DPS-B-A8-4-2

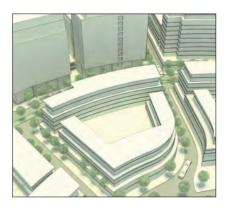


TITANIC QUARTER

PHASE III
AMENDMENT TO AGREED DEVELOPMENT FRAMEWORK

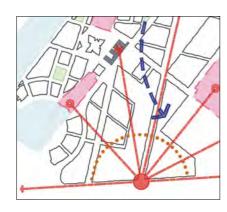
MAY 2008











- A Development Framework was prepared for the entire Titanic Quarter site in consultation with Planning Service and other statutory consultees from 2003 onwards and culminated in a version dated December 2006 which was agreed by the Department of the Environment in August 2007. The aim was to set a context (compatible with the draft Belfast Metropolitan Area Plan) for the approval of developments within Titanic Quarter, commencing with Arc I and the Gateway Office in Phase 1 which were approved in late 2006. Planning permission was subsequently granted for Phase II A (the Belfast Metropolitan College) in late 2007.and an announcement was made in September 2007 by the Minister for the Environment that Phase II was to be granted outline planning permission.
- 1.2 Since then planning and urban design work has commenced on Phase III of Titanic Quarter and this is set within the new context of Departmental thinking at the Belfast Metropolitan Area Plan Inquiry in 2007/8. The ongoing process of masterplanning Phase III has identified a number of new opportunities which can be summarised as follows:
- Establishing a key gateway into TQ through Phase III:
- An enhanced relationship with Sydenham Road;
- Maximising the relationship of Phase III with the built heritage of adjacent phases; and
- Delivering a Bus Rapid Transit route through Phase III.
- 1.3 This amendment to the agreed
 Development Framework (DF) relates to Phase
 III only and not to the principles laid down for the
 wider Titanic Quarter. This document follows the
 format of the agreed Development Framework and
 only amends where necessary.
- 1.4 Delivery of Phase I (Abercorn Arc & Office Gateway) and securing planning approvals for Phase II and Belfast Metropolitan College has provided a deeper insight into the potential inefficiencies of Phase III and the opportunity is now taken to resolve these and create an enhanced vision for this Phase and the wider Quarter.
- 1.6 The agreed DF is prepared in parallel with an amendment to the overall Transport Masterplan for TQ to ensure complete consistency between the level of infrastructure provision and proposed land uses and the intensity of those uses.

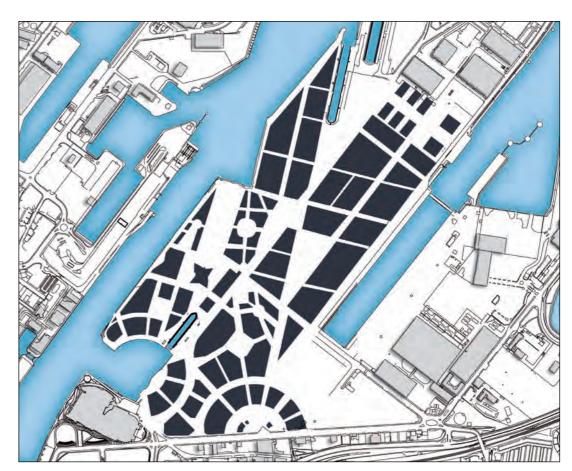


Fig 1. Block Structure

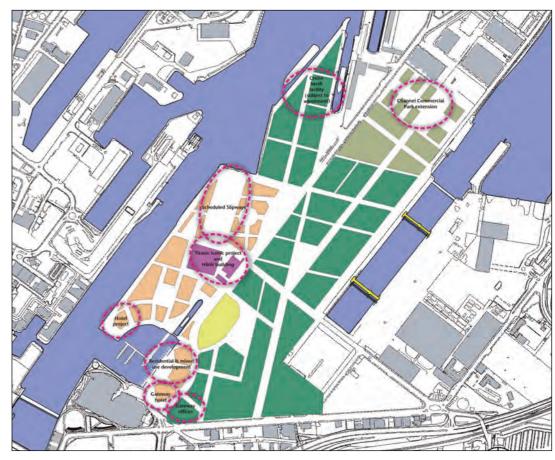


Fig 2. Concept Plan from Agreed Titanic Quarter Development Framework

ANALYSIS

- 1.8 Incorporation of improved key heritage views coupled with the need for an enhanced urban design response to the Sydenham Road frontage are key drivers for this amendment to the agreed DF.
- 1.9 Outline planning approval for Phase II will have a significant bearing on the nature and form of subsequent phases of Titanic Quarter as this planning approval defines in detail many of the design principles that will apply throughout this regeneration project. These principles relate to urban design and architectural principles, public realm & landscape and the hierarchy of streets. Phase II also established certain critical thresholds beyond which, regardless of which phase of TQ is being implemented, would require the provision of additional transport infrastructure including the construction of a new grade separated interchange at Connswater and provision of a new Bus Rapid Transit System (BRT).

