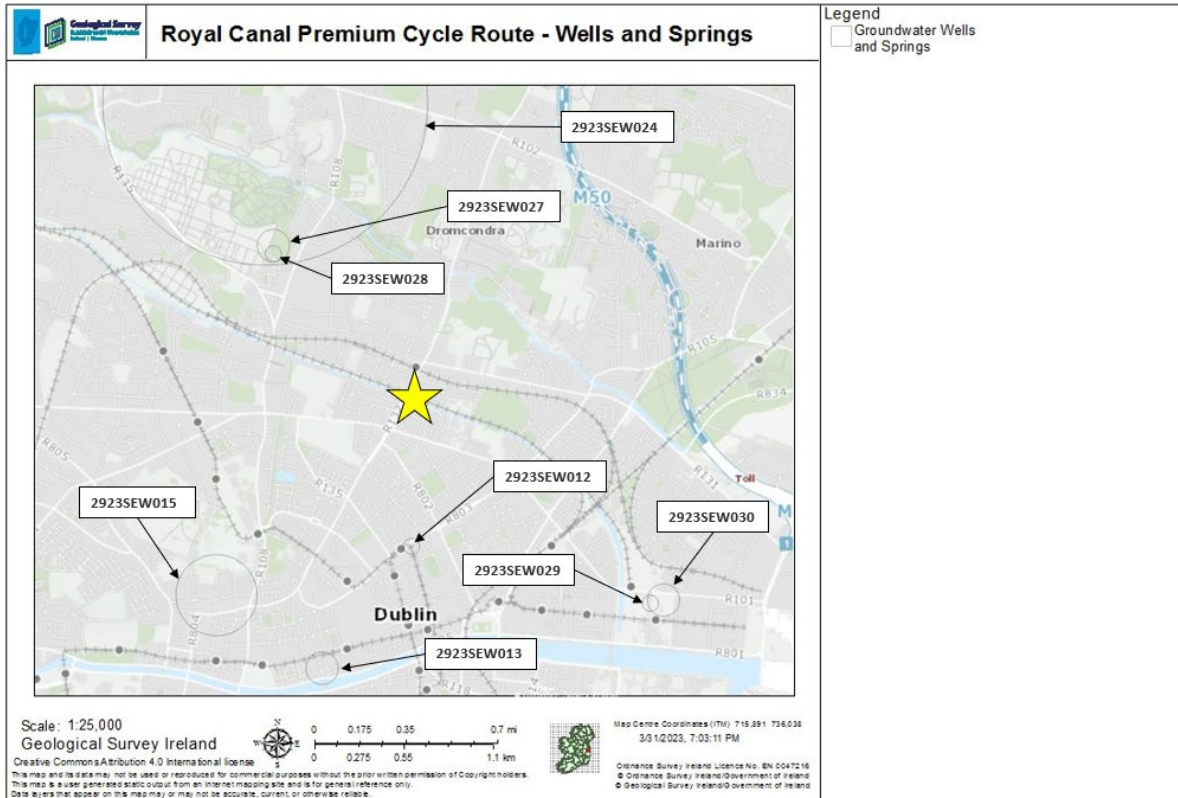
Groundwater Recharge Parameters	
<b>Average Recharge (mm/yr.):</b>	60
<b>Hydrogeological Setting Code:</b>	4m
<b>Hydrogeological Setting Description:</b>	Made ground
<b>Recharge Coefficient (%):</b>	20.00
<b>Effective Rainfall (mm/yr):</b>	301
<b>Recharge Range (mm/yr):</b>	51-100
<b>Subsoil Permeability Description:</b>	Low
<b>GW Vulnerability:</b>	Low
<b>Aquifer Category:</b>	L1
<b>Aquifer Category Description:</b>	Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones
<b>Rock Unit Group</b>	Lucan Formation

## 5.17 Wells and Springs

A search of the GSI groundwater well database was conducted to identify registered wells within the site footprint and/or the surrounding area.

