Development Framework

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DRD Department for Regional Development
H&W Harland and Wolff
NISP Northern Ireland Science Park
R&D Research and Development

Note The final names of the new streets will be subject to consultation

Date of issue: 10 August 2007
Executive Summary

This updated Development Framework for Titanic Quarter is a progression of the Development Framework produced by Turley Associates in 2002. It builds upon the previous work by developing a robust urban grid to guide the next stage of detail for infrastructure proposals, key sites and landscape design and public realm. It also provides guidance for Titanic Quarter in terms of a mixed development of land uses and associated facilities, services and infrastructure.

Vision

A broad Vision for Titanic Quarter has emerged over recent years reflecting the unique scale and opportunity of this waterfront location. It proposes Titanic Quarter as a high profile European waterfront development firmly rooted in the history and character of Belfast, acting as a driver for high quality investment and development in the city. The Vision is that Titanic Quarter presents the opportunity to create a new urban quarter, essential to the future prosperity of the city as a whole.

Analysis

The study area has been examined in detail to determine the opportunities and constraints of the site, including landscape and visual assets, having regard to the important maritime heritage and ship building history of this site, including the scheduled and listed structures, water bodies and areas of historical interest. As described above, particular emphasis has been placed on the need for development at Titanic Quarter to be modern and European while also being unmistakably part of Belfast. To achieve this a study of the characteristics of Belfast city centre has been undertaken to identify familiar characteristics of urban scale and form which could be included at Titanic Quarter.

Land Uses

The Development Framework proposes a ‘city quarter’ grid structure of streets and development blocks of similar scale to the city centre, together with a mix of land uses including the following:

- A number of residential neighbourhoods with a mix of dwelling types, including apartments and townhouses, of which a percentage will be affordable units. The final number of dwellings and percentage of affordable housing is subject to BMAP Public Inquiry or as may be agreed with the Department.

A high quality business environment, complementary to the existing city centre and new business and office space to cater for demand up to 2015. This development will help attract new high quality investment to the city including R&D, high technology enterprises, offices, light industrial employment and call centres.

A major Titanic Heritage Project, to be determined in consultation with all stakeholders.

Sympathetic and appropriate conversion of the listed former H&W HQ.

Creation of a ‘Gateway’ hotel at the entrance to Titanic Quarter at Abercorn Basin, plus further hotels in later phases subject to agreement with the Department.

Leisure development including restaurants and hotels, cafes/bars and health and fitness clubs.

Other commercial uses as appropriate.

Local services and business support facilities including local retail, health care, creches and day nurseries and educational facilities as necessary.

A new campus for further education is proposed, which will provide for part-time and full-time education.

In addition consideration will be given to the provision of a cruise liner berth and other support facilities for tourism.

Development Concept

The proposed urban grid has been designed to take advantage of views within and out of the site, and is based on the need to develop a street pattern comparable to the city centre. Queen’s Road will be realigned to create a curved crescent, known as Abercorn Crescent, at the entrance to Titanic Quarter and major new streets will be created, known as Titanic Boulevard and Olympic Boulevard.

Infrastructure

Infrastructure provision will be as necessary to support the development proposals. Although, the final infrastructure proposals will depend on the conclusions of the Strategic Transport Master Plan and Transport Assessments, the current proposals include:

- Laganside Corporation’s intention to create a Boulevard approach to Titanic Quarter at Queen’s Quay and the removal of the station street flyover.

Innovation and infrastructure contributions by Titanic Quarter towards the creation of a new grade separated junction on the Sydenham Bypass at Connnbank (Connnbank Interchange).

A new link road from the Connnbank junction to Airport Road and the upgrading of Airport Road to the Dee Street roundabout.

Upgrading of the Dee Street roundabout along with the closure of the existing Dee Street junction onto the Sydenham Bypass.

Proposals by the D&RI to widen the Sydenham Bypass to 3 lanes in each direction and to provide a link from the new Connnbank interchange to East Belfast plus the provision of a new Dee Street Bridge over the Sydenham Bypass.

Upgrading works to the existing Queen’s Road and Sydenham Road with new signalised access junctions.

The development of new high quality streetscapes throughout each phase of development.

Public transport, pedestrian and cycle access

The infrastructure has also been designed to accommodate high quality public transport and a new high frequency public transport service will be provided. Dedicated bus lanes will be created and infrastructure will be designed to facilitate the potential for future light rapid transport. Safe and accessible pedestrian routes and open spaces will be provided throughout Titanic Quarter in a structural way that links to an attractive riverfront walkway. Cycle routes will be also be provided on all main streets and along the riverfront, with connections made to the existing cycle network towards the city.

Public realm and public squares

A network of open spaces and landscaped areas will be provided as an integral part of the development. All main streets will include high quality hard and soft landscape elements.

A high profile area of public realm at Abercorn Basin will form part of a prominent pedestrian route from the Odyssey complex past Abercorn Basin and Hamilton Graving Dock to the H&W HQ and towards the Titanic Heritage Project.

Other squares and green areas will be provided within the various development areas under an integrated implementation and management approach.

Fig. 1 Aerial photograph of city centre with Titanic Quarter to north
Introduction

This is a Development Framework or "Masterplan" for land at Queen's Island known as Titanic Quarter and is a further development of the Framework produced by Turley Associates, Planning and Urban Design Consultants, in 2002.

Titanic Quarter is a 75 ha (185 acre) area of largely cleared land located at Queen's Island within the Belfast Harbour Area, close to the city centre of Belfast. The site is owned by the Belfast Harbour Commissioners and leased to Titanic Quarter Limited and Titanic Properties Limited.

The site was formerly part of the Harland and Wolff (H&W) shipyard which in its heyday employed over 30,000 persons and was one of the main economic drivers of Belfast's growth and wealth until the 2nd World War. Regeneration of this strategic area is an opportunity to create a unique waterfront of European significance at Titanic Quarter to recreate jobs and bring activity and economic prosperity back to this derelict area. Development of Titanic Quarter is recognised as a unique opportunity to build a north-easterly extension of the highly successful riverfront renewal which has been undertaken by the Laganside Corporation over the past decade on both sides of the River Lagan in central Belfast.