DEVELOPMENT CONCEPT

- 1.10 The urban grid established within the agreed DF was originally conceived to take advantage of views within and out of the site and on the basis of developing a street pattern comparable to the city centre. That objective remains constant and this amendment now seeks to enhance the scheme in line with that overall development concept. The introduction of a 'spokes of a wheel' approach to the design ensures that views towards the site's invaluable maritime heritage are anchored to a new TQ gateway at Sydenham Road. A phase which would otherwise have had limited connection to the site's ship building heritage now presents the opportunity to connect with all of the key assets.
- 1.11 The enhanced gateway proposed in this amendment introduces two additional accesses from Sydenham Road into TQ. One of these accesses will facilitate the fully segregated BRT route which will traverse through Phase III through the key public realm areas of the scheme to the proposed H&W Square opposite the listed former H&W Offices.

PUBLIC TRANSPORT

1.12 Outline planning approval for PhaseII of TQ commits to the delivery of BRT fromSydenham Road, along Queen's Road and return

through Phase III. This amendment introduces the opportunity to create an entirely segregated BRT route from Sydenham Road, through Phase III to the H&W Square (at the listed H&W building) and into Phase IV. The entirely segregated system will utilise 'a green-wave system' at junctions to ensure a highly efficient service which will represent a real alternative to the private car. The geometry and construction of the BRT route will be such that it will be future proofed for other forms of rapid transit which may come forward in the future.

1.13 Careful consideration has been given to this route to ensure maximum patronage to/from key destinations and thus ensure the long term sustainability of this new transport system.

PHASING

1.14 The agreed DF provides a flexible tool for guiding the development of TQ and the initial phases have been approved and are now underway. To ensure an orderly approach to the development, a series of sub phases have now been identified for Phase III, specifying the infrastructure which must be in place to service blocks within the overall phase. The first sub phase to be implemented will be a new Financial Services Campus (FSC) which will be delivered together with a new access from Sydenham Road.

PUBLIC REALM & PUBLIC SQUARES

1.15 With a more detailed appreciation of the linkages between Phase III and adjacent phases and a greater understanding of the form and nature of the character envisaged for TQ, it follows that the proposals for the public realm and squares within this phase are now better understood than they were in 2006. Proposals for three high quality public squares (the Crescent Fountain, the Quad and H&W Square) and the connecting public realm are described in this document. These will add significantly to the network of open spaces and landscaped areas which are integral to the development.



Fig 3. The Titanic Quarter Phase III Concept Masterplan

AGREED

U

EVELOPMENT FRAMEWORK

SITE CONTEXT

- 2.1 Phase III occupies land north of Sydenham Road, south of Hamilton Road, east of Queen's Road and west of the Harland & Wolff Building Dock. The site has few notable features remaining on site and none of the structures of the former ship building industry remain. A building formerly used as a local bank lies in the north western part of the site opposite the listed H&W building. It is of no particular architectural merit.
- Developments are already underway in Phase I, including the Office Gateway and the Abercorn Arc mixed use residential development, together with proposals for a new Belfast Metropolitan College (BMC) and a new Public Records Office of Northern Ireland (PRONI). These developments are establishing the immediate context of Phase III.
- The wider context remains as described in the agreed Development Framework.

ACCESSIBILITY

- 2.4 The agreed DF proposed two accesses from Sydenham Road into Phase III with one route being the new Titanic Boulevard. Titanic Boulevard was to be a main access into TQ from Sydenham Road with the potential for access onto Hamilton Road also allowed for.
- 2.5 The proposed streetscape of Phase II of TQ comprises a hierarchy of Main Roads, Secondary Roads, Streets, Shareways and Pedestrian/Cycle Connections. This strategy will now translate to all phases of TQ including that Phase III.
- 2.6 Outline planning approval for Phase II established a number of thresholds within its planning conditions, which if exceeded, will trigger the requirement for additional infrastructure to be provided including the implementation and operation of BRT and provision of a new grade separated interchange at Connswater, Belfast. It holds therefore that once a third of development, as quantified by the TQ Transport Masterplan, or the occupation/operation of the Titanic Signature Project, will trigger the provision of the new interchange. However, development of part of Phase III would not necessarily trigger the provision of the interchange as occupation of Abercorn Quay and/or the Titanic Signature Project is likely to occur in advance of Phase III implementation.

