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ROYAL CANAL GREENWAY
SHERIFF STREET UPPER TO ASHTOWN
PART 8 APPLICATION REPORT

OVERALL REPORT AND DRAWING BOOK STRUCTURE

i. BOOK 1 – PART 8 APPLICATION REPORT

ii. BOOK 2 – PART 8 BOOK OF DRAWINGS

iii. BOOK 3 – ARCHITECTURAL, ARCHAEOLOGICAL AND BUILT HERITAGE REPORTS

iv. BOOK 4 – ENVIRONMENTAL REPORTS
# ROYAL CANAL GREENWAY
## SHERIFF STREET UPPER TO ASHTOWN
### PART 8 APPLICATION REPORT

## TABLE OF CONTENTS

1. OVERALL GREENWAY SCHEME INTRODUCTION ........................................... 1

2. PHASE 2: SHERIFF STREET UPPER TO NORTH STRAND ............................. 3
   i. Introduction ............................................................................. 3
   ii. Site Location & Description ................................................. 4
   iii. Planning & Development Context ....................................... 6
   iv. Consultation ........................................................................ 9
   v. Extent Of Proposed Works ................................................... 12
   vi. Impact Of Proposed Works ................................................ 15
      Traffic Impact ...................................................................... 15
      Architecture, Archaeology & Cultural Heritage Impact .......... 15
      Environmental Impact .......................................................... 15
   vii. Alternatives Considered .................................................... 16
   viii. Conclusions ....................................................................... 17

3. PHASE 3: NORTH STRAND TO PHIBSBOROUGH ................................. 18
   i. Introduction ........................................................................... 18
   ii. Site Location & Description ............................................... 19
   iii. Planning & Development Context ..................................... 24
   iv. Consultation ........................................................................ 28
   v. Extent Of Proposed Works .................................................. 29
   vi. Impact Of Proposed Works ................................................ 34
      Traffic Impact ...................................................................... 34
      Architecture, Archaeology & Cultural Heritage Impact .......... 34
      Environmental Impact .......................................................... 35
   vii. Alternatives Considered .................................................... 36
   viii. Conclusions ....................................................................... 39

4. PHASE 4: PHIBSBOROUGH TO ASHTOWN .................................... 40
   i. Introduction ........................................................................... 40
   ii. Site Location & Description ............................................... 41
   iii. Planning & Development Context ..................................... 46
   iv. Consultation ........................................................................ 50
   v. Extent Of Proposed Works .................................................. 51
   vi. Impact Of Proposed Works ................................................ 54
      Traffic Impact ...................................................................... 54
      Architecture, Archaeology & Cultural Heritage Impact .......... 54
      Environmental Impact .......................................................... 55
   vii. Alternatives Considered .................................................... 56
   viii. Conclusions ....................................................................... 57
1. OVERALL GREENWAY SCHEME INTRODUCTION

This report supports a Part 8 application for the construction of the Royal Canal Greenway Scheme which proposes the construction of a Premium Cycle & Pedestrian Route along the Royal Canal from Sheriff Street Upper to Ashtown.

The scheme is presented herein in three linked phases namely:

- **Phase 1**: Guild Street to Sheriff Street Upper – Complete;
- **Phase 2**: Sheriff Street Upper to North Strand;
- **Phase 3**: North Strand to Phibsborough, and;
- **Phase 4**: Phibsborough to Ashtown.

The overall length of the scheme is 7.1 km from Sheriff Street Upper to Ashtown – Figure 1.1.

![Figure 1.1: Royal Canal Greenway, Sheriff Street Upper to Ashtown](image)

The overall Royal Canal Greenway project also includes a fourth, already constructed link, which runs from Guild Street to Sherriff Street Upper.

The purpose of the report is to describe the nature and extent of the proposed works and to assess their potential impact on the local cycle, pedestrian and traffic regime as well as on the local environment. As noted, the greenway scheme length is 7.1 km and the majority of the route will take place on
existing footpaths and towpaths of the Royal Canal banks. The aims of the project are to provide a Premium Cycle & Pedestrian Route which will:

- Develop a Greenway scheme;
- Meet the accessibility, traffic, layout, structural, safety and environmental requirements for cyclist and pedestrian facilities;
- Meet the requirements of Dublin City Council, Waterways Ireland, Iarnród Éireann and other stakeholders;
- Meet planning and statutory requirements;
- Take into account the Royal Canal as an amenity, a natural habitat & ecological corridor and to respect the integrity of the Royal Canal pNHA; and
- To enhance the canal as an amenity for the City and wider region.

Amongst the overall design features of the Greenway scheme are the following:

- The development of a premium pedestrian and cycle route;
- The provision of public lighting;
- The provision of universal access; and
- The promotion of sustainable transport.

To determine the potential for ecological impact, the National Transport Authority and Waterways Ireland commissioned an overarching Ecological Impact Assessment of the Greater Dublin Area Network Plan on the Royal Canal pNHA to determine the potential for environmental and ecological impact. The assessment notes that the Royal Canal covers a total area of 6,920,000m². Within the Dublin City to Maynooth section, the pNHA covers 892,000m². The proposed works would result in a disturbance to 81,100m² (9.09%) of this part of the pNHA. However the proposed work areas will be reinstated post construction to a cyclepath of width 3- 4m, which represents 6.25% of the pNHA within the area and 0.8% of the pNHA overall.

The scheme will provide significant environmental and public realm improvements. The Part 8 application addresses the current and proposed quality of public realm, the current and proposed Quality of Service for cyclists wishing to access the city centre and the opening up of the amenity of the Royal Canal to commuters, tourists and local residents.

The application is proposed by the Environment & Transportation Department of Dublin City Council. This department, and other Dublin City Council Departments, have worked closely with its consultants O’Connor Sutton Cronin & Associates and Roughan & O’Donovan/Aecom JV, and with their supporting sub-consultants, in developing the project under the aegis of the National Transport Authority and in close consultation with Waterways Ireland and other bodies as appropriate.
It is envisaged that once complete, the Part 8 proposals will promote a safe and inviting environment for cyclists and pedestrians to access the city and enjoy the amenity which the Royal Canal has to offer.
2. PHASE 2: SHERIFF STREET UPPER TO NORTH STRAND

i. Introduction

This section of the report focuses on Phase 2 of the scheme which runs from Sheriff Street Upper to North Strand Road. The report describes the nature and extent of the proposed works and assesses their potential impact on the local cycle, pedestrian and traffic regime as well as on the local environment. The scheme generally proposes to provide new footpaths and cycletracks along the bank of the Royal Canal, including new ramps and new pedestrian and cycle crossing facilities, to provide access to and safe passage to intermediate roads. A detailed description of the proposed works is set out in the report.

The proposed Phase 2 greenway is to follow the western bank of the Royal Canal between Sheriff Street Upper in Dublin 1 and North Strand Road in Dublin 3.

The scheme commences at the Lifting Bridge on Sheriff Street Upper, continuing along the Royal Canal to the proposed Newcomen Bridge Cycle Project on North Strand Road and is approximately 0.7 km in length. It will utilise the existing brown field site between Sheriff Street Upper and the Ossory Road Railway Bridge. The route interfaces with existing road and rail infrastructure.

The scheme's primary objectives are to deliver a successful cycling / walking facility and public amenity which maximises the following factors:

- Segregation from high-speed motorised traffic and heavy goods vehicles;
- Provide route continuity, particularly at road crossings;
- Provide a riding surface with a high level of comfort for cyclists whilst minimising maintenance costs;
- Provide convenience to users;
- Provide an attractive route and linear park to encourage use;
- Provide a safe facility;
- Respect the requirements of relevant third parties.

The scheme must also be sympathetic with the surroundings and be suitable for all levels of users including commuter and recreational cyclists.
ii. **Site Location And Description**

The Phase 2 site location is shown in Figure 2.1 below.

![Figure 2.1: Phase 2 Site Location Map](image)

The site is located along the western bank of the Royal Canal. It starts at the northern side of Sheriff Street Upper and continues for approximately 0.7 km. It is bounded to the east by the Royal Canal and the west by residential estates and railway infrastructure. The width of the bank varies between 20m and 25m.

Starting from the south of the site the area generally consists of derelict lands covered in scrub and untended grass. A vegetated earth embankment of unknown fill material with a crest level approximately 1m above ground level runs parallel to the Royal Canal for a distance of approximately 300m.

The bank of the canal is segregated from the adjacent residential housing estate by a 2.5m high wall which is predominately constructed of concrete blockwork. In three locations the blockwork wall is low and has a palisade fence up to a height of 2.5m on top. Throughout the site, but particularly in these three locations, there is evidence of illegal dumping.

The Ossory Road Railway Bridge crosses the Royal Canal approximately 530m north of Sheriff Street Upper. The section of the Royal Canal between the Ossory Road Railway Bridge and North Strand Road is predominately a brownfield site. The site straddles the Connolly to Drumcondra Line Railway Spur which curves in a northerly direction, generally at ground level and crosses the Royal Canal on a lifting bridge located at the northern side of the
The site undulates but rises steeply as it heads towards North Strand Road.

