12.4.2.19 Viewpoint 19 – Guinness Storehouse

Existing View

The Guinness Storehouse is amongst Ireland's most visited tourist attractions. The bar affords a panoramic view over the complex city roofscape towards Dublin Bay. Howth Head is prominent in the distance. The extensive, intricate skyline is punctuated by several exceptionally tall structures, most notably the Poolbeg chimneys, and St. Patrick's and Christchurch Cathedrals amongst others. Several more recent secular buildings are also prominent in the view including Liberty Hall and the pyramid-topped office complex at Tara Street. Although not remarkably high, the IFSC complex is prominent, and along with Liberty Hall and Tara Street it forms a distinct character area albeit relatively limited in extent in the context.

Proposed Change

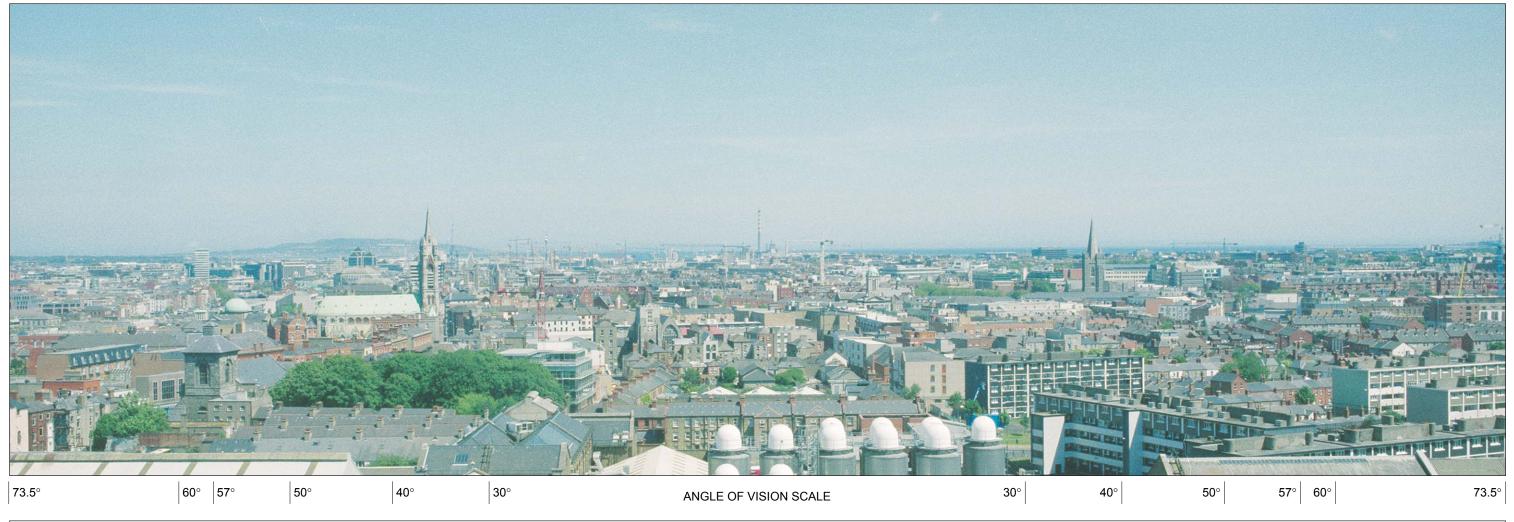
The proposed high building will punctuate the horizon formed by Howth Head and would take its place amongst the taller structures in the city. Its relative proximity to the cluster of modern buildings including Liberty Hall, the IFSC and the Tara Street buildings will contribute to the emerging character area. Its height, although less than the Poolbeg chimneys and the taller cathedrals, will render the building a landmark in the urban structure of the city. It will not however detract from their prominence since precedents for landmark modern buildings exist, with no apparent negative effect. In this view the proposed building will form an effective marker of the eastern limit of the city centre, contributing to the legibility of the urban structure.