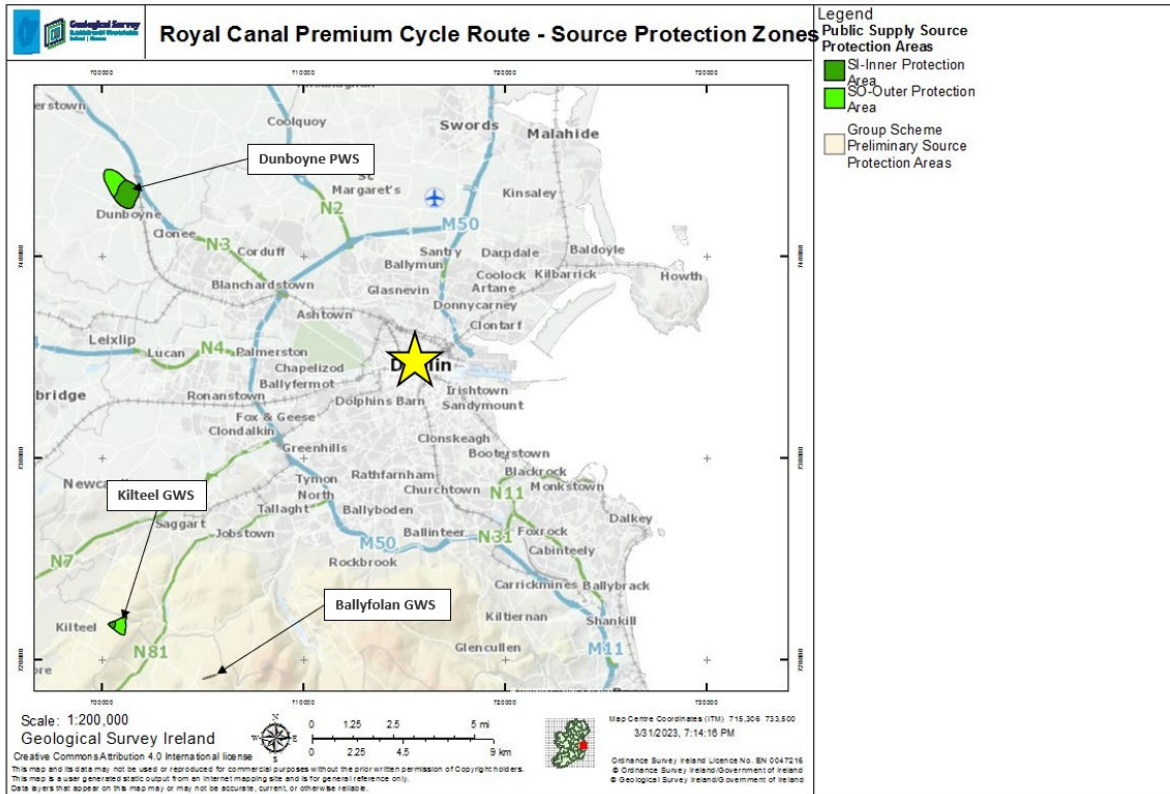
There are no wells located within the site boundary. There are five wells or springs within a 1.5km radius of the site (boreholes 2923SEW012, 2923SEW015, 2923SEW024, 2923SEW027, and 2923SEW028). The nearest borehole to the proposed site (2923SEW012) is located 0.9km south of the site and was drilled to a depth of 137 m on 29<sup>th</sup> December 1899, for an unspecified use.

The GSI database also provides information on groundwater source protection zones (e.g., areas of contribution to water supply bores). The closest source protection zones are Dunboyne PWS, Ballyfolan GWS, and Killeel GWS located 15.7km northwest, 20.2 km southwest, and 19.5km southwest, respectively.