INDUSTRIAL HERITAGE

- This area of TQ was the location of a number of iron works during the former ship building era. These structures have since been demolished and little evidence remains on the surface. Key heritage assets lie beyond the boundaries of Phase III and include the scheduled monuments of Hamilton Graving Dock, Thompson Dock and the H&W Cranes. Part of Phase III lies immediately opposite the listed former H&W HQ and would lie within the setting of the building as described in Planning Policy Statement 6 -Planning Archaeology and the Built Heritage.
- Although none of the visible remains are of special heritage merit all areas of cobbling will be salvaged for possible use elsewhere in Titanic



Fig 4. Aerial view with overlay of Titanic Quarter

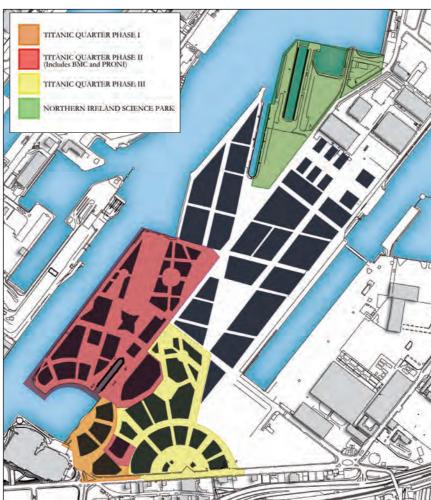
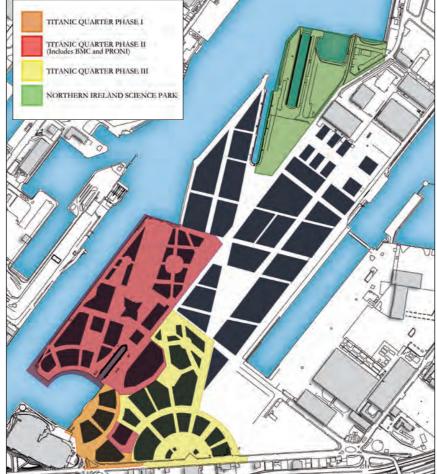


Fig 5. Context plan (Phases I - III)



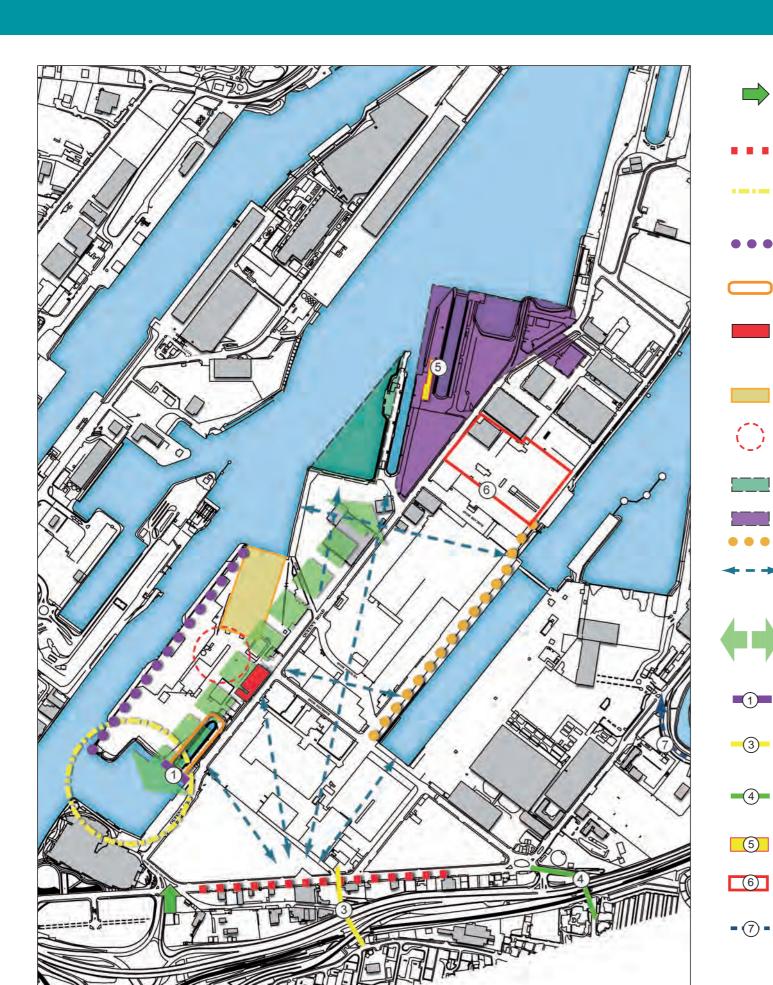
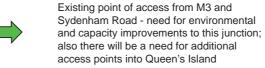


Fig 6. Opportunities and Constraints





Need for high quality frontage to Sydenham Road

Abercorn Basin - opportunity for high profile waterfront development and marina uses, with associated public realm

Queen's Island Wharf - need for new edge to river and opportunity for public walkway plus landmark developments

Hamilton Graving Dock

Listed former H&W HQ building - there will be a need to identify suitable uses for this important structure. Listed Building Consent granted for part conversion to TQ marketing suite

Titanic and Olympic Slipways - opportunity to provide high profile area of public realm

> Opportunity for 'Titanic Project' to provide a focus for the heritage of this important area and a landmark visitor attraction

Area of foul ground - potential for creation of cruise liner berth (subject to agreement)

Northern Ireland Science Park (NISP)