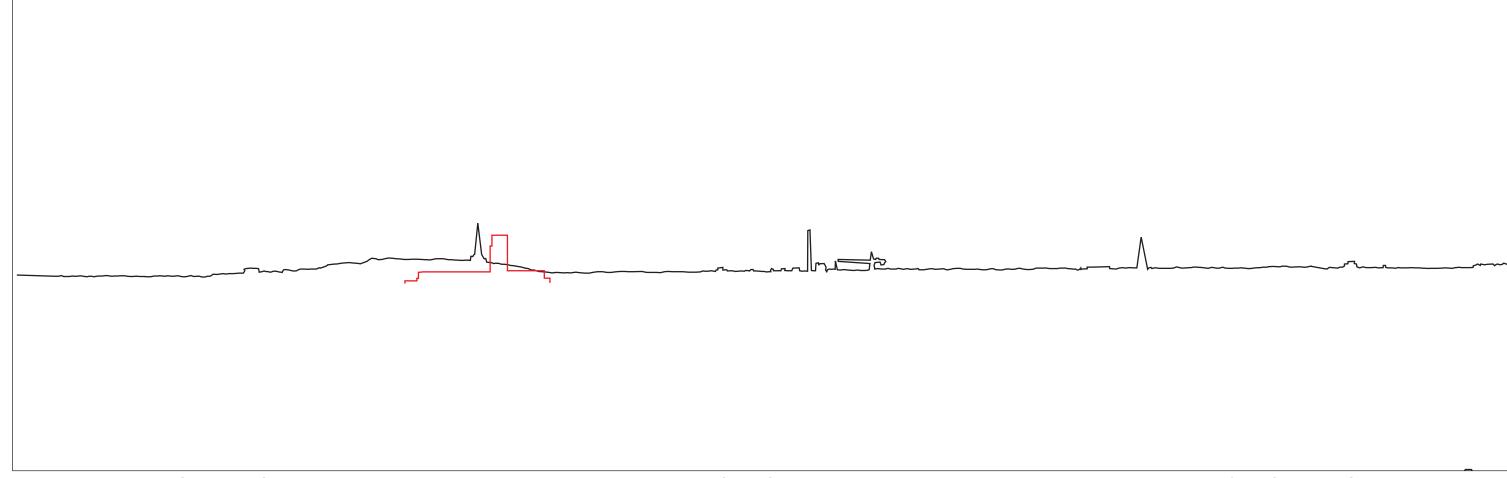
Visual Impact

The prominent city centre location affords amongst the broadest views of the city, and is a popular tourist attraction. The viewpoint sensitivity is thus high. The magnitude of change which will arise from the proposed high building is medium - although the proportion of the view affected is small the height of the building is such that it will draw attention. The significance of the impact is High (Refer to Figure 1). Considering the wealth of supporting policy for a landmark building, the lack of any significant negative effect, and a distinctly positive effect in terms of character area development and legibility, the impact is Beneficial.

Cumulative Impact

From this distance the Grand Canal Tower would be the most prominent additional development, creating a distinctive gateway feature at entrance to the River Liffey with the North Lotts Tower. The significance would continue, as above, <u>High</u> and Beneficial.





12.4.2.20 Viewpoint 20 - Clontarf Road

Existing View

The view from Clontarf, representing also the coastal approach to Dublin from the north, i.e. a gateway location, is dominated by Dublin Bay. Beyond the Tolka River inlet is the East Wall of Dublin Harbour. Industrial land use is prominent and various containers, silos, chimneys etc. trace the skyline of the view, punctuating the horizon formed by the Dublin Mountains in the distance. The low, predominantly glazed modern buildings of the East Point Business Park are also discernible. There is little in the view, except for cranes at present, to indicate the presence and proximity of the city centre.

