

WATERFORD NORTH QUAYS STRATEGIC DEVELOPMENT ZONE

PLANNING SCHEME 2018



**Waterford
City & County Council**
Comhairle Cathrach
& Contae Phort Láirge

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Note: The following reports accompany the Planning Scheme:

1. Strategic Environmental Assessment (SEA)
2. Appropriate Assessment (AA)
3. Strategic Flood Risk Assessment (SFRA)
4. Traffic & Transportation Impact Assessment (TTIA)
5. Updated Retail Assessment (John Spain & Associates)

01

INTRODUCTION

1.1 Background

During 2015 Waterford Council decided to seek SDZ designation for the North Quay Area of the City. The site measuring 8.23 Hectares (Ha) in extent has almost 1Km frontage along the River Suir and has an average depth of 75 meters.

The lands are the whole of the lands formally used for port related activity and rendered redundant by the transfer of the port activities to a deep water berth down river at Belview in the early 1990's.

The site incorporates lands owned by the Port of Waterford Company (The North Quay and Frank Cassin Wharf) and lands owned by Waterford City and County Council (the former IAWS grain handling facility on the centre of the quays).

Waterford City is a city in transition, traditionally dependant on manufacturing with port infrastructure. It is now in a move to high end manufacturing, internationally traded services and tourism. The redevelopment of the North Quays will feed into this change by enhancing and accelerating this transformation and propelling the City forward.

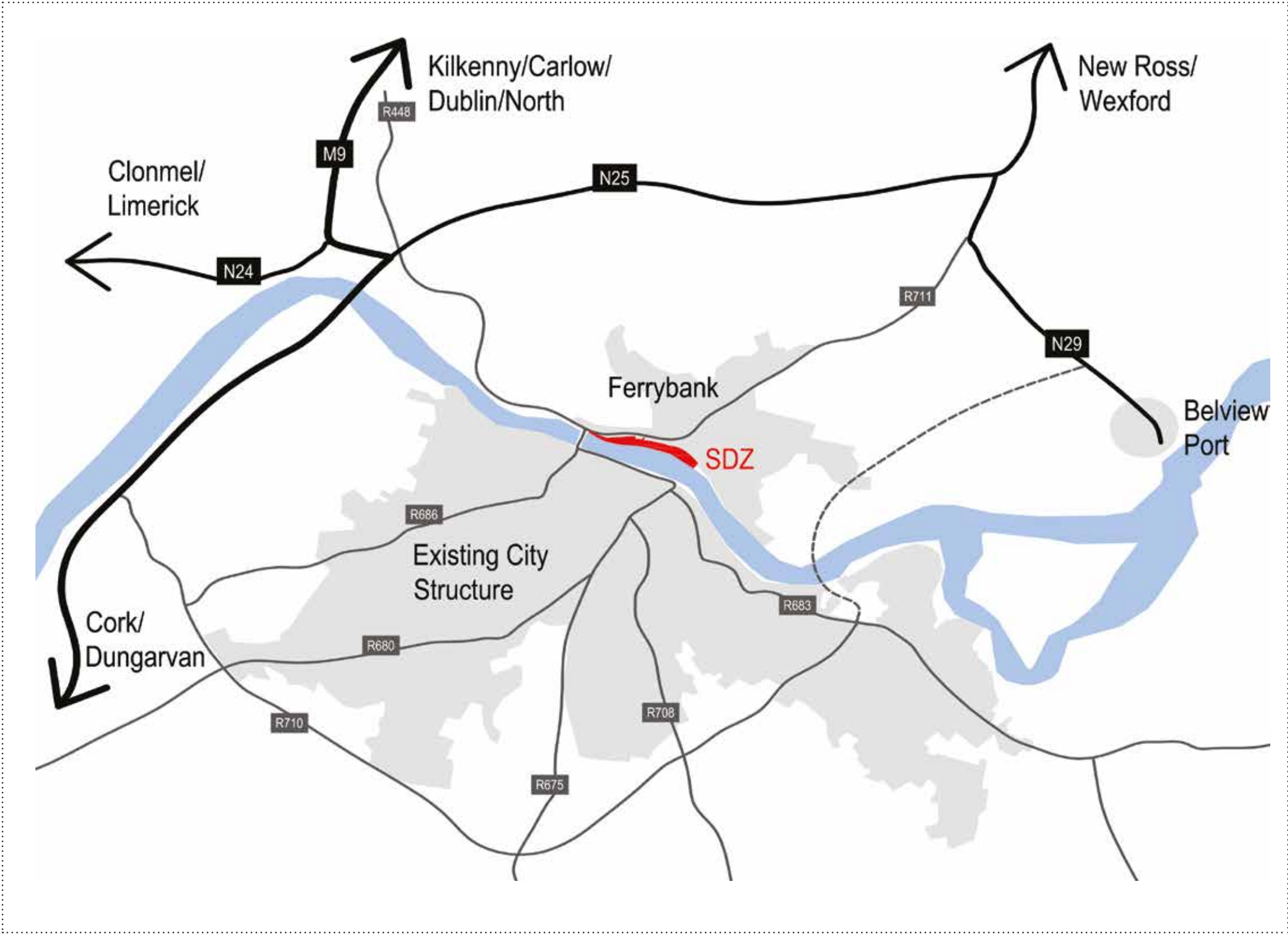


Figure 1: SDZ Context Map

1.2 National Policy

The North Quay has been acknowledged as a key strategic site for economic and social development at National level. The National Spatial Strategy 2002 (NSS) describes the development of the North Quays as an “opportunity for consolidating Waterford City around the River Suir”.

It was also envisaged that the “renewal and development of the North Quays”, along with infrastructure and transport improvements were some of the key investment priorities for Waterford.

The North Quays regeneration was included in the National Development Plan dating back to 2007 and more recently the site’s strategic importance has also been reflected in the Governments Capital Investment Plan – ‘Building on Recovery: Infrastructure and Capital Investment 2016-2021.’

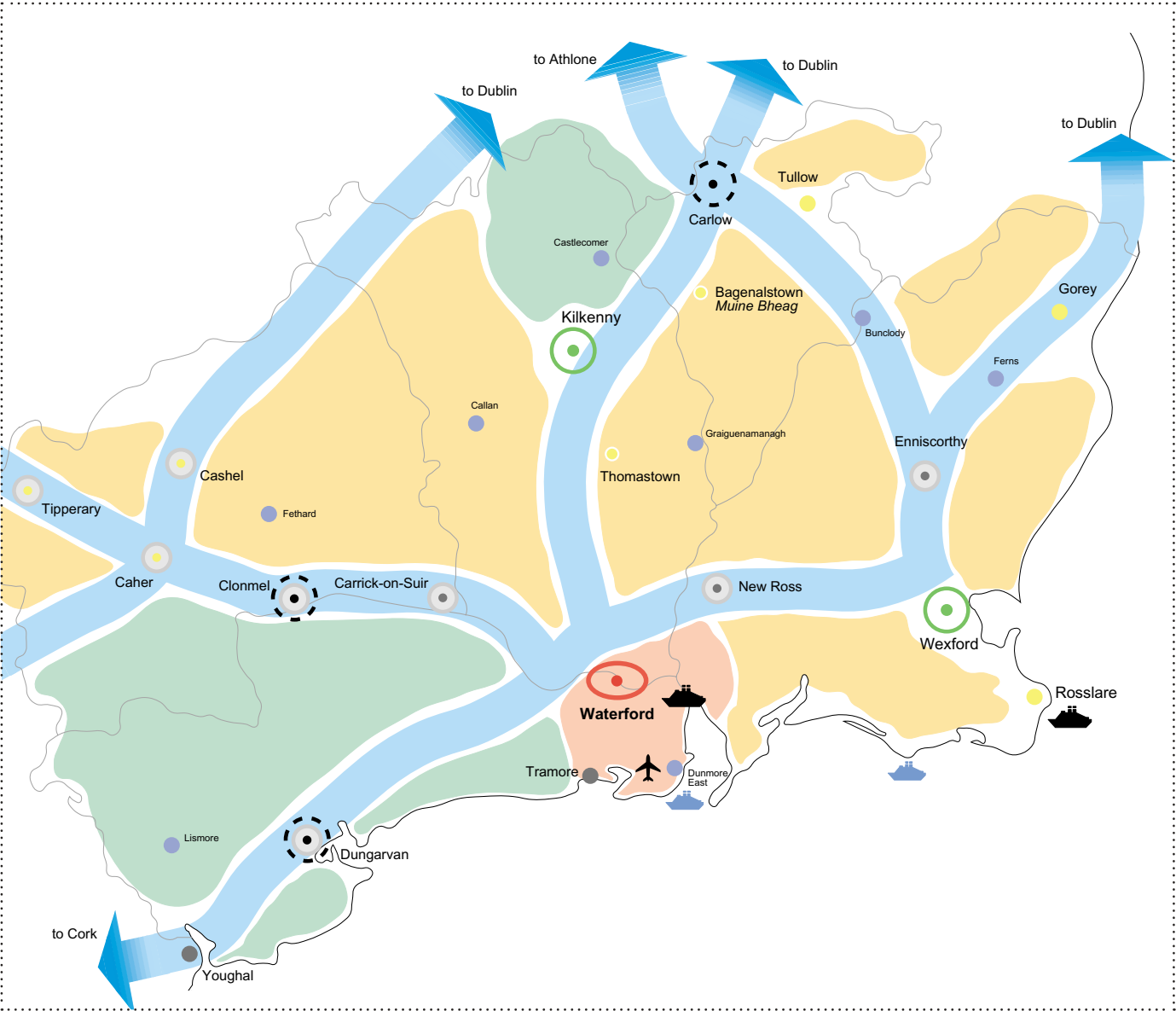


Figure 2: National Spatial Strategy Map

The National Planning Framework (NPF) “Ireland 2040” (replaces the NSS) is currently at draft consultation stage. The Draft NPF identifies that the population of Waterford City needs to reach a critical mass of 83,000 persons in order to function as an effective and sustainable city in its own right and as a regional economic driver.

The Draft NPF also identifies that the future development should provide a more balanced and sustainable pattern to that which has resulted in city expansion predominantly to the south. The Planning Scheme aligns with the Draft NPF in that its objective is to enable Waterford to become a regional city of scale, leading the economic recovery for the South East and expanding and enhancing the local economy to realise the potential of the City and the region as a whole. One of the key future growth enablers for Waterford as set out in the Draft NPF is the delivery of the North Quays SDZ together with a new pedestrian /public transport bridge.

The objectives contained within the Planning Scheme allow for the realisation of this project. The North Quays redevelopment is a significant opportunity to provide for mixed use development at the heart of the city, just north of its historic core. The site can achieve high density mixed use city centre commercial development with a significant portion of retail development supported by office/hotel/tourism/residential development and most importantly a new transport hub.

This latter element will enhance the attractiveness of the overall site for future investment and will future proof that investment in terms of sustainability .

1.3 Regional Policy

The South-East Regional Planning Guidelines (2010-2022) identifies the development of the North Quays as an exciting opportunity to enhance the attractiveness of areas for people and business.

In particular the Guidelines identify that “significant expansion of the commercial, cultural and civic centre of Waterford City through investment in, and support for, the redevelopment of the North Quays” is a specific priority of the Guidelines while the provision of a new rail passenger platform and public transport interchange will also be achieved on the North Quays.

It is expected that once prepared the Regional Spatial and Economic Strategy for the South East Region will support the SDZ Government designation of the North Quays.



1.4 Waterford Planning Land Use and Transportation Strategy (PLUTS) 2004-2020

The Waterford Planning Land Use and Transportation Strategy (PLUTS) 2004-2020 provides a vision and strategy for the development of Waterford City and Environs to 2020 and that a key city development challenge is to fully harness its river front potential as a central focus for the development of a new Irish urban experience.

The PLUTS seeks to readdress the current spatial imbalance bringing the northern side of the River Suir fully within the economic and social ambit of an expanded Waterford City.

The development of the North Quays as a northward extension of the existing City Centre has been highlighted as one of the key components of the spatial strategy for Waterford.

The principal features of the PLUTS include:

- More balanced growth between north and south sides of the River Suir.
- A new City Centre bridge exclusively for pedestrians and cyclists linking the redeveloped North Quays with the existing City Centre.
- Provision of a rail passenger platform on the North Quays as part of a new public transport hub.
- Development of a high-quality bus-based public transport system in the City.

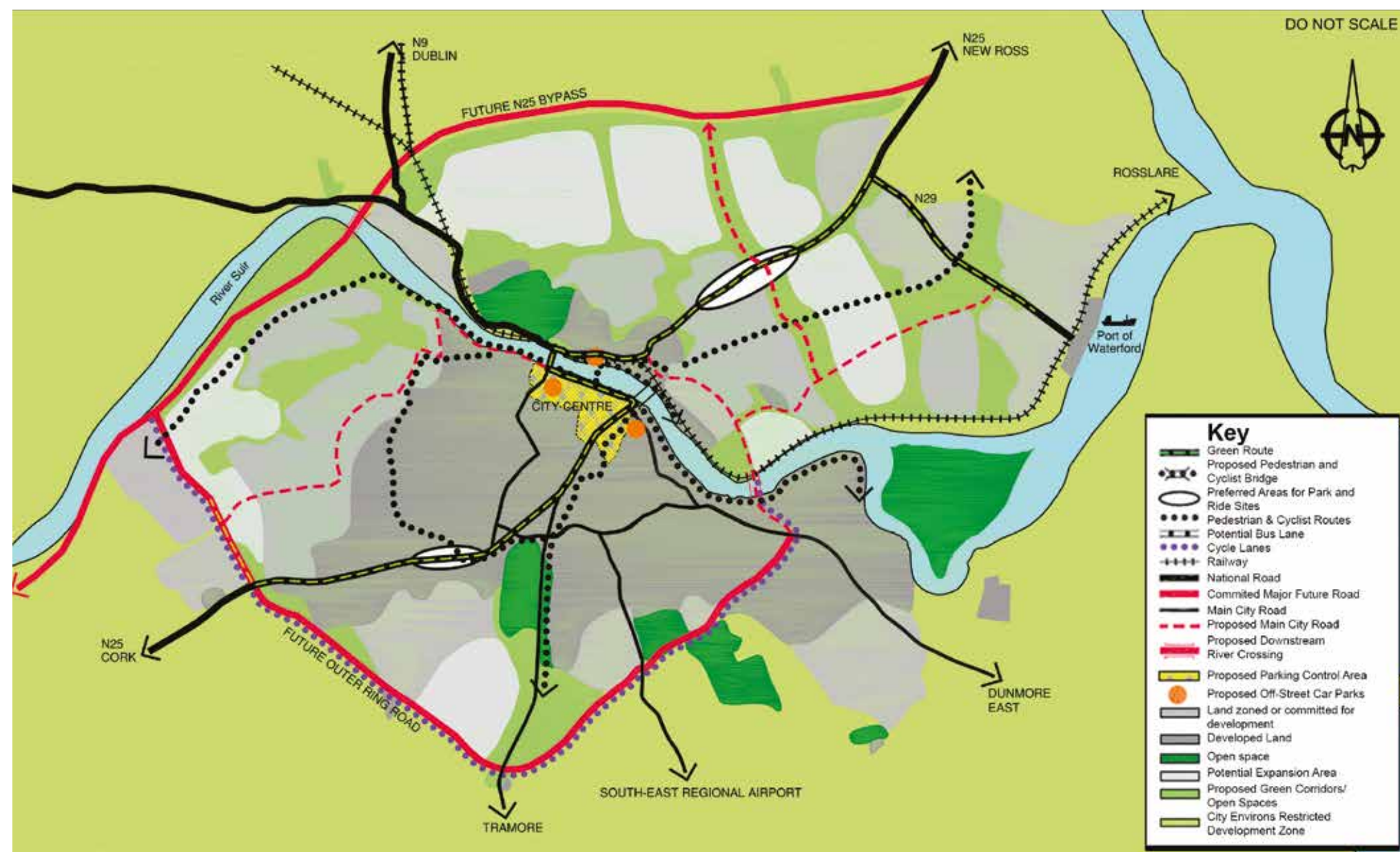


Figure 3: PLUTS Map

1.5 Waterford City Development Plan 2013-2019

The North Quay area is zoned as a “mixed use opportunity site” on the objectives map in the Development Plan. A range of mixed uses including retail, office and residential are permissible on the site under this zoning.

The Plan also states that any future development proposal on the North Quays shall generally conform to the principles set out in the Waterford Urban Design Framework Plan for the North Quays 2008 (referred to further in section 1.6).

Section 5.3.4 of the Waterford City Development Plan relates to the North Quays and reiterates the PLUTS classification of the North Quays as a primary redevelopment area, with a proposed new City Centre bridge for pedestrians and cyclists and the provision of a new rail platform on the North Quays as part of a public transport interchange. It highlighted that any master plan for the North Quays must investigate the feasibility of providing such a bridge in conjunction with the development and must take into account the requirements of Iarnród Éireann in relation to the operation and development of rail services on and through the site. It is an objective of the Development Plan to provide for a riverside promenade along the northern bank of the Suir, as part of the redevelopment of the North Quays, from Rice Bridge to the City boundary.

It is an objective of the City Plan to maintain the views and vistas from the South Quays to the north and from the North Quay to the south as per the Waterford Urban Design Framework Plan for the North Quays 2008.

The Development Plan identifies that the relocation of the port has resulted in a positive alteration to the general environment of the City's waterfront with activities thereon becoming more closely aligned with the tourism and leisure sector, for example accommodating small to medium sized cruise ships utilising the deep water wharves stretching between Rice Bridge and Abbey Church.

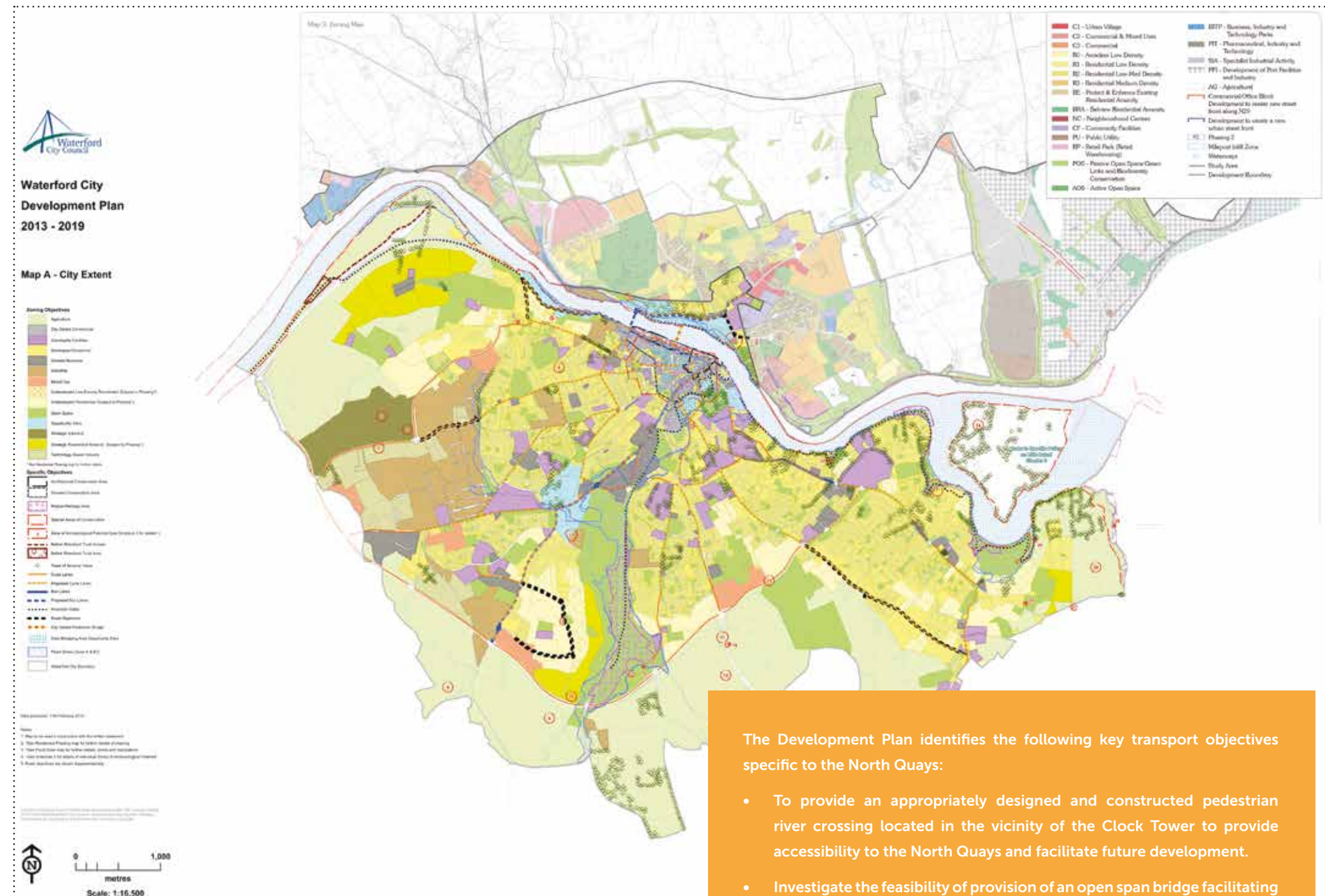


Figure 4: Waterford City Development Plan 2013-2019 (Zoning Map)

1.6 Previous Plans for North Quays

The SDZ designation is the culmination of a series of studies of the North Quays undertaken over the years.

In October 1998, the Architectural Service of the Office of Public Works (OPW) prepared a Development Vision for the North Quays. The vision for the development proposed the following elements:

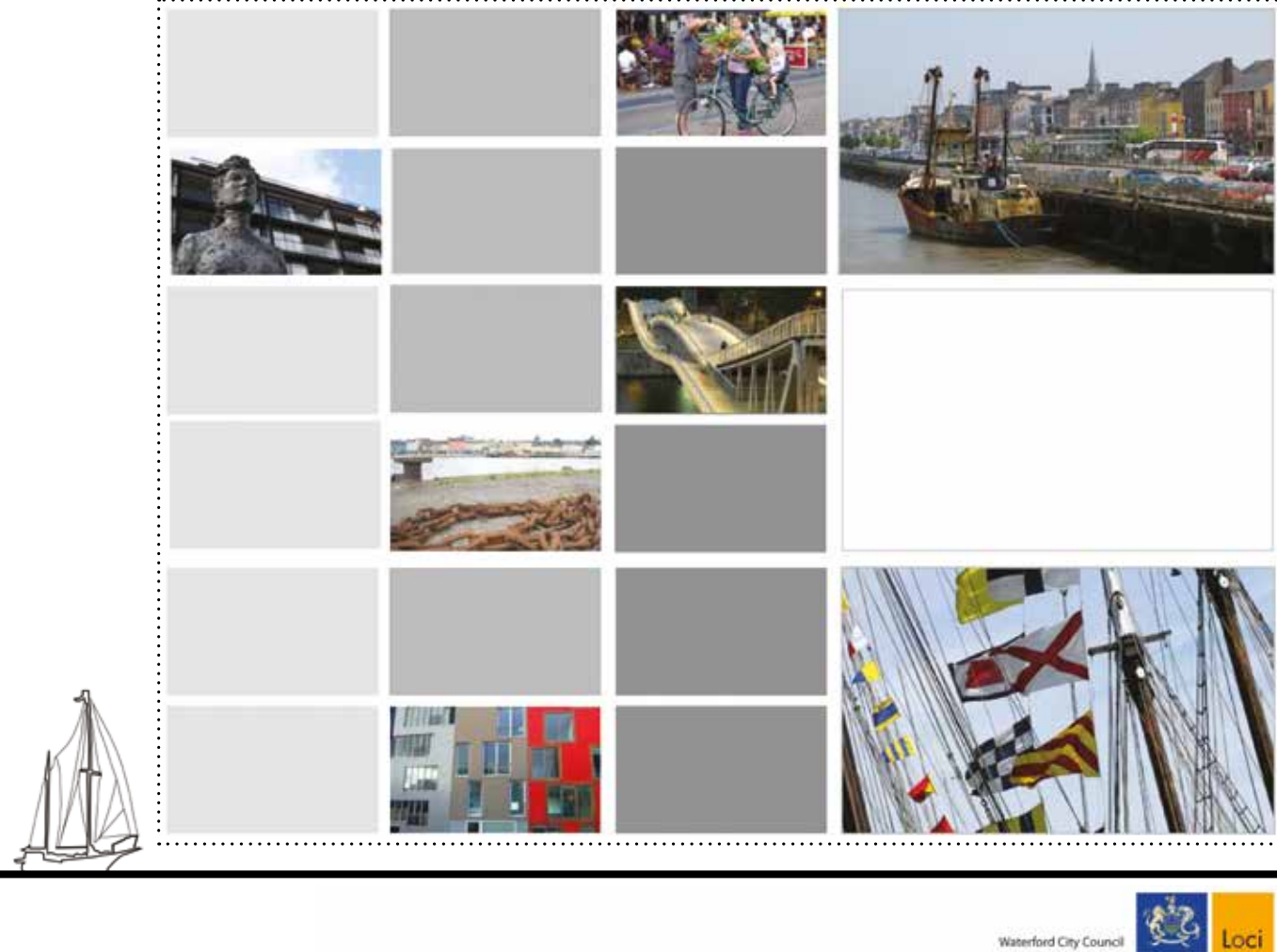
- Commuter ferry, spine road, pedestrian walk, hotel and marina, venue building, mixed use development, cruise liner docking and public spaces.