The carefully planned and well designed renewal of this area is key to the establishment of Belfast as a first class European city.

The Regional Development Strategy for Northern Ireland 2025 states in BMA 1.1 that the aim is to continue riverine renewal adding to the investment in the Odyssey Millennium Project, the Science Centre W5, along with other commercial development at Laganside; and promoting the development of the adjoining 'Titanic Quarter', building on the theme of industrial maritime heritage.

The Development Framework has the following objectives:

- To reiterate the Vision for this unique site and opportunity
- To provide further detail on the proposed urban form and network of streets, spaces and development areas
- To identify and provide a strategy for the preservation and enhancement of maritime and ship building heritage

To set out the proposed infrastructure that will be required to facilitate development of a new city quarter

To identify a range of appropriate future land uses

To provide a plan for the phasing of development and infrastructure

To provide design guidance for the development

The Concept Plan from the original 2002 Development Framework is shown (Fig. 3). This set out the principal land uses and zones for Titanic Quarter, and provided robust guidance for the development of the site. This Concept Plan remains the underlying strategy for Titanic Quarter and has provided background information for a number of planning approvals that have been received for residential, hotel, office and light industrial development plus infrastructure and public realm. These development proposals remain consistent with this 2007 Development Framework, as the principle of the proposed land uses, general massing and access remains unchanged, although some of the proposed urban grid has been updated in response to market demand for new development.

The 2007 Development Framework has evolved through discussion with DOE Planning Service and an iterative consultation process with statutory agencies and other stakeholder.

Fig 2. Concept Plan 2007

Fig 3. Concept Plan from superseded 2002 Development Framework
Vision for Titanic Quarter

This Development Framework for Titanic Quarter is underpinned by a clear understanding of the rationale for developing this site and a shared Vision of the potential of this important area of Belfast.

The fundamental goal for the development of Titanic Quarter is to achieve high quality investment and development in Belfast. The world renowned history of the site plus its waterfront setting create an opportunity that is both unique and a step change above other development opportunities in the city or in Northern Ireland. It should be regarded as on a par with other European waterfront locations and as such it should be considered as a principal focus for development within the region.

The principal physical and environmental qualities to be embodied in Titanic Quarter are:

- Exciting and dynamic architecture
- World class public realm
- Bringing the heritage to life, and
- Energising the waterfront

The key activities to be provided within Titanic Quarter will include the following:

- Tourism and visiting
- Working
- Connecting
- Relaxing
- Living
- Learning and discovering

All of the above qualities, activities and objectives are combined in the 'Vision Statement' (Fig. 4).

This Vision for Titanic Quarter has guided and informed the emerging Development Framework for this area. Put simply, the Vision for Titanic Quarter is a high profile European waterfront development, firmly rooted in the history and character of Belfast, acting as a driver for high quality investment and development in the city.

The Vision provides a development scenario that is complementary to the city centre and essential to the future prosperity of the city as a whole.

Fig 4. Vision Statement
Site Context

Location
Titanic Quarter is bounded to the south by Sydenham Road, to the west by Victoria Channel, to the east by Musgrave Channel and to the north by the Northern Ireland Science Park (NISP) and the Channel Commercial Park. To the south west lies the Odyssey complex, a recent development containing leisure and educational uses including a multi-use arena, multiplex cinema, bars and restaurants. Adjoining this to the north, within Titanic Quarter, is the Abercom Basin, a 4.9 ha (12 acre) semi-enclosed body of water formerly used in association with the shipbuilding industry.

Adjacent uses
Surrounding areas include the following:
1. Harbour Estate: active port uses on west bank of River Lagan including the Stena RO-RO ferry services. Current proposals are to relocate the Stena Terminal to Victoria Terminal 4, at the northern extent of the Harbour Estate.
2. Clarendon Dock: office-led development with surface car parks. Belfast Harbour Commissioners and Laganside Corporation have drawn up proposals for the area between Clarendon Dock and the city centre. The concept of a cross river pedestrian/cycle bridge to connect this area to the Odyssey and the east bank of the river is being provided by DSD.
3. Existing City Centre: draft Belfast Metropolitan Area Plan proposes to extend the city centre boundary across the river to include part of the Eastbank area. Objections have been submitted to the draft plan seeking extension of the proposed boundary to include Titanic Quarter.
5. Operational scrap metal processing use: requires servicing by vehicles which currently use Queen’s Road.
6. Northern Ireland Science Park (NISP): 10ha/25 acres. The first three of twelve buildings are complete - the Innovation Centre, the White Star Building and a major research facility for Queen’s University.
7. Channel Commercial Park light industrial area: 10ha/25 acres (existing area). Titanic Quarter Ltd. has secured planning permission for an extension.
8. Titanic Quarter: balance of site area some 65ha/160 acres (not including NISP).
9. Odyssey complex: this modern leisure attraction is a major opportunity for Titanic Quarter in terms of drawing pedestrian movement into the site.
10. Eastside: Laganside Corporation has proposals for development on Queen’s Quay, plus the realignment of Queen’s Quay Road and the removal of Station Street flyover to create a new boulevard approach to the Odyssey and Titanic Quarter. The Department of Social Development (DSD) has now taken over Laganside Corporation’s role.
12. The Compact Yard: Harland and Wolff ship building, repair and marine engineering use: Active area includes the Building Dock and Musgrave Channel Road, plus part of Hamilton Road.
14. Residential communities and fine grain commercial of east Belfast.

Fig 5. Site Context

Fig 6. Aerial photographs of Site (2007 top & 2003 below)

Fig 7. City Centre Context
5. ACCESSIBILITY

Existing Access and Movement

The site enjoys a unique and strategic central location adjoining and easily accessible from Belfast City Centre and the wider urban area, with direct access from the M3 motorway.

**M3**
Access to and from the motorway network is provided by the M3 sliproads.

**Sydenham By-Pass**
The Sydenham by-pass provides access to and from North Down. This is currently a two-lane dual carriageway, with a junction to Sydenham Road located at the bottom of the Dee Street bridge. The Draft Belfast Metropolitan Area Plan and the Belfast Metropolitan Transport Plan identify proposals to increase the by-pass to three lanes.