Frontage to active building dock

View corridors to structures within site and to surrounding hills

Potential sequence of heritage and visitor attractions, from the Odyssey complex to Abercorn Basin, Hamilton Graving Dock, the former H&W HQ, the scheduled slipways and ultimately Thompson Graving Dock and the listed pump house

1 Existing stone quay wall at entrance to Hamilton Graving Dock

> Need for an improved access to Bridge End Station and connection across M3 to east Belfast

Proposal by DRD for new Dee Street Bridge and closure of existing junction to Sydenham By-Pass

Listed pump house (within NISP) adjacent to Thompson Graving Dock

Planning Permission for light industrial adjacent to Channel Commercial Park

Potential for new grade-separated junction at Connsbank (Connsbank Interchange) as planned for in BUAP & Belfast Harbour Local Plan

OPPORTUNITIES AND CONSTRAINTS

An updated analysis of the site has identified no new constraints to the development but rather an opportunity to enhance the third phase. Retention of key views is a core principle for the Phase III. Views towards the listed former Harland & Wolff Headquarters Administration Building & Drawing Office and to the scheduled monuments of Hamilton Graving Dock; Thompson Dock; and the H&W Cranes, are now introduced to ensure that Phase III is firmly and permanently connected to the heritage of adjacent areas. The need for a high quality frontage onto Sydenham Road is also recognised in the analysis. The character of this route could be classified as medium to low quality and is not congruent with the vision for a high profile European waterfront development which will act as a driver for high quality investment. The analysis identifies the need to successfully address the frontage through the establishment of a high quality design response at this edge of TQ.

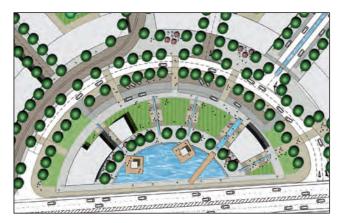


Fig 7. The Crescent Fountain

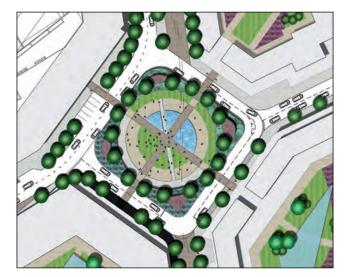


Fig 8. The Quad



Fig 9. H & W Square

PUBLIC REALM

3.0 Non-private urban space between buildings facilitates access and movement across the site, provides identity and 'address' to the property, and leads to the understanding and enjoyment of the place. Public spaces each have a unique character offering a range of experiences due to their relative amenity, safety (through passive surveillance), historical resonances and associated uses.

PLACE MAKING

- Each place has its own character linked by a street network.
- The Crescent Fountain formal water garden epicentre of radial street network becomes the heart of this phase with civic, leisure visitor attractions and commercial buildings. The Crescent also:
- Provides a ceremonial gateway addressing Sydenham Road; and
- Creates a civic centre for Phase III and definition to the wider TQ.
- 3.3 The Quad this space attempts to establish a campus style academic lifestyle, inspired by formal civic use adjacent to BMC. It is a Georgian square in character.
- 3.4 HW Square creating a setting for the heritage building of HW headquarters; creates connections from the east side of Phase II into Phase III.
- The public realm is defined by the building blocks. All open space is about quality - working as settings for heritage assets; public amenity and definition of civic spaces. Well-designed streets can also be 'public space' (i.e. spill out space for cafes; bus stops etc).

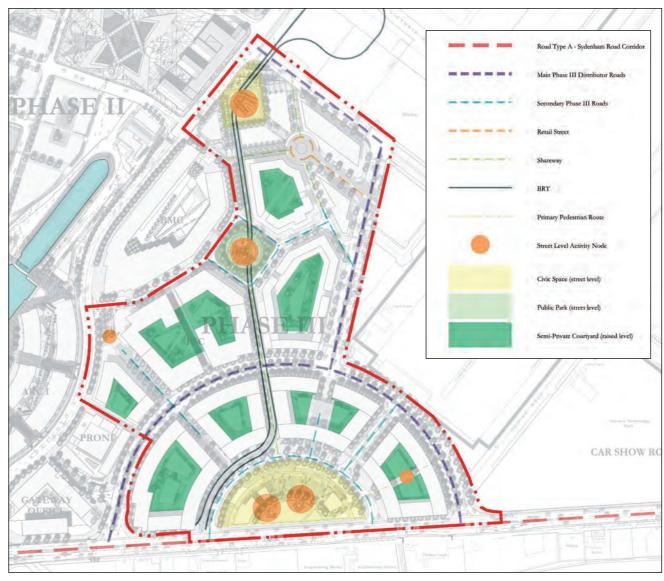
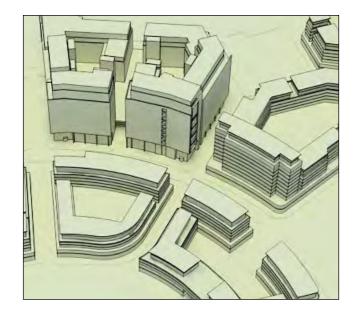


Fig 10. Spatial Hierarchy







LINKAGE

- 3.6 The proposals use public spaces to make nodes and then join these nodes to the heritage assets via the street network. Vistas are set up to make evident the relationships between different parts of the site and pathways to connect them.
- Radial lines from the Crescent Fountain are defined by the building blocks and maintaining these edges is paramount to creating vistas. These radial lines pay homage to shipbuilding heritage pieces in TQ.