Photographs, which give an overview of the existing western bank of the Royal Canal, are shown below:

- View looking towards the Liffey from Sheriff Street Upper
- View to the east of Newcomen Bridge
- View along the canal bank
- View Under Ossory Road Railway Bridge
- View between Ossory Road Railway Bridge and Newcomen Bridge
- View of North Strand Road

* Plates 2.1 – 2.6: Phase 2 Existing Views*
iii. Planning & Development Context

Background
Dublin City Council began installing cycling lanes in the mid 1990’s and now has a network of over 200km of cycling lanes. Approximately 90% of our cycling network are on-road lanes which are not physically separated from motorised traffic. Research indicates that many people are discouraged from cycling in Dublin by a perception of risk and there is evidence of a demand for more off-road cycling facilities which are physically separated from motorised traffic.

National Policy

National Cycling Policy Framework 2009 - 2020
In recognising cycling as one of the most important forms of sustainable transport the Department of Transport published a National Cycling Policy Framework in April 2009. The policy framework emanates from the Government’s new transport policy for Ireland – 2009-2020 Smarter Travel – A Sustainable Transport Future.

The framework sets out many policies and objectives in relation to cycling, with the ultimate aim of increasing cycling’s share of the total travel market from 2% to 10% by 2020. The key objectives of the policy framework are as follows:

- Move 160,000 people a day to work by bike; an increase of 125,000 people;
- Invest in better, safer cycle routes around the country for commuters, leisure cyclists and visitors. (Improve existing cycle routes and introduce new routes to best international standards);
- Increase cycling’s share of the total travel market, from 2% to 10%;
- Introduce a new approach to the design of urban roads to better recognise the needs of cyclists and pedestrians; and
- Retrofit major road junctions and roadways in key cities and towns to make them cycle-friendly.

The National Cycling Policy Framework 2009 – 2020 aims to create a strong culture of cycling in Ireland with an aim that 10% of all trips will be by bike by 2020. Reaching this national target will require that major urban centres achieve significantly higher cycling modal share. Currently around 3% of trips in Dublin are taken by bike.
As outlined in the National Cycling Policy Framework, no single action will prompt more people to cycle but the development of high quality cycling infrastructure will play an important part in helping to achieve a new culture where cycling is seen as an attractive mode of transport, particularly for short trips in urban areas.

*Dublin City Development Plan 2011 - 2017*

Dublin City Council is committed to a policy of developing and improving infrastructure for cyclists throughout the city.

*Chapter 5 - Connecting and Sustaining the City’s Infrastructure* of the Dublin City Development Plan sets out the Council’s policies and objectives for promoting modal change.

**Policy SI2** states: ‘It is the policy of Dublin City Council to continue to promote the modal shift from private car use towards increased use of more sustainable forms of transport such as cycling, walking and public transport and to implement the initiatives contained in the Government’s, ‘Smarter Travel, A Sustainable Transport Future 2009-2020.’

This project will provide a high quality facility specifically designed for pedestrians and cyclists. As it is completely separate from vehicular traffic it will assist in encouraging a modal change away from cars.

**Policy SI013** states: ‘It is an objective of Dublin City Council to develop new cycle routes including Grand and Royal Canal Premium Routes.’

**Policy SI014** states: ‘It is an objective of Dublin City Council to develop a direct cycle linkage system away from the primary traffic network including on and off-road cycle lanes designed and constructed to minimise conflict with other road users.’

**Policy SI018** states: ‘It is an objective of Dublin City Council to provide additional cycle and pedestrian bridges across the city’s canals and rivers to form part of strategic cycling and walking routes.’

**Policy SI020** states: ‘It is an objective of Dublin City Council to provide increased priority for cyclists at key road junctions where possible, by using road marking, priority light signals and other measures as appropriate.’

**Policy GC6** states: ‘It is the policy of Dublin City Council to protect and improve the natural character of watercourses and to promote access, walkways and other compatible recreational uses along them.’

**Policy GC19** states: ‘It is the policy of Dublin City Council to protect, maintain, improve and enhance the natural and organic character of the watercourses in the city, and to promote access, walkways and other recreational uses of their
associated open space, incorporating flood strategies and subject to a defined strategy of nature conservation in consultation with Inland Fisheries Ireland.’

**Smarter Travel Policy – A Sustainable Transport Future**

This is the transport policy for Ireland for the period 2009-2020. The policy recognises the vital importance of continued investment in transport to ensure an efficient economy and continued social development, but it also sets out the necessary steps to ensure that people choose more sustainable transport modes such as walking, cycling and public transport. The policy is a response to the fact that continued growth in demand for road transport is not sustainable from a number of angles; it will lead to further congestion, further local air pollution, contribute to global warming, and result in negative impacts to health through promoting increasingly sedentary lifestyles. Chapter 5 of the Policy document sets out (that in order that) the Government’s ambition to ensure that a reduction in travel demand and reliance on the car can be achieved, there must be appropriate, reliable and user-friendly alternatives in place. Action 17 of Chapter 5 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’.

**National Cycle Policy Framework**

The National Cycle Policy Framework was officially launched in April 2009 and details 109 individual but integrated actions that will be taken over the coming 12 years to deliver a culture of safe cycling in Ireland by 2020. Policy No 3.2 states ‘We will carry out further research and surveying work in order to expand the network to include rural recreational routes around urban areas and to connect major urban areas. We will pay special attention to the opportunities of using both the extensive disused rail network and canal / river tow path networks as cycling / walking routes.’

It is against the background of the above policy documents that the Royal Canal Greenway Phase 2 Premium Cycle & Pedestrian Route, Sheriff Street Upper to North Strand is being developed.
iv. **Consultation**

As part of the design process, DCC contacted a number of relevant parties who may be impacted by or have an interest in the proposed scheme. The aim of this process was to create awareness and to afford an opportunity to raise issues or provide information deemed pertinent to the project. DCC’s *Request for Tender* included a detailed list of stakeholders to be contacted as part of this process, with a point of contact provided where known and applicable. Stakeholders have been broken down into three separate groups as follows:

- Dublin City Council Divisions;
- Service Providers & Statutory Authorities;
- Local Residents & Residents Associations.

A letter was sent to each stakeholder, which included a summary of the scheme, along with its overall aims and objectives and an assessment of the proposed preliminary design process. Detailed drawings highlighting the exact area subject to this scheme were also included with each letter. Where possible, correspondence was sent both by post and by email. A copy of the *Stakeholders Consultation Report* is available under separate cover and includes details on the various responses stakeholder received to date. The *Stakeholder Consultation Report* will continue to be updated during the development of the project.

**MCO Consultation Process**

In addition to the MCO Projects were engaged in 2013 by Dublin City Council Roads & Traffic Department, to consult the local community and stakeholders about a proposed development of the site along the Royal Canal between Sheriff Street Upper and North Strand Road. The approach was to engage the community and stakeholders through a number of ways, including:

- One to one meetings with key stakeholders in North Wall and local vicinity;
- Door-to-door consultations in North Wall area;
- Consultation process and collaborative planning workshops with local schoolchildren to re-imagine their canal, enabled by MCO and an artist;
- Round-table meeting with key stakeholders;
- Collaborative planning workshops in North Wall, Spencer Dock, East Wall and Ballybough involving residents, youth groups, schoolchildren, community representatives, partners and other key stakeholders.

In November 2014, Dublin City Council re-engaged with local stakeholders prior to the commencement of the statutory Part 8 process for the Greenway. MCO prepared a draft visualisation of an outline proposal for the route along this section, based on the design guidelines produced in the previous engagement. This was put on display between 19th December 2014 and
January 15th 2015 in a number of key locations including Lawrence O’Toole Community Centre; North Wall Community Development Project; Fay’s shop, Seville Place; Charlemondt Mall Library; Sean O’Casey Community Centre and East Wall. MCO Projects presented the outline proposal for the cycle and pedestrian route to the North Wall Forum 12th December 2014. The pupils of St Lawrence O’Toole’s BNS and GNS were revisited to update them of progress.

Conclusions of MCO Consultation Process: The local community and stakeholders are generally positive about the proposed Greenway which offers enhanced amenity in the form of a new linear park in a currently derelict site. Based on the consultation, it was concluded that the design of the route in this section should:

- Resolve the existing backland character of the site and lack of visibility into and from the site;
- Take into account the distinctive boundary and access issues at key points in the area. Feedback reflected concerns about access points at Ferryman’s Crossing, Bellman’s Walk and Oriel St Lower, with a majority of residents strongly against any openings along the site. The positive aspects of access points were reflected by other stakeholders i.e. increased visibility and safety of the site, ease of security and maintenance and connectivity. This has reflected the need for a phased plan that could allow for access points in the future, once a trial period of c.18 months of the site has been established;
- Ensure that the detail design takes into account the current antisocial behavioural issues of the area and that an operational plan for the use and maintenance of the entire area be agreed between the partners and the local community at the outset of design.
The National Cycle Manual sets out the standard planning and statutory requirements for cycle schemes in a simple flow chart which is replicated in Figure 1. The figure sets out clearly the responsibilities of both the NTA and DCC in the process. It also clearly identifies the various consultees to be notified and consulted during the process. Finally the figure sets out the planning process and statutory process to be adhered to in securing planning permission for the scheme. The scheme is being progressed through the planning process in accordance with these guidelines.

**Figure 2.3: Planning and Statutory Requirements**
v. Extent Of Proposed Works

The design and layout of the proposed Phase 2 scheme is shown in the accompanying Book of Part 8 drawings. The greenway will be constructed on the western bank of the Royal Canal. Extensive site clearance, excavation of existing embankments and landscaping of the unmanaged grassland will be carried out during the works.