The final design proposed buildings of varying height oriented perpendicular to the riverfront, in parallel lines, and public space located strategically where the river bends, to expose long distance views.

The Waterford Urban Design Framework Plan for the North Quays (2008) which incorporated the key elements of the 1998 OPW Study and set out a broad vision for the area comprising development concepts and urban design guidelines.

The framework also proposed the provision of a new bridge to provide easy access to the existing bus station and better connectivity with the core shopping area in the City Centre.

Waterford North Quays - Urban Design Framework Plan



1.7 Strategic Development Zone (2016)

The SDZ designation was conferred on the North Quays by Government on the 20th of January 2016 (SI 30 of 2016), in recognition of its economic or social importance to the State. The Development Agency Waterford City & County Council (WCCC) is required to prepare a draft Planning Scheme within 2 years of the Government's Order.

Section 168(2) of the Planning and Development Act 2000 (as amended) identifies the key requirements of any designated planning scheme which shall consist of a written statement and a plan indicating the manner in which it is intended that the site or part of the site is to be developed and in particular:

- The type or types of development which may be permitted to establish on the site.
- The extent of any such proposed development.
- Proposals in relation to the overall design of the proposed development, including the maximum heights, the external finishes of structures and the general appearance and design.
- Proposals relating to transportation, including public transportation, the roads layout, the provision of parking spaces and traffic management.
- Proposals relating to the provision of services on the site, including the provision of waste and sewerage facilities and water, electricity and telecommunications services, oil and gas pipelines, including storage facilities for oil or gas.
- Proposals relating to minimising any adverse effects on the environment, including the natural and built environment, and on the amenities of the area.
- Where the scheme provides for residential development, proposals relating to the provision of amenities, facilities and services for the community, including schools, crèches and other education and childcare services.

The Planning and Development Act 2000 (as amended) requires that development within an SDZ be in accordance with the relevant planning scheme and that any proposed development which is deemed to comply with the planning scheme must be granted planning permission.

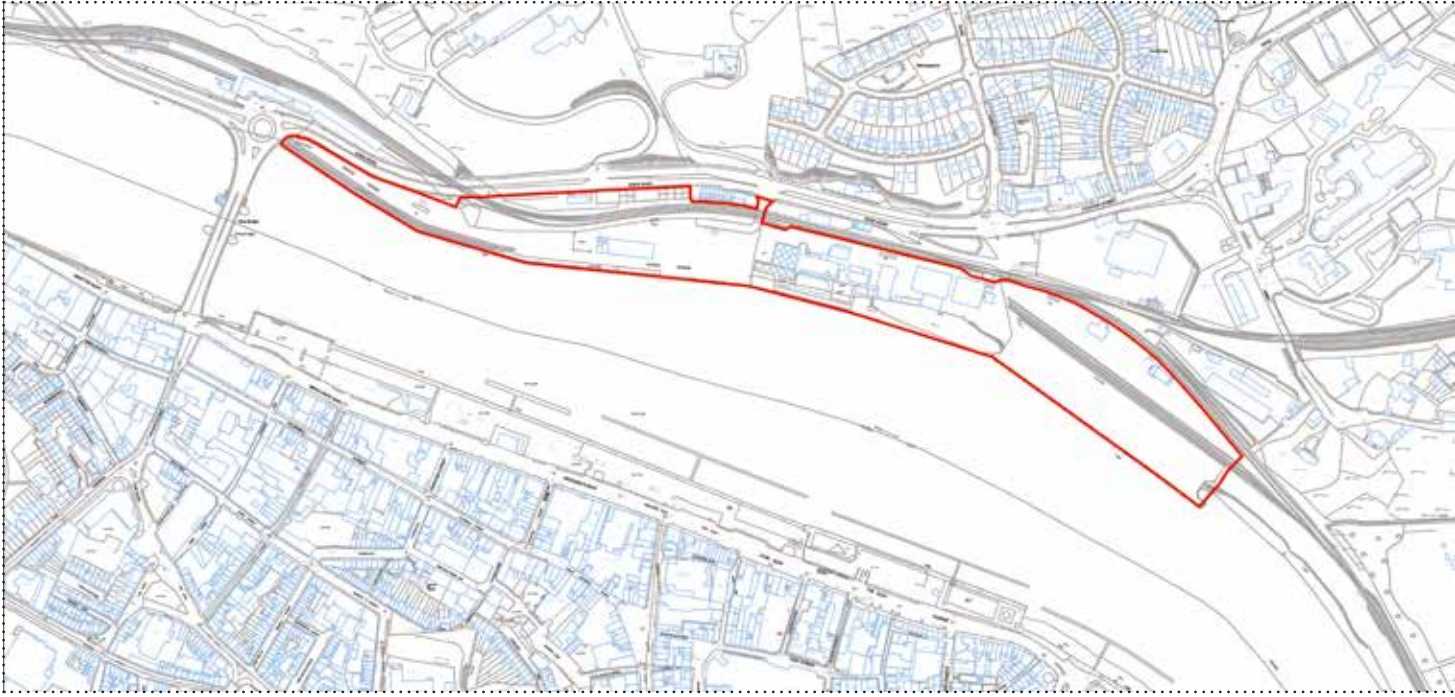


Figure 5: SDZ & Planning Scheme Area

1.8 SEA & AA

1.8.1 Strategic Environmental Assessment and Appropriate Assessment

The Planning Scheme has been prepared in accordance with the requirements of the Planning and Development Act, 2000 (as amended), the Planning and Development (Strategic Environmental Assessment) Regulations 2004 and Article 6 of the Habitats Directive 92/43/EEC. The Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA) processes, undertaken in tandem with the preparation of the Planning Scheme, have ensured full integration and consideration of environmental issues throughout each stage of the preparation process.

1.8.2 Strategic Environmental Assessment

Strategic Environmental Assessment (SEA) is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan or programme before a decision is made to adopt the plan or programme. SEA is a mandatory requirement during the preparation of a Planning Scheme for Strategic Development Zones. The purpose of the SEA is to systematically identify and evaluate the likely significant environmental effects arising from the implementation of the Planning Scheme.

The process of SEA is an iterative one and has been used to inform the Planning Scheme including changes to maps and objectives and/ or wording of the Planning Scheme. The SEA process is recognised as a central mechanism in promoting sustainable development, in raising awareness of the significant environmental issues experienced in an area and ensuring that these issues are addressed through the planning system in the form of amendments to text or maps.

The likely significant environmental effects of the Planning Scheme are identified and their significance evaluated with regard to the environmental baseline. The Environmental Report accompanying the Planning Scheme provides relevant information to the decision-makers, the members of the Council, who decide whether or not to accept the Planning Scheme, as well as to the public, providing a clear explanation of the likely significant environmental effects of the Planning Scheme. These issues, along with consultation responses have been considered as part of the final Planning Scheme and Environmental Report and will be documented as part of the SEA Statement.

1.8.3 Appropriate Assessment

The Lower River Suir is designated a Special Area of Conservation (SAC) under the Habitats Directive. Article 6(3) of the Habitats Directive (92/43/EEC) states that any plan or project not directly connected with or necessary to the management of a Natura 2000 site, i.e. Special Area of Conservation (SAC) or Special Protection Area (SPA), but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to an Appropriate Assessment (AA) of its implications for the site in view of the site's Conservation Objectives. The Appropriate Assessment has been carried out in parallel with the drafting of the Planning Scheme and is prepared as a separate document accompanying the Planning Scheme.

Stage 1 of AA (Screening) involved assessing the Planning Scheme in principle and determining the likelihood of significant effects on Natura 2000 sites as a result of its implementation, either individually or in combination with other plans or projects. The AA Screening considered that there was potential for the Draft Planning Scheme to have an adverse effect on certain Qualifying Interests of the Lower River Suir

SAC, adjoining the site and the River Barrow and River Nore SAC located downstream of the SDZ. The AA Screening concluded on the basis of objective information that significant effects are likely, or cannot be ruled out, therefore full AA (Stage 2) is required.

Stage 2 of AA involved a scientific analysis of the potential impacts of the Planning Scheme on the habitats and/or species for which the Natura 2000 sites "screened in" at Stage 1 are selected.

The Draft Natura Impact Report (NIR) examined, analysed and evaluated the implications of the Draft Planning Scheme for European sites, specifically the Lower River Suir SAC and the River Barrow and River Nore SAC, in order to assist Waterford City & County Council, as the competent authority, in undertaking the Appropriate Assessment (AA). The NIR concluded that, given the full and proper implementation of the relevant Principal Goals and Specific Objectives of the Planning Scheme, which are highlighted in Section 6 of the NIR, the Planning Scheme, either individually or in combination with other plans or projects, will not adversely affect the integrity of the Lower River Suir SAC, the River Barrow and River Nore SAC or any other Natura 2000 site, in view of their Conservation Objectives.

1.9 Vision for the North Quays

1.9.1 To create a sustainable, compact extension to the City Centre that will serve a future population of a 83,000 people

The vision for the area will be to create a sustainable modern mixed use quarter connected to, consolidating and extending the City Centre while facilitating the development of the northern city environs and respecting its historic and natural environment on the River Suir.

The area will act as a model in integrating smart, innovative and sustainable solutions into all aspects of the environment including land use, building design and public realm.

The development of the North Quays will reinstate the primacy of the river by creating a compact city core centred on the River Suir.

1.9.2 A regeneration catalyst for the City and Region and the establishment of a sustainable modern city quarter

The opportunity exists for a transformative development that can become a regeneration catalyst for the City and Region. It would have national exposure such is the importance and significance of the site and location.

The renewal of the North Quays is seen as essential to the proper expansion of the city core and the balanced future development of the city to the north of the River Suir with the North Quays acting as a focus for this renewal.

1.9.3 Creation of an integrated multi-modal transport hub designed to sustainably meet the access requirements of The City

The Transportation Vision is to develop and promote a modal shift away from private car towards increased use of an integrated multi-modal sustainable transport network to include: walking, cycling and public transport integrating bus and rail.

Specifically, it is proposed to relocate the train station to the North Quays close to the new sustainable transport bridge creating a new integrated transport hub. A city centre bus service will connect the North Quays/ railway station across the sustainable transport bridge and along the length of the retail spine to Michael Street. This would integrate a diverse retail offer connecting new shopping centres with traditional streets and shop frontages. The Greenway connecting Dungarvan to New Ross will cross the site using the new sustainable transport bridge and be incorporated into the development of the North Quays site.

Within the site, pedestrian access will be provided along the sensitive river edge by means of a riverside promenade with the service access road forming a spine road remote from the river edge parallel to the railway line either above or below ground. An integrated parking strategy north and south of the river will be put in place with a balanced provision of parking on the North Quays with Park and Ride options made available.

1.9.4 Building on the context and the riverside location of the site to create a high quality urban quarter as a natural extension of the City Centre

To capitalise, enhance and respect the site’s assets; its long south facing river frontage, panoramic views and proximity to the existing historic city core.

To bring to bear an architectural skill set with the experience and expertise to deliver a scheme of high design merit that would have the confidence to bring a new and exciting interpretation of the quays while respecting its maritime past and the traditional streetscape of the South Quays that has developed over many centuries.

1.10 Principal Goals

- To create a strong and complementary extension of the City Centre.
- To form a sustainable, smart connected urban area of regional significance acting as a gateway to the City.

- Provide a dynamic new economic engine for the City and Region.
- To promote the expansion of the City Centre to the north of the River Suir in a manner that enhances and supports balanced and sustainable growth in Waterford City and encourages its vitality and viability.
- To link the north and south side of the city by providing a new sustainable transport bridge crossing and improve accessibility and connectivity by creating an environment that facilitates internal pedestrian and cycle movements.
- To provide a rich and diverse mix of uses where a sustainable balance of retail, working, living and recreation can be achieved.
- To develop a design led scheme of high quality architectural merit.
- To balance the employment, retail and commercial base of the North Quays with the future residential growth of the City and the South East Region.
- To provide a sustainable transport hub on the North Quays.
- To provide for sustainable patterns of movement and access with priority for pedestrians, cyclists and public transport.
- To promote quality design of the spaces between and around buildings, the public realm that connects the various elements of the North Quays together including the wider hinterland.
- To create a safe, accessible and socially cohesive environment where people of all ages and abilities can live, work and relax.
- To provide sustainable infrastructure and services for future populations.
- To provide for the protection, enhancement and improvement of the natural environment, including the avoidance of adverse effects on European sites, particularly the Lower River Suir SAC and the River Barrow and River Nore SAC.
- To create a sustainable urban environment, which respects it's natural, historic and cultural heritage.
- To provide sustainable solutions that address and manages the risk of flooding and climate change.
- To promote the incorporation of resource energy efficiency and waste management into the area.

The principal goals are supported by attainable steps referred to as specific objectives throughout the Planning Scheme.



Figure 6: Existing & Proposed Land Use Quarters



02

SITE CONTEXT

2.1 Site Description & Context

The SDZ site has a very significant presence in Waterford City, forming part of the City Centre and being visible from the main northern approaches to the City as well as from the City Centre and South Quays. The site has a south facing aspect and has extensive redevelopment capacity having contained structures and silos of up to 39 metres Ordnance Datum (OD).

The total area of the SDZ site is 8.23 Ha and consists predominantly of under utilised former commercial docks. The land included in the Planning Scheme is identified in Figure 5. The extent of the Planning Scheme reflects a sequential approach to development and the need to ensure the effective consolidation of brownfield sites and optimisation of public investment on infrastructure. The lands to which the Planning Scheme applies varies between approximately 40m and 100m in width and is contained between the River Suir to the south and the railway line/Dock Road to the north. The distance between the north and south quays varies but is approximately 220 metres.

The North Wharf which lies closest to Rice Bridge forms the narrowest part of the site and lends itself to amenity space, commercial and residential uses. The mid section which lies adjacent to the new bridge crossing, has potential for greatest activity/footfall and lends itself to retail uses while Frank Cassin Wharf (the broader eastern end of the site) can accommodate a greater mix of uses such as commercial and residential.

The natural landscape behind the quays rises sharply at Mountmisery and Mount Sion and forms a substantial backdrop to the site when viewed from the City Centre/South Quays. The Dock Road and railway line run parallel between the quays and the high ground until the railway slips under the road as it meets Rice Bridge. The distance between the opposing waterfronts offers full vistas of both sides from almost any viewpoint. Panoramic views are afforded from any point in the site at present with reciprocal views to the north from the southern waterfront and framed views created through the streets that lie perpendicular to the river.

In terms of land use and activities it must be noted that industrial activity on the waterfront has moved on, leaving the site redundant. Some light industry remains on land adjacent and to the north east of the site including the Bus Éireann depot and small scale commercial uses.



Figure 7: North & South Quays - Tall Ships Festival 2011 (Aerial View)

There is a collection of houses along Sion Row to the north of the site, some of which are now uninhabited. The existing retail is minimal and caters to the local market. Ferrybank neighbourhood extends to the north catering for large areas of residential development.

This area is bordered by educational uses to the east and mixed uses further south. The south-east end of the docks is bounded by significant trees and forms an attractive foreground to the Abbey Church. Above the site to the west there are the well maintained and extensive grounds of Sion Hill House, which neighbours the even more expansive landscaped and increasingly steep bluff from which the former Ard Ri Hotel site dominates views to and from the city. Below the cliff and at the far west end of the site lies Plunkett Railway Station.

The National Inventory of Architectural Heritage (NIAH) identifies the former R&H grain store (Hennebique building) as a building of architectural significance. The former industrial building cannot be easily altered or adapted for alternative uses due to the nature of its construction. The future use of the building is therefore not viable. The removal of this building will be required to facilitate development on the site. The removal of the building would be dealt with under Part 8 of the Planning and Development Regulations (as amended).

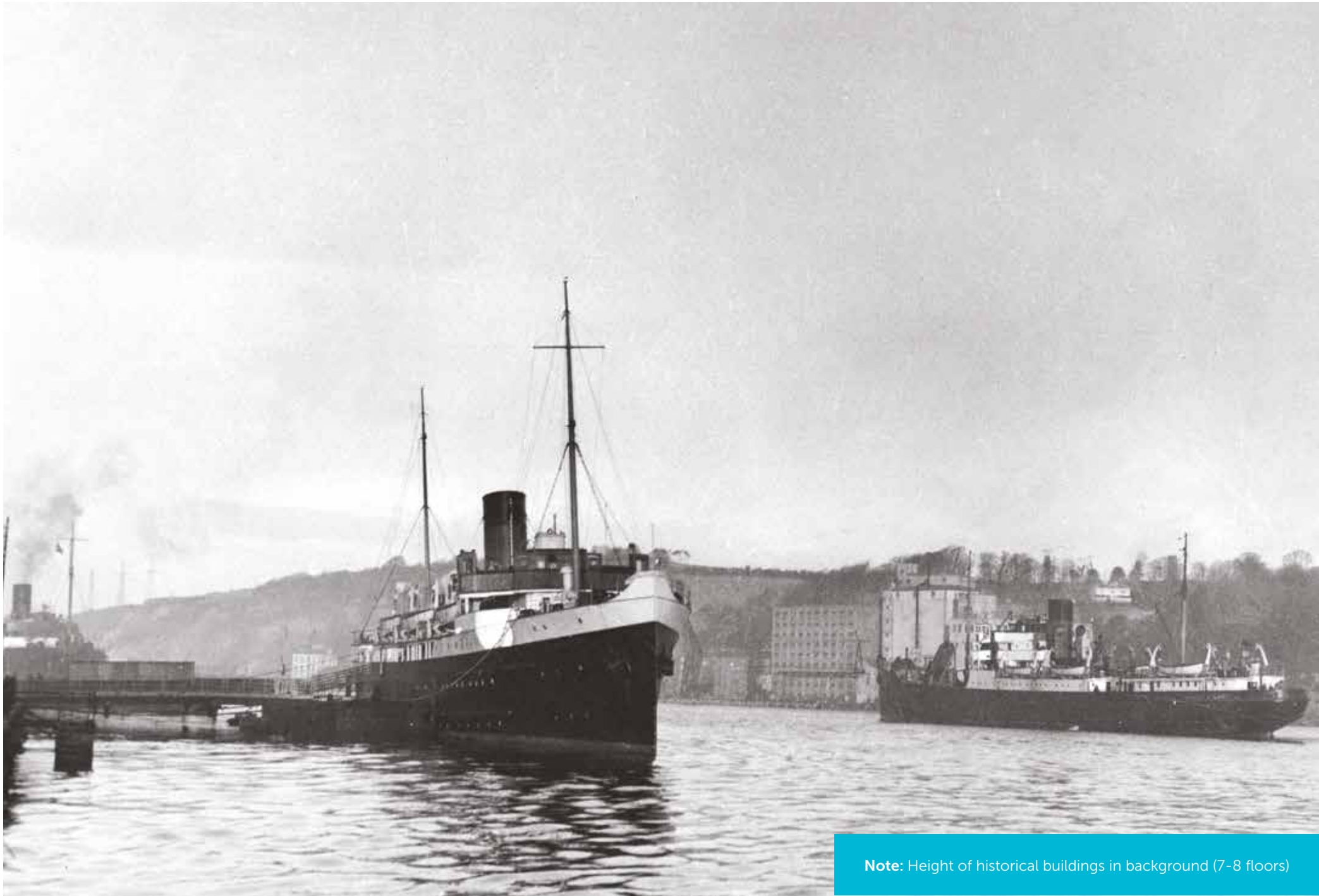
2.2 Historical Context

The City has developed over the centuries almost entirely on the south bank of the River Suir. For most of the historical period the commercial and port activity of Waterford City has centred on the South Quays. Dock Road itself which bounds the site to the north dates from the completion of the Timber Toes Bridge in 1794 spanning from what is now known as Bridge Street to Dock Road replacing the former ferry crossings.

In the early 19th Century the North Quay was largely a location for ship building with firms such as Pope & Co., William White and Charles Smith all located within the area. The former R & H Hall Mill dates from 1905 designed by William Friel utilising Francois Hennebique’s reinforced concrete technique. It was surrounded by a collection of additional warehouses and silos that developed throughout the 20th Century which have recently been demolished.

North on the hill overlooking Waterford City is the early 19th Century Sion Hill House which operates as a bed and breakfast with the gardens which are open to the public.

There are no protected structures or recorded archaeological sites located within the Planning Scheme area.



Note: Height of historical buildings in background (7-8 floors)

2.3 Physical Constraints

2.3.1 The River

The North Quays contiguous to the existing City Centre but is disconnected from the South Quays by the Suir River which is 200 meters wide at this point. The only river crossing is at Rice Bridge which is at the western extremity of the site.