STREET NETWORK

- The street hierarchy is based on those uses which are located along the route (graded by traffic carrying capacity and the logic of their junctions). At the top of the street hierarchy are the following main roads, including:
- Sydenham Road; and
- · Main Phase III Road
- The next streets in the hierarchy are the crescent type and radial streets, described as follows:
- · Radial streets: through type connections; vistas from ceremonial gateway to heritage assets;
- Crescent streets: internal site connections; and
- · All streets defined by blocks.
- Each street type within the hierarchy will establish its own character, created by the combination of uses, public realm, frontage, landscaping, cross section and building design.

URBAN WALL

3.8 The 'Urban Wall' carries the highest forms in this scheme rising up from both ends to the highest point in the centre and is given relief by the radial streets. Consistency in the wall creates legibility in form. This ensures the gesture is held together by building edges which further accentuate the Crescent Fountain in form.

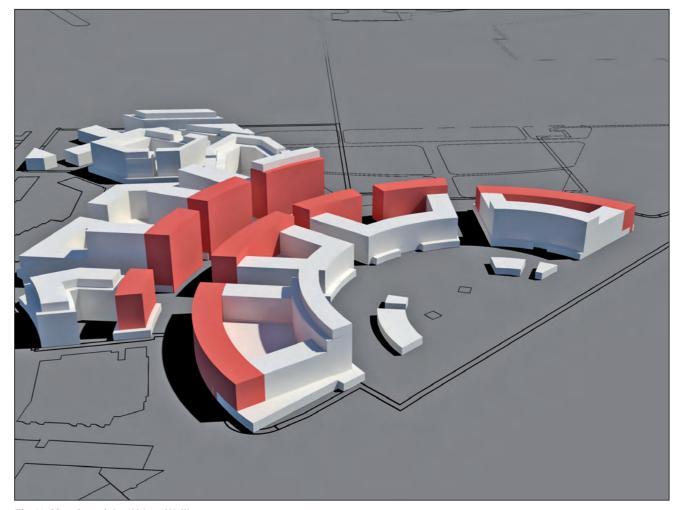


Fig 11. Massing of the 'Urban Wall'

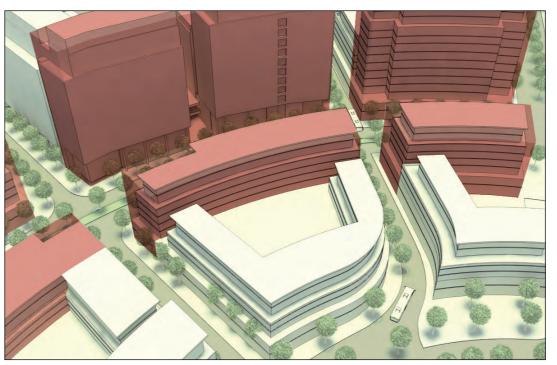
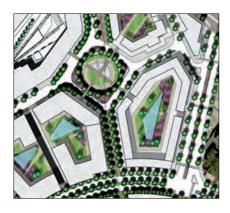
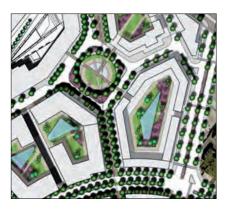


Fig 12. The 'Urban Wall'