A segregated cycle track and pedestrian walkway, 3m and 2m wide respectively will be provided. Public lighting and CCTV will be installed along the length of scheme. Vehicular access for routine maintenance works to the canal by Waterways Ireland will be provided by means of removable bollards at the Sheriff Street Upper entrance.

The pedestrian path will be set back 2m from the canal wall, thereby providing a 4m wide access for maintenance vehicles.

The canal bank will be landscaped to produce a high quality linear park. Access and egress points will be provided at Sheriff Street Upper and North Strand Road. Two links will be facilitated along the path for possible future access from residential areas located at Ferryman’s Crossing and Oriel Street Lower. These will only be installed after further consultations with the local residents within 12-18 months after the opening of the greenway.

Photomontages of the proposed path are shown below.

Plate 2.7: Photomontage at the Sheriff Street Upper Entrance
Plate 2.8: Photomontage at the Boundary Wall of Bellman’s Walk

Plate 2.9: Photomontage at Potential controlled access to Ferryman’s Crossing.

Between the Ossory Road Railway Bridge and North Strand Road a proposed earth ramp and 7 span concrete bridge will connect to the proposed Newcomen Bridge Cycle Project. This will provide access to North Strand Road and Phase 3 of the greenway further along the Royal Canal.

A photomontage of the proposed ramp and bridge are shown in Plate 2.10 over.
Plate 2.10: Photomontage of the proposed Newcomen Bridge Cycle Project.
View From North Strand Road
vi. Impact Of Proposed Works

Traffic Impact
The proposed route interfaces with two roads: Sheriff Street Upper and North Strand Road. The Sheriff Street Upper access to the greenway is from an existing Toucan crossing, which is not expected to impact traffic. Access to North Strand Road is via the proposed Newcomen Bridge Cycle Project. Additional traffic signalling and traffic management will be implemented in this area between Ossory Road and Charleville Mall. Significant impact to traffic is not expected in this area.

The scheme crosses a railway line between Newcomen Bridge and Ossory Road Railway Bridge. It is proposed to construct an elevated ramp access over this railway line whilst maintaining the current envelope required by Irish Rail. It is not expected that rail traffic will be impacted following the construction of the works.

Architectural, Archaeology and Cultural Heritage Impact
There are no structures of Architectural importance located along the length of the route. The Sheriff Street Upper Lifting Bridge (Ref 50010016) and the Newcomen Bridge (Ref 911) are recorded protected structures within the vicinity of scheme. Access to the scheme at Sheriff Street Upper will be made through existing hoarding; this ensures that the Sheriff Street Upper Lifting Bridge is not impacted by access to the greenway. The Link to Newcomen Bridge will be via the proposed Newcomen Bridge Cycle Project; as such this scheme will not impact on the existing Newcomen Bridge.

The canal is an area deemed as of importance to Ireland's Industrial Heritage. At present the canal wall is in disrepair, with a significant quantity of vegetation growth within the mortar joints. Existing vegetation along the western canal wall will be removed and repair works will be carried out to the wall where necessary in consultation with Waterways Ireland. The proposed footpath/towpath will be constructed to allow Waterways Ireland to perform regular maintenance along the route, which at present is not possible. It is not expected that there will be any negative impact to the archaeological or cultural heritage of the canal caused by the works.

Environmental Impact
The Royal Canal is a Proposed Natural Heritage Area (pNHA), this section is currently a brownfield site. Provided industry standard pollution prevention measures are adhered to during construction, it is considered that the proposed scheme can be provided without any negative impact on the pNHA. It is noted that the cycleway scheme from Spencer Dock to the First Lock has been located outside the pNHA and that there will be significant ecological enhancements in this area as a result of the creation of the linear park i.e. significant compensatory habitat creation.
vii. Alternatives Considered

Five alternative options were considered within the Phase 2 Options Selection Report. Two of these options considered a route on the western bank of the canal. The other three options considered routes on Seville Place. The options on the canal bank were as follows:

- Option 1: cycle and pedestrian paths along the bank of the canal;
- Option 2: cycle and pedestrian paths along the bank of the canal with three alternative access and egress points. These would link the proposed greenway to the residential areas located at Bellman’s Walk, Ferryman’s Crossing and Oriel Street Lower.

Options 3 to 5 considered routes along Seville Place, as follows:

- Option 3: Retain existing cycle lanes;
- Option 4: Two-way cycle lanes on the east side of Seville Place;
  - Option 4A: Two-way cycle lanes on the east side of Seville Place with removal of on-street parking facilities;
- Option 5: Two-way cycle lanes on the west side of Seville Place;
  - Option 5A: Two-way cycle lanes on the west side of Seville Place with removal of on-street parking facilities.

The options were assessed under the following criteria, in order to determine a Preferred Route:

- Environment;
- Quality of Service;
- Safety;
- Economy;
- Cost;
- Accessibility & Social Inclusion;
- Integration.

Option 2 was identified as the preferred option.

Following pre-planning consultation carried out by DCC it is proposed to take forward Option 2 to Part VIII without the connections to Ferryman’s Crossing and Oriel Street Lower. Provision is to be made for these connections but they will not be constructed until further consultation with residents is undertaken 12 – 18 months after the opening of the greenway.
viii. Conclusions

This chapter of the overall Royal Canal Greenway report supports a Part 8 application for the Royal Canal Greenway Premium Cycle & Pedestrian Route Phase 2, from Sheriff Street Upper to North Strand. The scheme will entail the following:

- The construction of 0.7km of new segregated cycling and pedestrian facilities;
- The construction of 150m of earth ramp and bridge to the new proposed pedestrian Newcomen Bridge;
- Extension of the existing pedestrian and cycling facilities currently located along the Royal Canal;
- The construction of new public lighting and CCTV facilities;
- The construction of Health Stations;
- The enhancement of the local area by the construction of a new linear park;
- Possible future play opportunity area;
- Communication ducting and equipment, drainage, traffic, signalling, traffic management measures, service diversions and other ancillary services.

The proposed works will greatly enhance facilities for cyclists and pedestrians in the area. The improvements will provide greater accessibility and integration of communities in the local area and will assist in providing a more sustainable transport network within the City.
3. PHASE 3: NORTH STRAND TO PHIBSBOROUGH

i. Introduction

This section of the report focusses on Phase 3 of the scheme which runs from North Strand Road to Phibsborough. The report describes the nature and extent of the proposed works and assesses their potential impact on the local cycle, pedestrian and traffic regime as well as on the local environment. The scheme generally proposes to provide new footpaths and cycletracks along the bank of the Royal Canal, including new ramps and new pedestrian and cycle crossing facilities, to provide access to and safe passage across a number of intermediate roads. A detailed description of the proposed works is set out in the report.

The Phase 3 greenway scheme is approximately 2.1 km in length. The scheme is considered in four individual zones. It runs along the southern bank of the canal through the first three zones and in the eastern section of Zone IV, crossing over the canal to the northern bank along the final section of Zone IV to Phibsborough Road. The design and layout of the scheme is shown in the Book of Part 8 Drawings accompanying the Part 8 application. The scheme is best demonstrated through a series of CGI images through each zone as shown later.

The scheme's primary objectives are to deliver a successful cycling / walking facility and public amenity which maximises the following factors:

- Segregation from high-speed motorised traffic and heavy goods vehicles;
- Provide route continuity, particularly at road crossings;
- Provide a riding surface with a high level of comfort for cyclists whilst minimising maintenance costs;
- Provide convenience to users;
- Provide an attractive route and linear park to encourage use;
- Provide a safe facility;
- Respect the requirements of relevant third parties.

The scheme must also be sympathetic with the surroundings and be suitable for all levels of users including commuter and recreational cyclists.
ii. Site Location And Description

The Phase 3 site location is shown in Figure 3.1 below.

![Phase 3 Site Location Map](image)

The site is linear in nature and stretches for just over 2.1 kilometres from North Strand Road to Phibsborough Road. En-route between these two points, the site crosses the following streets:

- Ballybough Road;
- Russell Street;
- Drumcondra Road.

The site is divided into four distinct zones with the canal bounded on its northern bank by a railway line throughout the scheme area.

Zone I (North Strand to Ballybough Road): is 273 metres long. It runs from Lock No. 1 at Newcomen Bridge on North Strand Road north-westwards as far as Clarke’s Bridge at the junction of Summerhill Parade and Ballybough Road. The canal is bounded on the southern side by Charleville Mall and on the northern side by a twin track railway line at the same grade, separated by a 5 – 6 metre wide mounded overgrown green space with intermittent trees. The railway is bound to the north by gardens of houses on Newcomen Avenue and by Ulster Terrace on the Ballybough approach.

There is a well-developed pathway along the southern bank of the canal from Newcomen Bridge to Clarke’s Bridge with relatively easy access and egress for cyclists at both ends. Access at Charleville Mall in particular is excellent via a wide, paved and high quality public realm area. There is an existing pedestrian
crossing on North Strand Road on the north side of Newcomen Bridge at the Ossory Road junction.

Plate 3.1: Aerial View of Zone I

Zone II (Ballybough Road to Russell Street): is 455 metres from Clarke’s Bridge to Russell Street. The canal is bounded to the north by the railway line, at the same grade, and separated by a mounded grassed bank.