**Figure 5.21: Wells and Springs; approximate site location indicated by the yellow star (Source: GSI, 2023)**



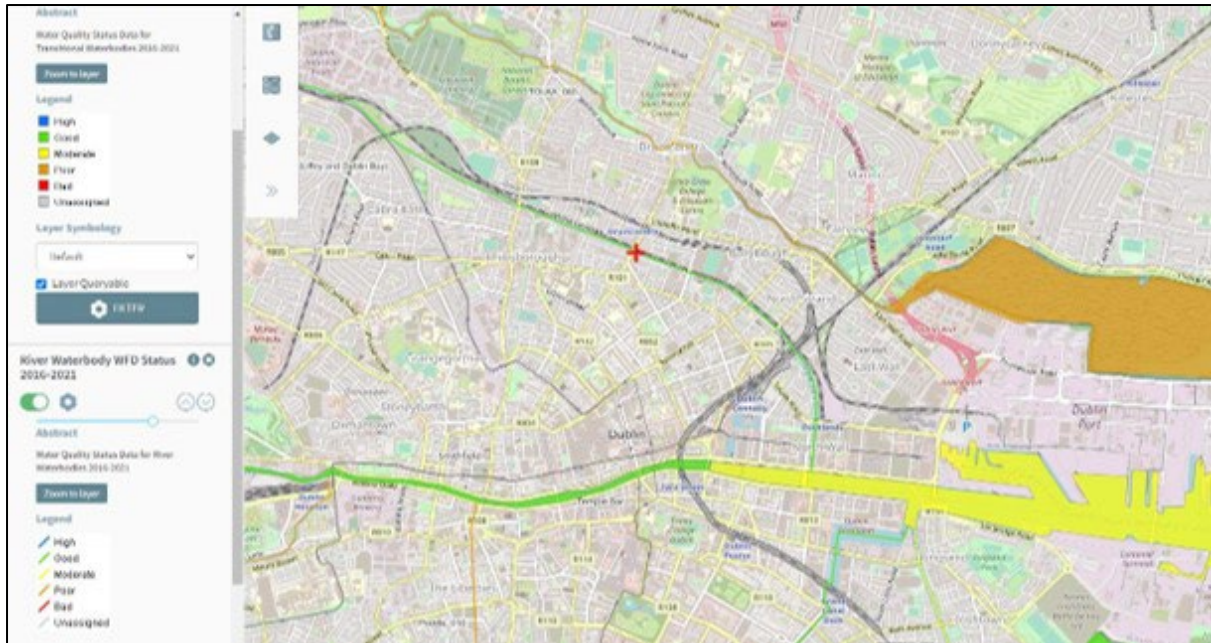


**Figure 5.22: Source Protection Zones; approximate site location indicated by the yellow star (Source: GSI, 2023)**

### 5.18 Hydrology

The site area comprises a section of the Royal Canal Main Line (Liffey and Dublin Bay) and its southern bank downstream of Binns Bridge. The Royal Canal flows from northwest to southeast into the Liffey River and then Dublin Bay. Based on the most recent water quality information (2016-2021), the Royal Canal has an overall Water Framework Directive (WFD) status of ‘Good’.

The EPA spatial dataset shows that the risk of the Royal Canal failing to meet its WFD objectives by 2027 is ‘Under Review’ (EPA 2023).



**Figure 5.23: Transitional Waterbody WFD Status; approximate site location indicated by red cross (Source: EPA Maps, 2023)**



**Figure 5.24: Transitional Waterbodies Risk; approximate site location indicated by red cross (Source: EPA Maps, 2023)**

The River Liffey is located 1.5km south of the site at its nearest point and flows east into Dublin Bay. The EPA classifies this portion of the River Liffey as within the Liffey Estuary Lower as it is a transitional waterbody. However, the portion of the river upstream of Talbot Memorial Bridge is classified for waterbody status and risk purposes as separate from the estuary downstream of this point. Upstream of Talbot Memorial Bridge the River Liffey has an overall WFD status of 'Good'. The EPA spatial dataset shows that the risk of this portion of the River Liffey failing to meet its WFD objectives by 2027 is 'Under Review' (EPA 2023).

The Liffey Estuary Lower downstream of Talbot Memorial Bridge is located 1.6km southeast of the site and flows from west to east into Dublin Bay. This portion of the Liffey Estuary Lower has an overall WFD status of 'Moderate' and is 'At Risk' of failing to meet its WFD objectives by 2027 (EPA 2023).

Dublin Bay is located approximately 4.3km southeast of the site at its nearest point and has an overall WFD status of 'Good'. The EPA spatial dataset indicates that Dublin Bay is 'Not at Risk' of failing to meet its WFD objectives by 2027 (EPA 2023).

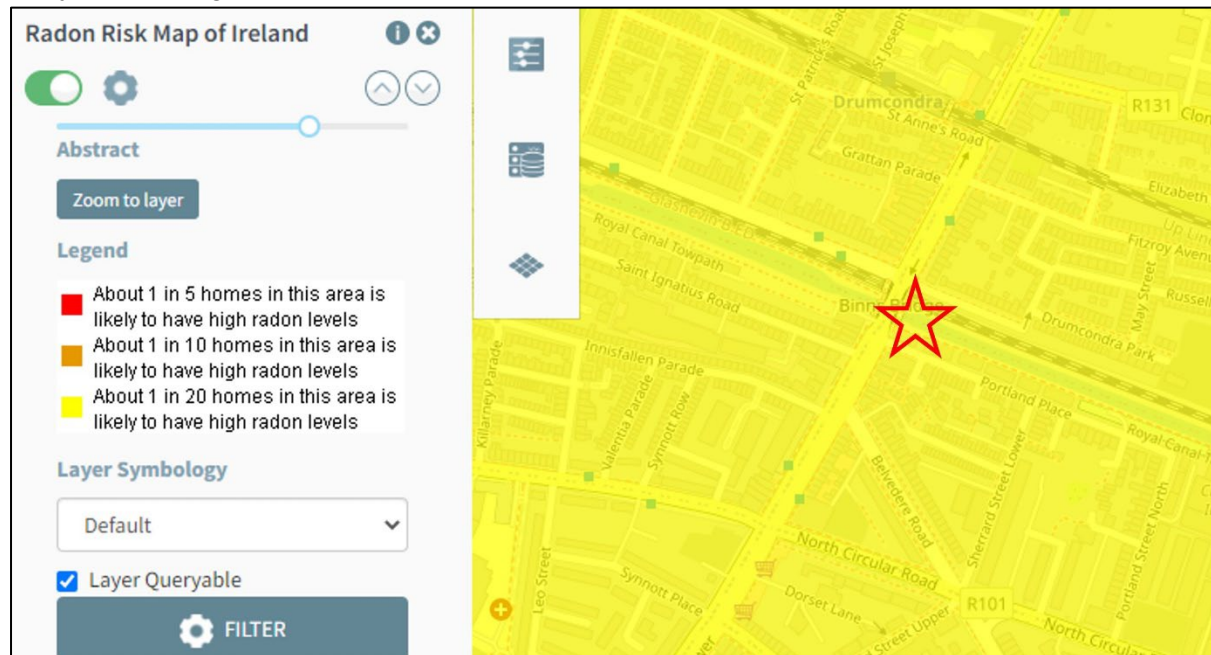
WFD summary information for these waterbodies is summarised in Table 4.3.