2.3.2 The Railway

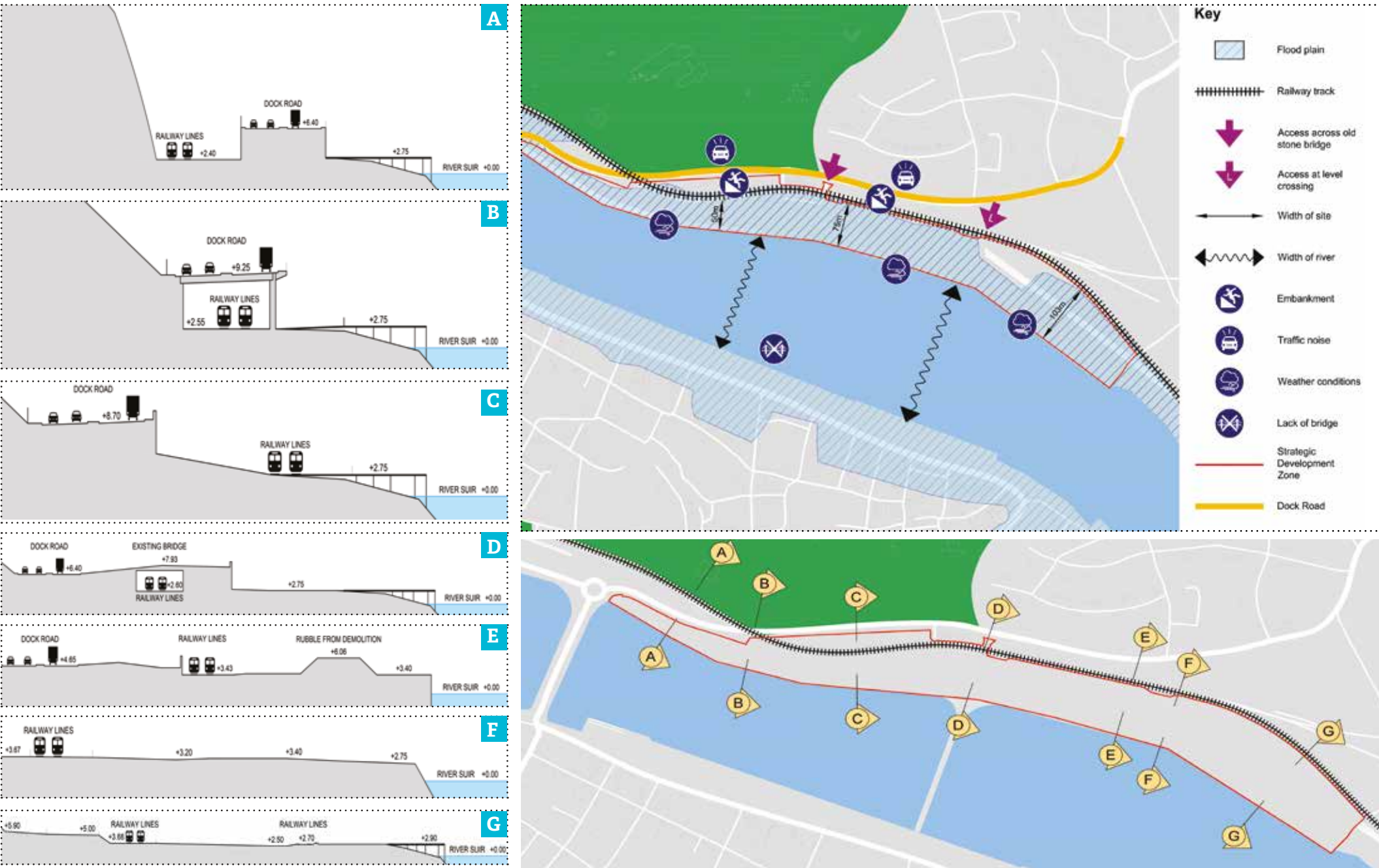
The route of the railway line along the northern boundary of the site forms a barrier to movement to and from the North Quays from Dock Road and Fountain Street. Access is provided by means of a railway level crossing and an old stone vehicular bridge which is restrictive in terms of its narrow width, an acute bend, slope and junction layout with the Dock Road and the North Quays.

2.3.3 Traffic

The volume of traffic utilising Dock Road and Rice Bridge also form barriers to pedestrian and cyclist movement between the north city and the quay site.

2.3.3 Flooding

The Planning Scheme area borders the River Suir for approximately 1km on its southern boundary, this section of the River Suir is tidal and portions of the site are indicated to be within flood zones A & B in the OPW South Eastern CFRAM study. A Strategic Flood Risk Assessment has been carried out in the preparation of the Planning Scheme. This assessment is an area wide assessment of the existing risks of flooding and the impact of those risks arising from proposed development on the site. The layout, design, finished floor levels and specific land uses set out in the Planning Scheme have considered the conclusion and recommendations of the Strategic Flood Risk Assessment and incorporated same in order to be consistent with the Planning System and Flood Risk Management: Guidelines for Planning Authorities 2009 (OPW).



Top to Bottom - Figure 8: Constraints Map; Figure 9: Existing Site Sections

2.4 Landscape & Topography

The area is physically and visually contained between the River Suir and elevated lands to the north.

To the west the land rises steeply to over 85m OD, the highest point proximate to the site and is characterised by an attractive mixture of natural informal and broken wooded landscape.

The former Ard Ri Hotel sits on a platform circa the 50m OD mark and the general skyline in this area is of mature tree canopies.

The central zone to the north is characterised predominately by residential development on a steep slope. Pockets of open space create a buffer between residential development and the Dock Road below. To the east of the site there is an attractive natural landscape following the course of the river including significant tree stands surrounding Abbey Church.



Figure 10: Contours Map



2.5 Existing City Centre

The existing City Centre is located on the south side of the River and is characterised by its fine grain mixed use waterfront, a historic quarter focussed on Reginald’s Tower, a retail quarter and cultural uses supported by mixed use developments to the south and west.

To date , save for the port related uses on the North Quays, the City Centre has been focused on the South Quays, which has hindered the sustainable concentric growth of the City, reduced the economies of scale in the provision of infrastructure and put pressure for development on “out of town ” areas.

Such pressure has been largely resisted but the consequent lack of suitable sites in the City Centre has resulted in a constrained retail offering which has exacerbated the problem of retail leakage from the region.

The redevelopment of the North Quays will redefine the existing City Centre and key to this will be the sustainable transport bridge which will provide necessary connectivity but also create a more central focus from which the City Centre can concentrically grow as envisaged under PLUTS.

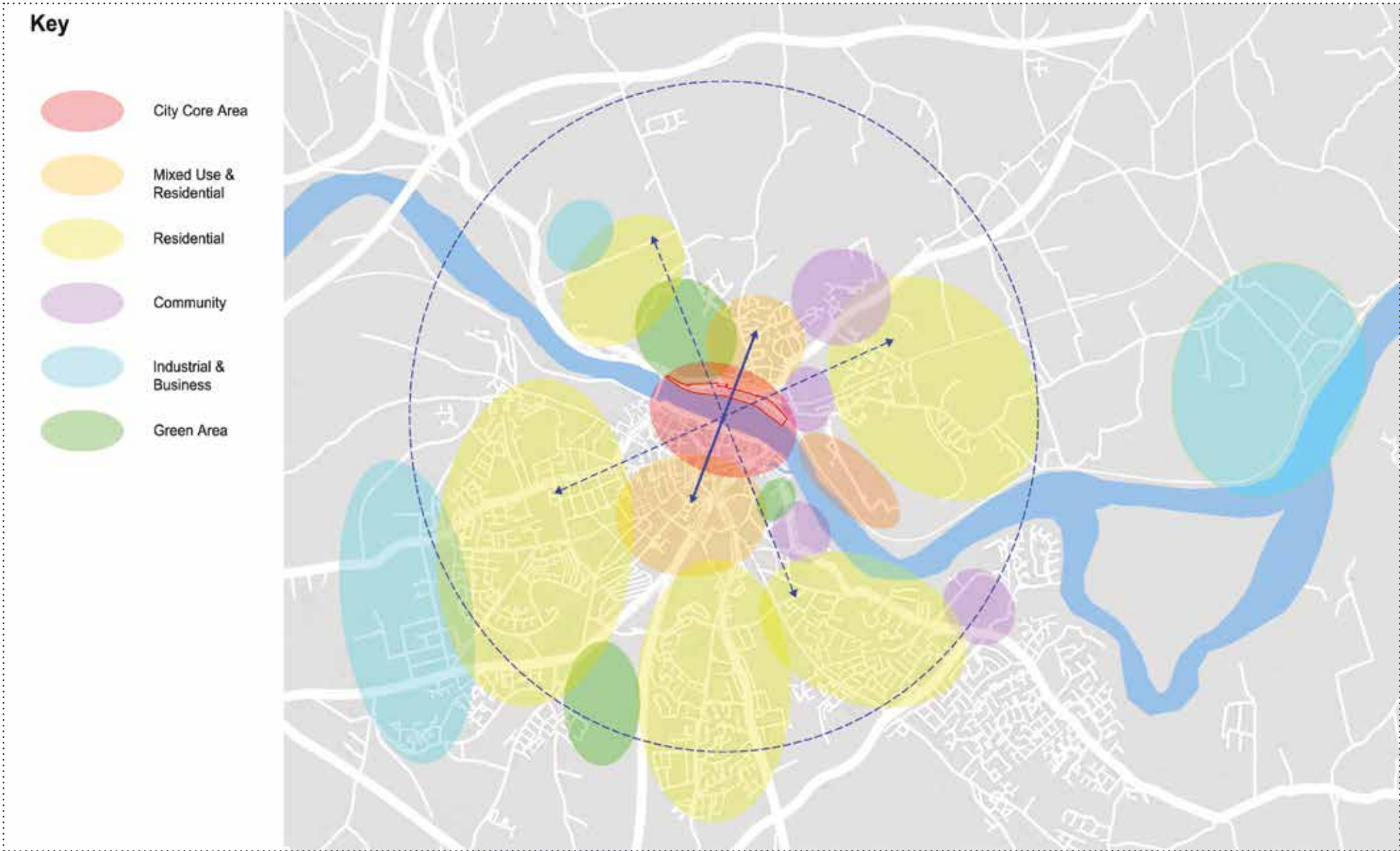


Figure 11: Concentric City

03

PHYSICAL & SOCIAL INFRASTRUCTURE

Part a : Access & Connectivity

3a.1 Access Strategy

It is a fundamental requirement of the Planning Scheme to ensure that the future demands for travel are met in a sustainable way. The Scheme envisages the North Quays developing as a transport hub facilitating not alone the mixed use development on the North Quays but the entire city. The strategy of the scheme is to limit car usage by making alternative modes of transport more accessible and attractive.

The main physical constraints as outlined in Chapter 2 are as follows:

- Remoteness of the site from the South Quays and the remainder of the City Centre.
- Access from its immediate road network.
- Flood protection requirements to raise substantial areas of the site above the design flood heights.

The City and County Council have undertaken a substantial body of work to resolve the access problem and it has been determined that:-

1. The existing access points to the site from the Dock Road are deemed to be inadequate and present a barrier to future development of the site. As a result, two new access points have been identified. One at the upper eastern end of the site from a widened Abbey Road, and the other at the lower, western end of the site by way of a new junction on the Dock Road and a new overbridge to the site. The existing level crossing from the Dock Road is not suitable and is therefore no longer required although the need for pedestrian permeability in this vicinity should be accommodated in some way as part of the site development.
2. Access to parking, loading and unloading, waste management and all such development related traffic should be contained within the site from an internal "spine" road constructed in a fashion that it would not become a visible feature when viewed from the South Quay and not forming a barrier to free pedestrian movement across the site or along the waterfront. It is likely that such a road would be parallel to the railway on the north of the site and the possibility exists for some or all of this internal road to be contained below the buildings.

3. A sustainable transport bridge capable in width to accommodate pedestrians, cyclists and a City Centre bus service should be built from the North Quay to the South Quay in the vicinity of the Clock Tower on the South Quay. Such a bridge would provide
 - Direct access to the exiting City Centre for pedestrians and cyclists.
 - A vital link in the connection of the Waterford Greenway to the proposed Dublin - New Ross - Waterford Greenway.
 - An opportunity for the retail sector in the city to operate a courtesy shuttle which could connect the extremities of the City Centre together.

A Strategic Flood Risk Assessment carried out for the Waterford City Development Plan 2013-2019 has also identified that the land area on the North Quays would have to be raised in order to meet the requirements in relation to flood risk in the area.

The existing quays are approximately at 2.75m above Ordnance Datum (OD). It is necessary to provide flood protection to a height of 4.42m OD as a minimum. Also, overcoming the barrier formed by the railway to the north of the site and providing proper integration with the Dock Road requires that the floor levels of the site should be raised to somewhere between 6m OD and 9m OD. Access routes provided north/south through the development site should be fully integrated with the surrounding environment.

Rather than simply raise the ground level by infill, the solution proposed is to construct a podium structure across the majority of the site, thereby both raising the future ground building height above the flood risk zone and also providing an opportunity to address the parking demands of the site in a discreet and efficient fashion.

The work carried out by the Council has identified the alterations required to the surrounding road network and the associated infrastructural requirements required to address the access constraints in the vicinity of the site, all of which are adjacent to but not included within the Planning Scheme area.

The detailed analysis of access requirements has also identified that in order to achieve the objective of creating a transport hub; the infrastructure requirements of such a hub would straddle the northern boundary of the Planning Scheme area.



Figure 12: Access Strategy



3a.2 Parking

A provision of parking capacity in the range of 1,600-2,000 spaces would be in line with current planning requirements for a city centre site of this scale and depending on the mix of uses. It is estimated that the provision of the podium type parking solution could provide sufficient spaces to meet these parking needs.

The Planning Authority will positively consider some relaxation of the relevant Waterford City minimum development management standards for car parking if realistic and feasible alternatives are submitted at planning application stage such as, integrated landuse planning and Smarter Travel plans. Proposals should demonstrate how they support and will deliver the Transportation Vision and objectives of the Planning Scheme.

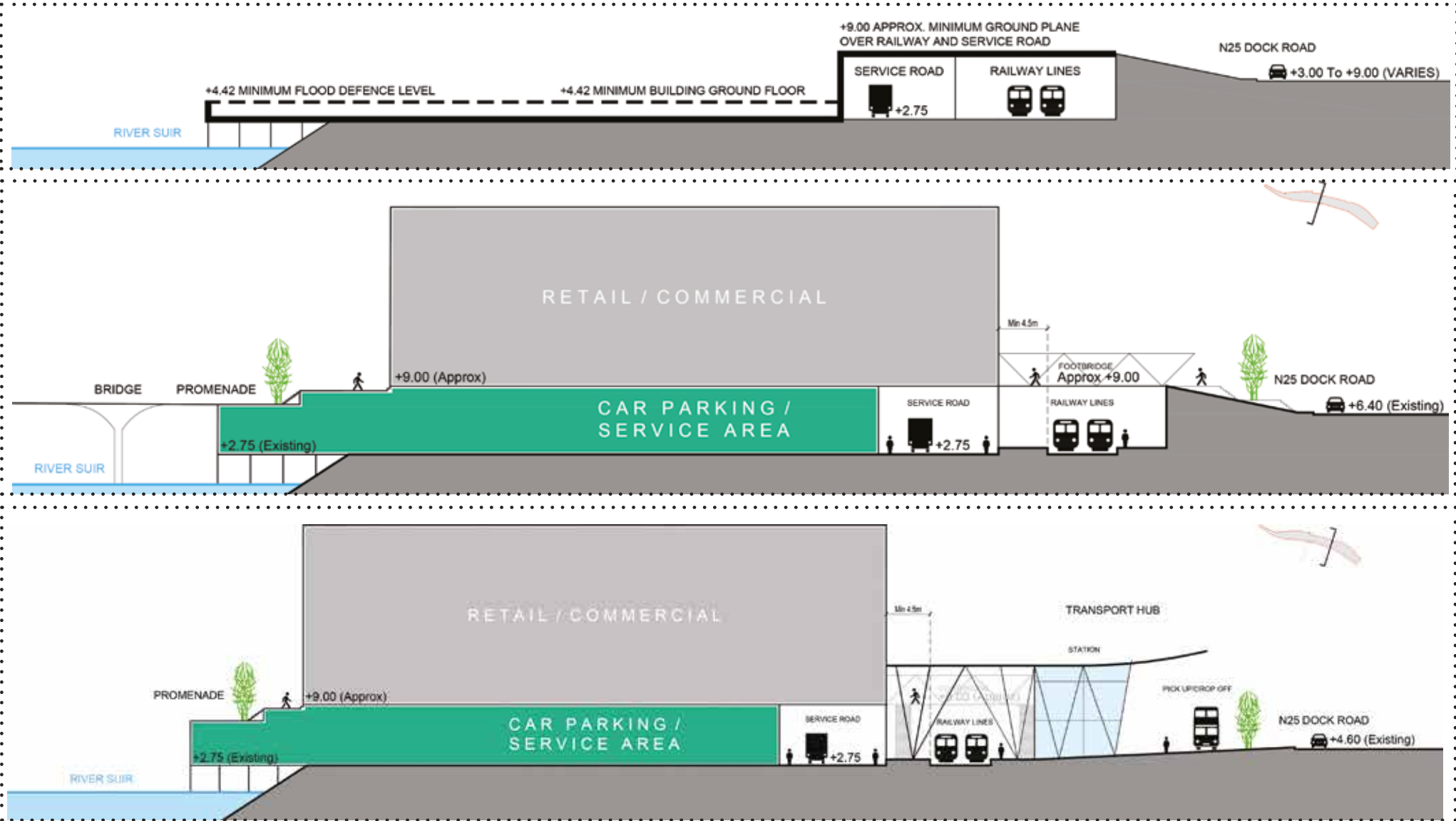


Figure 13,14 & 15: Typical Schematic Cross Sections through Central Zone

3a.3 Traffic Assessment

3a.3.1 Current Environment

The SDZ site stretches from Rice Bridge 1.1km eastward to just before Abbey Church. The site is bounded to the south by the River Suir, to the north by the R711 Dock Road and to the east by Abbey Road.

Traffic surveys carried out in 2016 show that Dock Road dual carriageway carries approximately 1,600 vehicles per hour in the AM peak, and 2,000 vehicles per hour in the PM peak. Rice Bridge carries approximately 3,000 vehicles per hour in the AM peak, and 3,300 vehicles per hour in the PM peak.

The junctions along Dock Road and at Rice Bridge are the overall determinant of traffic capacity on the local road network. Queues are often observed extending back from Rice Bridge along Dock Road in both directions (eastbound and westbound) in the AM Peak.

3a.3.2 Transport Demand

The TRICS database was used to determine the expected traffic that will be generated by the proposed development during both the AM and PM peak hours. The predicted peak hour traffic volumes of the SDZ site are estimated as 534 inbound and 181 outbound in the AM peak hour and 339 inbound and 615 outbound in the PM peak hour.

These numbers are considered a worst case scenario as they don't take into account the likely mode shift away from private car due to the improved provisions for pedestrians, cyclists and public transport.

The proposed new sustainable transport bridge will integrate the North Quays redevelopment with the City Centre and provide significantly improved access between the City Centre and the surrounding areas including Ferrybank, Abbeylands and Rockshire to the City Centre. The potential mode change from car to walking and cycling is significant, where the current population for the areas north of the River Suir that is within walking catchment is approximately 450 people, and cycling catchment is approximately 6,700



Figure 16: Access Strategy

people.

The construction of the proposed new sustainable transport bridge would potentially increase the walking catchment from the City Centre to the areas north of the River Suir to include a population of approximately 4,000 people, and the cycling catchment to include 7,400 people. Should there be a mode shift for these areas, equivalent to the areas south of the River Suir, this would equate to approximately 1,300 fewer car trips at peak times. This potential reduction in traffic would more than offset the traffic generated by the proposed development.

For the purposes of assessing the traffic impacts of the subject site the traffic survey baseline data has been factored up to an opening and design year using expansion factors taken from unit 5.5 'link-based traffic growth forecasting' within the Transport Infrastructure Ireland (TII) Project Appraisal Guidelines (PAG). This is a simplistic approach in the context of the local impact of the proposed development and it is not feasible within the context of this evaluation to take account of more complex future development factors. The traffic assessment considers the opening year taken as 2020 and design year taken as 2035 (15 years after opening year).

3a.3.3 Traffic Analysis

Traffic Capacity Analysis was carried out on both the proposed western and eastern access junction to the development along with immediate adjacent junctions likely to be affected by the development. The results of the junctions analysis is summarised below:

- A Western Development Access Junction:** Lin-Sig was used to analyse the capacity of, the proposed signalised 4-arm western access junction, which will be the new western entrance to the site on Dock Road at the junction of the former hotel site at Mountmisery. The results show that the proposed signalised junction at the western site entrance on Dock Road, operating on a 90 second cycle, has more than adequate capacity to accommodate the proposed development with a maximum Degree of Saturation of 58.4% and average maximum queue length of 11.2 pcu in the design year. This indicates that the subject junction could accommodate a greater portion of the overall development traffic, which will allow greater flexibility of route access.
- B Upgraded Abbey Road/Dock Road Junction:** ARCADY roundabout modelling software was used to assess the proposed roundabout at intersection of Abbey Road/Dock Road Junction. The results for the proposed roundabout junction at Dock Road/Abbey Road indicate that the junction will operate at 52% of its theoretical capacity and will be able to cater for the extra traffic generated as a result of the proposed development.
- C Eastern Development Access Junction:** ARCADY roundabout modelling software was used to assess the forearm proposed roundabout located on Abbey Road, which provides access to both the development site and Abbey Community College. The results for the proposed roundabout junction on Abbey Road indicate that at maximum, the junction will operate at 68% of its theoretical capacity and will be able to cater for the extra traffic generated as a result of the proposed development.
- D Rockshire Road Junction:** The proposed development is estimated to result in an increase in traffic at this junction by 17% in the AM peak and 24% in the PM peak. Lin-Sig was used to analyse the effect of the traffic generated by the development on the capacity of, and potential delays occurring at, the existing signalised 4-arm Rockshire Road junction on the R711 Dock Road. The results show that considering the extra traffic generated by the development, the existing signalised junction will slightly exceed capacity by 3.3% in the Design Year of 2035 due to general traffic growth along the R711 route towards Waterford City Centre, and without a new eastern orbital relief road and bridge downstream of the City Centre.

E Rice Bridge Roundabout: The proposed development is estimated to result in an increase in traffic at this junction by 7% in the AM peak and 9% in the PM peak. ARCADY roundabout modelling software was used to analyse the effect of the traffic generated by the development on the capacity of, and potential delays occurring at, the existing Rice Bridge Roundabout junction, located to the west of the development site. The results confirm that Rice Bridge forms a bottleneck on the connection from the northern suburban area to the City Centre. This highlights the need for a significant mode shift in Waterford from private car to walking, cycling and an upgraded public transport system. It is also probable that the increase in congestion at the Rice Bridge will lead to a natural trip diversion pattern developing from the current through-city movement to the outer ring road, which will, in time increase the demand for a further outer crossing of the River at the PLUTS proposed downstream crossing point. This gradual trip diversion will provide the capacity required in the short to medium term for the development of the North Quays as envisaged in the Planning Scheme.



Figure 17: Traffic Analysis

3a.4 PLUTS Compliance

The Waterford Planning and Land Use Strategy envisaged the City growing concentrically to support population increases to 2020.

The plan recommends future development should be internalised into neighbourhoods, each adequately serviced by access roads connected in turn to city circulation routes strategically built to service the City’s needs and encompassing separate public transport and cycling facilities.

The Waterford PLUTS envisaged the City Centre as primarily a people friendly area with ample public transport access catering for all age groups and mobility demands. The local authority has been working to implement this policy since the PLUTS was adopted in 2005.

The principal goals of the Planning Scheme is a continuation of the PLUTS policy referred to above. At present the bulk of the outer ring road has been constructed, all of the inner ring road has been constructed and the Council is now involved in several contracts for the pedestrianisation of the City Centre which will see traffic diverted from the City core onto adequately designed and managed streets.