Proposed Change

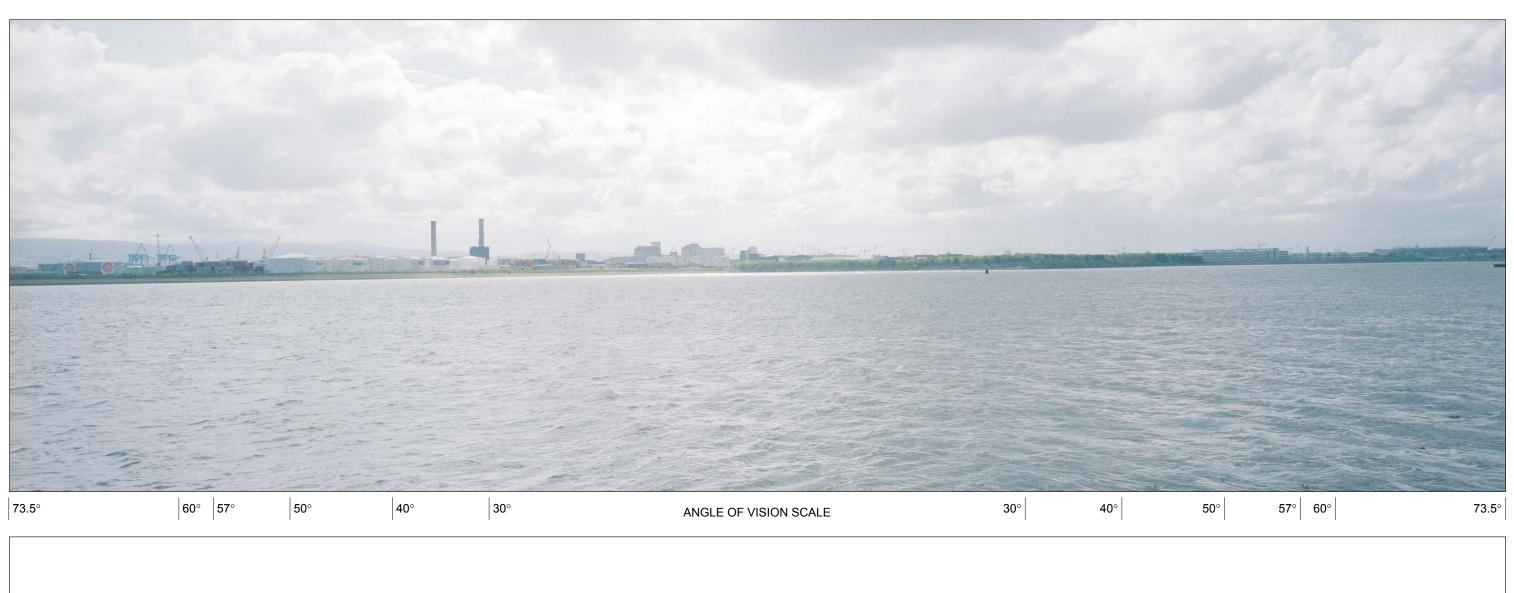
The proposed high building would protrude well above the majority of the Harbour infrastructure and building, roughly equal in height and prominence to the larger chimneys. It would not obscure or detract from any existing features. The building's relative prominence and importantly its distinctive form and function relative to the industrial context, would clearly indicate the presence and proximity of the otherwise obscured city centre. This would have a significant effect in terms of the legibility of the urban structure at this location.