Croke Park dominates the area and cantilevers over the north bank. At the eastern end the canal is bounded on the southern side by gardens of Richmond Cottages. It is then bounded by North Richmond Street Industrial Estate and by a parking area for Croke Park. On the north side, beyond the railway line, the canal is overlooked first by Sackville Gardens and then by Croke Villas before Croke Park dominates for the remainder of the zone.

There is a well developed pathway along the southern bank of the canal between the two bridges. There is no access from the northern bank onto Russell Street while access from the southern bank is by series of steps and ramps which are not conducive for travel by bicycle or by mobility-impaired persons. There is a significant 3.5 metre level difference between the canal walk and the east side of Russell Street.
Zone III (Russell Street to Drumcondra Road): is 423 metres in length and runs from Russell Street to Binn’s Bridge in Drumcondra. The layout through this zone is broadly similar to Zones I & II with the canal bounded on its northern bank by the twin railway lines at the same grade as the canal and separated by a mounded grassed area. Access from Russell Street is difficult with a series of 5 – 6 steps and a long steep ramp. There is a less steep ramp at the Drumcondra end of the south bank.

The southern bank of the canal is bounded initially by the Croke Park Industrial Estate and then by Portland Place. The northern bank beyond the railway lines is bounded initially by the Croke Park Hotel and then by Drumcondra Park. There is a well developed path along the southern bank of the canal albeit access is difficult given the vertical differences at either end of the zone.

Zone III terminates at Binn’s Bridge on Drumcondra Road. There is a significant and busy signalised junction at this point with multi-lane approaches on Drumcondra Road. There are no pedestrian or cycle crossings to link Zone III to Zone IV.
Zone IV (Drumcondra Road to Phibsborough Road): this is the longest of the four zones and is 865 metres in length. There are well developed pathways along both banks. There is easy access to both the north and south banks from Drumcondra Road. The southern canal bank meets the public road at Royal Canal Bank on the eastern approach to Phibsborough.

There are three canal locks in this zone i.e. the 2nd, 3rd & 4th Royal Canal Locks, two in the centre of the section with the other close to Binn’s Bridge. This means that the canal rises significantly as one moves from east to west and is manifest in the increasing level difference between the canal and the bounding railway lines along the northern bank.

At points along the northern bank the boundary wall to the railway is very low with a steep drop to the railway line. The southern bank of the canal is bounded by the rear gardens of St. Ignatius Terrace as one moves west from Binn’s Bridge. Thereafter it fronts a new apartment development at Dakota Court before running along Royal Canal Bank on the approach to Westmoreland Bridge at Phibsborough. The northern bank beyond the railway line is bounded by Whitworth Road for its full length.

The Zone terminates at Westmoreland (Cross Guns) Bridge on Prospect Road in Phibsborough.
An aerial view of the entire proposed scheme is shown in Plate 3.5 below.
Phase 3: North Strand to Phibsborough

Part 8 Application

iii. Planning & Development Context

Background

Dublin City Council began installing cycling lanes in the mid 1990’s and now has a network of over 200km of cycling lanes. Approximately 90% of our cycling network are on-road lanes which are not physically separated from motorised traffic. Research indicates that many people are discouraged from cycling in Dublin by a perception of risk and there is evidence of a demand for more off-road cycling facilities which are physically separated from motorised traffic.

National Policy

National Cycling Policy Framework 2009 - 2020

In recognising cycling as one of the most important forms of sustainable transport the Department of Transport published a National Cycling Policy Framework in April 2009. The policy framework emanates from the Government’s new transport policy for Ireland – 2009-2020 Smarter Travel – A Sustainable Transport Future.

The framework sets out many policies and objectives in relation to cycling, with the ultimate aim of increasing cycling’s share of the total travel market from 2% to 10% by 2020. The key objectives of the policy framework are as follows:

- Move 160,000 people a day to work by bike; an increase of 125,000 people;
- Invest in better, safer cycle routes around the country for commuters, leisure cyclists and visitors. (Improve existing cycle routes and introduce new routes to best international standards);
- Increase cycling’s share of the total travel market, from 2% to 10%;
- Introduce a new approach to the design of urban roads to better recognise the needs of cyclists and pedestrians; and
- Retrofit major road junctions and roadways in key cities and towns to make them cycle-friendly.

The National Cycling Policy Framework 2009 – 2020 aims to create a strong culture of cycling in Ireland with an aim that 10% of all trips will be by bike by 2020. Reaching this national target will require that major urban centres achieve significantly higher cycling modal share. Currently around 3% of trips in Dublin are taken by bike.

As outlined in the National Cycling Policy Framework, no single action will prompt more people to cycle but the development of high quality cycling infrastructure will play an important part in helping to achieve a new culture where cycling is seen as an attractive mode of transport, particularly for short trips in urban areas.
Dublin City Development Plan 2011 - 2017
Dublin City Council is committed to a policy of developing and improving infrastructure for cyclists throughout the city.

Chapter 5 - Connecting and Sustaining the City’s Infrastructure of the Dublin City Development Plan sets out the Council’s policies and objectives for promoting modal change.

Policy SI2 states: ‘It is the policy of Dublin City Council to continue to promote the modal shift from private car use towards increased use of more sustainable forms of transport such as cycling, walking and public transport and to implement the initiatives contained in the Government’s, ‘Smarter Travel, A Sustainable Transport Future 2009-2020.’

This project will provide a high quality facility specifically designed for pedestrians and cyclists. As it is completely separate from vehicular traffic it will assist in encouraging a modal change away from cars.

Policy SI013 states: ‘It is an objective of Dublin City Council to develop new cycle routes including Grand and Royal Canal Premium Routes.’

Policy SI014 states: ‘It is an objective of Dublin City Council to develop a direct cycle linkage system away from the primary traffic network including on and off-road cycle lanes designed and constructed to minimise conflict with other road users.’

Policy SI018 states: ‘It is an objective of Dublin City Council to provide additional cycle and pedestrian bridges across the city’s canals and rivers to form part of strategic cycling and walking routes.’

Policy SI020 states: ‘It is an objective of Dublin City Council to provide increased priority for cyclists at key road junctions where possible, by using road marking, priority light signals and other measures as appropriate.’

Policy GC6 states: ‘It is the policy of Dublin City Council to protect and improve the natural character of watercourses and to promote access, walkways and other compatible recreational uses along them.’

Phibsborough/Mountjoy Local Area Plan 2008
Phibsborough is noted as being one of Dublin’s oldest and best known neighbourhoods. A statutory local area plan was created in 2007 to ‘plan and direct the future development of this area as a quality urban neighbourhood.’ The Royal Canal is noted as being an important element in the development of the plan in terms of open space/recreation and also industrial heritage. ‘The Royal Canal is an important landscape site which adds to the diversity of the historic environment in the LAP area. In addition to its civil engineering heritage
significance as an element of a major national waterway, it provides a valuable public amenity space and a habitat for wildlife.’ Some of the key objectives in the Plan include:

- Expand the cultural and leisure potential of the industrial heritage of the Royal Canal, the Canal Bank and Blessington Basin;
- Consider the development of the Royal Canal and spur as a civic promenade as well as a primary recreational green route;
- Develop the Royal Canal Way and Blessington Street Park/Royal Canal Bank as strategic long distance pedestrian and cycle green routes;
- Promote the protection and enhancement of natural heritage areas as wildlife corridors along the Royal Canal; and
- Deliver further passive and active recreational space and sports facilities to include a new substantial water feature adjacent to the Royal Canal.

The Mountjoy prison site is noted as a key development opportunity area and it is noted that the success of any redevelopment will be its relationship with the Royal Canal. Connections and linkages around the Canal are noted in relation to a number of sites in terms of maximising their potential.

**Smarter Travel Policy – A Sustainable Transport Future**

This is the transport policy for Ireland for the period 2009-2020. The policy recognises the vital importance of continued investment in transport to ensure an efficient economy and continued social development, but it also sets out the necessary steps to ensure that people choose more sustainable transport modes such as walking, cycling and public transport. The policy is a response to the fact that continued growth in demand for road transport is not sustainable from a number of angles; it will lead to further congestion, further local air pollution, contribute to global warming, and result in negative impacts to health through promoting increasingly sedentary lifestyles. Chapter 5 of the Policy document sets out (that in order that) the Government’s ambition to ensure that a reduction in travel demand and reliance on the car can be achieved, there must be appropriate, reliable and user-friendly alternatives in place. Action 17 of Chapter 5 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’.

**National Cycle Policy Framework**

The National Cycle Policy Framework was officially launched in April 2009 and details 109 individual but integrated actions that will be taken over the coming 12 years to deliver a culture of safe cycling in Ireland by 2020. Policy No 3.2 states ‘We will carry out further research and surveying work in order to expand the network to include rural recreational routes around urban areas and to connect major urban areas. We will pay special attention to the opportunities
of using both the extensive disused rail network and canal / river tow path networks as cycling / walking routes.'

It is against the background of the above policy documents that the Royal Canal Premium Cycle & Pedestrian Route, Phase 3, North Strand to Phibsborough is being developed.
iv. Consultation

As part of the design process, DCC contacted a number of relevant parties who may be impacted by or have an interest in the proposed scheme. The aim of this process was to create awareness and to afford an opportunity to raise issues or provide information deemed pertinent to the project. DCC’s Request for Tender included a detailed list of stakeholders to be contacted as part of this process, with a point of contact provided where known and applicable. Stakeholders have been broken down into three separate groups as follows:

- Dublin City Council Divisions;
- Service Providers & Statutory Authorities;
- Local Residents & Residents Associations.