**Table 5.3: WFD Summary Information**

Name	Royal Canal	Liffey River	Liffey Estuary Lower	Dublin Bay
Waterbody Code	IE_09_AWB_RCMLE	IE_EA_090_0400	IE_EA_090_0300	IE_EA_090_0000
Waterbody Name	Royal Canal Main Line (Liffey and Dublin Bay)	Liffey Estuary Lower	Liffey Estuary Lower	Dublin Bay
Waterbody Type	Canal	Transitional	Transitional	Coastal
Iteration	SW 2016-2021	SW 2016-2021	SW 2016-2021	SW 2016-2021
Status	Good	Good	Moderate	Good
Risk	Under Review	Under Review	At Risk	Not at risk

### 5.19 Radon

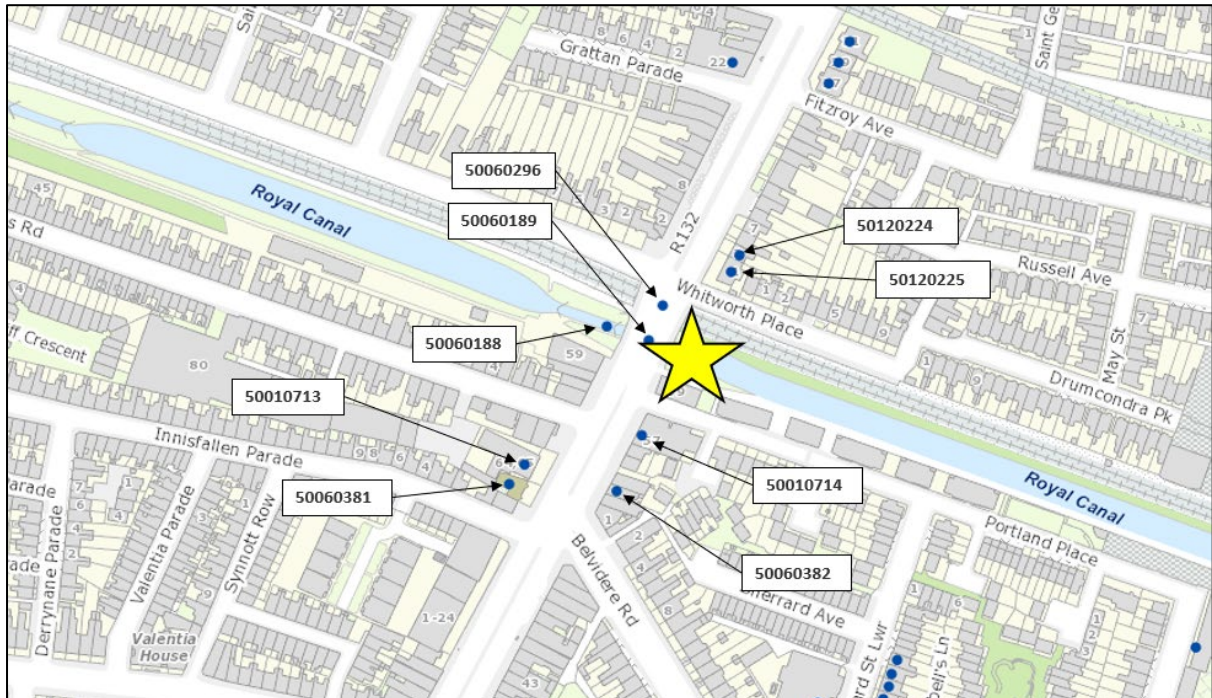
According to the EPA, the site has been classified as an area where about 1 in 20 homes are likely to have high radon levels.



**Figure 5.25: Radon Risk; approximate site location indicated by the red star (Source: EPA Maps, 2023).**

## 5.20 Protected Structures

The National Monuments Service (NMS) maps show that there are nine sites listed on the National Inventory of Architectural Heritage within close proximity to the site. These sites are listed in Table 4.3. The NMS maps also show one listing on the Sites and Monuments Records within the same area. This structure is listed in Table 5.4.



**Figure 5.26: National Inventory of Architectural Heritage sites and Protected Structures in the vicinity of the proposed site (Source: Source: NMS, 2023)**



**Figure 5.27: Sites and Monuments Records in the Vicinity of the Proposed Site; (Source: Source: NMS, 2023).**

Binns Bridge is included in the Record of Protected Structures (RPS) Ref. No. 908 (and does not make a distinction between the canal bridge and the railway bridge), and is included in the National Inventory of Architectural Heritage (NIAH) as previously and per Table 5.4.

Canal Bridge Reg. No. 50060189 with a Regional Rating and Categories of Special Interest cited as Architectural Social and Technical (b.1769), Railway Bridge Reg. No. 50060296, also with a Regional Rating and Categories of Special Interest cited as Architectural Social and Technical (b.1864) and 2nd Lock Royal Canal Reg. No. 50060188 with a Regional Rating and Categories of Special Interest cited as Architectural Social and Technical (b.1795).