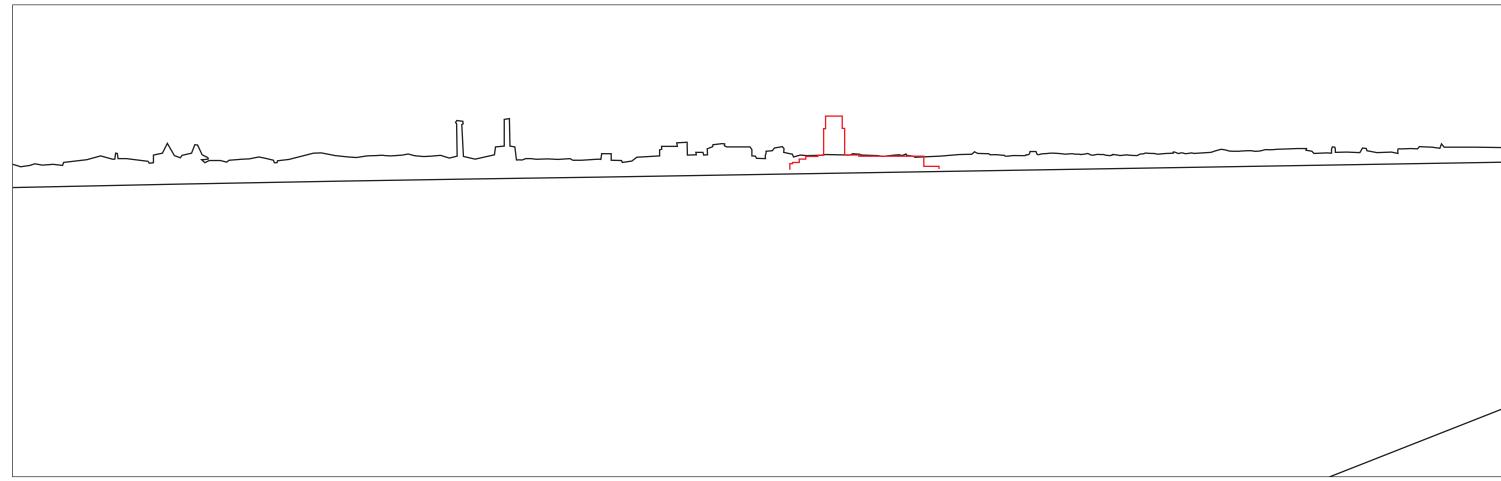
Visual Impact

The road affords a panoramic view towards the city but one which is presently characterised by unsightly industrial features. The viewpoint sensitivity to development in the area proposed is thus considered low. The magnitude of change which will arise from the proposed high building is high. The significance of the impact is <u>Low</u> (Refer to *Figure 1*). Considering the wealth of supporting policy for a landmark building due to its potential for improving the legibility of the urban structure, and the lack of any tangible negative effect to arise in the view, the impact is <u>Beneficial</u>.

Cumulative Impact

From this distance the Grand Canal Tower would be the most prominent additional development, creating a distinctive gateway feature to the River Liffey with the North Lotts Tower. The significance would be, as above, Low and Beneficial.





12.4.2.21 Viewpoint 21 – Beach Road, Sandymount

Existing View

The view is taken from Beach Road, Sandymount near the northern extremity of Sandymount Strand adjacent Irishtown and Sean Moore Park. The two storey houses fronting the road and waterfront can be seen to the left and the road itself. The park occupies the central and middle part of the view and the beach, the foregraound. The skyline is simple consisting of roofscape to one side of the view and trees to the parkside of the view. The location is very close to the Docklands and the City Centre although there is no indication of this in the view. Despite the attractions of the greenery, beach and domestic scale the location does appear lonely and isolated.