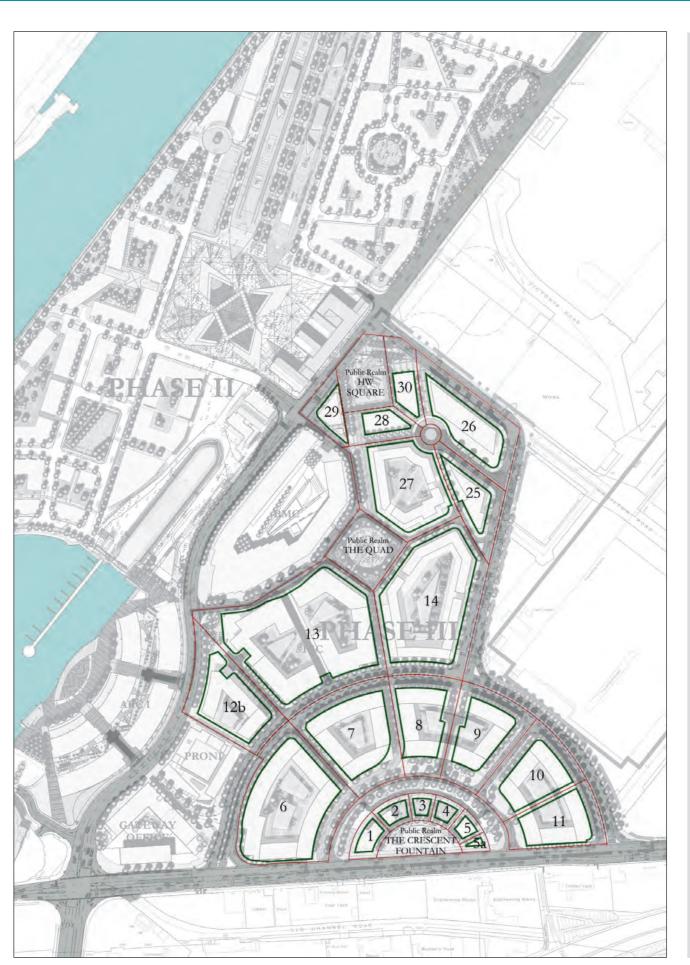


Fig 13. Block Structure

DEFINED EDGES

Perimeter blocks provide edge-defining buildings to create a legible urban form. The building block structure holds the edges to define public realms.

LEGIBLE URBAN FORM

3.10 The urban wall is only broken when a movement corridor is passing through. Each block contains shared private courtyard gardens above concealed basement parking garages.

ACTIVE FRONTAGES

- 3.12 Active frontages will be ensured by incorporating the following measures:
- Base of buildings to be at grade;
- Creation of adaptable spaces suitable for a variety of uses; and
- Embed car parking under raised courtyards to conceal it behind the active frontage.
- 3.13 The base of the buildings will be dedicated to active uses, with two storey ground level units serviced from behind through car parking decks.
- 3.14 A different grain of development, consistent with commercial uses, will allow for larger private public realm which can in turn minimize the scale of those developments.

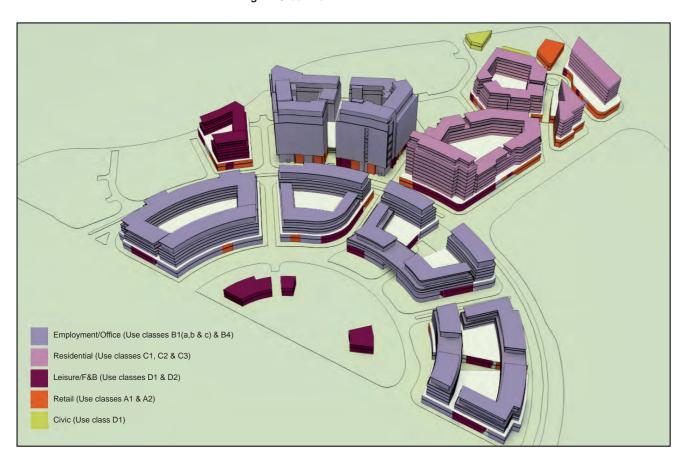
SECURITY AND SAFETY

- 3.15 Community Safety will be made an integral part of the development with the aim being to reduce crime and fear whilst creating an active neighbourhood. Variances to accommodate this, more commercial phase, include:
- Private shared open spaces are to be gated and overlooked by users to allow surveillance;
- Passive surveillance will be provided from perimeter blocks and active frontages will overlook the street;
- Secure street level access incorporated for safety of upper level users.

The Crescent

• • • • New Titanic Boulevard Alignmen

Fig 14. Urban Form



LAND USE

- 3.16 This mixed use development generally promotes active frontages. The mix of uses will change over time according to market conditions and spaces must be sufficiently adaptable to accommodate these changes. The aim within Phase III is to create a place where business enterprise may occur, bringing life and character to the Quarter. This vitality will be aided by a complementary mix of active uses on ground floors, including; local retail development; food and beverage; leisure and entertainment; and community uses.
- 3.17 Public realm areas within the streets will have their own character which relates to the street level uses and anchor precincts defined within Phase III.
- 3.18 The philosophy is to develop an identifiable, self contained commercial village that has a rich mixture of residential, community services, office, retail, leisure, dining, cultural, and civic facilities.
- 3.19 Widths of streets are to be relative to the height of buildings. Building height is relative to context and is only a part of the perceived scale of a building. The scale of the urban space may be finely calibrated to create comfortable environments.
- 3.20 The urban form works best when streets are spatially contained, i.e. given definition through consistent, legible edges and façade treatment. The Phase II concept of 'natural' viewing angles to achieve spatial containment 27° viewing angle has been found to result in a non-threatening urban form when facades are studied at close proximity this angle may rise to 45°.
- 3.21 The heights of buildings will be similar in scale to Phase II and range from single story pavilion structures at the Crescent Fountain to 14 storeys for the Financial Services Campus. The bases of buildings will be carefully articulated to capture visual interest and become an extension of the public realm. The uppermost parts of buildings are to be set back from the respective parapets. Commercial signage design guidelines will be required. Variety in building heights is desirable in the composition of the urban form as discussed above in respect of the 'Urban Wall' design concept.