The Dublin City Industrial Heritage Record (DCIHR) has two entries for the subject site - Binn's Bridge and the 2nd Lock.

**Table 5.4: Summary Of National Inventory Of Architectural Heritage Sites and Record of Protected Structures within and near the Site**

NIAH Ref.	Name	Location	Description	Distance from site
50060189	Binns Bridge	Drumcondra Road Lower, Dorset Street Lower, Dublin 7, DUBLIN	Single-arch bridge, erected c.1795, carrying road over Royal Canal. Rubble limestone parapet wall with dressed limestone string course, dressed granite copings and carved oval limestone plaque. Elliptical arch, springing from side walls of canal, with moulded granite voussoirs and vermiculated granite keystone. Water and gas pipes to east and west elevations. Abutting north side of bridge is double-arch stone rail bridge of c.1864. Snecked limestone wing walls with dressed granite copings.	0
50060296	Binns Bridge	Drumcondra Road Lower, Dorset Street Lower, Dublin 1, DUBLIN	Double-arch stone bridge, erected 1864, carrying road over railway line. Snecked limestone parapet wall with dressed granite copings and round arches with rusticated voussoirs. Water and gas pipes to west elevations. Snecked limestone wing walls with dressed granite copings. Abuts single-arch stone canal bridge of c.1795 carrying same road over Royal Canal.	0
50060188	2nd Lock	Royal Canal, Dorset Street Lower, Drumcondra Road Lower, Dublin 7, DUBLIN	Double canal lock, constructed c.1795, having dressed limestone chamber walls with dressed limestone coping with recesses for lock gates. Replacement timber and mild steel lock gates and timber balance beams. Truncated timber balance beams to centre gate. Lower chamber located underneath Binns Bridge. To east and west of lock canal expands to provide mooring areas. Twin recesses for stop gates to eastern end. Sculpture of Brendan Behan to northwest end.	0.035km W
50120225	-	1 Drumcondra Road Lower, Dublin 9, DUBLIN	Corner-sited three-bay three-storey former house, built c. 1830 as end house in terrace of five, having return to rear (east) elevation. Now in use as apartments. Pitched slate roof, having paired moulded clay brackets to eaves, red and blue brick eaves course, brown brick chimneystacks to gables with red brick platbands, blue brick detailing and clay pots, and with flat roof to return. Brown brick walling to front elevation, laid in Flemish bond, with render quoins and round pattress plates, and having smooth-rendered walling to side (south) and rear elevations. Square-headed window openings with raised render reveals, granite sills, and replacement uPVC frames. Round-headed doorway with moulded render surround, timber doorcase comprising panelled pilasters on render plinths, fluted brackets, cornice, plain fanlight and replacement timber door, fronted by granite step and render path. Cast-iron railings to front boundary set on cut granite plinth wall.	0.043km N
50010714	Red Parrot Bar & Grille	57 Dorset Street Lower, Portland Place, Dublin, DUBLIN	Corner-sited four-bay three-storey over basement public house, built c.1820, formerly two two-bay houses, with pub-front inserted c.1860. Single-storey addition to north and two-storey addition to rear. Hipped slate roof concealed behind parapet wall, and replacement uPVC rainwater goods. Brown brick walls laid in Flemish bond with stucco dressings comprising deep moulded parapet cornice, rusticated quoins and central vertical pilaster with quoin moulding. Gauged brick flat-arched window openings with moulded architrave surrounds, painted masonry sills and one-over-one pane timber sliding sash windows. Red and black brick pub-front having series of fixed display windows on moulded granite sills and polychromatic brick stall risers flanked by robust brick piers on granite plinth bases and surmounted by moulded capitals and paired console brackets to fascia. Several square-headed door openings, also flanked by brick piers having replacement double-leaf timber panelled doors. Fascia spans entire elevation and extends to flat-roofed section with small pediments corresponding to piers below. Doors open onto original granite flagged pavement, with iron openings to cellars. Interior comprising two large and subdivided sections delineated by central wall and accessed by swinging timber and glazed doors to rear, one being original frosted glass and timber door from former Leech's public house. Moulded timber cornice and frieze to many rooms. Original panelled timber beams supported by decorative and stylised cast-iron columns. Red and brown	0.045km S