A letter was sent to each stakeholder, which included a summary of the scheme, along with its overall aims and objectives and an assessment of the proposed preliminary design process. Detailed drawings highlighting the exact area subject to this scheme were also included with each letter. Where possible, correspondence was sent both by post and by email. A copy of the Stakeholders Consultation Report is available under separate cover and includes details on the various responses stakeholder received to date. The Stakeholder Consultation Report will continue to be updated during the development of the project.

The National Cycle Manual sets out the standard planning and statutory requirements for cycle schemes in a simple flow chart which is replicated in Figure 1. The figure sets out clearly the responsibilities of both the NTA and DCC in the process. It also clearly identifies the various consultees to be notified and consulted during the process. Finally the figure sets out the planning process and statutory process to be adhered to in securing planning permission for the scheme. The scheme is being progressed through the planning process in accordance with these guidelines.

**Figure 3.2: Planning and Statutory Requirements**
v. Extent Of Proposed Works

The design and layout of the proposed Phase 3 scheme is shown in the accompanying Book of Part 8 Drawings with the extent shown in Figure 3.3.

The scheme runs along the southern bank of the canal through the first three zones and in the eastern section of Zone IV, crossing over the canal to the northern bank along the final section of Zone IV to Phibsborough Road. The design and layout of the scheme is shown in the Book of Drawings accompanying the Part 8 application. The scheme is best demonstrated through a series of CGI images through each zone.

Zone I (North Strand to Ballybough Road):

The initial section of the scheme in Zone I runs along the existing road in Charleville Mall where a shared surface will be provided.

The works here will consist mainly of signing and delineating the existing roadway.
Moving westwards away from Charleville Mall, the next section through Zone I runs along an existing wide pavement. There is again a limited requirement for construction works here and the works will consist mainly of resurfacing and signing and lining.

Zone II (Ballybough Road to Russell Street):

The initial eastern section through Zone II at Ballybough Road will require widening of the existing towpath to provide sufficient width to accommodate the proposed footpath and two way cycletrack. This widening will be constructed using coir rolls to provide a new soft edge in accordance with ecological advice and following consultation with Waterways Ireland.

The canal towpath widens and changes character as one moves west through Zone II. As one approaches Croke Park the towpath is of concrete construction having being reconstructed as part of the Croke Park redevelopment project. The initial section of this towpath can accommodate the proposed Part 8 works with some resurfacing and delineation works.

The final section through Zone II, alongside Croke Park and on the approach to Russell Street, requires the construction of a new ramp to provide access up to Russell Street which is 3.5 metres above the canal towpath.
The new ramp will be constructed to provide easy access for mobility impaired persons. It will also be constructed so as to maintain access from Croke Park and canal maintenance access as required by Waterways Ireland.

The new ramp will partially oversail the canal but by a limited amount and will not adversely affect navigation of the waterway.

**Zone III (Russell Street to Drumcondra Road):**

The existing towpath through Zone III is of concrete construction. A section of the existing towpath and canal wall through this zone has collapsed and is being reconstructed by Waterways Ireland.

This reconstruction work will, by agreement, be wide enough to accommodate the new footpath and two way cycletrack. The remaining section of the towpath as far as Drumcondra Road will be widened under the proposed Part 8 works to accommodate the new scheme.

**Zone IV (Drumcondra Road to Phibsborough Road):**

Zone IV is different to the remaining three zones in that it is visually open and in a more parkland setting then the earlier confined zones. In the context of the local environment through this zone, the proposed scheme will be surfaced in a buff colour through this zone in order better to blend. The zone is also much longer than any of the other three and represents approximately 40% of
the scheme length. The initial section of the scheme runs along the southern bank of the canal behind the houses at St. Ignatius Road. There is a vehicular access from St. Ignatius Road to a parking area alongside the canal at this point. It is proposed to construct a control gate at this location to prevent vehicles accessing the new pedestrian and cycle facility.

This access control gate can be removed to provide occasional maintenance access to Waterways Ireland.

The scheme continues along the southern canal bank through Zone IV where the environment opens up into a more parkland setting. The new facility can be provided along the existing canal bank without any need for widening into the navigation.

As one continues westwards through Zone IV the proposed Part 8 works continue to run along the southern canal bank on the eastern approach to the second lock. The scheme rises gently through this section before turning through 90° to cross the canal using a new bridge to be constructed at the eastern end of the lock.
A second controlled access gate is being provided at this location to control vehicular activity and to allow occasional but necessary canal and lock maintenance access for Waterways Ireland.

The scheme crosses over to the northern canal bank between the second and third locks and remains on the northern bank as far as Phibsborough Road where the scheme terminates.

A new high visibility fence is to be provided along the northern edge of the scheme to separate cyclists from the low boundary wall which separates the canal from the railway line which is located at a significantly lower level than the towpath.

The final section of the scheme, on the approach to Phibsborough Road, features a gentle ramp providing easy access to the existing road where a new crossing will be provided.
vi. Impact Of Proposed Works

Traffic Impact
As part of the design process a detailed traffic impact analysis was carried out. This included traffic modelling at each of the five road junctions at North Strand Road, Ballybough Road, Russell Street and Phibsborough. In general the scheme makes use of existing pedestrian crossing facilities which are to be upgraded to toucan crossings as part of the proposed works. In that context the scheme will have a limited impact on traffic at these locations.

A new toucan crossing is to be provided at Russell Street however traffic at this point is very light so that no significant traffic impact is expected.

A new toucan crossing is also to be provided on Drumcondra Road to provide access between Zone III and Zone IV. Drumcondra Road is a wide, busy thoroughfare at this location featuring bus lanes and cyclelanes. The entire junction, including Whitworth Road, has been modelled using Vissim microsimulation software and this modelling shows that the proposed crossing can be accommodated without undue impact on existing traffic.

Architectural, Archaeological and Cultural Heritage Impact
DCC separately appointed an Archaeology consultant (Irish Archaeology Consultants, Ms. Maeve Tobin) to identify potential impacts of the scheme on archaeological features within the area. An Archaeology Report is available under separate cover. The report notes that the proposed scheme consists of c. 2km of cycle way, which will run from the North Strand Road to the Phibsborough Road. The scheme proposes to locate the cycle way within the existing walkway and banks of the canal. The proposed route will be located outside of the zone of archaeological potential for Dublin City (DU018-020). No RMP sites are impacted directly by the proposed scheme with the nearest located c. 120m south of the route (DU018-023).

DCC separately appointed an Architectural, Conservation and Industrial Heritage consultant (Irish Archaeology Consultants, Mr. Rob Goodbody) to identify potential impacts of the scheme on architectural, conservation or heritage features within the study area. A standalone report is available under separate cover. The report notes there are a number of protected structures adjacent to the route of the proposed cycleway, though none would be affected directly by the scheme. These include the former Whitworth Hospital / Drumcondra Hospital (now NCBI), Binns Bridge, Clarke Bridge, Lock-keeper’s cottage and Newcomen Bridge. The report makes a number of recommendations regarding the interface between the scheme and the protected bridges along the canal and all of these recommendations will be adhered to in the detailed design and construction of the scheme.
Environmental Impact
DCC separately appointed Ms. Faith Wilson Chartered Ecologist to identify potential impacts of the scheme on environmental and ecological features within the study area. A standalone *Ecological Report* is available under separate cover.

Flora
In its evaluation of Flora the report states ‘the principal interest from a nature conservation perspective of the proposed cycling route lies in its close proximity to the Royal Canal, which has been designated as a proposed Natural Heritage Area. The presence of opposite leaved pondweed (*Groenlandia densa*) adds to the botanical interest of the site. Overall the majority of the habitats impacted by the proposed cycling route are given a rating of E – local conservation significance and of low value, whereas the adjoining canals are given a rating of B – nationally important. The presence of a known invasive species (Japanese knotweed) at several locations along the scheme will require the preparation of a specific management plan for dealing with this species, which will be prepared in line with best practice’.

Fauna
In a summary evaluation of Fauna the report states that ‘the main species of faunal interest along the Royal Canal is the otter and several species of bats’. The report goes on to list a number of species under the Red List of the Birds of Conservation Concern in Ireland produced by Bird-Watch Ireland (Lynas et. al. 2007). The report states that ‘only one of these red-list species were recorded during the ornithological survey in 2012 (black-headed gull) while a second species was noted in both 2009 and 2012 (herring gull)’. Ms. Wilson advises that ‘there is no nesting potential for these colonial nesting species along the proposed cycling route’.

The *Ecological Report* makes a series of recommendations with respect to the detailed design and construction of the scheme in order to minimise environmental impact and all of these recommendations will be adhered to in the detailed design and construction of the scheme.
vii. Alternatives Considered

As part of the design process three separate routes were examined for the Phase 3 scheme. Before discussing the alternative routes it is worth noting that the northern bank of the canal through Zones I, II and III is a mounded grass bank sandwiched between the canal and the railway line with limited access to adjoining areas. On the other hand, the southern bank through the same zones is almost entirely paved with few green areas (save at the eastern end of Zone II) and with ramped or stepped access to adjoining streets.

Alternative Option I

The line of the first alternative route (Red Route) is shown below.