Proposed Change

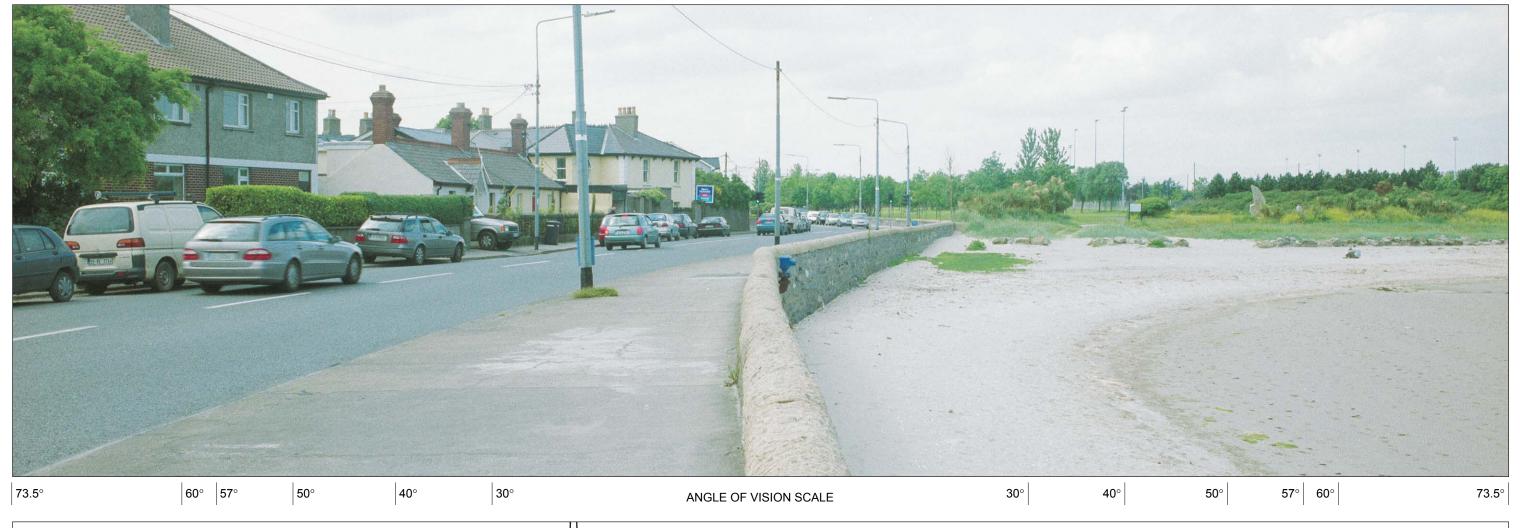
The proposed high building would protrude well above Sean Moore Park creating a new built landmark feature where currently no buildings are visible (although there are a range of major industrial installations just outside the view to the right (East) on the Ringsend peninsula. The building would not obscure or detract from any existing features, the remainder of the scheme would not be visible. The building's relative prominence and importantly its distinctive form and function relative to the view, would clearly indicate the presence and proximity of the nearby Docklands and city centre. This would have a significant effect in terms of the legibility of the urban structure at this location and emphasise the uniqueness of the amenities in the view by refecting the city context.

Visual Impact

The viewpoint sensitivity of the residential and amenity location is considered high. The magnitude of change which will arise from the proposed high building is high. The significance of the impact is <u>High</u> (Refer to *Figure 1*). Considering the wealth of supporting policy for a landmark building due to its potential for improving the legibility of the urban structure (linking this location to its city context), and the lack of any tangible negative effect to arise in the view, the impact is Beneficial.

Cumulative Impact

From this distance the Grand Canal Tower would be the most prominent additional development enhancing the legibility of the location of the Docklands and the City Centre and their proximity to this residential and amenity area. The significance would be, as above, High and Beneficial.





12.4.2.22 Viewpoint 22 – Dun Laoghaire Harbour, West Pier

Existing View

The view from Dun Laoghaire Harbour, representing also the approach by sea to Dun Laoghaire, is dominated by the expanse of Dublin Bay. Beyond the bay the flat coastal topography and relatively the low roofline of the city are evident. The industrial complex at Poolbeg is the dominant built feature of the view, with the pair of distinctive chimneys alone defining the skyline at this distance. Individual structures within the city centre are difficult to distinguish.