**Sydenham Road**
Sydenham Road bounds the southern edge of Titanic Quarter. This is a wide single carriageway, which is owned by the Belfast Harbour Commissioners and is currently not adopted.

**Queen’s Road**
Queen’s Road is a wide single carriageway road that runs the length of Queen’s Island. This is owned by the Belfast Harbour Commissioners and is not adopted.

**Musgrave Channel Road**
Musgrave Channel Road, which is not adopted, runs along the western side of the Building Dock. It is used by Harland and Wolff for operational activities and is not accessible by the public at present.

**Hamilton Road**
Part of this unadopted road is restricted to Harland and Wolff operational activities.

**Bridge End Station**
Bridge End station is served by commuter train services to and from North Down. It is accessed by a footbridge over the Sydenham By-Pass. There are currently no facilities provided at the station.

Queen’s Quay and Station Street Flyover
Access to the Odyssey and Titanic Quarter from the city centre is provided by Queen’s Quay, and the return leg can be made by either Queen’s Quay or the Station Street flyover. The government currently has proposals for the rationalisation of this area by removal of the flyover and creation of a new boulevard approach to and exit from Queen’s Island.

**Lagan Weir Footbridge**
The closest pedestrian connection from the Odyssey and Titanic Quarter to the city centre is via the Lagan Weir footbridge. This connects to Queen’s Square and Custom House Square.

**Lagan Walkway**
The pedestrian and cycle route from Queen’s Quay Road around the Odyssey currently terminates at the southern corner of Abercom Basin.
Maritime and Industrial Heritage

The important legacy of the ship building history on Queen's Island is a number of listed and scheduled structures which will be retained and enhanced as part of the development strategy. The description of the structures by Environment and Heritage Service is provided for reference.

1. Thompson Graving Dock (004:502): The Thompson Graving Dock, which lies within the NSP, built 1905. It was, at the time of construction, the largest graving dock in the world. The site is of world significance in terms of shipbuilding history, and, with the other docks, tells the story of the development of the shipbuilding industry in Belfast.

2. Thompson Dock Pump House HB 26/07/010: This is a Grade B1 listed building, within the NSP. It is a long rectangular single storey building, used as Belfast Harbour Commissioner's pump house. The pump house is in typical late Victorian eclectic style with various gables and Romanesque arched openings, all in polychrome facing brick. The building is a series of joined gabled pavilions constructed in red brick with cream brick dressings to the gable verges and semicircular and segmental head openings. The facades are decorated with many classical motifs and roundels, key stone acroteria etc. A large number of unsympathetic doors and windows have been added.

3. Alexandra Graving Dock (004:500): The Alexandra Graving Dock was built between 1885-89. It is 233m (830ft) long and the design reflected the new leaner ships of the nineteenth century.

4. Titanic and Olympic Slipways (004:503): This is the twin slipway of the Titanic and Olympic White Star Passenger Liners and the site of their construction side by side. These ships were the largest in the world at the time and highlight the world significance of Harland and Wolff as a prime shipbuilding centre.

5. Former Harland and Wolff HQ (HB26/07/009): The administration and drawing office block is Grade B2 listed (currently under review). It was constructed 1900-1919 and is built in three storeys of sandstone and brick. It is difficult to be certain as to the evolutionary sequence of the building, but it does seem clear that the original frontage to the main drawing offices was probably demolished. The oldest sections of the building appear to be the two large single storey drawing offices to the rear, which were probably originally fronted by a smaller entrance block set aside at Queen's Road.

6. Hamilton Graving Dock 1863-1867 (004:501): The Hamilton Graving Dock was the first graving dock built on the County Down side of the River Lagan. Its service basin, the Abercorn Basin was created out of open water facing the Harland and Wolff berths. The dock is 137m (450ft) long and the basin covers over 12 acres of water.

7. Scheduled Cranes - Samson and Goliath (004:505 & 004:504): Goliath is one of a pair of heavy lift cranes in the Harland and Wolff shipyard. It was erected in 1969 and largely constructed within the yard. It is one of the smallest in the world, standing 96m high with a span of 140m and can lift 840 tonnes. Samson, the larger of the two, standing 106m high, was erected in 1974. Both cranes, which span Harland and Wolff's Building Dock and Block Assembly Area, run on 800m of track. In operation, each crane moves at 0.30m per minute, though this can be increased to 45m per minute for loads of up to 100 tonnes.

6. MARITIME & INDUSTRIAL HERITAGE
Docks Structures

A detailed analysis of the existing condition of the dock walls/edges has been carried out, which has determined that the existing structures are generally in a poor condition. There will be a need to replace or refurbish all of the quay edges to Titanic Quarter on the western side, abutting the River Lagan and Victoria Channel. The final design of new quay structures will depend on the need for berthing and mooring in certain areas, particularly in Abercorn Basin, and high visual quality.

The existing dock wall edge condition is described below.

1. **Victoria Wharf.** Steeply sloping rock armoured revetment – limited long term stability.
2. **Mouth of Titanic and Olympic Slipways.** Steeply sloping fill with no rock armour or slope projection.
3. **Queen’s Island Wharf (South and North) and Alexandra Wharf.** Revetment – erosion and settlement problems.
4. **Abercorn Basin – northwest.** Rubble fill.
5. **Abercorn Basin – east side.** Part open piled quay with limited lifespan and part original stone quay wall in good appearance.
6. **New concrete piled quay wall.**
7. **Existing stone wall and steps at entrance to Hamilton Graving Dock.**

There will be a need for new quay walls of appropriate style and quality together with complementary detailed design of new areas of public realm and restoration of existing built structures.

Fig 10. Existing Dock Structures
8. OPPORTUNITIES & CONSTRAINTS
Local Distinctiveness

Having regard to the unique scale of opportunity, maritime and heritage constraints, the need to recognise the urban form of the adjacent city centre and other influences for the development of Titanic Quarter, an analysis has been carried out to determine the essential townscape characteristics of Belfast city centre in terms of views and setting, urban form, massing, public realm and movement. This process is considered to be important if Titanic Quarter is to be developed as a modern European waterfront quarter that is still unmistakably part of Belfast.