- 3.22 Taller buildings are to be embedded and clustered deep within the scheme with a grading down of heights to the periphery. The benefits of this approach are:
- Layered elevations from edges giving lower buildings in foreground, creating the idea of view sharing with higher buildings overlooking lower buildings so that more people can enjoy views;
- Layering of façades and buildings diminishes the experience of building height;
- Creates a distinctive identity which adds to the 'place making' of Phase III; and
- Heights are relative to the heights of the H&W cranes.

ACCESS AND MOVEMENT

- 3.23 Phase III proposes a public transport spine which accommodates a combination of pedestrian/cyclist priority and BRT along a segregated shareway. This segregated shareway is a major contributor to the Quarter's sustainable transport proposals. Although commencing within Phase III, the BRT route itself will link to the wider TQ, including Phase II and future phases.
- 3.24 This Phase of TQ will act as the Gateway for a significant percentage of the vehicular movements into TQ. Hence the road scheme which accommodates this future traffic load must have sufficient capacity so as not present any obstacle to future growth.
- 3.25 The street network itself aids in establishing a legibility and orientation in the urban form. The street grid established for Phase III arises from 3 main opportunities:
- · Formation of the Crescent and hence the realignment of Titanic Boulevard;
- Establishing vistas from the Crescent to certain elements of the historic fabric of Titanic Quarter;
- · Interfacing with the adjacent developments of Phase I and BMC.



Fig 16. Cross Section

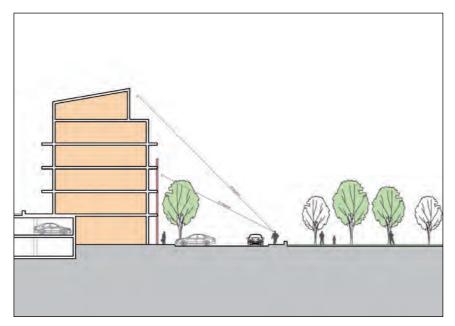


Fig 17. Cross Section



Fig 18. Section

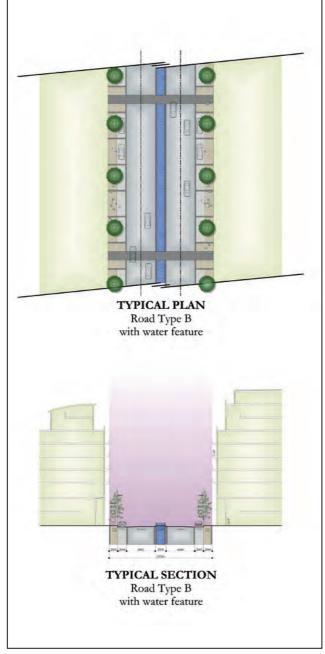


Fig 19. Typical Section through Road

DEVELOPMENT FRAMEWORK

4.1 Sydenham Road is a main existing road located to the south of Phase III. Titanic Boulevard, Olympic Boulevard and Hamilton Road will act as the main distributor roads linking Phase III with Phase II. Secondary roads provide the internal connections within Phase III including Sydenham Crescent; the road bounding the Quad and roads linking the site with Abercorn Crescent and Queen's Road. The primary shareway (which is the route of the BRT) starts at the junction of the Sydenham Road and Sydenham Crescent passes through the Quad and H&W Square and onto the future Phase IV. There are a number of pedestrian routes linking the Crescent Fountain with Sydenham Crescent and on to the north linking H&W with Phase II and IV.

PARKING STRATEGY

- 4.2 A key principle of the Titanic Quarter project is the promotion of sustainable modes of transport and the reduction in the number of private car trips. Throughout each phase of the development the aim is to continually reduce the number of car trips while increasing the number of walking, cycling and public transport trips to and from the site.
- 4.3 Good pedestrian and cycling links together with high frequency public transport are to be provided within Phase III. This infrastructure, coupled with reduced parking provision and parking enforcement, will aid the reduction in private car trips.
- 4.4 Titanic Quarter is treated as a Belfast City Centre Fringe parking area and provision of parking is to be in accordance with dBMAP TRAN 4
- 4.5 The car parking strategy has been developed to enable the amount of parking to be coordinated with the main aim being the avoidance in creating a car dominated environment. This can be achieved through a reduced reliance on private car trips while promoting the use of sustainable modes of transport (pedestrian, cycling, public transport).
- 4.6 On street parking will be limited / prohibited along the main routes, with Harbour Police patrolling, clamping in force and car parking ticketing in operation. This will ensure parking takes place exclusively in the areas of parking

provided and will aid the drive towards sustainable modes of transport.