			brick walls with segmental arches articulating all rooms. Coved ceiling and Lincrusta wall coverings in main bar area to moulded skirting. Modern timber flooring throughout, with some reproduction geometric tiling at bar.	
50120224	-	3 Drumcondra Road Lower, Dublin 9, DUBLIN	Terraced two-bay three-storey former house, built c. 1830 as one of terrace of five, having return to rear (east) elevation. Now in use as apartments. Pitched slate roof, having paired moulded clay brackets to eaves, red and blue brick eaves course, brown brick chimneystacks with red brick platband and blue brick detailing, replacement rainwater goods, and flat roof to return. Brown brick walling to front elevation, laid in Flemish bond, with vertical iron pattress plate between bays, and rendered walling to rear. Square-headed window openings with raised render reveals, granite sills, and replacement uPVC frames. Round-headed doorway with moulded render surround, panelled pilasters, scrolled brackets with acanthus leaf detail, stepped cornice, plain fanlight and four-panel timber door, fronted by granite step and rendered path with mild-steel railings. Cast-iron railings set on granite plinth wall to front boundary.	0.055km N
50060382	J Dempsey	54A Dorset Street Lower, Dublin 1, DUBLIN	Terraced two-bay two-storey former house, built c.1880, with shopfront. Now vacant. M-profile pitched slate roof with terracotta ridge tiles. Front slope has been covered with sealant. Rear of roof has collapsed. Red brick chimneystacks with clay chimney pots to south party wall. Roof set behind parapet wall with granite coping. Red brick facade, laid in Flemish bond. Segmental-arch window openings to first floor with brick reveals, granite sills and one-over-one pane timber sliding sash windows. Timber shopfront to ground floor comprises plain pilasters with cornices supporting painted fasci board with cornice and lead flashing over. Decorative terminal to west end, having carved acanthus leaf console bracket with carved leaf detail and ridge roll to pitched roof to top. Raised painted lettering to timber fascia bearing business name 'J. Dempsey' and house number. Smooth rendered stall-risers below plain display windows having metal security panels. Central shop door comprises square-headed door opening with double-leaf panelled door and plain over-light. House door comprises square-headed door opening with bolection-panelled door and broken plain over-light. Granite thresholds to doors.	0.074km S
50010713	Saint Francis Xavier Community Centre Ltd	65 Dorset Street Lower, Dublin, DUBLIN	Detached school building, built c.1890, front facade comprising two-bay two-storey gable-fronted section and slightly recessed and lower single-bay two-storey entrance bay to south. Now in use as community centre. Pitched natural slate roof with black clay ridge tiles set behind front gable surmounted by granite apex stone (finial missing), weathered granite coping and gabled granite kneeler stones. Pyramidal roof to entrance bay with copper finial and moulded red brick eaves. Single profiled red brick chimneystack with granite coping. Replacement uPVC rainwater goods. Red brick walls laid in Flemish bond and projecting rough-hewn squared limestone plinth course with yellow brick trim. Rectangular limestone panel between floors of gabled section with roll-moulded surround and raised lettering stating 'St. Francis. Xavier's / National Schools'. Gauged brick segmental-headed window openings with roll-moulded surrounds, moulded granite sills and two-over-two pane timber sliding sash windows. Continuous moulded granite sill course to first floor. Gauged brick two-centred arch door opening to entrance bay with roll-moulded surround and inset doorcase containing replacement hardwood doors and overlight. Door opens onto concrete front area enclosed to street by cast-iron railing on granite ashlar plinth wall with matching iron gates on polychromatic brick piers having granite capstones. Rear elevation abutted by single storey rendered addition with flat roof. Interior comprises single large room to each floor, much altered during late twentieth century. Ground floor retains some timber panelling and original dogleg closed-string timber staircase with stop-chamfer balusters. First floor hall comprising full-length recreational space with	0.09km SW

			exposed timber roof having iron ties and braces with cast-iron cramps spanning width of hall supported on moulded granite brackets.	
50060381	Dorset College	66 Dorset Street Lower, Dublin 1, DUBLIN	Attached three-bay two-storey former house, built c.1890, with canted bay windows to front, and two-storey extension to rear. Abutted by house to south. Now in use as college head office. Hipped tiled roof with terracotta ridge tiles, red brick chimneystacks with yellow brick string courses, red brick saw-tooth cornices and octagonal clay pots over each gable, and with roof-light to rear slope. Roof behind parapet wall. Pitched tiled roof to rear extension. Red brick facade laid in Flemish bond, with cement re-pointing, granite quoins, and having rendered entablature to parapet. Smooth render to north gable. Red brick canted bay windows with rendered parapets. Segmental-headed window openings with bullnose brick reveals and granite sills set within canted bay windows, having replacement uPVC windows. Stilted segmental-headed brick arch door opening with chamfered brick reveals, painted stone doorcase comprising tapering columns with Doric capitals supporting segmental-headed entablature with decorative keystone having open heart and anthemion motifs to face and flower-head to soffit. Flower-head band to soffit of architrave. Doorcase surrounds timber door frame with raised-and-fielded panelled door and rolled glass over-light. Door opens to granite steps and granite plinth walls. Brick paving to front site. Front of site bounded to footpath by painted granite plinth wall with wrought-iron railings and pedestrian gate having fleur-de-lys finials. Cast-iron vine-detailed uprights flanking to gate. Square-plan red and yellow brick piers with granite pyramidal caps to each end of railings. Piers and railings similar in style to those of adjacent Saint Francis Xavier National Schools.	0.1km SW