The distillation of these characteristics has informed the Development Framework for Titanic Quarter, so that the emerging development will create a strong sense of place, complementary to and integrated with Belfast City Centre.

Views and Setting

There are considered to be two defining characteristics of Belfast city centre: the views to the hills around Belfast and the setting of the City Hall within Donegall Square. The interrelationship between these two characteristics gives Belfast City Centre its unique townscape setting, as described below.

The architecture of the City Hall is distinctive and the style of building, its setting and public realm create local distinctiveness. However, it can be seen from Figs. 13 to 15 that it is not just the architectural style which is unique. There are strong parallels with other classical and neoclassical buildings such as St Paul's Cathedral in London and the Dock Office in Liverpool (one of the so-called “Three Graces”). Rather, it is the combination of the architecture and the townscape setting that creates distinctiveness. In the case of Belfast the setting of Donegall Square creates strong view corridors to the City Hall from Donegall Place and from Linenhall Street (views 1 & 2), and in addition key views are created past the City Hall towards the hills to the west, along Donegall Sq North and Donegall Sq South (views 3 & 4).

In particular the view corridor along Wellington Place to Chichester Street is important as it links views of the hills, RBiA, the City Hall, the retail core, the banking zone and the Waterfront Hall in one overall composition.

The concept of a major view corridor can be carried over to the setting of the major building to be retained in Titanic Quarter - the former H&SW HQ building.

Massing

Building heights in Belfast City Centre range from about 4 storeys to 8+ storeys. In Titanic Quarter it is proposed to develop a hierarchy of building heights for various areas of development to create a critical mass of new uses and new buildings to sustain a mixed use urban quarter.

Public Realm & Movement

The predominant public realm in Belfast City Centre is the network of streets that comprise the city grid. Fig. 12 illustrates the width of these streets. It can be seen that there are, in the main, three street types as follows:

1. Main streets, such as Great Victoria St, Chichester St and Bedford St. These are characterised by a road width of 13-14m and a total width of 22-28m.
2. Intermediate streets, including Adelaide Street, Linenhall Street and Upper Queen’s St. These have a road width of around 10-11m and a total width of 16-19m.
3. Minor Streets including Upper Arthur St and Montgomery St, which have a road width of c.7m and a total width of 12-14m.

Significantly, an element of on-street parking is provided on all the above streets. This hierarchy of streets is reflected in this Development Framework (see page 18).

9. CITY FORM & DISTINCTIVENESS
10. NATIONAL & EUROPEAN WATERFRONT DEVELOPMENT

National and European waterfront developments

The unique opportunity, scale and location of Titanic Quarter provides an opportunity to learn from best practice elsewhere in the UK and Europe and also to avoid mistakes that have been made in the early days of waterfront development elsewhere.

Studies of comparative national and European cities have been undertaken, which have informed the Vision for Titanic Quarter and where appropriate will act as benchmarks for architectural and public realm quality.

Fig 16. Royal Yacht Britannia permanent mooring at Leith Ocean Terminal, which is also a berth for visiting cruise liners

Fig 17. Interior of Leith Ocean Terminal, which includes restaurants, retail, leisure and the Royal Yacht Britannia visitor centre

Fig 18. Public art at the waterfront area, Barcelona, provides a strong visual landmark

Fig 19. Marina at Malmo incorporates timber decks to provide public access and level changes from dockside to water

Fig 20. Family housing at Malmo Waterfront Development on former port/ship building land

Fig 21. Marina at Barcelona provides interest and on-going maritime activity
Development Principles and Concept

The following development principles will underpin the framework for more detailed master planning and a series of linked development proposals to create a varied and vibrant new City Quarter and destination.

- High density and critical mass of new development sufficient to sustain a mixed use City Quarter for living, working and recreation.
- Sufficient critical mass of business, industrial, leisure and support facilities - food, drink, local support retail and services.
- High specification, high technology businesses and office space to build on the catalyst of NISP and business incubation.
- A range of industrial buildings adjacent to Channel Commercial Park offering a choice of unit size.
- High and medium density residential development, potentially in mixed use buildings, apartments and town houses.
- New water-based leisure facility with consideration given to potential berthing for cruise ships.
- Strong urban form and scale adjoining Odyssey fronting Sydenham Road, as a high quality ‘gateway’ to Titanic Quarter.
- A series of high quality, landmark buildings linked by excellence of public realm.
- Imaginative re-use of Titanic and Olympic slipsways and heritage features including the listed H&W headquarters building as historic focus.
- High quality internal walkways / cycleways including a riverside promenade connecting Odyssey, NISP and TQ with the City Centre and Laganside.

Upgrade of Queen’s Road and creation of Olympic and Titanic Boulevards as principal transport corridors and Sydenham Road frontage as main point of arrival. Musgrave Channel Road is to be retained as access to the east of Queen’s Island.

Integration of land use and transportation providing ease of access and high quality public transport links.

Integration and ease of access to ‘Eastside’, Laganside and remainder of Belfast City Centre, and the urban area generally.

Transportation and Infrastructure Framework

Infrastructure provision as development progresses will include some or all of the following:

- A new internal street network and complementary cycle network for Queen’s Island.
- New junctions, traffic signals and access roads connecting the internal network to the existing road network.
- Junction improvements to the adjacent highway network. Highway improvements are specified in more detail in page 16.
- Infrastructure contributions by Titanic Quarter towards the creation of a new grade separated junction on the Sydenham Bypass at Connswater (Connswater Interchange).
- A new link road from the new grade separated junction to Airport Road along with the upgrading of Airport Road to the Dee Street roundabout junction.
- Upgrading of the Dee Street roundabout junction along with the closure of the existing Dee Street junction onto the Sydenham Bypass.
- A scheme is being brought forward by the Department to widen the Sydenham Bypass to 3 lanes in each direction and to provide a link from the new grade separated interchange to East Belfast. This will include the provision of a new Dee Street Bridge over the Sydenham Bypass which will carry traffic as well as other transport modes.