- 4.7 Road markings and signage along will be provided to clearly identify the no parking areas. All on street parking spaces will be controlled and the methods of control will include some or all of the following:
- Parking bays with defined time limits (less than 4 hours) - permitting medium stay parking with charges levied for use of these spaces (parking meters or pay and display);
- Parking bays permitting free short stay (less than 2 hours) – parking at locations in the controlled zone required for access to local shops and services; and
- Residents-only parking with restrictions as to who is permitted to park by using a system of parking permits which will be available to local residents and businesses.
- 4.8 Car parking on the site will be provided at a restrained level of one space per apartment in a semi basement format under apartment blocks. Parking under commercial blocks is concealed behind frontages to allow for servicing throughout the day. Elsewhere there will be limited on-street parking. All streets within the site provide for cyclists and pedestrians. Deck parking helps relieve the canyon effect and responds to the requirement of the raised ground floor of 4.2m.

BRT ROUTE

- 4.8 At agreed trigger levels, as dictated by passenger numbers, the Metro service to the city centre will be replaced by a segregated BRT service. The Transport Assessment (TA) for the entire Titanic Quarter development would indicate that a frequency of 4 minutes is required when Phase III is fully operational.
- 4.9 Public transport routes have been designed to provide efficient movement of the segregated BRT and be convenient to the areas in the development that they serve. BRT stops shall be located within easy reach of all parts of the Titanic Quarter development, shall be of a high quality design, well lit, overlooked and incorporate real time information systems. Linkage to existing services to the city centre and other destinations will be provided and enhanced wherever possible.

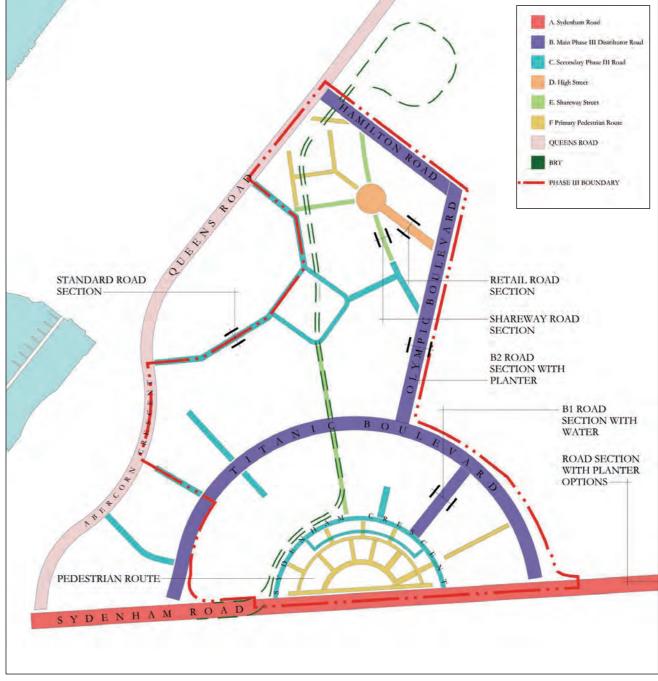


Fig 20. Road Hierarchy

TITANIC QUARTEI

4/ INFRASTRUCTURE AND IMPLEMENRNTAION STRATEGY

PHASING

In common with the approach previously adopted at Titanic Quarter developments are introduced on a phased basis to ensure that the appropriate infrastructure is programmed to be in place at a specific stage within the overall development period. The general phasing outlined below is illustrative only, is linked to the Transport Masterplan for the wider Quarter and is subject to changing market conditions.



Fig 21. Phase 3A

• Preparation of development parcel 13



Fig 22. Phase 3B

- Continue construction of Titanic Boulevard and access roads to service FSC development (Parcel 13)
- Creation of The Quad and The Financial Services Campus
- Temporary BRT route established from Belfast City Centre to terminate to the north of Phase III and return
- Preparation of development parcels 1 7 and 12B



Fig 23. Phase 3C

- Completion of Titanic Boulevard connecting back to Sydenham Road
- Construction of Sydenham Crescent
- Connection of Titanic Boulevard to existing Hamilton Road via new Olympic Boulevard
- Road improvements to section of Hamilton Road connecting Titanic Boulevard to Queens Road
- Completion of parcels 1 7 and 12B
- The Crescent Fountain created as gateway to Titanic Quarter
- Preparation of development parcels 8 11, 28 30 and Harland & Wolff Square



Fig 24. Phase 3C

- Completion of access roads and development to parcels between Sydenham Crescent and Titanic Boulevard – 6 - 11
- Completion of access roads to parcels between Olympic Boulevard and Queens Road – 14, and 25 - 30
- Completion of parcels 28 30 to define Harland and Wolff Square
- Completion of Harland & Wolff Square as civic setting to Listed Former Harland & Wolff Headquarters Administration building & Drawing Offices
- Preparation of development parcels 14, and 25 27



Fig 25. Phase 3D

- Completion of development in parcels 14, and 25 27
- Continuation of BRT route to wider TQ