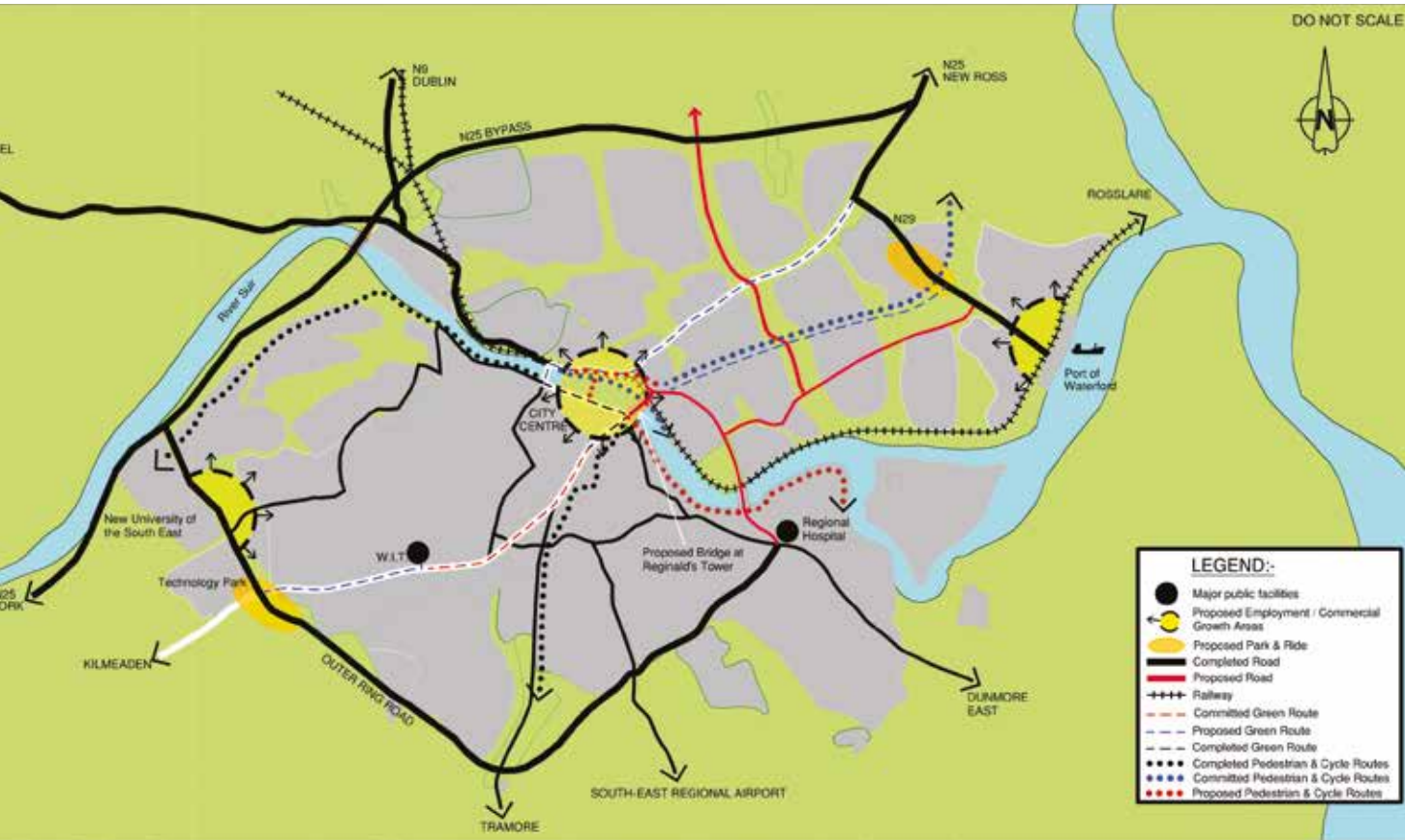
This ERDF co-funded project will see the completion of the City Centre pedestrianisation goal by the end of 2019.

The transport strategy for the North Quays area would be an extension of the PLUTS policy. The area should be created as a pedestrian and cycle zone with traffic limited to access only and access roads would not be permitted to present a barrier to unhindered movement of pedestrians through and across the site.

The site has many opportunities for the creation of pedestrian friendly spaces and walks which will be required as part of future development.

The development of the site must maintain and maximise the opportunity to develop a significant waterside walking and cycle route along the river and connecting the site to the northern suburbs in Ferrybank with pedestrian connections at the two new vehicular entrances, with the provision of a pedestrian access at the location of the existing railway bridge from the Dock Road and the development of another pedestrian route in the vicinity of the existing railway level crossing.

This would provide the required degree of permeability from the north of the City and the immediate Ferrybank area through the site at the most appropriate locations.



3a.5 Sustainable Transport Bridge

The sustainable transport bridge is a critical piece of enabling infrastructure over the River Suir that will connect the North Quays development with the existing City Centre.

The bridge will have an opening centre section equivalent in size to that currently available at Rice Bridge. The bridge will be constructed by the Council and its termination points at both sides will be focal points on the pedestrian route through the City. The proposal to provide a City Centre bus service will greatly enhance connectivity between both Quays. The sustainable transport bridge will also carry the link between the New Ross to Waterford and the Waterford to Dungarvan Greenways.

3a.6 Transport Hub

The development of the North Quays area presents an opportunity, long acknowledged as being necessary, for the City to relocate the train station from its present isolated location to the west of Rice Bridge into the City Centre.

The Planning Scheme envisages the realisation of this opportunity and takes the opportunity to further develop the principles of the PLUTS strategy by ensuring that the design of the North Quays and surrounding roads encompasses a transport hub where pedestrian, cycling, car, rail and bus users can interchange in a comfortable environment.

Specific Objectives:

PSI 1: The siting, design, orientation and accessibility of the proposed transport hub should be informed by the objective of delivering seamless interchange between sustainable transport modes, connectivity and integration with complementary landuses, in the context of high quality public realm.

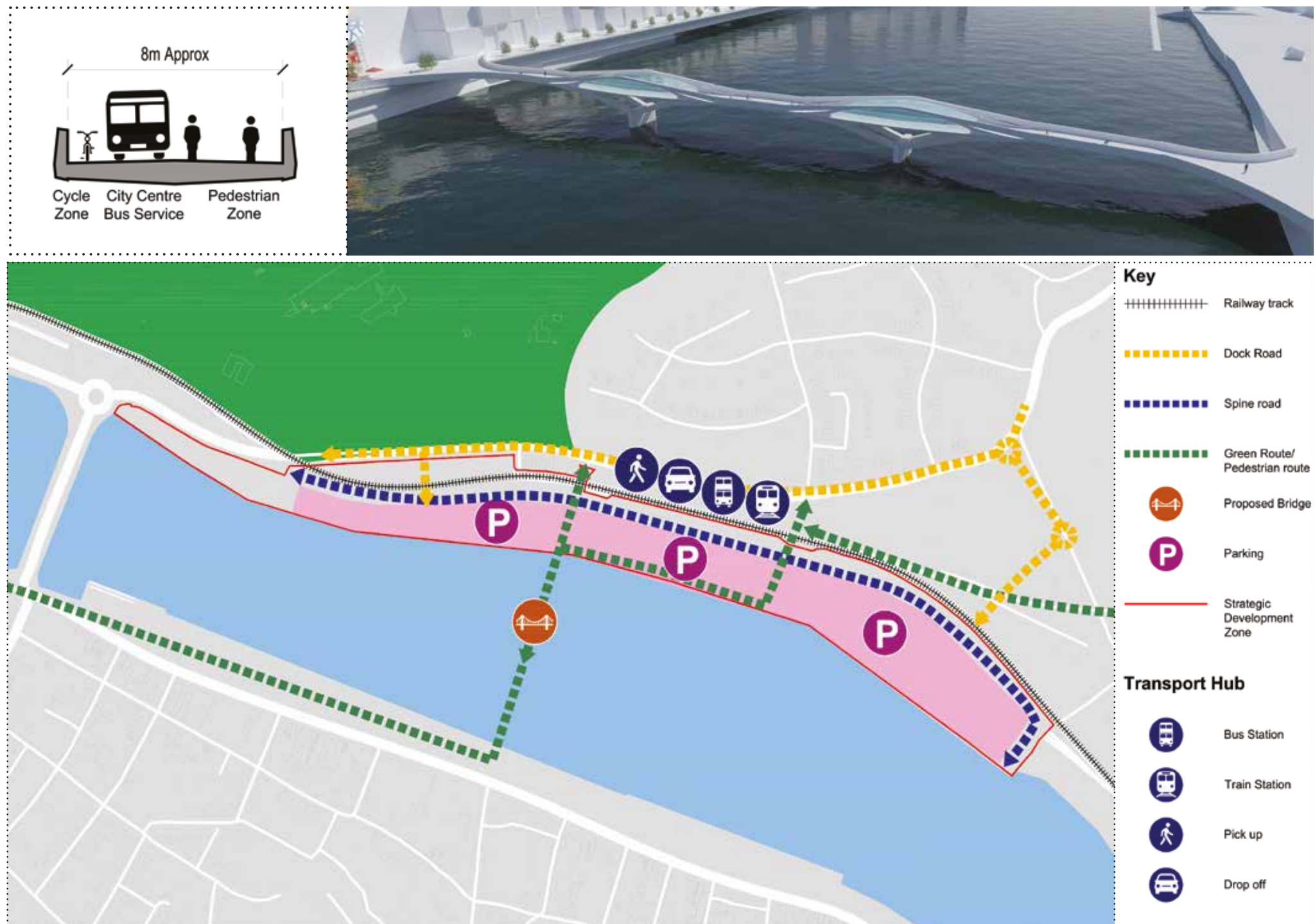


Figure 19: Transport hub & Access Strategy

3a.7 Sustainability

While the flood protection solution presents an opportunity to create a significant capacity for parking, the current development management standards as outlined in the Waterford City Development Plan ultimately control the parking provision.

Notwithstanding that however it is intended that any development of the site will be encouraged to limit the provision of parking on the site to levels below those allowed in the development standards by the use of incentivised sustainable transport modes in association with tenants, private and public transport providers.

All applications for permission on the site will be analysed in relation to the transport sustainability of the proposal to ensure that all future development on the site fits well with the transport policy from the Waterford PLUTS.



Left to Right - Figure 20: Existing pedestrian travel times from train station;
Figure 21: Proposed pedestrian travel times from train station

3a.8 Future Proofing of Transportation Needs

As the City inevitably grows, and in cognisance of the National Planning Framework and the conclusions of the PLUTS for the City, it is envisaged that the concentric growth of the City will lead to a public transport demand for cross city services on almost all routes.

At present, with 45,000 people living south of the river and approximately 5,000 living in the northern suburbs only one such cross city route is currently provided. With future growth in mind, the development of the North Quays site must ensure that sufficient provision is made for the growth of such public transport demands. The construction of the proposed new railway station within the North Quays will provide for potential future growth in both commuter and tourist/visitor traffic.

While the traffic analysis indicates that there would be no requirement for additional vehicular traffic across the river as a result of the development of the North Quays SDZ area, in recognition of the envisaged growth scenario for the City in general, the Local Authority is currently undertaking a separate study of such additional river crossings, (which were identified as part of the PLUTS), in order to gauge the likely timing and best location for any such crossing(s) to achieve the desired result in the long term planning for the City.

Provision will have to be made as part of any development on the North Quays for the possible long term development of an additional vehicular river crossing at the eastern end of the site whose function would be the orderly redistribution of vehicular traffic from Rice Bridge, the Quays and the Dock Road.

The abandoned rail line between Waterford and New Ross, which is currently in the planning process in Wexford and Kilkenny Councils for the provision of a Greenway, as already mentioned, has got within its boundaries a readily achievable additional capacity for the provision of a high capacity public transport link which would provide ideal access from developing areas in the north of the City and would also provide

a quick, direct and exclusive public transport access to a future park and ride facility on the edge of the City directly into the North Quays site which will be developed as part of a wider network of such facilities as outlined in the PLUTS report.It would be the intention of the Council to promote such a scheme with Kilkenny County Council in the future as the North Quays and Ferrybank are developed.

Specific Objectives:

PSI 2: To develop and promote a modal shift away from the private car use towards increased use of a sustainable integrated multi modal transportation network to include walking, cycling public transport integrating bus and rail infrastructure. All future planning applications shall demonstrate how they seek to implement the actions contained in the Government’s “Smarter Travel, A Sustainable Transport Future 2009-2020”.

PSI 3: To support and facilitate the development of an integrated public transport network with efficient interchange between transport modes, to serve the existing and future needs of all ages in association with relevant transport providers, agencies and stakeholders and to facilitate the integration of walking and cycling with public transport.

PSI 4: To require a standard workplace travel plan for any development that employs over 100 people in accordance with the “National Transport Authority the preparation of workforce travel plans- a guide for implementers”.

PSI 5: To provide a cycle and sustainable transport bridge across the river to form part of strategic cycling and walking routes.

PSI 6: To create and support a well-designed network of pedestrian infrastructure to promote and facilitate walking and cycling; provide priority for pedestrians and cyclists within the North Quays and linking with the surrounding walking and cycling networks in Waterford/Kilkenny environs, including the Waterford/ New Ross Greenway.

PSI 7: To require provision of good quality end-of-trip facilities to encourage walking and cycling such as secure and weather-proof bike stands, lockers, showers, changing and drying rooms.

PSI 8: To provide appropriate levels of car parking and cycle parking to serve a range of uses in accordance with the Waterford City Development Plan car parking standards (as amended by Variation No 1 to the Waterford City and County Development Plan). Reduction in car parking standards may be considered appropriate where alternatives means of sustainable transport are being provided for within the site. Planning applications should incorporate electric vehicle charging points across the site.

PSI 9: To promote best practice mobility management and travel planning.

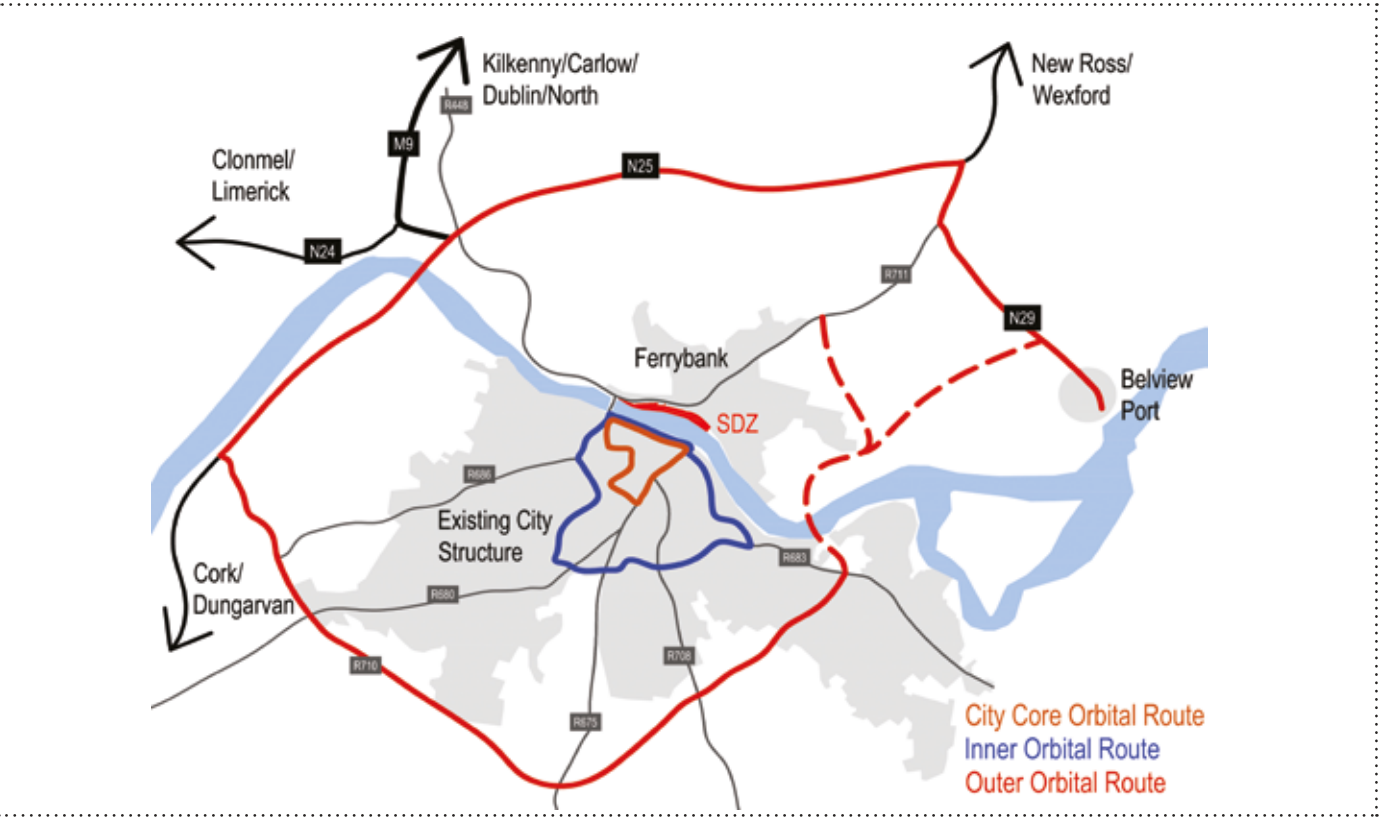
PSI 10: An Area Based Travel Plan should be implemented in conjunction with the development of the SDZ lands.

PSI 11: Cycle parking should be located in locations which are secure and easily accessible and all cycling measures shall be consistent with the provisions of the National Cycle Manual.

PSI 12: To provide for improved bus service provision and bus network connectivity serving the SDZ lands, connecting it with Waterford City Centre and the wider Waterford City/Environs area.

PSI 13: Proposed layouts must demonstrate high standards of permeability prioritising walking and cycling routes that are direct, safe and secure, in accordance with the National Transport Authority’s “Permeability Best Practice Guide”. Major barriers to pedestrian/cycle movement must be avoided. Layouts should be designed to ensure that defensible space is defined by buildings which in turn must provide passive supervision of the public realm.

PSI 14: To provide recharging points for electric vehicles within the car parking areas of the North Quays.



03

PHYSICAL & SOCIAL INFRASTRUCTURE

Part b : Environmental & Social
Infrastructure

3b.1 Environmental Infrastructure

The responsibility for strategic planning and investment for water services infrastructure is under the remit of Irish Water.

3b.1.1 Water Supply

The site is bounded by a good water network 250mm and 150mm diameter pipes. Irish Water has confirmed that there is sufficient capacity within the system to serve the site.

The requirements of the Draft River basin Management Plan for Irelands 2018-2020 (or any subsequent update) should be taken into consideration in the development of the North Quays.

3b.1.2 Foul Drainage

There is currently no sewer network on site, so this leaves a clear site for any potential layout, which will have to be gravity fed into the existing Ferrybank pumpstation on-site. The Ferrybank Pump Station is located within the North Quays SDZ. While much of this pump station is located underground, any development in its vicinity would have to take account of its presence and ensure appropriate access in maintained. This pumpstation has been sized to take account of any potential development on the North Quays. Irish Water has confirmed that there is sufficient capacity within the system to serve the site.

3b.1.3 Surface Water Drainage

There is no existing network on site, but existing outfalls for lands to the north should be maintained. All new storm drainage will discharge to the River Suir. The surface water drainage network draining land north of the site conveys water through the SDZ Site. All existing connections from north of the site will be maintained and continue to outfall directly to the Suir. No additional connections to the existing surface water drainage system will be made.

Contaminated surface water such as oil/fire water/detergents will be intercepted and stored appropriately for future treatment and disposal.

New surface water drainage networks will be required as part of any new development. Sustainable Drainage Systems SuDS will be implemented and will be utilised to manage surface water and pluvial flood risk both within the SDZ area and to adjacent areas. These networks should be designed in accordance with the SuDS Manual.

A SuDS Management Train is defined in Ciria 753 “The SuDS Manual” as “the sequence of drainage components that collect, convey, store and treat runoff as it drains through the site”. A SuDS Management Train should be incorporated during the design stage whereby surface water should be managed locally in small subcatchments rather than being conveyed to and managed in large systems further down the catchment. Use of a Management Train should for example, eliminate the requirement for conventional petrol interceptors.

The following SuDS components shall be considered as part of all proposed development within the SDZ:

- **Green roofs:** Green Roofs comprise a multi-layered system which covers the roof of a building with vegetation and landscaping over a drainage layer. They are designed to intercept and retain precipitation which reduces the volume and rate of surface water runoff. Green roofs can be used on a variety of roof types and sizes, although larger roof areas are typically more cost effective. They are particularly suited to flat/gently sloping roofs on commercial buildings, sports centres, schools, apartment blocks and other similar buildings.
- **Bioretention Areas/Modified Planters:** Bioretention areas are stormwater controls that collect and

treat stormwater runoff. The runoff is treated using soils and vegetation in shallow landscaped basins to remove pollutants. Treated runoff can then be conveyed further through the drainage network or allowed infiltrate into the subsoil or subgrade. Part of the runoff volume will be removed by evaporation and plant transpiration.

- **Rainwater harvesting:** Rainwater harvesting involves collection of rainwater from roofs and hard surfaces, similar in principle to Water Butts but generally on a much larger scale. Collected water is typically used for non-potable purposes such as irrigation, flushing toilets and washing machines. The size of the harvesting tank depends on catchment area, seasonal rainfall pattern, demand pattern and retention time. Stormwater attenuation can also be provided by additional storage capacity in the tank.
- **Permeable surfacing:** Permeable pavements provide a pavement suitable for pedestrian and/or vehicular traffic, while allowing rainwater infiltrate through the surface and into the underlying layers where it is subsequently infiltrates to the ground and/or is collected and conveyed to the drainage network. Permeable pavements are most suitable for areas with light traffic loads and volume. The pavement generally caters for rainwater which lands directly on its surface but in certain cases, can accept runoff from other impermeable areas.
- **Swales:** These are broad, shallow, vegetated drainage channels in which can be used to convey or store surface water. Swales are generally suited for small catchments with impermeable areas. They are generally good for removal of pollutants. Swales can be designed for infiltration to subsoil or detention and conveyance to another stage in the management train, conveyance can be in the open channel or in a perforated pipe within a filter bed below the base of the channel.

Specific Objectives:

PSI 15: To achieve best practise and innovations in SUDS design as part of the Planning Scheme, including the successful coordination of surface water management with ecology and amenity functions of open space and landscaped areas. All planning applications shall be accompanied by a surface water drainage plan which will include proposals for the management of surface water within sites in accordance with requirements as listed in Section 3b.1.3 of the Planning Scheme, protecting the water quality of the existing water bodies and ground water sources, and retrofitting best practice SUDS techniques on existing sites, Design and implementation of SuDS shall be in keeping with best practice as detailed in CIRA 753 “The SuDS Manual.

PSI 16: To ensure the protection of surface and ground water quality in the plan area and surrounding areas. Surface water quality is to be protected in the construction/maintenance of enhanced drainage systems, to ensure compliance with the requirements of the Water Framework Directive.

PSI 17: Contaminated surface water such as oil/fire water/detergents will be intercepted and stored appropriately for future treatment and disposal.

PSI 18: To work with the relevant stakeholder including Irish Water in the delivery of infrastructure for the North Quays.

3b.1.4 Flood Management

The design flood defence level for the River Suir through Waterford City Centre is approximately 4.42m OD. The final ground level of the North Quays will be raised such as to provide appropriate protection from flooding, a minimum flood defence level of 4.42m OD is required. The main approach to reduce flood risk at Waterford North Quays should involve raising the ground floor levels above modelled flood levels. The minimum finished floor level for all residential developments, commercial premises and entrances to underground spaces within the SDZ shall be above 4.42m OD, In limited circumstances where raising floor levels cannot be achieved, development will be restricted to “water-compatible developments” as described

in the OPW’s “The planning System and Flood Risk Management-Guidelines for Planning Authorities” (Table 7.1 lists potential water-compatible developments). If this is the case, then these would be required to be a flood-resistant construction using water-resistant materials. Basements shall be allowed to have a floor level below 4.42m OD but shall only be utilised for heavy goods vehicle (HGV) access/deliveries, vehicle parking and storage. Basement construction should provide impermeable solutions with possible pumping for seepage.