Extended public transport provision via the new and existing network.

Provision will be made for the proposed CITI Rapid Transit Route within Titanic Quarter.

Enhanced pedestrian linkage to Bridge End Station.

Enhanced pedestrian linkage to Belfast city centre via new quay wall walkways.

Traffic generated within some initial elements of development will replace that associated with previous uses on Queen’s Island, and the overall transportation strategy will include early provision of new high frequency public transport services.

As development progresses the need will arise for improved road links to the existing urban motorway network, including provision of a new grade separated junction at Connswater Interchange. Page 21 specifies the timing of the infrastructure works, and a detailed transportation and infrastructure strategy will be agreed with the Roads Service of the Department for Regional Development.

Titanic Quarter is suitable for a range of mixed use development creating a variety and mix of employment, residential, leisure, heritage and service accommodation.

The Development Principles, overall concept and proposed framework have been brought forward having regard to current planning policy and the economic guidelines of the Regional Development Strategy.

It is considered that the Vision, Principles, Framework and emerging proposals are consistent with approved regional and development plan policy.

Land uses

The main land use components of this new City Quarter can be described further as follows:

- Employment uses including office, and research and development, high technology uses and call centres.

Residential neighbourhoods comprising dwellings in the form of apartments and townhouses to include provision for affordable housing. Final number of dwellings and percentage given over to affordable housing is subject to BMAP Public Inquiry or as may be agreed with the Department.

Storage, distribution and light industrial uses.

Heritage uses including a major Titanic Project.

Local services and community facilities such as local retail, health care in the form of GP and dentist surgeries / treatment centre, education, plus business support such as printers, business supplies and sandwich bars.

Leisure, cultural, recreation and tourism destinations that bring the heritage of the site to life, including hotels, water based leisure and with consideration given to the potential for a cruise liner berth.

Public realm works such as new quay walls, public spaces and pedestrian and cycle routes.

A new further education campus at the heart of Titanic Quarter, providing for part time and full time students.
Block Structure and Public Realm Framework

The Development Framework for Titanic Quarter is based on a network of streets, squares and pedestrian routes which define development blocks within the study area. The network of streets and blocks is designed as an extension of the city grid, as can be seen in Fig 23.

The scale of the development blocks is based on the typical block dimensions found within the City Centre, with sufficient variation of block size provided to allow a range of building types and uses to be accommodated. The street types have been designed to reflect the style and hierarchy of routes within Belfast City Centre, with main, intermediate and minor routes (see page 18 for detail).

The street network is designed as a permeable grid which not only provides access to developments but also sets up view corridors, connects important elements of public realm and provides linkages between the key heritage structures within Titanic Quarter.

In particular the block structure and public realm framework is designed according to the principles of good urban design embodied in the DETR publication "By Design." The detail underlying the Development Framework is described in the following pages.
Townscape

The layout of streets and blocks is designed to maximise the particular qualities of this study area, while also creating a sense of place that is unmistakably part of Belfast.

The qualities of local distinctiveness and legibility are achieved by setting up view corridors between important elements of the study area and also creating key views and street types that reflect the typology found in Belfast City Centre and around the City Hall in particular.

Former Harland and Wolff HQ building

The setting of this listed building is designed to reflect the important heritage and townscape potential of the structure. The proposed setting draws upon the characteristics derived from the City Hall's setting, of having views to the building and also side views past the building towards the Belfast Hills.

Titanic Heritage zone

The Development Framework sets up a 'civic spine' that connects the Odyssey, Abercorn Basin, Hamilton Graving Dock, the former H&W HQ, the proposed Titanic Project, Alexandra Graving Dock and terminates at Thompson Graving Dock and Pump House. Known as the Titanic Heritage zone, this is based on the current alignment of Queen's Road and provides views and a movement corridor along the length of the spine.

Key buildings

Sites for a number of landmark buildings or projects have been defined. These include gateway sites on Sydenham Road, plus the tip of land at the mouth of Abercorn Basin. A site for a major Titanic Project' is identified between the Titanic and Olympic slipways and the former H&W Head Quarters building.

site with regard to building heights is to vary the proposed heights, with a lower height appropriate on the eastern side of Titanic Quarter where it has an interface with existing industrial uses at Harland and Wolff and Bombardier Aerospace. The proposed height increases towards the west, taking the Waterfront location and the city centre in general as references together with Samson and Goliath as background referencing. The key buildings and projects are envisaged as potentially tall buildings of heights to be agreed.
Public Realm

The role of the public realm at Titanic Quarter will be to provide the setting and context for the functions and activities found in the Quarter. The strategy is to link key nodes of activity and to provide gateways and view corridors that will create a sense of place and 'legibility' and encourage pedestrian movement.

The site of the scheduled slipways will be the principal open space area for the development. This will preserve the slipways and restore them to create a high profile visitor attraction and landscaped area. This space will be a major area for recreation and events for the city.

A high profile area of public realm will be created at Abercorn Basin. This will incorporate a new marina within the Basin and new dock walls, plus a high quality hard landscaped area next to the basin. This will seek to provide a stepped transition of levels from the public realm to the Basin, allowing a more direct and intimate experience of this important body of water.

Landscaped Georgian-type greens will be provided in conjunction with development areas, in order to provide local open space for each stage of development.

A modern style park will be located within Titanic Quarter, which will be a significant green space within the development, incorporating high quality landscaping and children's play areas. Open spaces will also be provided within development areas and individual sites.

The dock edges will provide new public space, linked by a pedestrian walkway along the entire river's edge of Queen's Island connecting to the Odyssey and the city centre.

Linear open spaces will be created along the lines of Hamilton and Alexandra Graving Docks. These will be hard landscaped areas, fronted by active and high quality development.

Fig 27. Public Realm Detailing, Donegall Quay, Belfast.

Detailing of the public realm will be robust and high quality, evoking the industrial past through the reuse of granite sets from the site and incorporating existing maritime and industrial elements where appropriate. The style will also be modern and forward looking, in a manner suited to this regional European waterfront development.