![Route II: Red Route](image)

Figure 3.4: Red Route Alignment

This route commences on the east side of North Strand Road where it ties into the North Strand on-road facility. It then crosses the R105 along the north side of Charleville Mall where a new pedestrian/cyclist bridge takes the cycleway across the canal to the north bank west of the Lockkeeper’s Cottage. Thereafter the route runs along the north bank of the canal between the canal and the railway line as far as Clarke’s Bridge on Ballybough Road. At this point a new ramp brings the cycleway up to existing road level. The route crosses Ballybough Road via a relocated pedestrian crossing which is to be upgraded to a Toucan as part of the scheme.

In Zone II a second ramp takes the cycleway from Clarke’s Bridge back down to the level of the towpath and it continues westwards again along the northern canal bank. East of Croke Park the route again crosses over the canal via a second bridge to a landing area on the south bank opposite Croke Park. The route continues up to the level of Russell Street via a new ramp replacing the...
current steps/ramps. As part of this new ramp it will be necessary to provide a redesigned maintenance access with Croke Park. The route crosses Russell Street via a new Toucan crossing to be provided as part of the scheme. This second crossover is considered necessary in order to avoid conflict with Croke Park lands where there is very limited maintenance access to the stadium and where there is no room to accommodate a narrowing of the canal or a setback of stadium structures.

In Zone III a further ramp brings the route back down to the level of the towpath where it continues again along the north bank between the canal and the railway as far as Binn’s Bridge where a new ramp brings the cycleway up to the level of the N1. The route crosses the N1 via a new Toucan crossing to be provided as part of the scheme.

Finally, in Zone IV the route continues along the north bank of the canal from Binn’s Bridge as far as Westmoreland (Cross Guns) Bridge where it crosses the new at the existing pedestrian crossing which is to be upgraded to Toucan as part of the scheme.

**Alternative Option II**
The line of the second alternative route (Blue Route) is shown below.

![Figure 3.5: Blue Route Alignment](image)

Alternative Route II commences on the east side of North Strand Road where it ties into the North Strand on-road facility. It then crosses the R105 along the north side of Charleville Mall continuing along the south bank of the canal as far as Clarke’s Bridge on Ballybough Road at which point a realignment of the existing ramp brings the route up to road level. The route crosses Ballybough...
Road via a relocation of the existing pedestrian crossing which is also to be upgraded to a Toucan as part of the scheme.

In Zone II a realignment of the ramp on the west side of Clarke’s Bridge then takes the cycleway back down to the level of the canal towpath and it continues westwards again along the southern canal bank. The route continues up to the level of Russell Street via a new ramp replacing the current steps/ramp. As part of this new ramp it will be necessary to provide a redesigned maintenance access with Croke Park. The route crosses Russell Street via a new Toucan crossing to be provided as part of the scheme.

Through Zone III a further ramp, to replace the existing ramp/steps on the west side of Russell Street Bridge, brings the route back down to the level of the towpath where it continues again along the south bank as far as Binn’s Bridge where a realignment of the existing ramp at the rear of Portland Place brings the cycleway up to the N1 at Drumcondra Road. The cycleway route crosses the N1 via a new Toucan crossing to be provided as part of the scheme.

Finally, in Zone IV the cycleway route crosses the N1 via a new Toucan crossing to be provided as part of the scheme. This brings it to the north bank of the canal at Binn’s Bridge. The route continues along the north bank of the canal as far as Westmoreland (Cross Guns) Bridge where it crosses the N2 at the existing pedestrian crossing which is to be upgraded to Toucan as part of the scheme.

**Selection of Preferred Route**
The three feasible routes were assessed in order to select a preferred route. The selection criteria used were as below:

- Cycle Route Level of Service;
- Suitability by Cyclist Type:
  - Commuter Cyclists;
  - Tourist Cyclists;
  - Family Cyclists.
- Buildability;
- Ecological Impact;
- Archaeological Impact;
- Heritage Impact;
- Utilities Impact;
- Land Acquisition Impact;
- Impacts on Canal Navigation; and
- Cost.

Following the above assessment the Phase 3 preferred route was identified and is being brought forward for Part 8 approval.
viii. Conclusions

This chapter of the overall Royal Canal Greenway report supports a Part 8 application for the Royal Canal Greenway Premium Cycle & Pedestrian Route Phase 3, from North Strand Road to Phibsborough Road comprising:

- The construction of 2.1 kilometres of an off road orbital Premium Cycle Route;
- The construction of 2.1 kilometres of an off road orbital Pedestrian Route;
- The provision of new public lighting and security equipment;
- The reconstruction of damaged hard and soft edged canal walls and banks;
- The opening up of the strategic environmental asset that is the Royal canal in this sector of the City whilst simultaneously protecting the ecological, environmental, archaeological and architectural heritage of the canal;
- Improved access for mobility impaired persons to a significant environmental asset;
- The enhancement of the public realm;
- The provision of a number of new toucan crossings to provide for pedestrian and cyclist access and safety; and
- The provision of improved surfaces, signage and delineation.

The proposed Phase 3 Part 8 works will result in substantial improvements to the existing public realm. The works will enhance pedestrian and cyclist access and safety and will open up a strategic environmental asset to greater public use. In addition the works will assist in the achievement of a greater degree of sustainable transport in the City.

The proposal is an important strategic piece of cycling infrastructure for the city which will provide a proper, high quality link from North Strand to Phibsborough, providing a good facility both for commuting and leisure cyclists.

The proposal conforms to the cycling objectives of the Dublin City Development Plan 2011 – 2017 in addition to relevant national policy such as the National Cycle Policy Framework 2009-2020 and ‘Smarter Travel’.

The proposed development is considered to be in accordance with the proper planning and development of the area and in accordance with a number of national, regional and local planning policies and objectives.
4. PHASE 4: PHIBSBOROUGH TO ASHTOWN

i. Introduction

This section of the report focusses on Phase 4 of the scheme which runs from Phibsborough to Ashtown. The report describes the nature and extent of the proposed works and assesses their potential impact on the local cycle, pedestrian and traffic regime as well as on the local environment. The scheme generally proposes to provide new footpaths and cycletracks along the bank of the Royal Canal, including new ramps and new pedestrian and cycle crossing facilities, to provide access to and safe passage across a number of intermediate roads. A detailed description of the proposed works is set out in the report.

The greenway, as proposed, is to follow along the northern bank of the Royal Canal between Phibsborough in Dublin 7 and Ashtown in Dublin 15.

The scheme commences at Cross Guns Bridge on Phibsborough Road continuing along the Royal Canal to the Village Centre at Ashtown and is approximately 4.3km in length. It will utilise the existing towpath for the majority of its length except in some limited locations where the existing alignment will be revised to provide an improved facility or where there is widening of the existing towpath. The existing towpath corridor interfaces with existing road and rail infrastructure.

The primary objective of the scheme is to provide a premium quality cycle and pedestrian facility with environmental enhancements to encourage and promote cycling in the Dublin Region. Secondary objectives for the scheme are as follows:

- Improve the Royal Canal corridor as a recreational cycle and pedestrian facility;
- Improve connectivity between the Royal Canal corridor and adjacent public transport infrastructure;
- Improve inter-connectivity between the Royal Canal corridor and adjacent (existing and proposed) residential neighbourhoods;
- Increase and promote the amenity value of the Royal Canal corridor resource;
- Increase and promote the historical and heritage value of the Royal Canal corridor resource;
- Increase the accessibility of the Royal Canal corridor resource to all users.
ii. Site Location And Description

The Phase 4 site location is shown in Figure 4.1 below.

The site is located along the northern bank of the Royal Canal. It starts at the western side of Cross Guns Bridge on Phibsborough Road and continues to the Village Centre in Ashtown. It is approximately 4.3km in length and along its route it connects the following roads:

- Broombridge Road;
- Ratoath Road.

There is an existing shared cycleway pedestrian facility already in operation in the area along the towpath on the northern bank of the canal. It is used for both access and amenity purposes. The scheme is divided into 4 zones.

Zone 1
This zone starts at Phibsborough Road and extends 1,055m as far as the railway line that passes under the canal that provides service between Drumcondra and Heuston stations. This area has a path that is currently 3.5m in width and is bounded by a mixture of Palisade fencing, stone wall and Paladin fencing to the north of the path. There are four houses located along this section of the path which require use of the path for vehicular access. Irish Rail also have a yard opposite Lock 6 which they require to access with machinery on intermittent occasions. The path is level over the majority of its length in this section, apart from an increase in gradient at Lock 6.
Zone 2

The second zone is 1,070m long and varies its width from 3.5 to 2.3m. It continues from Zone 1 to the point where the path connects with Broombridge Road. The path is bounded to the north by a mixture of Paladin/Palisade/Razor wire fencing, over ground shrubs and retaining walls to the south of the Dublin Industrial Estate. Pedestrian access can be gained to this section from Moyle Road (north of Lock 7), which is located within the Dublin Industrial Estate.

There is greater green space available in this section, with large green areas available to the east and west of Lock 7. The tipping of waste has occurred in this area due to the secluded nature of the path. The path utilises an Underpass under the railway line between Drumcondra and Broombridge Stations. The level changes in two positions along this section, the first at Lock 7 and the second to gain access to Broombridge Road. At grade access is also available to the next zone as the tow path extends under the bridge but the path width reduces to 1.5m. Access from here can be made to the Broombridge Railway Station and the new terminus to the Luas Cross City once it is constructed.