Proposed Change

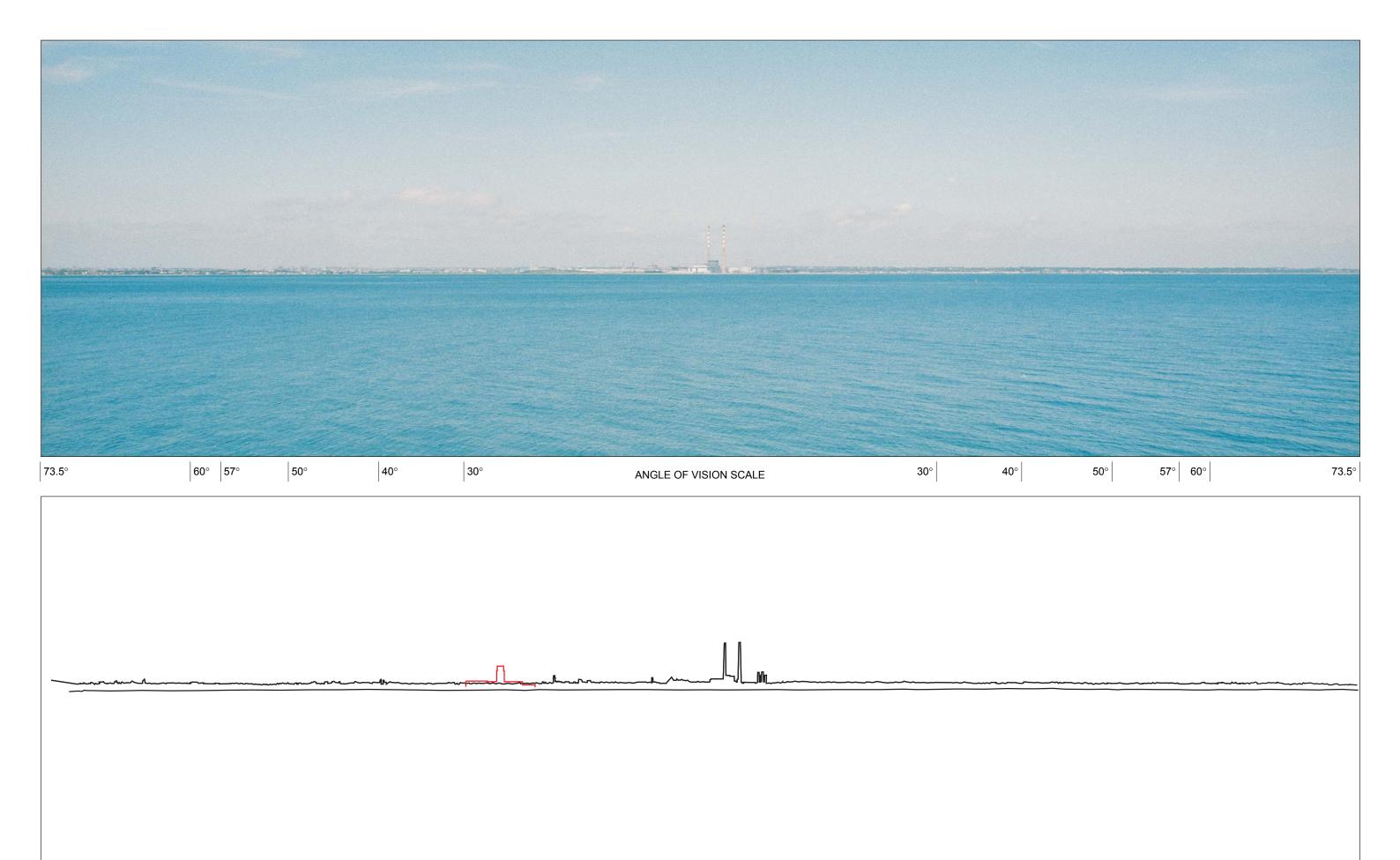
The proposed high building would protrude well above the city skyline to the west of Poolbeg, its height approximately half of the chimneys'. Although it would be prominent in what has been a low rise cityscape for overseas arrivals in Dun Laoghaire it would also reflect the application of policy to create such landmarks and enhanced legibility within the city. It would obscure or detract from any existing features.

Visual Impact

The viewpoint sensitivity of this Gateway location is considered high. The magnitude of change which would arise from the proposed high building is low. The significance of the impact is <u>High</u> (Refer to *Figure 1*). Although there would be a substantial change to the *image* of Dublin from this view, the actual physical change is relatively small and considering the wealth of supporting policy for a landmark building at this location the impact is regarded as <u>Neutral</u>.

Cumulative Impact

From this distance the Grand Canal Tower would be the most prominent additional development, creating a distinctive gateway feature to the River Liffey with the North Lotts Tower and enhancing the legibility of the location of the Docklands and the City Centre. The significance would continue, as above, High and Neutral.



12.4.2.23 Viewpoint 23 - Con Colbert Road

No visual impact will result as the proposed development is not visible from this location.