The long term management of all public open space in TQ will be achieved by transparent management structures.

Commitment to long term management of all public open space in Titanic Quarter will be agreed and secured prior to each phase of the development commencing on site, such that the scope of future management will form the public realm specification and design at each stage.
Land use

The vision for Titanic Quarter is for a major European Waterfront development that incorporates world class tourist attractions, high profile residential development, opportunities for learning and recreation and a setting for significant job creation and inward investment. This equates to a mix of land uses as outlined in Fig. 28 and described below.

Residential and Supporting Uses

A number of residential neighbourhoods are proposed within Titanic Quarter which will provide a mix of dwelling types in a high quality environment including provision for affordable housing. The majority of the units will be apartments, with a significant proportion of townhouses also provided. All dwellings are envisaged as being ‘family friendly’, in the sense that apartments will be larger than the market norm, and local facilities and amenities will be provided. The final number of dwellings and percentage given over to affordable housing is subject to BMAP Public Inquiry or as may be agreed with the Department.

Support uses will be provided to cater for the residents and to provide support services for the business population of Titanic Quarter. Facilities will include local retail, business support facilities, health care, education, creches and day nurseries.

Employment

A significant range of opportunities for job creation and inward investment are catered for. Mixed use zones are identified which will accommodate offices and support business, plus high technology, research and development, call centre and light industry uses. The overall quantum of Class B1A offices is to be agreed with the Department.

Business & Leisure tourism

Several new hotels are proposed including a gateway hotel at Abercorn Basin and at least one 4-star hotel in Phase 2 which will provide major tourist and conference venues. In addition, the proposed Titanic Signature Project will be a major tourist destination, as described below.

Recreation & Leisure

Recreation and leisure uses are proposed on the edge of Abercorn Basin and Hamilton Graving Dock, to include restaurants, cafes and bars. This will be an extension of the leisure offer found within the Odyssey and will create a new focus for leisure activity in the city. This will fit in well with Laganwise Corporation’s (now DSD) plans for the Quays area to the south of Odyssey.

Additional leisure development will be provided throughout Titanic Quarter, including health and fitness clubs and leisure activities associated with the Titanic Project and the consideration will be given to a cruise liner berth.

Titanic Project

A site for a world class ‘Titanic Project’ is provided between the scheduled slipways and listed H&W HQ building. It is proposed that this will provide a major tourism destination and will include a Titanic heritage and visitor attraction, plus commercial and leisure uses.

Education

A new educational campus is proposed, which will provide for part time and full time students of further education. A site for this has been identified at the heart of Titanic Quarter, close to Hamilton Graving Dock.

Potential Cruise Liner Berth

Consideration will be given to a berth for visiting cruise liners on ground adjacent to Alexandra Dock. The provision of a modern cruise facility is seen as essential in promoting tourism within Titanic Quarter, the wider city and the region. There will be facilities for the visiting tourists at this point, plus other commercial and residential uses which will maximise the potential of this important facility.

Design Development

The proposed land uses have evolved through consultation. A previous, now superseded, land use plan is below.
Access and Movement

The strategy for access to Titanic Quarter and movement within the site is based on the principle of ease of movement. There should be a choice of routes forming a network and providing connections for all modes of transport.

Several approaches to Titanic Quarter will be available from the strategic road network, as follows:

- M3 access leading to Queen's Road and Abercorn Crescent.
- Dee Street providing access to Sydenham Road from East Belfast.
- Connswater Interchange giving access from the Sydenham Bypass to the east side of the Queen's Island via a new link road to Airport Road.
- Queen's Quay providing access from the City Centre direction.

Abercorn Crescent and Titanic Boulevard will form the main access roads from Sydenham Road into Titanic Quarter. The potential for an access from Hamilton Road is also allowed for, should this become available in the future (see Fig. 30). Internal access to plots will be provided via the main street network of Abercorn Crescent, Queen's Road, Titanic Boulevard and Olympic Boulevard.

Within the site Abercorn Crescent, Titanic Boulevard, Olympic Boulevard and Queen's Road comprise the main street network. All will be of high quality and set within an attractive, landscaped public realm. Quality intermediate level streets and a third level of minor streets are also provided. In all cases development should front onto the street network, creating a strong sense of enclosure and an active street scene.

Sydenham Road will be remodelled to provide a new footpath/cycle lane, plus tree planting and redefinition of the carriageway lanes.

Outside of the site a number of key infrastructure works are proposed, including works separately proposed by Laganside Corporation (now CDD) and others:

- The remodelling of Queen's Quay Road and the removal of the flyover at Bridge End to create a high quality boulevard approach to Queen's Island.
- Widening of the Sydenham by-pass. A new bridge at Dee Street.
- A new interchange at Connswater, which Titanic Quarter Ltd. will contribute towards.

This document should be read in conjunction with the Strategic Transportation Masterplan for Titanic Quarter, which sets out in more detail access, movement, public transport and parking provision.
Public Transport, Pedestrian and Cycle Access

The street network within Titanic Quarter will be designed to accommodate segregated public transport on main routes. It is envisaged that the initial public transport strategy will be quality bus corridors, which will comprise high frequency bus services on Queen’s Road/Abercorn Crescent. This bus service will be provided between Titanic Quarter and the city centre at an early stage of development, and will provide a sustainable and high quality linkage.

As development proceeds into later phases of development the public transport provision will be upgraded to provide deeper penetration of Titanic Quarter and additional services.

It is intended that the provision for public transport has the potential to be upgraded to Rapid Transit. The proposed internal infrastructure allows for the future CITI Rapid Transit Route, with Queen’s Road and Titanic/Olympic Boulevard capable of accommodating through services.

The potential exists to provide a new, attractive access to Bridge End Station.

Pedestrian and Cycle routes form a key part of the design with provision being made along all traffic corridors as well as a network of additional routes being created where vehicular movements will be limited. Through ongoing discussions with Sustrans, a commuter cycle route will be provided along Sydenham Road where it will be picked up at the front of the Odyssey and lie into the National Cycle Network. A further recreation pedestrian and cycle route will be established at the quay side along the western flank of Titanic Quarter which will connect into the proposed network of cycle routes throughout Titanic Quarter and to existing cycle routes.
A hierarchy of roads and streets is proposed of comparable scale and dimension to the city centre.