Specific Objectives:

PSI 19: There is a requirement for a site specific flood risk assessment for all planning applications for the SDZ. The flood risk assessment will consider the impact of the proposed development in accordance with the “The Planning System and Flood Risk Management” (DEHLG & OPW, 2009). No development shall be allowed that contradicts the recommendations of the SFRA for the North Quays or increases the flood risk to existing developments. As part of the applicants’ site specific flood risk assessment a justification test will not be required as this has been completed as part of the Waterford North Quays SFRA.

PSI 20: Basements, below 4.42m OD shall only be utilised for vehicle parking and storage and ancillary services all access points to basements shall be defended to a level of 4.42m OD. Basements shall be lined with impermeable sealants as to restrict groundwater ingress and pumping stations should also be installed.

3b.2 Utilities and ICT

3b.2.1 Telecommunications

Telecommunications infrastructure is a key requirement within the SDZ. The availability of high-speed broadband is critical to the economic competitiveness of the area and in attracting investment into the area. It is important to ensure that new residential and commercial developments are connected in terms of ducts to existing or proposed optical fibres. The sharing of ducts by operators is encouraged.

Future planning applications shall have to include proposals linking into providing communication networks. It is anticipated that the current fibre network can be extended into the site. High Speed Fibre Broadband services (1GB/sec) can be delivered to the proposed location by an extension of the Metro Area Network (MAN) ring from the Train Station to The North Quay Site. Provision for Data Ducting to be included in any new bridge crossing of the river to North Quay Site. Provision for open ducting network within the site would be a requirement of development.

Specific Objectives:

PSI 21: It is an objective to require future applications to include details of the proposed network at planning application stage.

PSI 22: To require the use of ducting for information communication technology within individual new residential and commercial developments.

PSI 23: To facilitate the development of accessible Wi-Fi zones within the Planning Scheme area.

3b.3 Energy

3b.3.1 Electricity

The North Quays is currently served by the 38Kv substation in Mountmisery. The ESB confirm that there is sufficient capacity in the network to provide for future development in the North Quays.

3b.3.2 Gas

The North Quays site can be served by gas via the existing gas network along the Dock Rd and Fountain Street. The medium pressure network would have significant capacity to cater for development in the North Quays and the gas demand should be readily available at a connection point in this area.

3b.4 Waste Management

Waterford City and County Council in accordance with the EU and National legislation accord with the waste management hierarchy of waste prevention, waste recycling, energy recovery and disposal.

Specific Objectives:

PSI 24: To require all development within the North Quay to comply with the waste policy as set out in the Waterford City Development Plan 2013-2019 in accordance with the waste management hierarchy of waste prevention, waste recycling energy recovery and disposal. At planning application stage proposed development will have to show regard for refuse collection/recycling composting etc at suitable locations where required.

PSI 25: All potentially contaminated land shall be dealt with in accordance with waste management legislation prior to redevelopment as part of an Environmental Management Plan which covers remediation.

3b.5 Biodiversity

The Lower River Suir SAC, is a very large multi-interest site covering more than 100km of the main river channel and supports a range of Annex II species and Annex I habitats. The SDZ is bounded by the River Suir SAC.

The objective of the Lower River Suir SAC is to maintain and restore the favourable conservation conditions of the Annex I habitats and or Annex II species for which the SAC has been selected. The following objectives shall apply to the Planning Scheme in order to minimise adverse impacts on biodiversity.

Information in relation to nationally protected habitats and species within and adjoining the site, is contained in the Strategic Environmental Assessment Environmental Report (SEA ER) Section 5.2 including the habitats and rare and protected species recorded within the Study Area. Figure 5.3 of the SEA ER illustrates the Natural Heritage Areas (NHA) and proposed Natural Heritage Areas (pNHAs) within 15km of the Planning Scheme. Information relating to other environmental baseline parameters is also detailed in Section 5 of the SEA ER.

Specific Objectives:

PSI 26: Any plan or project with the potential to give rise to significant direct, indirect, secondary impacts or through indirect or cumulative impact, on a Natura 2000 site(s) shall be subject to an Appropriate Assessment in accordance with Article 6 of the EU Habitats Directive (92/43EEC) and associated legislation and guidelines informing decision making. All proposals are required to consider the mitigation measures contained in the Natura Impact Report of the Planning Scheme.

PSI 27: All development should include proposals on how they address the natural heritage in terms of conservation, management, and improvements to the local biodiversity in the urban environment. Developments shall incorporate landscaping and other design features that have the potential to improve or enhance existing natural habitats, ecological corridors and blue and green infrastructure.

- PSI 28:** All development proposals will be encouraged to include the planting of appropriate native flora to support and develop habitats for both terrestrial and aquatic fauna. Planting should, as far as possible, be limited to native plant species and enhance the riverine and riparian environment and protect the native flora and fauna in the area.
- PSI 29:** All future proposals shall ascertain the extent, if any, of invasive species, and implement measures to control or, where possible, eradicate them from the relevant site.
- PSI 30:** To protect, preserve and /or record the archaeological value of terrestrial and underwater archaeology where feasible.

3b.6 Community

The range and quality of the social infrastructure available and accessible to the residents and workers of the North Quays will be paramount to their decision to live and work there. Social infrastructure will also determine if communities integrate, stay together and remain inclusive.

Attracting people to work live and play in an area and attracting business to invest in an area is dependant on creating a vibrant neighbourhood.

It is vital, in addition to opening up the site, to reach out from the site to the neighbouring community and environs. The integration of the North Quays redevelopment and the surrounding communities is paramount to its success.

The disconnect between the North and South Quays due to the historic physical separation acts to divide the community and it is vital that the bridge connectivity is provided as ultimately this is seen as the first step in unifying the community and providing the means to grow the city concentrically.

It is also important that the services already provided both north and south, such as employment, education, social/civic amenity, etc. are shared by all. This integration will build further community structures, elevate the city as a desirable place to live and provide the impetus for propulsive growth, needed to grow the city to circa 83,000 population by 2040 in accordance with local and national policies.

It is important that services are accessible for existing and future family units, are within walking distance or close to public transport connections in order to foster genuine sustainable neighbourhoods. The location of facilities also provides focal points where residents within the community can meet and socialise, developing a true sense of neighbourhood and local identity. Housing provision cannot be seen in isolation in this regard and to be sustainable in the long term, must be provided in tandem with social and community services as the need arises.

3b.6.1 Educational facilities

Primary School : Ferrybank is served by two primary schools St. Mary’s Boy’s National School (Scoil Mhuire) and the Good Counsel School for Girls. Both schools are close to or at capacity but overall in Waterford City the primary schools have capacity to meet the demand.

The Waterford City Development Plan 2013- 2019 has zoned a large amount of land adjacent to the Good Counsel School as community facilities. In relation to St. Mary’s, the school was extended in 2010 and the present school site is zoned for community facilities in the Waterford City Development Plan.

The Ferrybank LAP has made provision for the expansion of St. Mary’s, with the zoning of 0.9 hectares immediately to the east of the existing school for community facilities. Therefore, there is sufficient land available for expansion of the schools if the need arises.

Post Primary School Facilities: There is one secondary school in the vicinity of the North Quays, the Abbey Community College in Ferrybank. This co-educational school was established in 2000, and is an amalgamation of the Sacred Heart of Mary Secondary School, Ferrybank, and Slieverue Vocational School. The school’s catchment area encompasses Slieverue, Ferrybank and parts of the parishes of Mullinavat and Kilmacow in South Kilkenny, as well as the part of Waterford situated north of the River Suir.

The secondary school has obtained planning permission for an extension which would result in an increase in capacity to 1000 pupils. Waterford City is served by a number of additional post primary schools including Ballygunner, Mount Sion, De la Salle and Newtown, The Ursuline and St Pauls.

The Planning Scheme acknowledges the specific objective in the Ferrybank-Belview LAP for the provision of a new secondary school.

3b.6.2 Childcare

The Planning Scheme seeks to facilitate the sustainable development of good quality and accessible childcare in the North Quays. It is considered that a requirement for a pro rata childcare provision will not necessarily meet the needs of an evolving population and it is acknowledged that market forces will have a greater role in determining the location of childcare facilities.

Key locations for crèche and early childcare facilities will be within the retail area of the development or in the residential areas.

3b.6.3 Healthcare Facilities

There is a primary health care unit planned for Ferrybank and it is anticipated that in conjunction with the other city wide health care facilities the future population of the North Quays would be adequately provided for.

The Ferrybank area is serviced by a number of retirement/nursing homes and health care facilities are provided for in the City Centre and University Hospital Waterford.

3b.6.4 Play Areas

In order to provide recreation and play facilities and satisfy the local population envisaged under the Planning Scheme future development proposals on site should contain provision for child centered play areas that enable children to take advantage of the traffic free nature of the site and to move freely and safely around the neighbourhood.

Specific Objectives:

- PSI 31:** To promote the development of community, health, childcare and other community and social facilities as part of the mixed land-use policy for the SDZ.
- PSI 32:** To include purposefully designed play areas as part of future planning applications on the North Quays.
- PSI 33:** To require an indoor recreational space within the residential area providing an inviting place for informal recreation.

04

PLANNING STRATEGY

4.1 Introduction

The North Quays is in a unique position to help meet Waterford's growing needs and provides an opportunity to create a sustainable mixed use city centre development.

The Planning scheme will provide the framework to deliver long term social, economic, social and environmental benefits for the North and South Quays.

The North Quays can become a hub for recreation, tourism, entertainment and a quality work and living environment. The North Quays will be a showcase for high quality urban design, architectural expression and public realm.

The development of the North Quays will create a new City Centre skyline as a means of countering urban sprawl and enabling residents to live close to work and facilities. The development of the North Quays will activate a new relationship and create strong interaction between the opposing quays, refocusing the River as the centre of the City.

Essential transport improvements are an integral part of the Planning Scheme which aims to reduce the need to travel by providing residential and employment uses alongside leisure and cultural development, community facilities and major transport links.

Key Opportunities

- The development of the North Quays will activate a new relationship between the North and South Quays.
- The North Quays will be a new city quarter with a blank canvas which will need its own identity/statement of design.
- The North Quay is a site of national importance and focus and is deserving of bold expression and special design.
- The North Quays presents an opportunity to alter the landscape of Waterford marrying the historic old city with a 21st Century modern development.
- Surrounded by ridges acting as a backdrop the North Quays can accept some degree of height and an opportunity exists to import 21st Century design concepts into this historic city.
- The expansive river frontage requires variation in terms of height and scale so as to maintain a vibrant interesting outlook and accessibility to the river.

Specific Objectives:

PSS 1: All future planning applications shall comply with the relevant Waterford City Development Plan policies and objectives (and any subsequent revision).

PSS 2: All future applications are required to have regard to:

- Urban Design Manual, A Best Practice Guide (2009) Department of the Environment, Community and Local Government (and any subsequent revisions/updates).
- Sustainable Urban Housing Design Standards for New Apartments Guidelines for Planning Authorities (2015), Draft Updated (2017) (and any subsequent revisions/updates).
- Smarter Travel – A Sustainable Transport Future 2009-2020 (and any subsequent revisions /updates)

4.2 Site Capacity

The Planning Scheme area measures 8.23 Ha resulting in a gross site area of 82,300 sqm.

The proposed transport and infrastructure solution allowing for an internal access road, buffers between buildings and a minimum of 20% public open space (to include a minimum 10 metre wide riverside promenade/s) would leave a net developable area of approximately 53,000 sqm.

4.3 Land Uses

The Government Order SI 30 of 2016, designating the North Quays as an SDZ, specifies a mixed use development which may include the following:

“Commercial activities including, office, hotel, leisure and retail facilities, residential development and the provision of educational facilities, supporting transport infrastructure, emergency services and the provision of community facilities as referred to in Part III of the First Schedule to the Act, including health and childcare services, as appropriate”

It is considered that the commercial activities contained in the Government Order are not exhaustive and may include light industry/start up business/enterprise knowledge etc. Typical city centre uses that are applicable to the existing City Centre on the South Quays, as provided for in The Waterford City Development Plan 2013-2019 are also considered appropriate uses for the North Quays.

It is imperative that the North Quays becomes a dynamic and enlivened space offering opportunities for living, working and socialising. The mix of uses will be fundamental to the overall success of the North Quays Development and to its integration into the wider urban context. The appropriate mix of uses will promote a more compact, lively, well connected city and city centre.

Specific Objectives:

PSS 3: To foster a sustainable mix of retail, commercial, residential, integrated transport, cultural and leisure activities to support a vibrant enlivened urban quarter.

PSS 4: To provide a sustainable mix of uses throughout the SDZ site that will create active and animated spaces both day and night respecting the unique biodiversity of the area.

PSS 5: To ensure an appropriate level of active ground floor uses to make a positive contribution to the street level activity and ensure passive surveillance across the site.

PSS 6: To provide a range of supporting uses such as local convenience shops, restaurants, cafés and leisure, childcare, health care and financial services within the SDZ area.

The following uses are considered appropriate and necessary for the successful delivery of a modern active urban environment on the North Quays:

4.3.1 Retail

To determine accurately the quantum of retail shopping for the City, John Spain & Assocs. were commissioned to provide an updated assessment of the likely capacity, in quantative terms, for additional retail floorspace. This updated assessment of the 2012 City Retail Strategy used the actual 2016 CSO population statistics for the City and Region, projecting requirements up to 2022 (RPG). As outlined in John Spain’s retail assessment there is currently 48,000sqm of retail floor area in the existing City Centre. The updated Retail Assessment indicates a requirement for additional comparison net retail floorspace of between 43,503 sqm and 49,783 sqm up to 2022. Existing development proposals for the City provide circa 7,000 sqm of this requirement. The North Quays has the planned potential to provide an additional 30, 000 sqm of this requirement.

While it is clear the Planning Scheme site does not provide the full quantum of comparison retail floor space, as set out in the updated retail assessment. it is anticipated the shortfall will be made up over time from improvements to existing retail units on lands currently zoned for City Centre use in the Waterford City Development Plan.

The anticipated increase of Waterford City population over the next 20 years (Draft NPF) and the anticipated and planned development of the northern city suburbs (PLUTS) to facilitate balanced ‘concentric’ city growth, and taking account of the current under provision of comparison retail in the City, it is imperative that the development of the North Quays makes a significant contribution towards the provision of comparison retail for the future sustainable development of the City.

The area adjacent to the sustainable transport bridge landing is the area of highest activity and footfall and will be the preferable location for retail development. The concentration of retail development in this central area will also maximise connectivity with the existing City Centre shopping areas and form part of the extended retail spine from Michael Street through to Barronstrand Street and across to the North Quays.

Specific Objectives:

PSS 7: To provide a maximum of 30,000 of net retail comparison floor space in accordance with the Guidelines for Planning Authorities Retail Planning 2012, Department of the Environment , Community and Local Government and /or any subsequent revisions.

4.3.2 Office

The North Quays is strategically placed to attract national and multi-national organisations through the provision of 4th generation office space in a modern city centre quarter, adjacent to an integrated transport-hub. A range of office types must be provided to reflect the key growth sectors and to meet business life cycle needs from start up to growth phase to maturity and consolidation. There is a need to accommodate flexible floor-space provision and to allow for a range of office accommodation types.

Large and medium offices occupiers have demand for flexible and dividable floor plates of between 2,000 and 5,000 sqm which can be accomodated within larger buildings. The North Quays should provide flexible office accommodation that allows for expansion and growth taking account of synergies, spin offs and the potential for the exchange of talent.

Office buildings should integrate shops, cafes, leisure activities and other activities to support employees and to ensure vibrant and animated spaces that contribute to the North Quays experience. It is acknowledged that start up companies want to be located in the City Centre and that their employees want to work and live in the City Centre. Residential and commercial developments complement each other and people want to live within close proximity to their workplace. The North Quays can provide optimum work /live opportunities, in a fresh vibrant environment, for start up business and their employees.

Specific Objectives:

PSS 8: To facilitate a range of office types taking into account the demand for flexible and dividable floor plates.

4.3.3 Residential

The provision of residential development on the North Quays is vital to ensure the creation of a vibrant community within the City Centre. In line with the core strategy as set out in the Waterford City Development Plan 2013-2019 and PLUTS it is considered reasonable that the North Quays would deliver in the region of 100 to 300 residential units primarily in the form of apartments. In addition the NPF foresees Waterford City growing by 29,000 people over the next 20 years to a population of 83,000. The North Quays SDZ lays the foundation for this propulsive growth.

As stated in Sustainable Urban Housing – ‘Design Standards for New Apartments Guidelines for Planning Authorities’, apartments are most appropriately located within urban areas and the scale, extent and density of apartment development should increase in relation to close proximity to urban centres and established higher density housing locations. Existing public transport nodes or locations where good public transport can be provided and which are close to employment and a range of urban amenities including parks/ waterfronts, shopping and other services, are also particularly suited to apartment development.

The North Quays could support a population of approx 660 people based on an average household size of 2.2 people. The Waterford City Development Plan 2013-2019 identified approximately 30% of the site being developed for residential development. Given the City Centre location of the site and the proposal to compliment the residential development with employment/transport hub and given the requirement to increase the population of the city by 29,000 people it is considered appropriate that the North Quays caters for the proposed figures.

The opportunity to live on the North Quays offers exciting new prospects for inner city living enjoying outstanding cityscape and water views. Residential development should be spread throughout the site in such a manner that will sustain the North Quays as an enlivened and active urban quarter. It is important that the advantages of living in the City Centre, including proximity to place of work, services, amenities and public transport are maximised in the integration of the residential element of the North Quays. The quality of the living environment, from the fabric of the apartment /residential block to integration with the urban street and the internal quality of the individual unit, needs to be of a high standard to attract and retain residents. Residential developments will be required to interact with the street by means of frequent entrances, overlooking windows and balconies.

There is a design challenge in developing exemplary high quality layouts and providing facilities for families in compact higher density forms. The planning scheme encourages innovation and distinctive design in order to achieve quality family living.

The Sustainable Urban Housing – ‘Design Standards for New Apartments Guidelines for Planning Authorities’ state that the mix of apartment types should be achieved in new developments.

Specific Objectives:

PSS 9: The following mix is a requirement of the Planning Scheme:

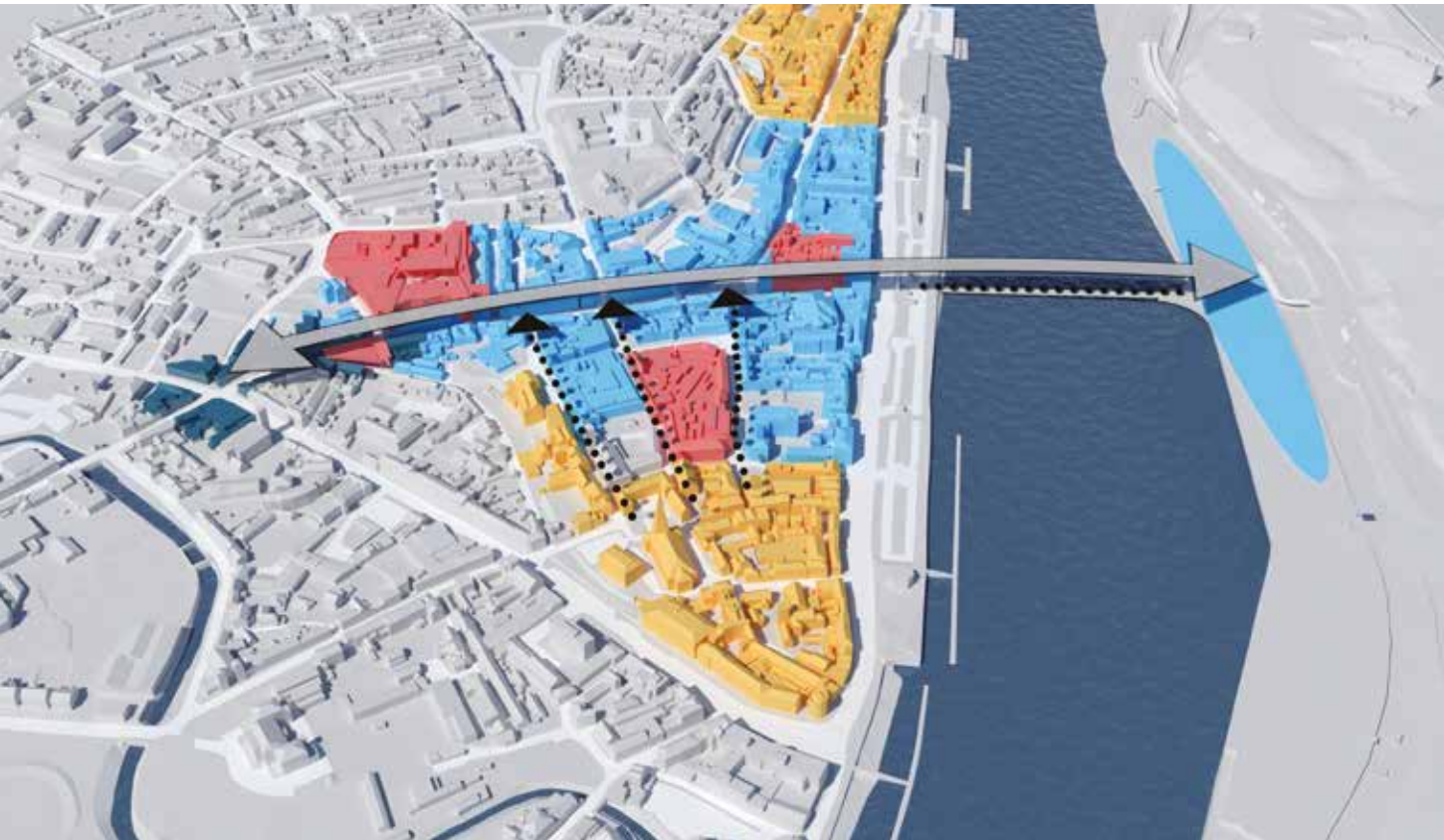


Figure 23: City Centre Retail Spine

- Maximum of 25-30% comprise of 1 bedroom apartments
- Maximum of 10-12% of units comprise of studio apartments
- Maximum of 50-60 % comprise of 2 bedroom apartments
- Maximum of 15-18% comprise of 3 bedroom apartments

In the interest of greater sustainability it is considered appropriate to allow for some flexibility to respond to future social and economic circumstance subject to a justification at planning application stage so as to ensure that that the Planning Scheme is fit for purpose.

PSS 10: To promote a residential population of circa 500 to 600 population in the North Quays, by providing high quality adaptable homes and quality residential choices for a range of household types inclusive of single occupants, students, young couples, families, the elderly and those with special needs.

PSS 11: To promote sustainable higher densities and quality innovative designs achieving generous standards of residential amenity for residents, including spacious and adaptable interiors, high quality natural lighting, good storage facilities, private open space amenity and car parking/bicycle parking.

PSS 12: To seek a successful interaction between the residential scheme, streets and public realm to foster a true sense of neighbourhood and encourage interaction between residents. Opportunities for animated ground floors, homes with own door access, private landscaped terraces and a successful integration with communal and public open space shall be encouraged.

PSS 13: To promote socially balanced communities through the implementation of Part V of the Planning and Development Act (as amended) in accordance with the Waterford City Development Plan 2013-2019. At all times the requirement of the current Waterford City Development Plan and Housing Strategy will also apply to residential development in the Planning Scheme.

PSS 14: To promote sustainable land use patterns by integrating sustainable modes of travel and transportation into the design of residential developments.

PSS 15: Apartment standards are to be in accordance with the Waterford City Development Plan and the "Sustainable Urban Housing – Design Standards for New Apartments- Guidelines for Planning Authorities Draft Update 2017 (or any revision of same).

PSS 16: Promote the implementation of supporting community, social, economic, cultural health and education facilities in tandem with the completion of new residential development.