Plates 4.1 – 4.4: Images of the Existing Path in Zone 1
The stone work of both the Underpass at Lock 7 and Broombridge have become damaged over time due to fires and graffiti. The current access across Broombridge for pedestrians or cyclists is uncontrolled and limited visibility is available for either the vehicle or pedestrian users.

View along towpath of linear green area at the underpass at Lock 7 (looking west)

View of under pass at Lock 7 (looking east)

View along towpath at Lock 7 (looking west)

View of towpath under Broombridge (looking west)

_Plates 4.5 – 4.8: Images of the Existing Path in Zone 2_

**Zone 3**
The path in Zone 3 extends for 600m, where the width varies from 2.1 to 3.0m. This zone extends to Ratoath Road where the level increases to meet the road and Lock 8. To the north of the path is Dublin Industrial Estate where the units are secured by palisade fencing topped with razor wire. Graffiti is also prominent in the area particularly on the fencing.

The Ratoath Road is currently being realigned by the new Reilly’s Bridge to remove the exiting level crossing. This project is in its final stage of construction.
Zone 4
The fourth zone is 1,600m in length and runs as far as the Village Centre in Ashtown. The path is 3.0m in width and is bounded by walls at the rear of residential property. Palisade fencing at disused development land and also a large linear park in the location of Lock 9. The level of the existing path changes at Lock 9 and Lock 10 in Ashtown.

There are a number of pedestrian access points along this section of the path to allow residents of the apartment and residential complexes in the area to access the park and towpath. Access to Ashtown Train Station is also gained at the end of the section by passing over Longford Bridge. There are also two weirs located west of Lock 9 that allow the Royal Canal to overflow into the Tolka River.

A number of photographs of the current environment are shown over.
View along towpath at Lock 9 (looking west)

View along towpath between Lock 9 and Lock 10 at Weir positions (looking west)

View of path condition between Lock 8 and Lock 10 (looking west)

View along towpath at Ashtown (looking east)

*Plates 4.11 – 4.14: Images of the Existing Path in Zone 4*
iii. Planning & Development Context

Background
Dublin City Council began installing cycling lanes in the mid 1990’s and now has a network of over 200km of cycling lanes. Approximately 90% of our cycling network are on-road lanes which are not physically separated from motorised traffic. Research indicates that many people are discouraged from cycling in Dublin by a perception of risk and there is evidence of a demand for more off-road cycling facilities which are physically separated from motorised traffic.

National Policy

National Cycling Policy Framework 2009 - 2020
In recognising cycling as one of the most important forms of sustainable transport the Department of Transport published a National Cycling Policy Framework in April 2009. The policy framework emanates from the Government’s new transport policy for Ireland – 2009-2020 Smarter Travel – A Sustainable Transport Future.

The framework sets out many policies and objectives in relation to cycling, with the ultimate aim of increasing cycling’s share of the total travel market from 2% to 10% by 2020. The key objectives of the policy framework are as follows:

- Move 160,000 people a day to work by bike; an increase of 125,000 people;
- Invest in better, safer cycle routes around the country for commuters, leisure cyclists and visitors. (Improve existing cycle routes and introduce new routes to best international standards);
- Increase cycling’s share of the total travel market, from 2% to 10%;
- Introduce a new approach to the design of urban roads to better recognise the needs of cyclists and pedestrians; and
- Retrofit major road junctions and roadways in key cities and towns to make them cycle-friendly.

The National Cycling Policy Framework 2009 – 2020 aims to create a strong culture of cycling in Ireland with an aim that 10% of all trips will be by bike by 2020. Reaching this national target will require that major urban centres achieve significantly higher cycling modal share. Currently around 3% of trips in Dublin are taken by bike.

As outlined in the National Cycling Policy Framework, no single action will prompt more people to cycle but the development of high quality cycling infrastructure will play an important part in helping to achieve a new culture where cycling is seen as an attractive mode of transport, particularly for short trips in urban areas.
Dublin City Development Plan 2011 - 2017
Dublin City Council is committed to a policy of developing and improving infrastructure for cyclists throughout the city.

Chapter 5 - Connecting and Sustaining the City’s Infrastructure of the Dublin City Development Plan sets out the Council’s policies and objectives for promoting modal change.

Policy SI2 states: ‘It is the policy of Dublin City Council to continue to promote the modal shift from private car use towards increased use of more sustainable forms of transport such as cycling, walking and public transport and to implement the initiatives contained in the Government’s, ‘Smarter Travel, A Sustainable Transport Future 2009-2020.’

This project will provide a high quality facility specifically designed for pedestrians and cyclists. As it is completely separate from vehicular traffic it will assist in encouraging a modal change away from cars.

Policy SI013 states: ‘It is an objective of Dublin City Council to develop new cycle routes including Grand and Royal Canal Premium Routes.’

Policy SI014 states: ‘It is an objective of Dublin City Council to develop a direct cycle linkage system away from the primary traffic network including on and off-road cycle lanes designed and constructed to minimise conflict with other road users.’

Policy SI018 states: ‘It is an objective of Dublin City Council to provide additional cycle and pedestrian bridges across the city’s canals and rivers to form part of strategic cycling and walking routes.’

Policy SI020 states: ‘It is an objective of Dublin City Council to provide increased priority for cyclists at key road junctions where possible, by using road marking, priority light signals and other measures as appropriate.’

Policy GC6 states: ‘It is the policy of Dublin City Council to protect and improve the natural character of watercourses and to promote access, walkways and other compatible recreational uses along them.’

Policy GC19 states: ‘It is the policy of Dublin City Council to protect, maintain, improve and enhance the natural and organic character of the watercourses in the city, and to promote access, walkways and other recreational uses of their associated open space, incorporating flood strategies and subject to a defined strategy of nature conservation in consultation with Inland Fisheries Ireland.’
Phibsborough/Mountjoy Local Area Plan 2008

Phibsborough is noted as being one of Dublin’s oldest and best known neighbourhoods. A statutory local area plan was created in 2007 to ‘plan and direct the future development of this area as a quality urban neighbourhood.’ The Royal Canal is noted as being an important element in the development of the plan in terms of open space/recreation and also industrial heritage. ‘The Royal Canal is an important landscape site which adds to the diversity of the historic environment in the LAP area. In addition to its civil engineering heritage significance as an element of a major national waterway, it provides a valuable public amenity space and a habitat for wildlife.’ Some of the key objectives in the Plan include:

- Expand the cultural and leisure potential of the industrial heritage of the Royal Canal, the Canal Bank and Blessington Basin;
- Consider the development of the Royal Canal and spur as a civic promenade as well as a primary recreational green route;
- Develop the Royal Canal Way and Blessington Street Park/Royal Canal Bank as strategic long distance pedestrian and cycle green routes;
- Promote the protection and enhancement of natural heritage areas as wildlife corridors along the Royal Canal; and
- Deliver further passive and active recreational space and sports facilities to include a new substantial water feature adjacent to the Royal Canal.

The Mountjoy prison site is noted as a key development opportunity area and it is noted that the success of any redevelopment will be its relationship with the Royal Canal. Connections and linkages around the Canal are noted in relation to a number of sites in terms of maximising their potential.

Smarter Travel Policy – A Sustainable Transport Future

This is the transport policy for Ireland for the period 2009-2020. The policy recognises the vital importance of continued investment in transport to ensure an efficient economy and continued social development, but it also sets out the necessary steps to ensure that people choose more sustainable transport modes such as walking, cycling and public transport. The policy is a response to the fact that continued growth in demand for road transport is not sustainable from a number of angles; it will lead to further congestion, further local air pollution, contribute to global warming, and result in negative impacts to health through promoting increasingly sedentary lifestyles. Chapter 5 of the Policy document sets out (that in order that) the Government’s ambition to ensure that a reduction in travel demand and reliance on the car can be achieved, there must be appropriate, reliable and user-friendly alternatives in place. Action 17 of Chapter 5 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’.
National Cycle Policy Framework
The National Cycle Policy Framework was officially launched in April 2009 and details 109 individual but integrated actions that will be taken over the coming 12 years to deliver a culture of safe cycling in Ireland by 2020. Policy No 3.2 states ‘We will carry out further research and surveying work in order to expand the network to include rural recreational routes around urban areas and to connect major urban areas. We will pay special attention to the opportunities of using both the extensive disused rail network and canal / river tow path networks as cycling / walking routes.’

It is against the background of the above policy documents that the Royal Canal Greenway Phase 4 Premium Cycle & Pedestrian Route, Phibsborough to Ashtown is being developed.
iv. Consultation

As part of the design process, DCC contacted a number of relevant parties who may be impacted by or have an interest in the proposed scheme. The aim of this process was to create awareness and to afford an opportunity to raise issues or provide information deemed pertinent to the project. DCC’s Request for Tender included a detailed list of stakeholders to be contacted as part of this process, with a point of contact provided where known and applicable. Stakeholders have been broken down into three separate groups as follows:

- Dublin City Council Divisions;
- Service Providers & Statutory Authorities;
- Local Residents & Residents Associations.