The main streets within Titanic Quarter are based on the typical street width found in Bedford Street or Chichester Street. The total width is 22.5m, which allows for a range of carriageway options including dedicated public transport corridors.

Intermediate streets will be provided to a high quality based on intermediate street types such as Adelaide Street or Linenhall Street. The width, at 18.5m, will be sufficiently wide to create a sense of arrival and enclosure. Controlled on-street parking will enliven and animate the street, as discussed in page 20.

Minor streets will serve as access to developments and as intimate and attractive environments for pedestrians & cyclists. The width would average 13 m - 15 m, which is consistent with the likes of Montgomery Street and Upper Arthur Street.
Maritime and Titanic Heritage

This Development Framework provides a vision and strategy for bringing the ship building and sea faring heritage of the study area back to life. The Framework links the heritage assets of the site as a sequence of places, events and structures that will draw visitors along the length of Titanic Quarter, creating a world class visitor destination that will appeal to both residents of Belfast and tourists.

Abercorn basin

Starting from the southern end of Queen’s Island, Abercorn Basin will be a major feature that will link directly to the Odyssey complex. Abercorn Basin will be fronted by a new hotel and high quality apartment developments, with leisure uses such as cafes and bars/restaurants at ground floor level. New quay walls will be built. The quay structures at the entrance to Hamilton Graving Dock will be refurbished. It is envisaged that the new quay wall to the south east of Abercorn Basin will feature a sequence of levels that will link the walkway with the water of the Basin.

Within Abercorn Basin a new marina is planned, which will provide short and long term moorings for leisure craft.

Hamilton Graving Dock

The route north from Abercorn Basin connects to Hamilton Graving Dock. Subject to further engineering investigation, it is proposed to refurbish the dock entrance and provide access to the dock for a heritage type vessel that would be permanently moored as a visitor attraction.

Former Harland and Wolff HQ building

Abercorn Basin leads to the former H&W HQ building, which will be refurbished. The refurbishment of this building will provide public access to this important landmark.

Titanic Heritage Project

Between the former H&W HQ building and the scheduled slipways is the area designated for the Titanic Project. The final form and content of this project will be subject to detailed design. However, it is proposed that the project will focus on the Titanic and Olympic slipways, and will provide a major interpretive centre accompanied by leisure, commercial and residential uses.

The Titanic Project will provide a strong linkage with the river and the western flank of Queen’s Island.

Scheduled Slipways

As described on page 14, the slipways will be restored as a high profile area of public realm. This will include hard and soft landscaping, in a design that will commemorate the history of this area.

Cruise liner berth facility

As one moves north of the Titanic Project site, the site for a potential cruise liner berth will be encountered. This would provide a stopover for ocean going cruise liners and contribute an essential component in the tourist offer of Titanic Quarter, Belfast and the region as a whole. There is the potential for exciting architecture at this location that will complement the cruise ship berths, and the berthing of the liners is envisaged as being a striking attraction in its own right. The attraction of the cruise liners will be highlighted by the provision of a major vista from Queen’s Road that will terminate at the berthed vessels.

Alexandra and Thompson Graving Docks and listed pumphouse

The most northerly elements in the maritime heritage trail are Alexandra Graving Dock, the listed pump house and, in particular, Thompson Graving Dock which was built for the fit-out of the Olympic class vessels. Thompson Graving Dock, which lies within the Northern Ireland Science Park, gives a feel for the scale of the Titanic itself.

H&W cranes

The more recent ship building history of Queen’s Island should also be recorded within Titanic Quarter. The scheduled Samson and Goliath cranes are clearly important landmarks in the city, and the continuing maritime industry is an asset that the development of Titanic Quarter should also acknowledge.
Parking Strategy

Parking
A strategy for the provision of parking has been developed in order to coordinate this important element of the development. The strategy is based upon the need to avoid a car dominated environment while also recognising the fact that some on-street parking will help to enliven the public realm.

Phased approach
The parking strategy recognises that a phased approach will be necessary, whereby in the early stages of development some surface level parking will be provided.

In the later stages of development when there is a greater critical mass of development, overall levels of parking will be reduced and relocated to multi-storey car parks. Fig 35 illustrates the 'end-state' development, including possible locations for multi-storey car parks.

On-Street Parking
It is proposed that intermediate and minor streets should have on-street parking, which may be on one or both sides of the street. The purpose of on-street parking is firstly to encourage an active public realm. In a development where many people will travel by car, on-street parking will generate pedestrian activity on the public realm. Secondly, a general principle for parking within Titanic Quarter is to have as much shared parking as possible. The unallocated on-street parking will be available to different users throughout the day, and so help to reduce the overall on-street parking requirement within Titanic Quarter.

The potential also exists for a restricted element of on-street parking on the main boulevards within Titanic Quarter. Intermediate streets will have designated parking bays along their length. Abercorn Crescent and Titanic/Olympic Boulevard will have the potential to accommodate on-street parking at off-peak times which will assist leisure uses such as the hotel or café/bars at Abercorn Crescent.

Multi-Storey Parking
A number of sites will be allocated for multi-storey car parks. These will provide parking in the longer term for people working on site and visiting the area. It is proposed that the multi-storey car parks will be flanked by development which will screen two or three sides of the car park from the street, helping to maintain an attractive and active street scene.

On-Site Parking
Within each development there will be some requirement for limited on-site parking. The amount of private parking will be restricted in favour of unallocated public parking in multi-storey car parks or surface sites, in order to reduce the overall parking provision. This may be in the form of basement parking or parking located within the internal courtyard of the block. In some cases semi-basement parking will be used which will require the provision of street level shop/café units or other uses that will screen the parking from view.

Fig 36. Possible locations for multi-storey car parks (shown in grey).