4.3.4 Hotel and Conference Centre (200 - 300 bed)

While there is a range of overnight accommodation available in the City, there is currently a shortage of hotel rooms in the 4 to 5 star range. There is a current projection increasing tourist levels in the period 2017 to 2022. There is also a greater need for larger scale conference facilities. The North Quays provides an ideal location for a high quality hotel, in a prime city centre location and on a first class transport network, surrounded by a range of supporting services and amenities.

Specific Objectives:

PSS 17: To facilitate the development of a high quality hotel and conference centre on the North Quays.

4.3.5 Tourism/Cultural development and Tourism related Retail

A mix of cultural and tourism development would enliven the quays both north and south and provide a sustainable mix of uses bringing "after hours business" to the area. In conjunction with a high quality hotel, the site, offers maximum exposure to long distance views and could provide for a visitor centre or similar major attraction of national consequence. Berthing facilities for recreational/leisure vessels, visiting

liners and opportunities for holding regattas etc should be considered as an appropriate amenity provision reflecting the cultural heritage of the area.

The existing City Centre lacks a large exhibition space or tourism attraction on a scale appropriate to a regional city, the development of the North Quays would address this deficiency. It is considered appropriate that an element of tourism related retail could be provided for in any tourism/cultural development.

Specific Objectives:

PSS 18: To facilitate tourism/cultural development on the North Quays with associated tourism related retail.

PSS 19: To facilitate where possible berthing facilities for recreational/leisure vessels and appropriate amenity provision reflecting the cultural heritage of the area.

4.3.6 Public Open Space

High quality amenity and public open space areas will form a strong component of development in the North Quays. The Planning Scheme requires that a minimum of 20% public open space is provided for throughout the scheme to include a minimum 10 metre wide riverside promenade/s (exception to this may be permitted at certain locations if justified in a design statement). The promenade/s provides an opportunity for an open flexible space that would adapt to various temporary uses. A major component of the open space provision could be a large area of public amenity space adjacent to Rice Bridge, offering rest and relaxation in an urban environment. Areas of public open space should include active uses such as playgrounds/outdoor gyms utilising the traffic free nature of the site.

The opportunity arises to create a series of pocket spaces/urban plazas/gathering places around certain land uses must be maximised e.g. the landing area for the sustainable transport bridge. The North Quays development will become an integral part of the Waterford-New Ross Greenway creating an active route throughout the site providing for pedestrians and cyclists.

Specific Objectives:

PSS 20: To develop a hierarchy of inter-connected hard and soft open spaces, recreation and landscaped areas, walking and cycling priority routes, through the SDZ area that support local biodiversity and development of ecological corridors as far as practical.

PSS 21: To provide a minimum of 20% public open space to include a minimum 10 meter wide riverside promenade/s (exception to this may be permitted at certain locations if justified in a design statement) that contributes to local biodiversity and create a mix of well designed active and passive open spaces throughout in accordance with specific objectives in Section 3b.5 Biodiversity. Further guidance can be referred to in; "Green City Guidelines: Advice for the protection and enhancement of biodiversity in medium to high-density urban development's" (2008).

PSS 22: To provide a public plaza at the landing point of the sustainable transport bridge. Pedestrian and cycling connectivity to the Dock Rd is required to be provided at this location.

PSS 23: To provide a public plaza at the eastern portion of the site on the Frank Cassin Wharf. Pedestrian connectivity to the northern environs of the city is required to be provided through the proposed plaza.

PSS 24: To promote the integration community, cultural and recreational development, through the provision of generous landscaped amenity areas and public realm.

PSS 25: The size and animation of open spaces, to include both hard and soft landscaping shall be related to the height of the adjoining buildings in order to achieve satisfactory levels of sunlight and daylight.

PSS 26: To seek the provision of a wide range of both active and passive recreation for various age groups and abilities.

4.3.7 Supporting uses

A range of additional supporting and community uses will occur throughout the North Quays to support its overall development and integration of the emerging community. Such uses as crèche facilities, health services, food and beverage, convenience shopping would contribute to achieving the living city centre goal of the Planning Scheme.

Specific Objectives:

PSS 27: To encourage a wide range of supporting and complimentary uses throughout the North Quays in tandem with the main land use objectives.

4.4 Extent of Development

The total maximum quantum of development which is an objective to deliver in the SDZ is 150,000 sqm City Centre mixed use development the design of which will be required to comply with the requirements of the development management standards of the Waterford City Development Plan 2013-2019 (or any future revision).

| Land Use | Minimum Net Floor Area | Maximum Net Floor Area |
|--|------------------------|------------------------|
| Retail (Comparison) | 20,000sqm | 30,000sqm |
| Food and Beverage | 5,000sqm | 7,000sqm |
| Office | 10,000sqm | 15,000sqm |
| Hotel and Conference Centre | 10,000sqm | 15,000sqm |
| Tourism/Cultural /Enterprise/Light Industry/Community Facilities | 10,000sqm | 15,000sqm |
| Residential | 200 units | 300 units |

Note: Allow for up to 20% of office or retail floor space to be re allocated for residential development if the market place so demands.

Table 1: Extent of Development



Figure 24: Development Zones

The minimum quantum of development is 120,000sqm, this is to ensure that the site is not underdeveloped and to respect the strategic nature of the site and the associated investment in public infrastructure. Within these overall limits the Table 1 below provides the range of areas allowable for each land use accommodated within the Planning Scheme. The minimum and maximum quantum's of development will be above the 6.05m OD podium level and are exclusive of public open space/ transport infrastructure and basement car parking.

Specific Objectives:

PSS 28: To deliver a maximum quantum of 150,000sqm of city centre type development in the Planning Scheme area.

4.5 Views

Existing significant views as identified in previous plans for the North Quays as follows:

South to North

- (A) Bridge Street
- (B) Barronstrand Street
- (C) The Mall
- (D) Panoramic view from South Quays to North Quays

North to South

- (E) Western approach to Rice bridge
- (F) Rockshire Road
- (G) Panoramic view from North Quays to South Quays

It is generally recognised that the most significant views are those generally available from the north to the south and vice versa from any point on the river's edge. It is the objective of the Planning Scheme that these views will be retained as the defining views of the City.

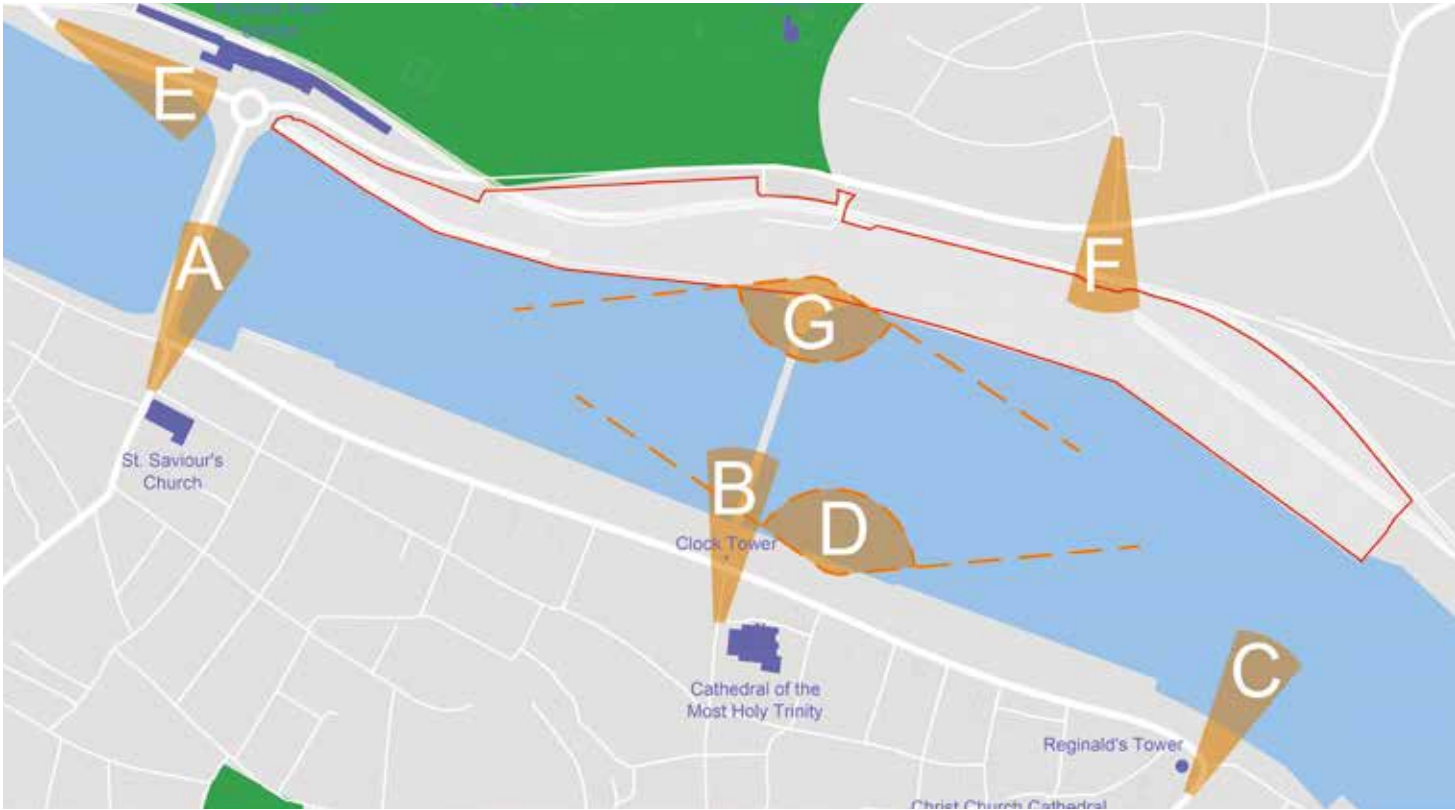


Figure 25: Views

The axial views from The Mall and Bridge Street and the western approach to Rice Bridge will generally remain unaltered. However, the current axial views for the Rockshire Road and from Barronstrand Street will be altered by any future development of the North Quays. The Urban Design Framework recognises that some views are of less significance in terms of shaping the City and may be alerted in favour of future development. Given the transformative nature of the proposed redevelopment of the site and the opportunity arising for architectural expression it is considered that the alterations to the Barronstrand Street and Rockshire road axial views will not be significant in the long term because of the opportunity for the improvement of these views which the development of the North Quays provides.

Specific Objectives:

PSS 29: To safeguard, protect and enhance existing listed views while supporting the creation of new focal points in the landscape, respects culture of the site and scenic nature of the River Suir waterway corridor. It is considered that only if supported by a clear design justification, will alterations to existing views be considered at planning application stage, taking into account the Goals of the Planning Scheme, functionality of the site and the need to develop a city centre of scale.

4.6 Building Height

Within the North Quays, a variety of building heights will be promoted to reflect the diversity of the context and the mixed use opportunities of the site.

The Planning Scheme seeks to provide for sustainable building heights for new developments in the plan area in a manner which promotes land use efficiency, the development of sustainable communities and protects the established residential and visual amenity of the area. There is a need for a flexible approach to height in order to attract high end users and maximising potential for areas of public open space/plazas etc. The height for new development is determined by taking the following into consideration:

- Previous heights on the site extending to 40m OD. The height and scale of these buildings was absorbed by the higher ground to the north and the substantial width of the river separating the site from the South Quays.
- While respecting the existing grain and diversity of building forms on the South Quays, the proposed design should reflect the strategic nature and location of the site and the need to create appropriate levels of use and function while acknowledging the need to create an urban quarter of scale and mass.
- The existing topography of the northern environs of the city which allows for higher buildings on the western portion of the site.

The following shall be taken into consideration in assessing any proposal for a high building:

- In general heights up to 60m OD are considered appropriate given the City Centre brown field nature of the site and the former heights associated with the site. Justification can be made at planning application stage for an increase in height depending on the context of the structure.
- The scale of the building in relation to surrounding open space and neighbouring buildings.
- The degree of overshadowing and consequent loss of light caused to a surrounding property.
- The adverse level of impact on high level views.
- The degree of overlooking, particularly of residential properties and consequent loss of privacy to surrounding premises.

The Central Development Zone will accommodate heights up to 35m OD taking into account that it is the most suitable place for retail development, which is normally accommodated over two storeys and is consistent with previous heights in this area.

The Western Development Zone could accommodate the maximum height of 60m OD and would also be suitable for a landmark building due to the rising nature of the land to the north. The Eastern Development Zone could also accommodate the maximum height of 60m OD and any landmark building should be concentrated to the western end of that development zone. Height variation will be encouraged through diversity of building usage and type and will be considered with reference to set building heights rather than a range of storeys, as storey height changes depending on the use of the building. Certain land uses such as residential/hotel /office are height tolerant in so far as they can be accommodated in tall buildings. Uses such as retail are normally only economically viable over two floors. The floor-plates can be varied to suit the individual land use which will deliver a range of heights and allow better and more meaningful public open space in the overall site.

Specific Objectives:

PSS 30: Applications for high-rise buildings over 60m OD shall be accompanied by a design statement as part of the assessment criteria for high buildings.

PSS 31: High buildings must make a positive contribution to the city skyline, city structure and topography, in accordance with Section 13.9.1 of the Waterford City Development Plan 2013 - 2019.

4.7 Massing

The redevelopment of the North Quays provides the opportunity to create an expression of modern architecture and produce a range of architectural concepts that complement each other in an appealing unification.

There is a necessity to punctuate the development with a variety of heights and massing throughout the development in order to respect the fine grain and gentle modulation of the South Quays.

A range of massing is likely to occur given the variety of land uses provided for in the Planning Scheme, which will ensure a visually diverse and attractive urban area.

Specific Objectives:

PSS 32: High quality development will be achieved by adhering to development management standards set out in the Waterford City Development Plan, such as daylight,provision of private and public space, privacy and overlooking.

4.8 Landmark Buildings

A city centre location, the grand scale of the River Suir, the proposed public transport hub and the objective of sustainability all combine to enable a scheme that can be of significant urban density.

To create a sense of place, urban legibility and visual diversity, landmark buildings at 70m OD are encouraged at key focal points throughout the North Quays in the Eastern and Western Development Zones. The rationale for tall buildings should be explained within the Design Brief.

Landmark buildings may be particularly suited to non-residential uses and are encouraged to at least partly include public or community activities. It is important to note that the significance of these buildings need not be limited to their height and that their presence may be enhanced by changes in building form, colour and construction materials.

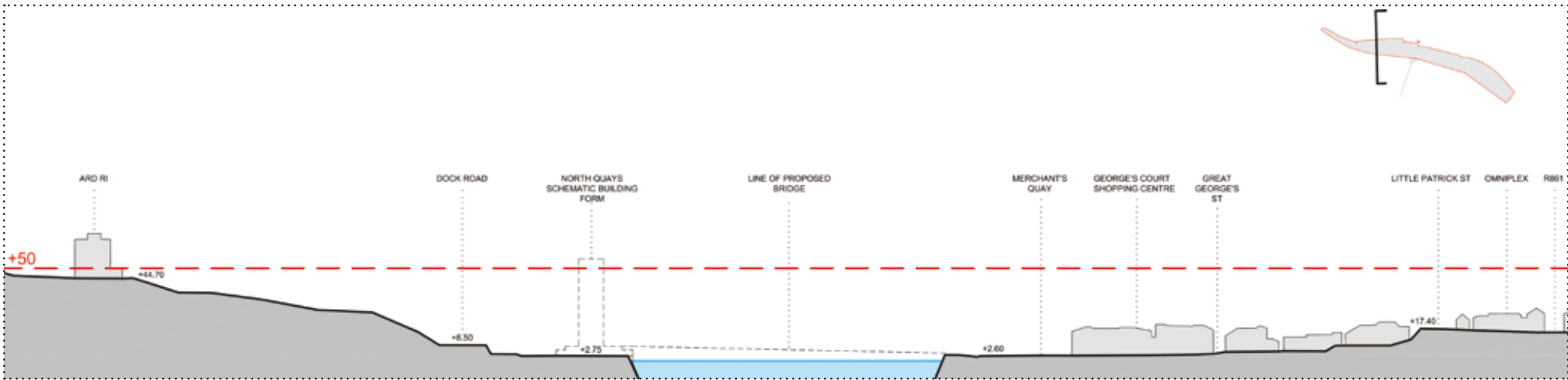


Figure 26: Context Section at Western Development Zone



Figure 27: Context Section at Central Development Zone



Figure 28: Context Section at Eastern Development Zone

4.9 Public Realm

Development proposals should demonstrate a positive contribution to achieving quality urban space by creating active ground floor uses, contributing to passive surveillance of public areas, improving the micro climate in and around new buildings and incorporating high quality surface treatments, street lighting, furniture and public art.

Quality open spaces will result in an increase confidence to live, work and invest in an area; the quality of the public realm will provide a unique selling point for the regeneration and development of the North Quays. How the North Quays links with the northern environs of the City is essential to the cohesion of the urban neighbourhoods.

It is the intention to exploit the amenity of the River Suir through waterfront orientated development. The development of new promenade as well as a primary green route through the site serves as a link of the greenways of Waterford, Kilkenny and Wexford.

Specific Objectives:

PSS 33: Develop a high quality public realm through the provision of appropriate public open space, surface treatments, street lighting, furniture and public art that promotes the North Quays as a modern innovative urban quarter while also respecting its rich historical past and cultural heritage. Reference should be made to Design Manual for Urban Roads and Streets (2013), Department of Transport, Tourism and Sport and Environment, Community and Local Government.



Top to Bottom - Figure 29: Schematic of Transport Hub; Figure 30: Schematic of Eastern Public Realm Node

4.10 Urban Form

The Schematic Masterplan overleaf reflects the proposed urban form of the North Quays which aims to control the extent of the proposed development on site and protect the public realm and main circulation routes and view corridors while delivering an appropriate level of density and height for the site.

Connecting the area with public transport, developing high levels of amenity and public areas of integration, requiring active commercial uses such as shops and cafes at street level will make the North Quays an enlivened and vibrant space. Mixed use development will be encouraged to promote activity, passive surveillance and a sense of safety, especially at night

Two road access points have been identified into the site and are illustrated on the urban form layout. A vehicular spine road has been provided for running parallel to the railway line, this will form the primary access and service road for the overall development.

Public open space areas are located strategically throughout the development to ensure vitality and movement throughout the site. A river side promenade, a minimum of 10 metres in width, is provided for the entire length of the site. Exception to this may be permitted at certain locations if justified in Design Statement. It is envisaged that the walkway will link the greenway between Waterford and New Ross.

The quality of the public amenity space, strengthened by the river amenity will be a defining characteristic of the North Quays. A network of public open space is proposed as a core element of the urban structure. The spaces will optimise pedestrian connectivity and act as a focus for pedestrian movement, forming legible points in the urban structure from which pedestrians can chose the next path through the North Quays. Furthermore the open space areas will be a place of rest and relaxation, a place where people can gather etc.

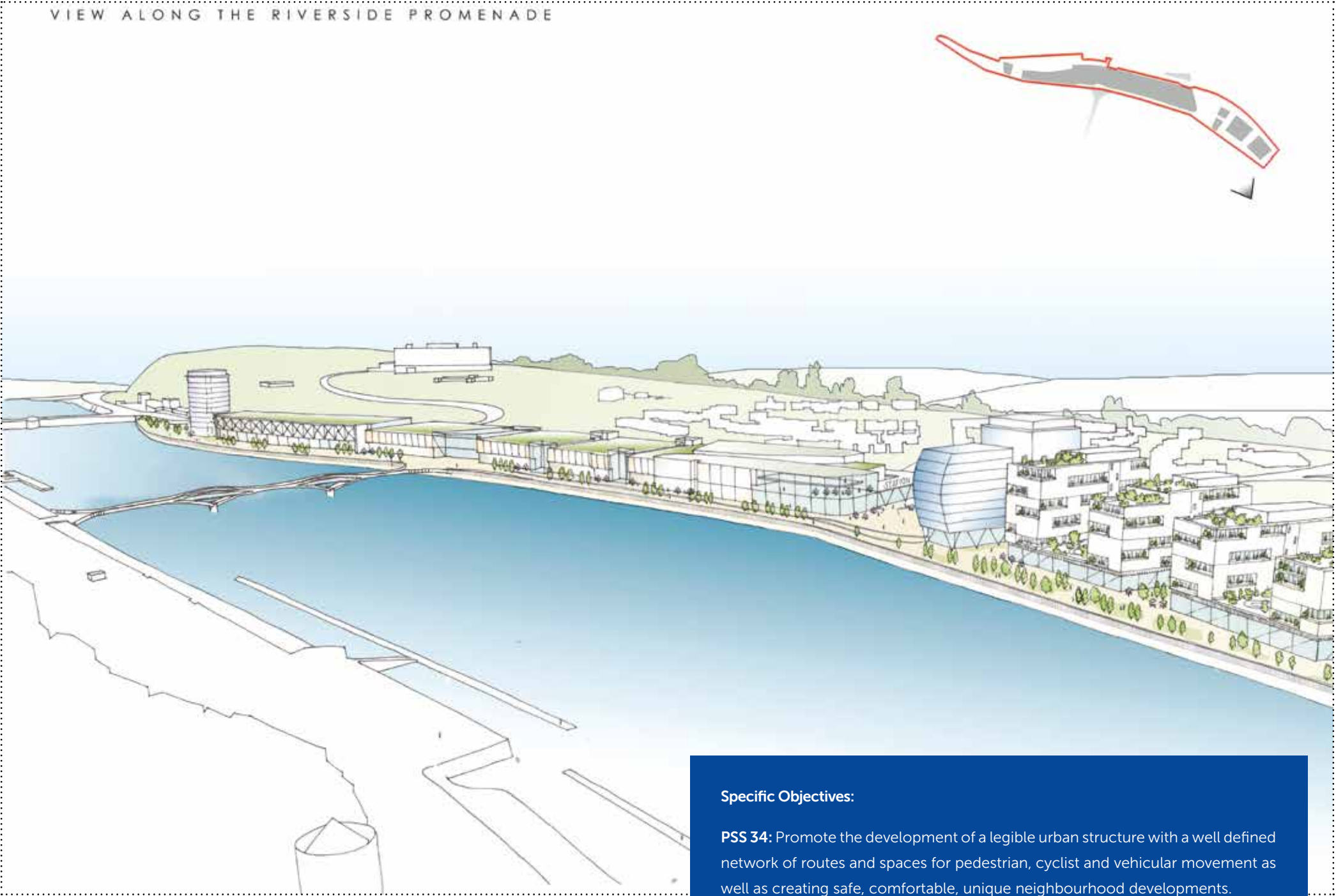


Figure 31: Artist's Impression

Specific Objectives:

- PSS 34:** Promote the development of a legible urban structure with a well defined network of routes and spaces for pedestrian, cyclist and vehicular movement as well as creating safe, comfortable, unique neighbourhood developments.
- PSS 35:** Creating new routes which contribute to ease of movement and connect existing spaces, circulation patterns and public transport.
- PSS 36:** Provide for integration and connections with the wider urban area and the city in generally.
- PSS 37:** Provision to optimise permeability and access for pedestrians.



Figure 32: Schematic Master Plan

4.11 Sustainability

4.9.1 Sustainable Strategy

The redevelopment of the North Quays can contribute in a positive way to realization of European Union and national sustainability policies/targets and contribute in the reduction of the impact on climate change through the implementation of climate change adaption and mitigation policies. The effects of climate change at the North Quays development can be minimised by

- Maximising existing and future public transport use.
- Through implementing best practice in sustainable building design, flood defence and best use of a brown field site.
- By maximising the usage of energy efficient products and integration of renewable energy technologies.
- By utilizing the existing infrastructure/services.
- By providing positive socio-economic benefits to the surrounding community.