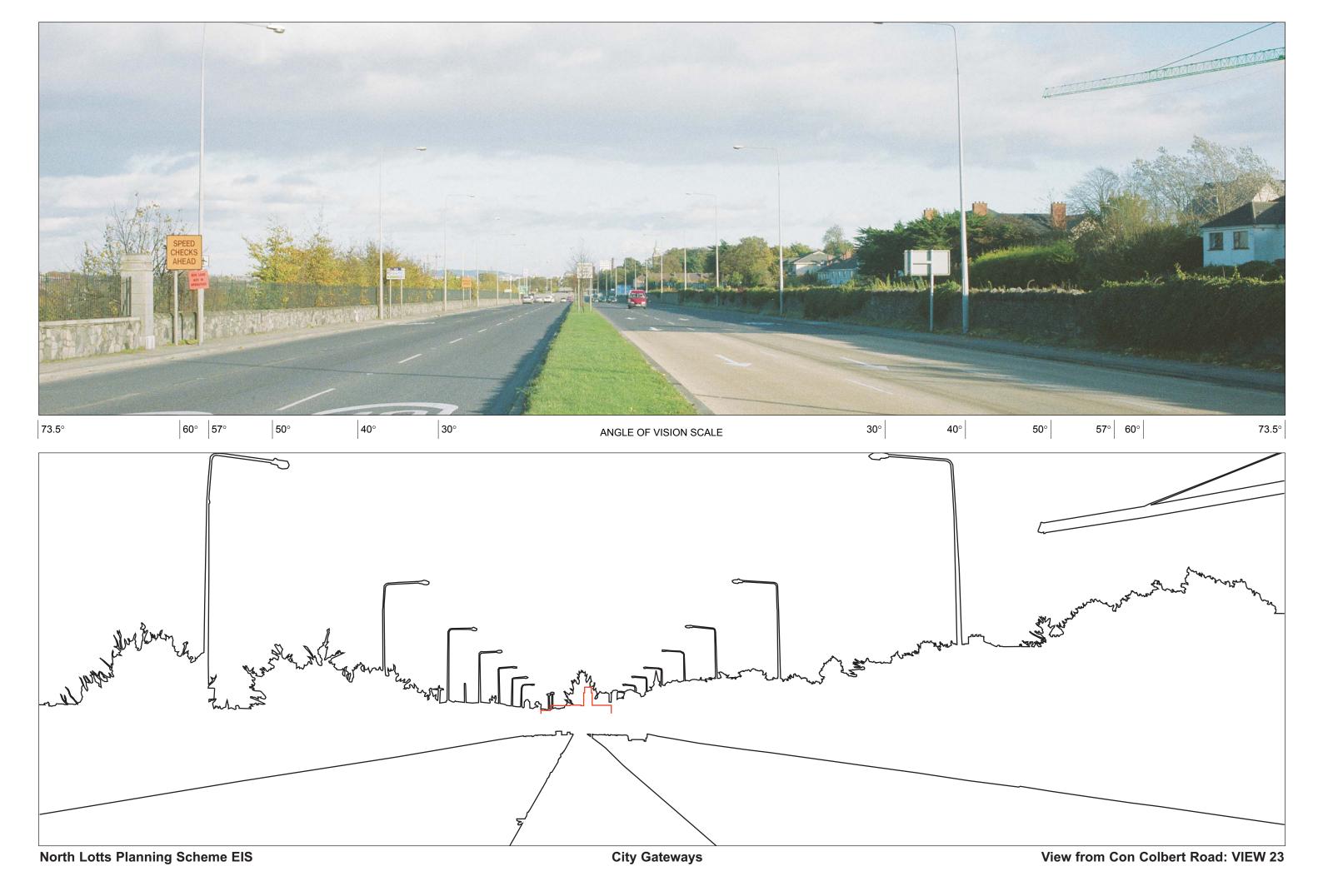


Table 2 Results of Visual Impact Assessment

No.	Cat.	Location / Description	Viewpoint Sensitivity	Degree of Change	Predicted Impact	Cumulative Impact	
1		Russel Avenue East, East Wall	High	High	High/Neutral	High/Neutral	
2	ient	East Road, East Wall	Low	High	Low/Beneficial	Low/Beneficial	
3	ıvironm	East Wall Road (R131), East Wall	Low	High	Low/Beneficial	Low/Beneficial	
4	g en	East Link (R131)	Low	High	Low/Neutral	Low/Beneficial	
5	Immediate Receiving environment	Dodder Bridge, Ringsend Road, Grand Canal Docks	Low	High	Low/Beneficial	Low/Beneficial	
ĵ	liate R	Sir John Rogerson's Quay, South Quays	High	High	High/Beneficial	High/Beneficial	
7	шес	Talbot Memorial Bridge	High	Medium	Medium/Beneficial	Medium/Beneficial	
8	<u> </u>	Mayor Street, IFSC	Low	High	Low/Beneficial	Not Perceivable	
9		Seville Place	No Visual Impact				
10							
11	cati	Howth Head	High	Low	Medium/Beneficial	Medium/Beneficial	
12	City Locations	South Wall	High	Medium	High/Beneficial	High/Beneficial	
13		Baggot Street Bridge, Grand Canal	No Visual Impact				
14	ic / I	Fitzwilliam Street	No Visual Impact				
15	Historic / Key	Trinity College	No Visual Impact				
16	6 TO'Connell Street Bridge No Visual Impact						

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17		City Hall, Dame Street	No Visual Impact			
18		Grattan Bridge, Capel Street	Low	Low	Low/Neutral	Not Perceivable
19		Guinness Storehouse	High	Medium	High/Beneficial	High/Beneficial
20	ν	Clontarf Road, Clontarf	Low	High	Low/Beneficial	Low/Beneficial
21	ways	Beach Road, Sandymount	High	High	High/Beneficial	High/Beneficial
22	ity Gate	Dun Laoghaire Harbour, West Pier	High	Low	High/Neutral	High/Neutral
23	Ö	Con Colbert Road	No Visual Impact		,	

12.5.0 Section 5 Landscape and Visual Impact Assessment Conclusion

The assessment has found that the landscape impact of the proposed development would be of medium significance and beneficial to the receiving environment. In recognition of its strategic location the Site is identified in the Dublin Docklands Master Plan (2003) and Managing Intensification and Change – A Strategy for Dublin Building Height (2002) as suitable for a landmark high building. It provides an opportunity for the affirmation and reinforcement of the emerging high intensity mixed use city centre character area which is sought by national, regional and local policy.