A letter was sent to each stakeholder, which included a summary of the scheme, along with its overall aims and objectives and an assessment of the proposed preliminary design process. Detailed drawings highlighting the exact area subject to this scheme were also included with each letter. Where possible, correspondence was sent both by post and by email. A copy of the Stakeholders Consultation Report is available under separate cover and includes details on the various responses stakeholder received to date. The Stakeholder Consultation Report will continue to be updated during the development of the project.

The National Cycle Manual sets out the standard planning and statutory requirements for cycle schemes in a simple flow chart which is replicated in Figure 1. The figure sets out clearly the responsibilities of both the NTA and DCC in the process. It also clearly identifies the various consultees to be notified and consulted during the process. Finally the figure sets out the planning process and statutory process to be adhered to in securing planning permission for the scheme. The scheme is being progressed through the planning process in accordance with these guidelines.

![Figure 4.2: Planning and Statutory Requirements](image-url)
v. Extent Of Proposed Works

The design and layout of the proposed Phase 4 scheme is shown in the accompanying Book of Part 8 drawings. The greenway will be constructed on the western bank of the Royal Canal. Extensive site clearance, excavation of existing embankments and landscaping of the unmanaged grassland will be carried out during the works.

Zone 1
In Zone 1 the path is currently 3.5m wide to accommodate the vehicles accessing the Coke Oven Cottages. The proposed works will involve the installation of public lighting, CCTV, signing and delineating the scheme as a shared surface for pedestrians, vehicles and cyclists. A new access layout at Phibsborough Road will make it safer for non-motorised users to access the greenway.

A new coping stone will be laid along the edge of the quay wall between Lock 5 and Lock 6 to delineate the edge, as currently none is provided. The path will be resurfaced and gradients improved, particularly in the area of Lock 6.

Removable bollards will be installed west of the Coke Oven Cottages to prevent unwanted access, while allowing DCC, Irish Rail and Waterways Ireland access for maintenance purposes.

Plate 4.15: Photomontage at Lock 6 in Zone 1
Zone 2
The path in Zone 2 will be widened to 4.5m to facilitate a segregated cycle and pedestrian facility, with a narrowed zone in the area of the existing underpass at Lock 7. New paving, lighting, CCTV and signage will also be added over its length. The path will be realigned in the area of Lock 7 to provide greater sight distance. The current linear parks in the area will be upgraded to provide areas of amenity. To the rear of the Dublin Industrial Estate a new retaining wall will be built to accommodate the widened path and protect the existing wall. Access over Broombridge will be via a new Toucan Crossing. Ramps to provide access to and from Broombridge will be re-graded to lower the existing grade of the path and improve access. Existing palisade fencing in the area will be replaced with paladin fencing.
Zone 3

Zone 3 of the path will be widened to 4.5m to accommodate a segregated cycle and pedestrian facility. To accommodate this, a proposed retaining wall will be required at the rear of units within the Dublin Industrial Estate, and a new paladin fence will be installed to provide security to the Industrial units in the area.

Following the completion of Reilly’s Bridge, Ratoath road will become a Cul de Sac and priority will be given to greenway users. Removable bollards will be installed to allow Irish Rail to access a maintenance yard. A new surface will be laid to the path with new lighting, CCTV, signing and delineation provided over its full length.

Figure 4.18: Photomontage Looking West from Broombridge Road in Zone 3

Zone 4

In Zone 4 the path will also be widened to 4.5m to accommodate a segregated cycle and pedestrian facility. New paladin fences and boundary walls will be required for the construction of the wider path. West of Lock 9 the path will be raised in level by a structure above the existing weirs. This will prevent the path from flooding at times when the canal overflows into the River Tolka. A new surface will be laid to the path with new lighting, CCTV, signing and delineation provided over its full length.

The works will be carried out in two phases. The first will be the construction of the greenway in areas where land is already available. The second phase will be completed after land is acquired, in areas where widening is needed.
vi. Impact Of Proposed Works

Traffic Impact
Phase 4 of the Royal Canal greenway connects with two roads. The first is Broombridge Road; there is currently an unrestricted crossing point across the road that is unsafe for users because it is on the blind side of a hump back bridge. It is proposed to install a new toucan crossing to allow safe crossing and access from the road for pedestrians and cyclists. The existing underpass will be maintained for pedestrians. The new toucan crossing is not expected to have a significant impact on the traffic in the area, as currently traffic over the bridge is one way.

The second crossing is at Ratoath Road; this existing crossing is unsafe for pedestrian and cyclist users due to inadequate sight distance. The new Reilly’s Bridge eliminates the traffic on Ratoath Road and creates a cul de sac in the area. This allows greenway users to have right of way across the road. Removable bollards will be installed to the north of the road crossing to keep users safe from vehicles while still allowing Irish Rail to access their maintenance yard. It is not expected that there will be any significant impact on traffic.

Architecture, Archaeology and Cultural Heritage Impact
An Archaeology consultant (CRDS) was engaged to identify any Architectural, Archaeology and Cultural Heritage impacts within the area of the scheme. There are six recorded archaeological monuments within 500m of the proposed greenway. The proposed greenway will not impact directly on any monuments and none are visible from the proposed route.

Within 200m of the route there are four structures that are included in the Record of Protected Structures (RPS). These are:

- Longford Bridge (RPS 907);
- Broombridge (RPS 909);
- H. S. Reilly Bridge (RPS 913);
- The former mill building at the 6th Lock (RPS 6733).

None of the above structures will be impacted directly by the greenway development.

Forty four structures included in the Dublin City Industrial Heritage Record are within 200m of the proposed Greenway. The majority of these structures are associated with the Royal Canal, the former Midland Great Western Railway line or milling structures.

One direct impact on a feature included in the Dublin City Industrial Heritage Record is the upgrading of the Royal Canal tow path (DCIHR ref. 18 01 010,
DCIHR ref.18 02 002 and DCIHR ref. 18 03 002). This is mitigated by the fact that the late eighteenth century fabric of the canal tow path has been upgraded at various times and comprises a modern tarmac roadway, therefore this impact is considered negligible.

**Environmental Impact**
An Environmental report was completed for the scheme and identifies the following:

**Flora**
There are no records of any protected plant species within the footprint of the proposed greenway and there will be no impact on any protected plant species. Japanese Knotweed is present outside the site boundary but will not be impacted by the construction or the final greenway development.

**Fauna**
None of the recorded habitats in the area are noted as possessing any significant nature conservation value in their own right. The loss of any habitats is not considered significant and it is concluded that mitigation is not required. There will be no impact on any habitat utilised by the water-birds which frequent the canals (mallard, grey heron, moorhen, mute swan etc.). Any habitat that may be lost as a result of the widening of the canal towpath does not provide suitable nesting opportunities for any of the typical garden birds recorded and therefore the project will have no impact on these species.

It was found that neither the construction nor operation of the proposed greenway will have any impact on otter species, its population or distribution. It was also concluded in the bat survey carried out that there will be no impact on the populations of any bat species and there will be no impact on the existing commuting or foraging patterns as a result of the construction or operation of the greenway.

The assessment also concluded that there will be no impact on the Glutinous Snail species.

**Aquatic Ecology Impact**
An Aquatic Ecology consultant (BEC Consultants Limited) was appointed to carry out an aquatic ecological assessment. No protected species were recorded in this area of the Royal Canal. Following an assessment of the proposed works and the existing environment, it was concluded that there will be no significant negative impact on the aquatic ecology of the Royal Canal from the proposed works. Recommendations have been made in the environmental reports in respect to the detailed design and construction phases of the scheme to minimise potential impacts. These will be adhered to during the detailed design and construction of the scheme.
vii. Alternatives Considered

As part of the design process three separate design options were considered for Phase 4 and outlined in the Options Selection Report. These were Do Minimum, Do Something and Do Maximum. The options followed the same route along the existing towpath of the Royal Canal.

The three Options involve the following works:

- **Do Minimum** – widen the existing path to 3.5m where space permits and increases the Quality of Service within the available lands;
- **Do Something** – acquisition of lands along the route to widen the path to 4.5m and increase the Quality of Service;
- **Do Maximum** – acquisition of lands along the route to widen the path to 4.5m and provide segregation between pedestrians and cyclists along the route.

The options considered each of the following aspects Geometry, Cross Section, Surfacing, Drainage, Accessibility / Permeability, Landscaping / Boundary Treatment, Services and Utilities.

The three options were assessed in order to give a preferred option under the following criteria:

- Environmental Impacts;
- Quality of Service;
- Safety;
- Economy;
- Accessibility & Social Inclusion;
- Integration.

It was identified that the Do Maximum option was the preferred option and this option is being brought forward to Part 8.
viii. Conclusions

This chapter of the overall Royal Canal Greenway report supports a Part 8 application for the Royal Canal Greenway Premium Cycle & Pedestrian Route Phase 4, from Phibsborough to Ashtown. This phase of the scheme will entail the following:

- The construction of 4.3km of cycling and pedestrian facilities;
- The construction of new public lighting and security facilities;
- Improved access and Quality of Service;
- The enhancement of the current path to provide an improved local amenity;
- Improved safety at road crossings;
- Greater links and access to public transport hubs;
- Improved pavement surface, signage and path markings.

The proposed Phase 4 works will greatly enhance facilities for cyclists and pedestrians in the area.

The improvements will provide greater links to existing public transport such as the Ashtown and Broombridge Railway Stations, as well as the new Luas Cross City Terminus at Broombridge and will assist with providing a more sustainable transport network within the City.