4.9.2 Sustainable Trasport

The opportunities afforded for the advancement of sustainable transport to meet existing and future demands for the gateway city and region have been set out in chapter 3. Integrating the high level transportation aims creates a number of challenges and opportunities for the scheme. At present the primary route connecting the north and south sides of the city is along the Dock Road via Rice Bridge. This is not a pleasant pedestrian journey as the dual carriageway is adjacent to the footpath. The improvements in vehicular and pedestrian connectivity via the proposed sustainable transport bridge and the proposed link between the Waterford and New Ross greenways will contribute significantly to sustainable transport measures. The reduction in car usage as a result of the redevelopment is a key feature of the North Quays scheme as is the improved connections both physical and social between the north and south sides of the City. Pedestrian access to the railway station and the North Quays will further assist in the provision of sustainable transport infrastructure. The installation of bike parks and cycle lanes at strategic locations will complement the pedestrian strategy and increase the scope of the sustainable transport services. The location and design of the transport hub affords the opportunity to form the northern gateway to the City Centre.

Specific Objectives:

PSS 38: To promote reduced energy consumption and to provide for sustainable means of energy where feasible and appropriate.



05

ARCHITECTURAL STRATEGY

5.1 Architecture

5.1.1 Architectural Vision

The architectural vision for the North Quays SDZ is to create a destination quality sustainable modern quarter connected to and consolidating the City Centre while facilitating the natural expansion of the northern city environs. The development of the North Quays will reinstate the primacy of the river by creating a compact city core centred on the River Suir. Capitalising on the unique character of the site, the architecture will seek to develop to the greatest possible extent the sites assets, including the long south facing river frontage, proximity to the existing city core and the proposed incorporation of a public transport interchange. The architecture will be design led and seek to develop schemes of high quality design merit with the confidence to deliver a new and exciting interpretation of the quays while respecting the traditional streetscape of the South Quays that has evolved over many centuries.

There is an opportunity to make the North Quays a showcase for sustainable high density and high quality working/living environments that promotes human well being, and is relevant to the current and future needs of the City. The 18th Century painting of the South Quays by Van Der Hagen was commissioned to showcase the City as an exciting forward thinking and commercially vibrant place to carry out business and trade. The development of the North Quays will update this vision for the 21st Century.

The nature and narrow form of the site coupled with the constraints imposed by the railway line and dual carriageway to the north means that the typical and traditional fine/medium urban grain block structure of the South Quays may not be applicable. Given these challenges, the planning scheme does not intend to be overly prescriptive in terms of urban structure but will be open to considering an appropriate form of block development that does not result in long lengths of inactive facades.

The general architectural composition will be a series of podiums that address the requirement for flood protection, level change across the site and contain car parking with built forms sitting above. The central zone containing the retail offer needs to be architecturally clear as the primary development element and must be of exemplary architectural quality. The ends of the site contain other functions to create a mixed city centre use and these may have vertical form of varying heights optimising open space and views to

the river. On the Dock Road side there will be a new transport hub contributing to a design resolution of the northern façade. The scheme as viewed from the South Quays should have an overall compositional balance and a variety of heights and forms is encouraged that conform to an overall design vision.

Specific Objectives:

PSA 1: All applications are required to submit a Design Statement and Visual Impact Assessment as part of planning applications with supporting illustrative material and description of proposed development demonstrating how it has been developed having regard to the built heritage context, topography and landscape character of the site.

PSA 2: To create a sense of place, character and identity for the North Quays that can be used to define a new vision for the city

PSA 3: To seek to generate and support vibrancy and activity in the public domain.

PSA 4: To create a sustainable urban quarter of scale and mass while also acknowledging the existing city on the south bank. This can be achieved by creating a lively, varied and balanced compositional approach that counterpoints the south quays.

PSA 5: To create a sense of openness and punctuation. This can be achieved through a variety of building forms, heights and breaks between and within blocks. A singular monolithic or repetitive block structure with long, unalleviated elevations facing the waterfront or transverse routes will not be considered appropriate. Height and form variation will be encouraged reflecting the diversity of building usage and type, while avoiding a monolithic or repetitive appearance to the river side or the Dock Road facades. Appropriate set back and terracing may be utilised to achieve best advantage of views and aspect. Indentations in the transverse direction would help create protected areas from the wind funnelling along the river.

PSA 6: To address the need for flood protection and change in levels across the site by incorporating car parking with retail, commercial and residential development above. The interfaces between buildings and public spaces to be carefully considered bearing in mind this transverse level change. There is a significant design opportunity to create a lively and varied public realm that will call for innovative solutions.

PSA 7: All landmark buildings should achieve an exceptionally high quality design and finish. The ground floor of buildings should contain active uses to ensure a continuous degree of movement around the site.



5.1.2 Connectivity & Porosity

The architecture on the North Quays will seek to connect the City Centre and South Quays, Ferrybank and the City’s northern suburbs. The planning scheme provides for public spaces which encourage movement through the site and particularly along the riverside promenade.

The primary pedestrian access to and across the site are:

- North/south: from the South Quays via the proposed sustainable transport bridge and connecting to the Dock Road. From the north at the Rockshire Road, across the railway line connecting to the riverside promenade.
- East/west: along both the riverside promenade and the transport hub parallel to Dock Road.

These pedestrian links access the primary nodal public realm spaces. The detail design of these spaces will be dealt with at planning application stage.

Specific Objectives:

PSA 8: Proposed layouts must demonstrate high standards of permeability prioritising walking and cycling routes that are direct, safe and secure. Major barriers to pedestrian/cycle movement must be avoided. Layouts shall be designed to ensure that defensible space is defined by buildings, which in turn provide passive supervision of the public realm.

PSA 9: To provide pedestrian crossings over the railway line opposite the proposed new sustainable transport bridge and also in the vicinity of the Rockshire Road intersection. The architectural expression of these crossings should be considered with respect to the overall scheme and the design concept outlined in the Design Statement.

PSA 10: To require that development within the Planning Scheme area is consistent with, and connected to the development of the Waterford Greenway extending to New Ross.

PSA 11: Consideration should be given to connectivity at upper levels as well as the main pedestrian level.

PSA 12: The opportunity to provide an indoor/covered protected route within the development can be considered at planning application stage.



5.1.3 Podiums

The development will be placed on a series of raised podium levels which provide defense for flood protection, enclosure for car parking, space for service vehicles, facilitate access over the railway line and give elevated views.

The upper podium will form the base for the retail floor of the central development zone. The appearance of the southerly face of these podiums, particularly their appearance from the river, and the connectivity between them is of importance.

There is no prescriptive approach but they should conform to an overall aesthetic vision for the development that should be included in the design statement.

Specific Objectives:

PSA 13: Podium levels will vary between approx. 6m OD and approx. 9m OD. The higher podium level which forms the floor of the retail block/s should not generally extend beyond the central retail development area and the public plaza terminating the eastern end of this zone. The transition between the podium levels can extend laterally and will be considered at planning application stage.

PSA 14: Particular consideration should be given to the treatment of the faces of the podium/s at the river edge. A design strategy is required at planning application stage that is practical, ecological and aesthetically considered. One approach may be to face the lower plinth that addresses the river with a neutral type finish to create a continuous visual ‘line’ along the length of the quays and upper plinths recessed and brightly finished as part of the active promenade.

PSA 15: The interplay between the plinth levels should be used to create variety and spatial interest connecting the levels. Depending on the location, there should be steps, ramps, planting, artwork, seating, lighting and other public realm treatments.



5.1.4 Promenades

A promenade or series of promenades that can be at varying levels will address the river along the full length of the SDZ.

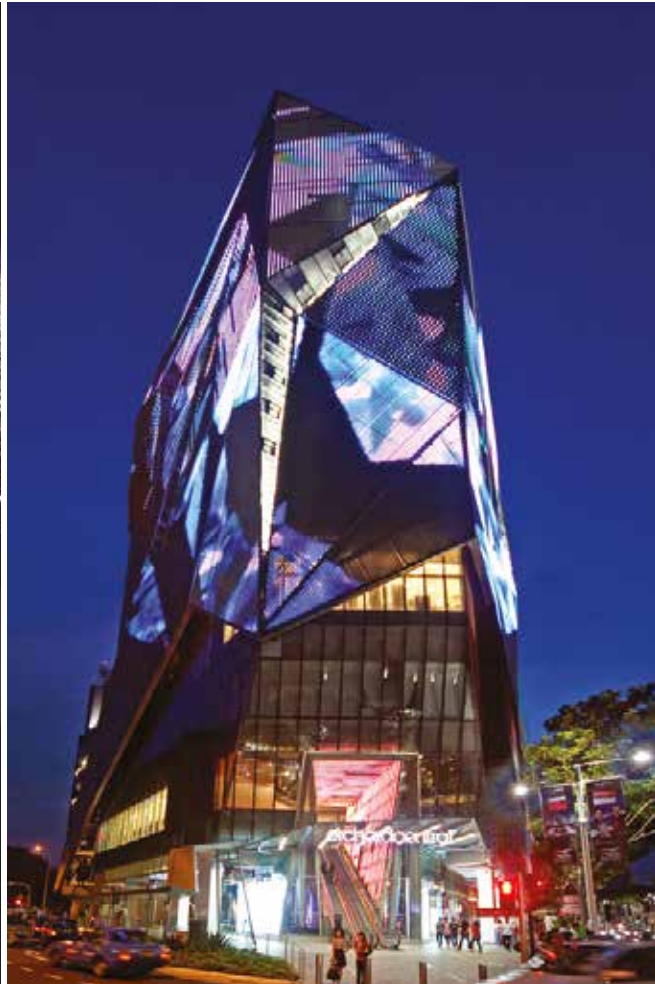
The promenade/s should not be envisioned as linear parallel strips but rather as an opportunity for interaction, connectivity and variety of spatial experience.

Specific Objectives:

PSA 16: Minimum of 10 metres is required between the edge of the building and waterfront. Exceptions to this may be permitted at certain locations if justified in the Design Statement. The Planning Scheme allows for a possible cantilevered walkway/boardwalk extending 5 metres over the river. Such proposals will be detailed at planning application stage.

PSA 17: Promenade/s should have a high level of amenity including seating, street furniture, greening and public lighting – preferably bespoke design elements and high quality, durable materials.

PSA 18: Promenade/s should feel safe and have zones that are protected from the elements during wind and inclement weather.



5.1.5 Edges & Massing

Edge treatment and massing of the development is critical. To the south the scheme’s relationship with the River Suir and historic South Quay’s requires a well considered response. To the north, the treatment of the Dock Road facade and the interaction with Ferrybank needs to be addressed. The North Quays should be viewed as the magnet that will draw both sides together into a concentric city model as envisaged under the PLUTS report.

Specific Objectives:

PSA 19: New facades and blocks will provide a fresh and innovative response to today’s needs, while carefully considering the site and its relationship to the South Quays, creating a dialog which respects and shows an affinity with its historic neighbour while affirming its own unique identity. There should be significant visual breaks in the north and south facades expressed both as gaps between buildings and as movement in the horizontal and vertical plane within building blocks.

PSA 20: Given the greater scale in terms of individual buildings compared with those on the South Quays an overall balanced and compositional approach for all of the building forms is required to create variety, diversity and also a sense of unity for the entire development. This would act to mitigate the larger volumes necessary to achieve the required floor plates, and also to set a relevant typology for the North Quays that does not mimic or overpower the fine grain of the South Quays.

PSA 21: The interface with the Dock Road presents a significant design challenge that must consider a series of changing levels, the rail line and dual carriageway. Buildings addressing Dock Road must consider lively facades and pedestrian access at key locations with good connections to Ferrybank.

5.1.6 Central Development Zone

The most significant and key section of the development is the central retail development zone and it forms the primary economic attractor. This zone should be given the highest level of attention in relation to its form and quality. It should be a primary focus in the development and addressed in detail in the Design Statement. Given that the central development zone will likely contain a limited number of floors due to the layout requirements of retail use, the massing in this area may generally be of lower height than the eastern and western zones.

Specific Objectives:

PSA 22: To be of outstanding design, create a unique identification with the City and North Quays, be of civic scale, serve to attract people over the sustainable transport bridge and animated in its night time appearance.

PSA 23: Large scale urban design qualities should include an identifiable and varied form, height and functionality with individuality generated by reflecting interior uses. The overall composition should be broken up in form by transverse breaks through to the Dock Road elevation to alleviate massing. These may be glazed or open. The principal break must be from the sustainable transport bridge to Dock Road and part of this could be glazed over and form the significant interior public space of the retail block. Many retail developments require large continuous floor plates containing shop floor, interior circulation and services – and it is recognised that much of the central development zone will be devoted to retail. However, appropriate design can create exciting opportunities for a civic scale that also can deliver a variety of scale.

PSA 24: Riverfront façade/s to be relieved and activated visually to address overall massing. This can be achieved by stepping the façade/s in the vertical and horizontal plane. Drama could be included by integrated, creative envelope treatment of roof and walls. These facades can also be activated by the considered use of innovative lighting, signage and information technology. Sustainable technology components (high performance glass, bris-soleil, canopies, pv panels would be appropriate given its southerly aspect) and would further enliven the facades.

PSA 25: Fine grain urban design qualities particularly to the waterfront should include: no long inactive elevations, night time activities, human scale, creative public realm, street furniture and lighting. Sufficient openings onto the riverside promenade must bring human scale and activity to the riverside walkway. While not every retail unit needs to be accessed from the promenade – there should be public realm solutions in the intermediate zones between accesses to enliven these areas.

PSA 26: The Dock Road facade needs to be activated, lively and have a design purpose. It should not read as a barrier, but introduce the northern suburbs and traffic along Dock Rd to the City Centre.

PSA 27: Dock Road façade massing can be mitigated by lower structures of the transport hub such as station/gateway building, platform and drop off glazed canopies which can run the full length of the rail platform.

PSA 28: Dock Road elevation must be relieved visually to address its overall massing. This can be achieved by stepping the facade/s in the vertical and horizontal dimension, the use of breaks and change in material. Drama could be included by innovative envelope treatment (roof and walls). This facade/s should be activated by use of innovative lighting, large scale signage and electronic media, green walls and artwork.



5.1.7 Transport Hub

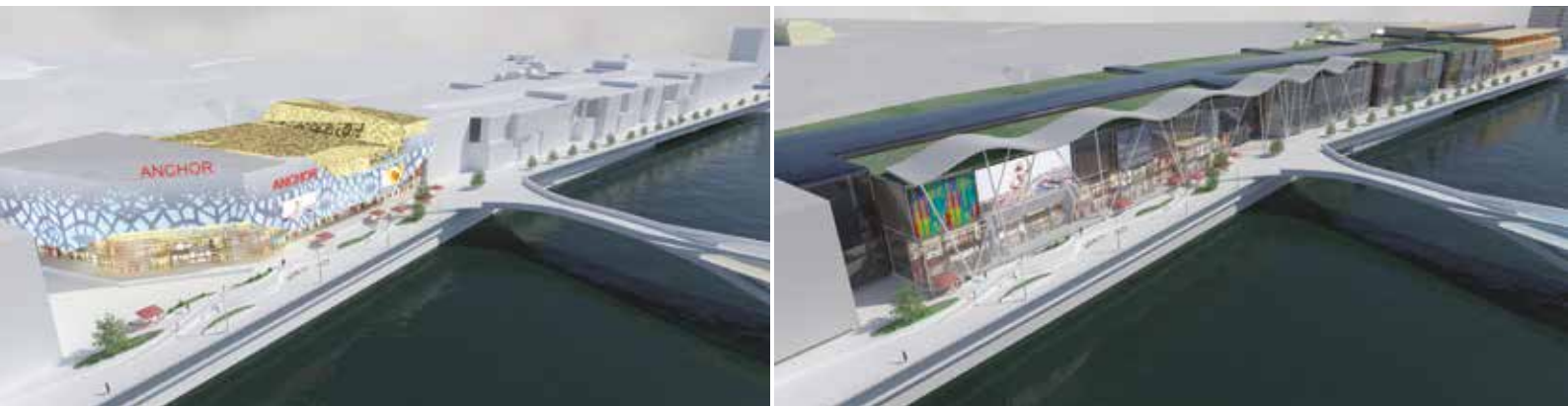
The transport hub forms part of the support infrastructure for the SDZ. It will consist of a multifunctional gateway/station building, rail platforms, vertical circulation such as lifts, ramps and steps as well as protective canopies and landscaping. This hub provides the primary site access and drop off from the northern suburbs and from various transportation modes such as cars, buses, taxis and trains.

The gateway building and bridge over the railway line act as a focal point and landmark to signify the development from Dock Road and Greenway. It could also provide additional functionality such as after-hours shopping. The assembly of structures associated with the hub can be designed to be attractive, colourful, of bold design and varied in form.

Specific Objectives:

PSA 29: Design of central development zone block/s to be considered in tandem with the bridge and gateway structure. There is an opportunity to seamlessly link the structures on both sides of the railway line and form a dramatic entrance to the development. The design solution could incorporate various forms of shelter including tensile structures, canopies and amenity structures.

PSA 30: There will be vertical circulation at each end of the rail platform to provide access to the bridges across the railway line; the eastern crossing in the vicinity of the Rockshire Road and the western opposite the sustainable transport bridge. These routes and their associated public realm areas should be seamlessly integrated into the development with clear way-finding.



5.1.8 Eastern Development Zone

This area is largely composed of the old Frank Cassin Wharf and there are important views from the South Quays at Reginalds Tower and the up-river approach.

Specific Objectives:

- PSA 31:** Building forms should optimize views to the river, solar aspect and shelter from the winds.
- PSA 32:** All planning applications within 700m of the Seveso site require referral to the Health & Safety Authority for technical advice in order to reduce the risk and limit the consequences of major industrial accidents.
- PSA 33:** The Eastern access road will be at the high podium level where it joins the North Quays. There is an opportunity for the buildings to connect podium levels and create a varied and pleasant public realm utilizing this change of level.
- PSA 34:** The buildings in this zone should read as a component of the overall composition and should be varied in height and form. Tallest building/s will be at the western end of the development zone.
- PSA 35:** Berthing of cruise liners should be accommodated in this zone and there should be a larger provision of public realm adjacent to the river at this point.

5.1.9 Western Development Zone

Given the steeply rising ground to the north, there is the opportunity to locate a tall landmark building within this zone, terminating the North Quays western edge and addressing views from the city’s western approaches, the M9 and Thomas Francis Meagher Bridge.

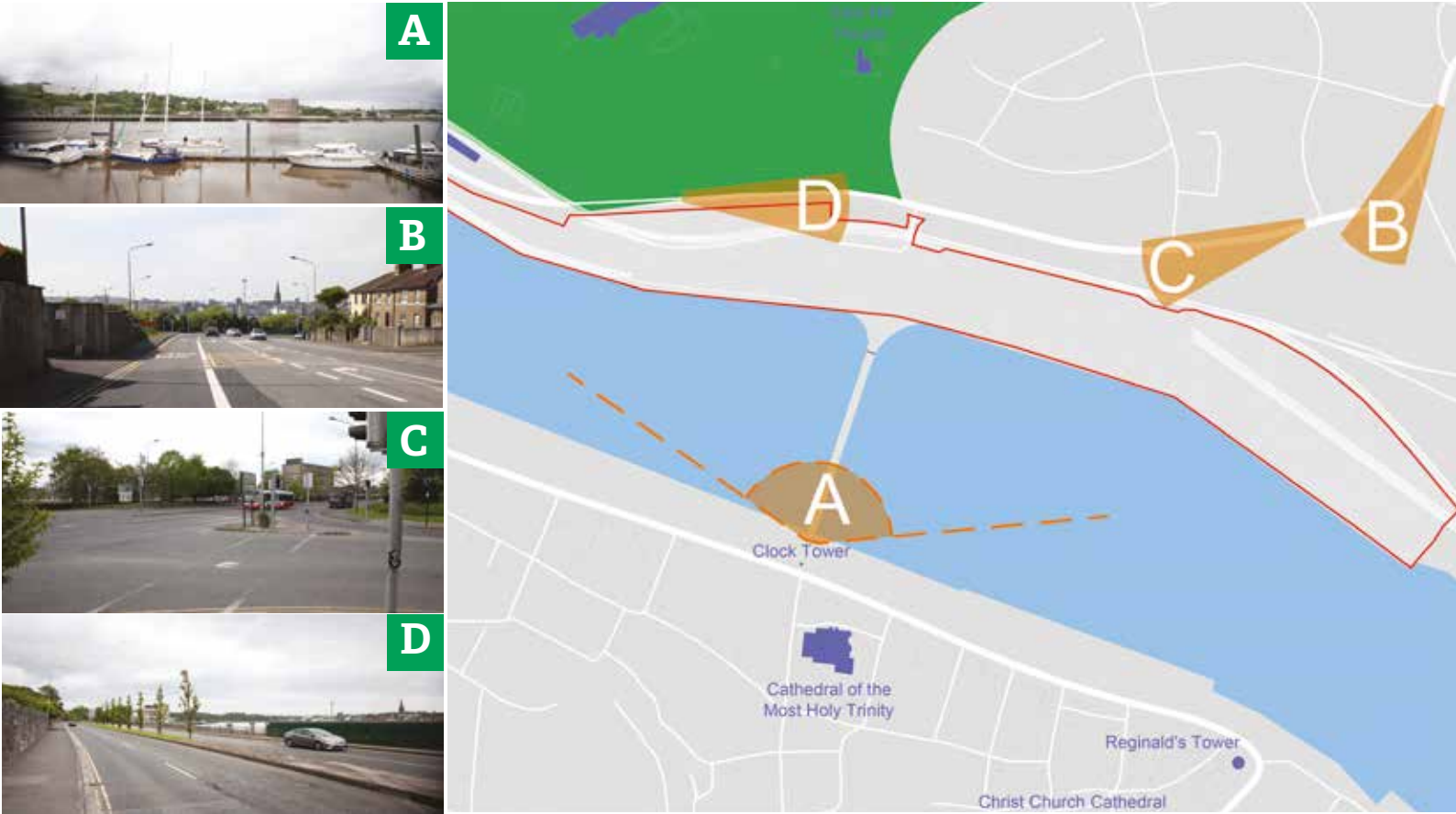


Figure 33: Future Views

5.1.10 Future Views

The area is physically and visually contained between the river and the high ground to the north. The primary view of key importance is the overall aspect of the site from the South Quays. Views can be considered when articulating the new building forms as part of the design process:

Views from south:

View A: General panoramic view from the South Quays spanning from Rice Bridge to Reginalds Tower. There should be a compositional balance of the development from these multiple viewing points.

Views from north:

- View B:** From the intersection of the New Ross Road, Abbey Road and Fountain Street, there is a visual link with Christ Church Cathedral and Reginald’s Tower; this is a fine high level initial view of the city towards the Viking Triangle which could be accounted for in placing the buildings in order to maintained glimpsed views of this aspect.
- View C:** From Fountain Street towards The Rockshire Road intersection. This is a key nodal point in the development looking towards the transportation hub.
- View D:** Dock Road approaching the development from the west – this view will traverse the north side of the development.