**Table 5.5: Summary of Sites and Monuments Records Near the Site**

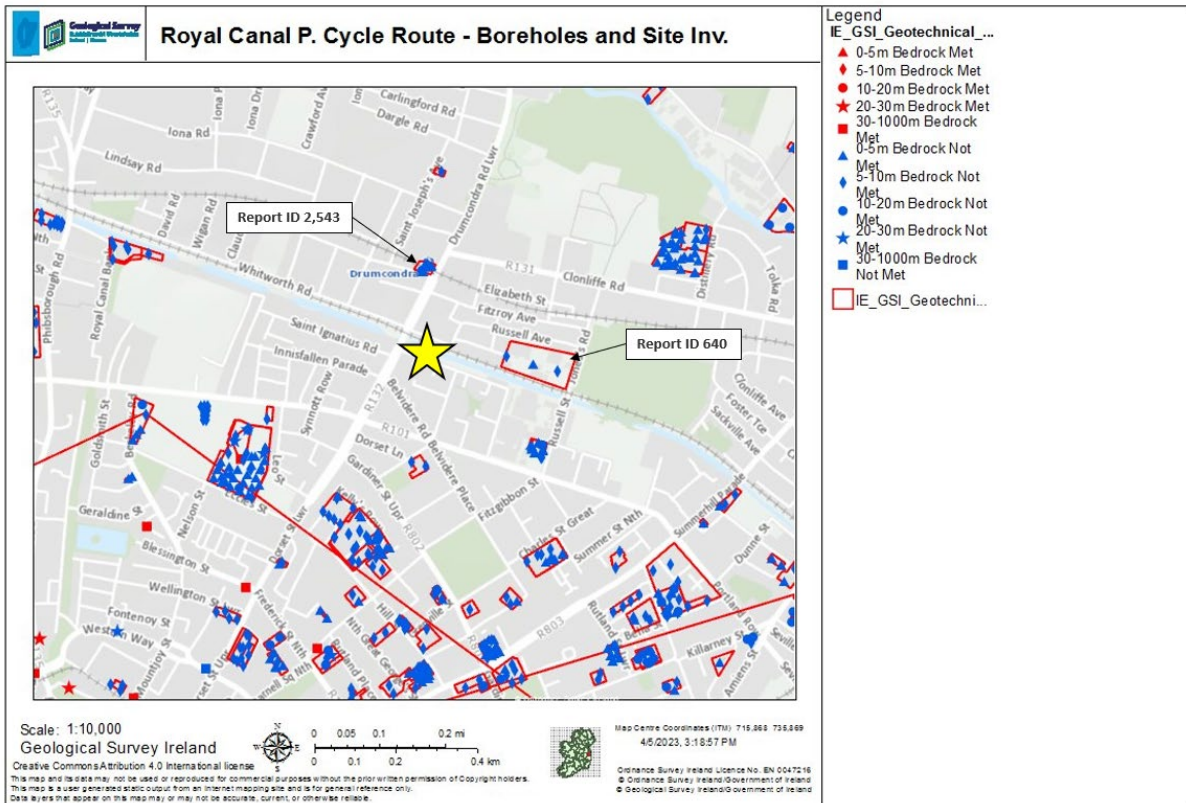
NIAH Ref.	Name	Location – Townland	Description	Distance from site
DU018-023----	House - indeterminate date	Dublin North City	In his book 'Lost Dublin' (1981, 73: Gill and Macmillan), Frederick O'Dwyer reproduces a photograph of No. 80 Lower Dorset Street taken 'shortly before its demolition in the 1890s' and described as an early eighteenth-century mansion built by Richard Synnot and occupied by the Synnot family up to, at least, 1789. O'Dwyer concludes by saying, 'A row of Queen Anne style Victorian shops now occupies the site.'	0.21 km SW

All information taken from the Ordnance Survey Ireland website.



### 5.21 Nearby Site Investigations

The Geological Survey of Ireland (GSI) have compiled a database of site investigations carried out in Ireland. The area surrounding the proposed site has been extensively investigated with over forty investigations located within a 1km radius of the site. The nearest recorded site investigation is at Drumcondra Railway Station (Report ID 2,543) is located 0.18km north of the site. The next nearest recorded investigation was at Johnston Mooney + O'Brien Ltd, Flour Mills, (Report ID 640) located 0.24km east of the site. There are also no details regarding either of these geotechnical investigations. See Figure 4.23 for the location of nearby site investigations and boreholes.



**Figure 5.28: Nearby Boreholes and Site Investigations; approximate site location indicated by the yellow star (Source: GSI, 2023).**

## 6 TYPES AND CHARACTERISTICS OF POTENTIAL IMPACTS

The likely significant effects on the environment of the proposed development in relation to specified criteria are outlined below.

### 6.1 Magnitude and Spatial Extent of Impact

This project relates to a modification to the previously approved 2.1km Royal Canal Greenway Phase 3 project. There is no portion of the proposed project footprint located within the Natura 2000 network. The distance to nearest designated European site, the South Dublin Bay and River Tolka Estuary SPA via the Royal Canal and the River Liffey. The proposed site is located within Royal Canal pNHA. Therefore, there is a direct hydrological connectivity from the area of the proposed works to this pNHA and an indirect link to the South Dublin Bay and River Tolka Estuary SPA located 5.6km downgradient of the site.