Parking Restrayment
The proposal is that Titanic Quarter will be treated as an area of fringe parking restraint (with the parking standards set out in DBMAP for city centre fringe car parking). The provision of high quality public transport access and a designated pedestrian / cycle route network, plus the proximity of Titanic Quarter to the city centre, will make walking and cycling an attractive alternative to vehicular use from the start.
Phasing

The total development period for Titanic Quarter is anticipated to be some 15 - 20 years. Within this period there will be a need to phase the implementation of infrastructure works in tandem with development of the site. In general phasing is illustrative at this stage and will be further dependent on the Transport Assessment and changing market conditions.

Phase 1 - Infrastructure and Public Realm
- Queen's Road Realignment to create Abercorn Crescent, including associated public realm.
- Queen's Road/Sydenham Road Signal Junction.
- Improvements along Sydenham Road.
- Initial phase of segregated cycle lanes along Sydenham Road to commence the commuter route.
- Extension of the cycleway / walkway around the Quay side from the back of the Odyssey leading to Phase 2.
- Initial phase of shared cycleways/footways along Abercorn Crescent/Queen's Road.
- Implementation of the 1st phase of public realm including a major area of public realm adjacent to Abercorn Basin.
- Traffic corridors which provide the facility for future bus lanes.
- Creation of new dock wall to the east of Abercorn Basin.

Phase 1 - Development proposals
- Hotel and residential to the east of Abercorn Basin, including associated public realm.
- Gateway office development.

Phase 2 and 2A - Infrastructure and Public Realm
- Extension of the improvement works along Queen's Road and a new access link road.
- Implementation of the first phase of Public Transport provision in the form of:
  - A high quality, high frequency bus service operating between City Hall and the new education site, picking up at Donegall Square West and Chichester Street.
  - Developer funding for 5 years.

Allocation of road space for the provision of the future Rapid Transit route. Construction of the street network within the Phase 2 area, to include provision for pedestrians and cyclists. Provision of bus/coach drop off points at the entrance to the Phase 2 area along Queen's Road. Infrastructure funding contributions by Titanic Quarter towards construction of the new grade-separated interchange on the Sydenham Bypass (Connswater Interchange). Removal of Dee Street traffic signals and a central reservation opening removed. New link road from the new interchange to Airport Road. The upgrading of the Dee Street roundabout junction. Continuation of the improvement along Sydenham Road. Continuation of the pedestrian/cycle routes along key corridors. Refurbishment of Hamilton Graving Dock. Possible creation of marina. Continuation of pedestrian/cycle recreation route from Odyssey and Phase 1. Implementation of public realm work including restoration of scheduled slipways to create a major area of public realm, creation of public landscaped greens, and high quality public realm at the water's edge and around the heritage projects.

Fig 37. Phasing Plan

Phase 3 - Infrastructure and Public Realm
- Construction of Titanic Boulevard to tie into Hamilton Road. Hamilton Road will be upgraded to a similar standard to Abercorn Crescent and Titanic Boulevard.
- Extended upgrading of Queen's Road.
- Creation of a cycle/pedestrian friendly street network for the Phase 3 area.
- Upgrading of airport road.
- New cruise liner berth and associated public realm, subject to agreement.
- New quay walls and walkway/cycle route along water's edge.

Phase 3 - Development proposals
- Development associated with cruise liner berth and support facilities, subject to agreement.

Phase 4 - Infrastructure and public Realm
- Construction of Olympic Boulevard.
- Provision of pedestrian/cycle friendly street network including dedicated cycle routes on Queen's Road and Olympic Boulevard.
- Creation of a major park at the heart of Queen's Island.

Phase 4 - Development proposals
- Development of residential and employment uses.
Initial Development Proposals

Development of Titanic Quarter will commence in the area around Abercorn Crescent, known as Phase 1. This phase will comprise of the Gateway office building at the entrance to Abercorn Crescent, a hotel development adjacent to the Odyssey Complex and residential development on Abercorn Crescent. In addition there will be infrastructure and public realm works as detailed on P21. Reserved Matters approval was granted for the office and residential developments in January 2006.

Phase 1 Roads Infrastructure works were granted planning permission in January 2006 and work commenced on site in May 2006.

Outline consent for the hotel has been approved, and a Reserved Matters application lodged. These development proposals, in conjunction with high quality landscaping and public realm works, will provide a prestigious start to the development of Titanic Quarter.

Illustrated opposite are the current detailed proposals for the residential and hotel development at Abercorn Basin and the gateway office building.

Fig 38. Illustrative Masterplan for initial phase of development

Gateway Office Building at entrance to Titanic Quarter
A Masterplan for the Phase 2 area of Titanic Quarter has been prepared. This sets out more detailed proposals for the area in terms of overall massing, land use, landscaping and public realm, and access and movement, which are consistent with this Development Framework.

Some of the key features proposed for Phase 2 are:

- Restoration of the scheduled Titanic and Olympic slipways to create a major area of public realm. This area will use hard and soft landscaping to outline the plan of the ships, and this space will become a major new recreation and events space for the city.
- A Lottery application has been lodged for the Titanic Project. The site for this has been identified as the area between the listed H&W HQ building and the scheduled slipways. Refurbishment and restoration of the listed building is also proposed. Listed building consent for the first stage of refurbishment has been granted.
- Some 2000 residential dwellings are proposed for Phase 2. These will be located to benefit from private landscaped courts and external views to public landscaped squares or water bodies.
- Public open space within Phase 2 will be some 30% of the total area. A mix of employment, leisure and support services are also proposed. Major 4-star hotels are planned at the water’s edge, one adjacent to the Titanic Project and one at Abercorn Basin.
- The proposed development height will be an average starting point of six storeys and, in addition, three landmark buildings are proposed at the river’s edge, which will be proportioned to provide a suitable height-to-width ratio to this considerable body of water.
- A new campus for Belfast Institute of Further and Higher Education is proposed as Phase 2A. This will provide teaching facilities for some 2800 ‘full time equivalent’ students, which will encompass a mix of full time students plus many more part time students. A full planning application has been submitted and is pending.
- An outline planning application for the Phase 2 area has been submitted (Dec 2006) and provides further detail on these proposals.