Specific Objectives

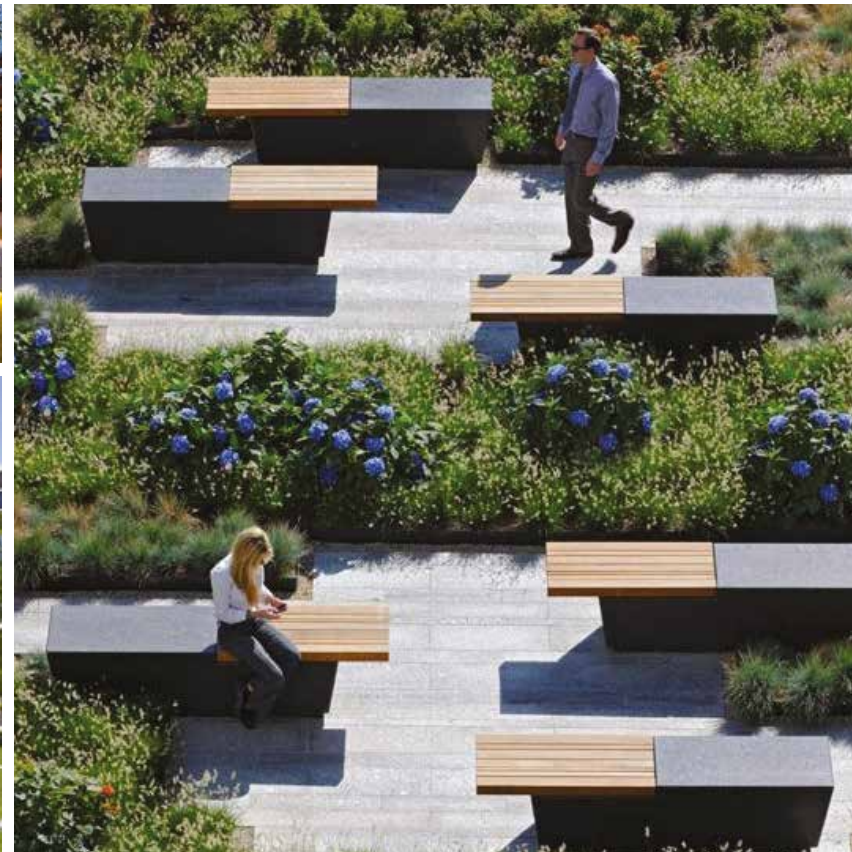
- PSA 36:** To consider future views and address in Design Statement.

5.2 Landscaping/Public Spaces

5.2.1 Public Realm

The strategic objective is to create a lively, exciting, high density, high quality urban waterfront scheme containing innovative, pleasing and safe open spaces that work with and complement the architectural solution. There should be a seamless and integrated approach to open space design prioritising the human needs and well being of users. The design strategy will include integrated soft and hard landscaping, creative lighting and street furniture with locations for artwork and water features. In addition, this universal design strategy will address the multiple requirements of groups from young to elderly and special needs. The quality of public spaces, strengthened by the river amenity will be a defining characteristic of the North Quays. The development should address the following:

- A network of public open space is a core element of the urban structure. The spaces will optimise pedestrian connectivity and act as a focus for pedestrian movement, forming legible points in the urban structure from which pedestrians can chose the next path through the North Quays.
- The open spaces will be places of rest and relaxation where people can gather. The urban form must provide for defined areas of open space including landscaped areas and a river side promenade. A minimum of ten metres in width, the promenade is provided for the entire length of the site. It is envisaged that the promenade will link the Waterford Greenway and Waterford and New Ross Greenway.
- Maximum advantage should be taken to capitalise on the inherent opportunities created by the level changes across the site. Innovative design solutions could exploit terracing and views.
- An integrated and visually pleasing lighting design is integral to the success of the future development.
- Amenity areas, public walkways and circulation space should contribute to the creation of attractive and lively mixed-use places which include consideration of appropriate opportunities for resting and enjoyment. Opportunities for social interaction will occur at multiple scales: from places of arrival and movement, to public walkways, on-street cafés and shared communal spaces within residential communities.



Specific Objectives

PSA 37: To develop two principle nodal public realm spaces – one at the proposed sustainable transport bridge landing and the second opposite the eastern end of the central retail zone in the vicinity of the Rockshire Road access. Each space should have a distinct character, act as a meeting/focal point in the development and have an integrated design solution.

PSA 38: The bridge landing area should act as a gateway to the development from the City’s retail spine and gives access to the central retail zone and public transport hub. It should allow for the turning of the City Centre bus from the South Quays which should be incorporated seamlessly into the public realm solution. A public realm scheme for this node should consider the use of sculpture and water.

PSA 39: The plaza at the eastern end of the central development zone can be at the high podium level and should facilitate views towards the Viking Triangle and Reginalds Tower.

PSA 40: To develop an integrated public realm scheme for the North Quays which addresses elements including street furniture, hard and soft landscaping finishes, bin storage, bicycle parking and services including public lighting.

PSA 41: To require public open spaces to be retained generally free from development save for possible small scale kiosks, and public infrastructure where appropriate subject to normal planning controls.

PSA 42: To require public open spaces and civic spaces to be fully accessible to all users, with clear way finding and be composed of high quality/durable materials. Proposed plazas will be designed in a legible and clear manner, incorporating landscaping and public art, while facilitating pedestrian and cycle circulation.

PSA 43: To require a comprehensive landscaping scheme to include details of hard and soft landscaping proposals including tree species and the use of soft boundaries to demarcate /define private open space.

PSA 44: To promote a child centred approach to public open space areas and to provide adequate recreation and play facilities that satisfy local needs and the projected population of the North Quays taking into account surrounding communities.

5.2.2 Greening

Green spaces represent public values and have an important role to play for the health and well being of users. The natural characteristics of green spaces depend on natural processes, need time to mature and require ongoing maintenance. Therefore a greening strategy requires agreement with the planning authority in order to generate an effective and sustainable long term solution.

There should be a significant ‘green’ or soft element to the public spaces. This is an urban, waterfront development - much of the area on a piled deck with no natural topographic or existing soil component.

Specific Objectives:

PSA 45: To require future development proposals to build a ‘green’ strategy into the fabric of the development and to submit proposals in relation to green infrastructure at planning application stage.

PSA 46: To maximize planted areas to avail of the southerly exposure and to create protected areas to shield plants and people from the elements and particularly the prevailing winds which funnel down the river.

PSA 47: To require the use of appropriate planting for the site conditions. It may not be possible for instance to plant significant areas of large mature trees therefore the use of alternative maritime hardy plants would be appropriate in raised planters.

PSA 48: To require contemporary design solutions where the hardscape and softscape complement one another with the use of colour, texture, form in the planting selection.

PSA 49: To maximise and exploit the changes in levels across the site and to form these transitions as green zones.

PSA 50: To require clear delineation of the boundaries and transitions between private space, communal space and public space.

PSA 51: To agree with Waterford City and County Council detail specifications of work for all public open space and green infrastructure.



5.3 External Materials, Finishes and Technology

5.3.1 Pallete and Approach

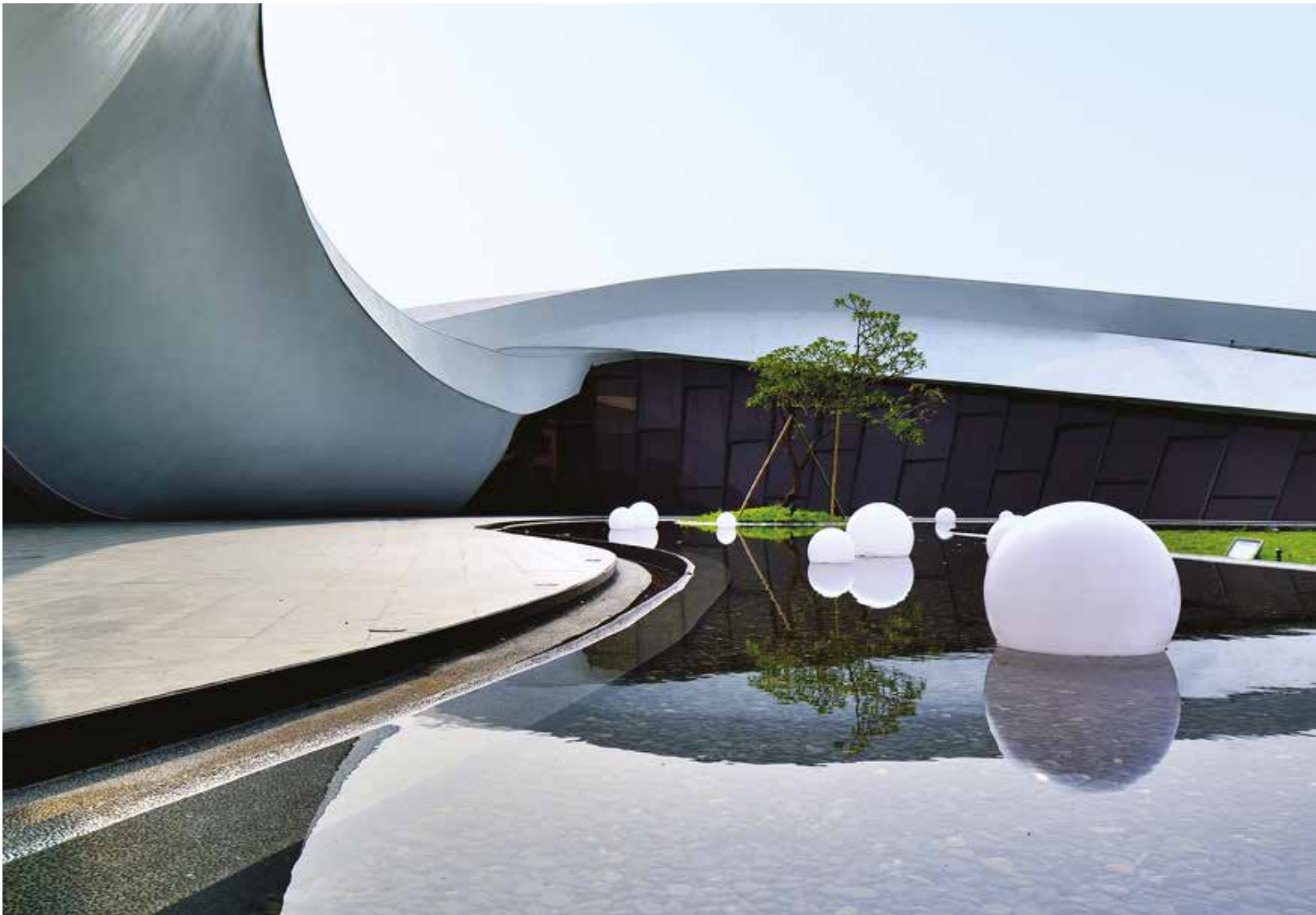
Colours and materials will play a significant role in creating a cohesive image for the North Quays, while lending distinctive identities to its various parts.

The palette of appropriate colours and materials should respond to the site’s setting. Carefully controlled use of more vivid colours would animate the composition and also greening of terraces and public spaces would soften the overall development given that much of the development is over water and piled.

Materials shall be durable, weather resistant, be an important contributor to the general appearance of the City Centre and be reflective of the high standards required for the urban core.

Waterford is in a maritime location and careful attention must be given to selecting materials that will maintain a high quality finish and will not become degraded in appearance. The design and choice of materials for north-facing street elevations will need particular attention, so as to improve the environment of Dock Road and avoid oppressive buildings creating an overbearing presence.

Lighting and display technologies offer great potential in animating architectural facades as well as the public open space. The site offers these technologies an opportunity to operate at a number of scales and locations. The entire North Quays will be visible from the south bank and there is enormous potential to create a dramatic and aesthetic vision. Creative proposals in this regard would be welcomed.



Specific Objectives

PSA 52: To promote the use of an appropriate palette of colours and materials suitable to the site setting.

PSA 53: To promote the use of appropriate and sustainable materials such as glass and other high quality complementary materials.

PSA 54: To avoid the excessive use of any material that might become oppressively dominant.

PSA 55: To promote sustainable and creative proposals in lighting and display technologies, while respecting the unique biodiversity of the area, particularly light spill toward the lower River Suir SAC. All external lighting should be downlighting and should be time limited where possible. Lighting should be avoided in sensitive wildlife areas and light pollution avoided. All external light proposals should be accompanied by a light pollution study and deviations to the objective will only be considered where the applicant can clearly show that the proposed light solution would result in a more sustainable solution.

PSA 56: To require any future application to consider signage, branding and lighting at the outset as part of the overall design approach and submit details at the application stage, including an assessment of potential impacts of light pollution on the immediate and wider environment.

PSA 57: To require any future planning application to consider and submit proposals for the careful detailing of the interface with the street (including selection of floor levels, the design of entrance features, use of paving materials and lighting proposals).

PSA 58: Facades at street level require to be detailed with regard to human scale and tactile quality.

PSA 59: To apply the current design philosophy and the high quality design of the public realm within the existing medieval City Centre to all future development on the North Quays.

5.4 Sustainability

5.4.1 Sustainable Urban Form /Building Design

The redevelopment of the North Quays will be one of the first developments in Ireland that complies with, “Nearly Zero Energy Buildings” (NZEB) standards, which will be the adopted standards by 2020. All buildings will have approximately 60% less energy consumption than buildings that are constructed to current Building Regulation Standards of 2008 Technical Guidance Document The design of buildings will comply with relevant aspects of the “Energy Performance of Buildings Directive”.

Each building within the development shall have advanced computer modelling undertaken, with the end goal of optimising the performance levels from building fabric/M&E services and as a means of reviewing the integration and performance of the buildings within the whole development.

It is considered too limiting to strictly define parameters in relation to building sustainability and its provision given the pace of change in this area. However the redevelopment of the North Quays will:

- Create a sustainable built environment taking into account the local natural environment and the River Suir SAC.
- Create a sustainable environment through the design of efficient buildings and construction methods.
- Maximise potential of southerly exposure and investigate the feasibility for renewable energy and incorporate into development proposals.
- Provision of sustainable urban drainage systems.
- Proposals for water harvesting in future developments
- Waste recycling facilities etc.

Sustainable urban forms should ensure that an appropriate microclimate is established between buildings. Buildings should receive adequate levels of light, ventilation, and passive solar energy while minimising heat loss, exposure and shading.

Layout and design will seek to minimise overshadowing or loss of sunlight and daylight both to existing and proposed/ new buildings as well as public spaces, whilst taking care not to unduly weaken any sense of enclosure required to create a high quality urban environment.



Specific Objectives

PSA 60: All future planning applications to comply with with “Nearly Zero Energy Buildings” (NZEB) standards.

PSA 61: To prevent high radon levels occurring in new buildings it is a requirements to install passive preventive measures in all buildings and to continuously monitor radon levels in all buildings.

PSA 62: Each building within the development shall have advanced computer modelling undertaken, with the end goal of optimising the performance levels from building fabric / M&E services and as a means of reviewing the integration and performance of the buildings within the whole development.

PSA 63: Sustainable urban forms and building design shall demonstrate how they seek to:

- Create a sustainable built environment taking into account the local natural environment and the River Suir SAC.
- Create a sustainable environment through the design of efficient buildings and construction methods.
- Maximise potential of southerly exposure and investigate the feasibility for renewable energy and incorporate into development proposals.
- Provision of sustainable urban drainage systems.
- Proposals for water harvesting in future developments
- Waste recycling facilities etc

PSA 64: Sustainable urban forms should ensure that an appropriate microclimate is established between buildings. Buildings should receive adequate levels of light, ventilation, and passive solar energy while minimising heat loss, exposure and shading.

PSA 65: Layout and design will seek to minimise overshadowing or loss of sunlight and daylight both to existing and proposed/new buildings as well as public spaces, whilst taking care not to unduly weaken any sense of enclosure required to create a high quality urban environment.



5.4.2 Energy Efficiency

In order to deliver on “Nearly Zero Energy Buildings” (NZEB), the following technologies will be considered at an early stage in the design process and incorporated, to meet the building performance requirements.

- Passive solar design including the orientation, location and sizing of windows.
- The use of natural ventilation.
- Energy-efficient glazing units and frames.
- Improved building fabric.
- Building envelope air tightness and testing.
- Appropriate renewable technologies.
- The utilisation of LED lighting for buildings and street lighting.
- The utilisation of Building Control Systems.

5.4.3 Residential Development

The residential developments shall have an Energy Performance Coefficient (EPC) of .305 and Carbon Performance Coefficient (CPC) of .302 for achieving nearly zero energy consumption in new dwellings.

5.4.4 Renewable Energy

A range of options will be encouraged including solar/geothermal/CHP etc. It is not the intention of the planning scheme to be prescriptive on the types of renewable technologies. It is a principal goal of the North Quays to be sustainable in terms of construction and in terms of building operational performance and creating a sustainable living and working environment for generations to come.

Specific Objectives

PSA 66: To comply with all the objectives of the current Waterford City Plan in relation to sustainable energy and the Interim Guidelines for Planning Authorities on Statutory Plans, Renewable Energy and Climate Change (2017) or any subsequent revisions.

PSA 67: To promote reduced energy consumption and to provide for sustainable means of energy where feasible and appropriate.

PSA 68: To support sustainable energy initiatives and to facilitate where possible new and innovative technologies within the planning scheme area.



06

ACTIONS & IMPLEMENTATION

6.1 Implementation

The provision of infrastructure and services in a timely manner is crucial to the achievement of the vision for the North Quays. Critical infrastructure needs to be brought forward in tandem with development .

The range of strategic and local infrastructure and facilities as identified in the Planning Scheme are essential to facilitate development within the Strategic Development Zone. The delivery and sustainable funding of this infrastructure will be a key focus of Waterford City and County Council in its role as Development Agency.

This Chapter sets out the key actions required for the successful delivery of the North Quays.

The implementation of development through the Planning Scheme is designed to ensure that critical infrastructure is brought forward in tandem with development.

Waterford City and County Council is designated as the Development Agency for the implementation of the Planning Scheme for the North Quays SDZ.

In its role as Development Agency, the Council will actively promote the implementation of the specific objectives of the Planning Scheme, including community infrastructure, through collaboration and engagement with all relevant stakeholders, proactive project management and ongoing monitoring of progress, together with consultation and feedback mechanisms.

In carrying out its role as Development Agency, the Council will seek to coordinate with all relevant stakeholders, including Government Departments and agencies responsible for the provision of infrastructure to ensure coordinated delivery and funding.

6.1.1 Infrastructure Development Programme

The infrastructure provision required for the proper development of the North Quays can be viewed as a series of separate projects, the wider City Centre Access Project, the Direct Site Access Project, the Sustainable Transport Bridge Project and the Transport Interchange Project. The development of these projects is planned as follows:-

1. City Centre Access

- Preliminary Design – completed.
- Seek Funding – completed.
- Procure Final Design – completed.
- Property Acquisition – completed.
- Procure and build scheme. – 2018-2020

Improvement in access to and around the city centre is intrinsic with the PLUTS objective of providing a pedestrian and cycle friendly extended city centre with high public transport penetration.

2. Direct Site Access

- Preliminary Design – completed.
- Seek Funding – completed.
- Topographic Survey – completed.
- Site Investigation – underway.

- Structural Surveys – completed.
- Property Acquisition – underway by Compulsory Purchase Order (CPO).
- Procure Final Design – 2017.
- Procure and build scheme. – 2018-2020.

Direct site access will be required as early as possible in order to facilitate the development of the site.

3. Sustainable Transport Bridge

- Preliminary Design – completed.
- Seek Funding – completed.
- Topographic Survey – completed.
- Site Investigation – underway.
- Structural Surveys – completed.
- Property Acquisition – underway by CPO.
- Procure Final Design – 2017.
- Procure and build scheme. – 2018-2020.

The provision of the Sustainable Transport Bridge connecting the City Centre is a vital prerequisite of the North Quays development. The development of this project is interlinked with the development of the Podium on the North Quays site as the northern side of the pedestrian bridge is founded on the Podium slab. The presence of a developer for the central section of the site is therefore an integral component in the provision of this project which should be completed in tandem with the provision of the central portion of the site development.

4. Transport Interchange

- Preliminary Design – completed.
- Seek Funding – completed.
- Topographic Survey – completed.
- Site Investigation – underway.
- Structural Surveys – completed.
- Property Acquisition – underway by CPO.
- Procure Final Design – 2017.
- Procure and build scheme as joint project. – 2018-2020.

This will be a joint project between Waterford City and County Council, CIE and a developer. The Planning Scheme for the site envisages that the provision of the Integrated Transport Interchange is essential to the development of the north quays site and, as such, the provision of this project, along with the pedestrian bridge are integral with the development of the first phase of the north quays.

6.1.1 Infrastructure Development Programme

An Implementation Plan for the Development Agency will be prepared following the adoption of the Planning Scheme to prioritise the investment and funding requirements identified in the Planning Scheme and set out the delivery programme for the Development Agency. Engagement with relevant stakeholders, including landowners and infrastructure providers, will form part of the preparation of the Implementation Plan.

It is envisaged that development will take place in the following manner:

Phase 1: The Council assembles the site for the delivery of development and surrounding infrastructure (already underway).

Phase 2: The Council seeks Government funding to construct site access infrastructure and wider City Centre access projects (application already made).

Phase 3: The Council will seek to enter into an agreement with developer/s for the delivery of the development on a phased basis as follows:

- Sustainable transport bridge connection/access/podium/retail/tourism/cultural development/hotel/first block of office/first block of residential.
- The remainder office and residential will follow a normal development profile.

6.2 Development Contributions

The Planning & Development Act 2000 (as amended) enables a Planning Authority, when granting planning permission, to attach conditions requiring the payment of a contribution in respect of public infrastructure and facilities benefiting the development of the administrative area of the Planning Authority.

This relates to public infrastructure and facilities that are provided, or that it is intended will be provided, by or on behalf of the Local Authority. The Council operates a General Development Contributions Scheme under Section 48 of the Planning & Development Act 2000 (as amended) which applies to development across the entire City and County and this Scheme will continue to apply in the SDZ Planning Scheme Area.

There may be a requirement for additional funding, over and above that collected under the Section 48 contribution scheme adopted by the Council, towards specific public infrastructure projects or services. Consideration may, if required, be given to the implementation of a Supplementary Contribution Scheme under Section 49 of the Planning and Development Act, 2000, as amended. Such a scheme would be applicable to the Planning Scheme area in order to provide for specific projects identified within the SDZ, benefiting development proposed therein. Adoption of any such supplementary contribution scheme is a reserved function of the elected members of Waterford City and County Council.

Where there are specific exceptional costs arising in relation to an individual development at planning application stage, the payment of a special development contribution under Section 48(2) (c) of the Planning and Development Act, 2000, as amended, may be considered.

In devising any new development contribution schemes, the combined impact of the rate of contributions will be considered to ensure that they do not act as a disincentive to development.

6.3 SDZ Applications

All SDZ applications must be assessed in the context of the approved Planning Scheme and the specific objectives contained within.

Where proposed development is not consistent with the approved Planning Scheme, planning permission will be refused and where consistent with the Planning Scheme will be granted.

Each Planning application within the planning scheme area must be accompanied by a Compliance Statement illustrating how the development complies with the Planning Scheme.

In order to assess planning applications under the SDZ and determine whether planning permission should be refused or granted, a Compliance Matrix will be prepared by the Development Agency

In determining whether planning permission should be refused or granted, development proposals within the North Quays SDZ will be considered under the following:

- The Vision for the North Quays & principal goals.
- The Planning Scheme urban form and land uses.
- The specific objectives contained within the Planning Scheme.

Specific Objectives

PSAI 1: Any future planning application on the North Quays SDZ shall be consistent with the vision, goals and specific objectives as set out in this Planning Scheme.

PSAI 2: Any future planning application on the North Quays SDZ shall be accompanied by a Compliance Statement illustrating how the development complies with the Planning Scheme.

PSAI 3: All planning applications are required to demonstrate as part of the Compliance Statement how the services and infrastructure requirements for each planning application will be development to include connections to the strategic network, together with a programme of installation works and responsibility for delivering infrastructure.

PSAI 4: Waterford City and County Council will prepare an Annual Progress Report detailing planning permissions granted, development commenced and/or completed, progress on objectives and progress on sustainability indicators in the SDZ.