Given the scale and duration of the proposed works and the distance to nearest designated European site, the impact to this and other European sites within the ZOI is considered to be unlikely and not significant. Given the scale and duration of the proposed works, impact to the Royal Canal and other pNHAs is considered to be unlikely and not significant subject to implementation of pollution mitigation measures during the construction phase.

### 6.2 The Nature of the Impact

This project relates to a revised ramp design to the previously approved 2.1km Royal Canal Greenway Phase 3 project to accommodate a shallower gradient on the approach to Binns Bridge. This project is small in magnitude and extent. Potential impacts relate primarily to sedimentation and water quality impacts and are likely to be temporary and not significant to fish and other aquatic groups when subject to implementation of a site-specific Construction Environmental Management Plan (CEMP), and maintenance of a minimum 1-2m buffer zone from Royal Canal, where reasonably practicable. Pre-construction surveys to include bats and otters will also be completed.

### 6.3 The Transboundary Nature of the Impact

Transboundary impacts related to the project are predicted to be unlikely, temporary, and not significant subject to implementation of mitigation measures which will be detailed in the site-specific CEMP.

### 6.4 The Intensity and Complexity of the Impact

The project involves a small work area which has been limited to that required to create a useful amenity for both visitors and residents. Any potential impacts be short term, temporary and not significant.

### 6.5 The Probability of the Impact

The probability of impact is low subject to the implementation of mitigation measures detailed in the project-specific CEMP which will be prepared by the appointed contractor.

## **6.6 Expected Onset, Duration, Frequency and Reversibility of the Impact**

Based on scope of work and the short duration of the project and the distance to the nearest designated European site, the South Dublin Bay and River Tolka Estuary SPA, which is located 5.6km downstream, potential impacts to the Natura network are expected to be unlikely, not significant, and short-term subject to the implementation of the site-specific CEMP. In addition, although the proposed works will be undertaken next to the Royal Canal pNHA, the potential impact to this pNHA is expected to be unlikely, not significant, and short-term subject to the implementation of the site-specific CEMP.

## **6.7 The Cumulation of the Impact with the Impacts of Other Existing and/or Future Developments**

There are no likely cumulative impacts of the proposed works in conjunction with committed developments based on a review of planning grants.

## **6.8 The Possibility of Effectively Reducing the Impact**

The project involves a work area which has been limited to that required to for a modification to the previously approved 2.1km Royal Canal Greenway Phase 3 project. A CEMP will be prepared by the appointed contractor considering all site works and detailing all required mitigation measures.

The potential exists during the construction stage for an amount of nuisance associated with localised traffic disruption, construction noise and dust, and siltation associated with soil disturbance. However, construction impacts related to this project are expected to be short-term, and not significant subject to implementation of the CEMP.

Cognisance of the impact of lighting on biodiversity, particularly bats, has been undertaken and directional lighting with motion sensors will be used, where possible.

## **6.9 Screening Decision**

Based on the size and nature of the proposed project, it is considered that the overall impact on the receiving environment will be low subject to implementation of all mitigation measures detailed in the CEMP.

An Appropriate Assessment (AA) Screening Report has been prepared by OCSC which concluded that it is foreseen to not likely give rise to adverse effects on the designated European sites with which it is hydrologically linked. Therefore, a Natura Impact Statement (NIS) does not need to be prepared for this proposed project.

Please refer to the completed Screening Checklist identified in European Commission publication Environmental Impact Assessment of Projects, Guidance on Screening (2017).

**Table 6.1: Environmental Impact Assessment of Projects Screening Checklist**

Checklist	Response
Will there be a large change in environmental conditions?	No
Will new features be out-of-scale with the existing environment?	No
Will the impact be unusual in the area or particularly complex?	No
Will the impact extend over a large area?	No
Will there be any potential for transboundary impact?	No, subject to CEMP.
Will many people be affected?	Minor, short-term impacts. Overall positive impact in creating a new amenity.
Will many receptors of other types (fauna and flora, businesses, facilities) be affected?	There will be a short time impact on flora and fauna during the works, however this will be reduced subject to implementation of an appropriate CEMP.
Will valuable or scarce features or resources be affected?	No
Is there a risk that environmental standards will be breached?	No, subject to implementation of an appropriate CEMP
Is there a risk that protected sites, areas, and features will be affected?	Protected sites will not be affected.
Is there a high probability of the effect occurring?	No.
Will the impact continue for a long time?	Temporary to short term.
Will the effect be permanent rather than temporary?	No
Will the impact be continuous rather than intermittent?	Temporary to short-term during construction.
If it is intermittent, will it be frequent rather than rare?	-
Will the impact be irreversible?	No
Will it be difficult to avoid, or reduce or repair or compensate for the effect?	No