The proposed development makes optimal use of the significant development potential of the Site, and reflects / responds to the evolving character of the receiving environment landscape.

Although much of the amended Scheme is of a scale consistent with recent local developments it is inevitable that the proposed high building will be highly visible from locations within the receiving environment. However, the assessment shows that the majority of sensitive (historic) city centre locations will be unaffected by the proposed high building. For the most part visual impact will be beneficial, however great the magnitude of change, and therefore appropriate to a portion of the city undergoing a rapid and dramatic land use, landscape and visual transformation. In conclusion the LVIA finds that the proposed alteration to the North Lotts Scheme (2002) and the high building envisaged is appropriate.

In reviewing the potential cumulative impact of the Scheme with tall buildings proposed within the City and Docklands area in particular, it is noted that such cumulative impacts enhance the above results and where the potential dominance of the North Lotts Scheme and its tall building is viewed in the context of similar developments locally, this potential dominance is generally mitigated against i.e. the Scheme is best judged against the changing cityscape particularly in its immediate environment. This inter-relationship is most beneficial when the Scheme is viewed in the context of the proposed Grand Canal tower with which it forms an informal "gateway" and wider landmark at the mouth of the River Liffey.

13.0.0 EFFECT ON THE ENVIRONMENT: SUNLIGHT AND DAYLIGHT

13.1.0 INTRODUCTION

A study was carried out by ARC Consultants on behalf of the Dublin Docklands Development Authority of the shadows likely to be cast by the proposed planning scheme at Docklands North Lotts, Dublin 1.

13.2.0 RECEIVING ENVIRONMENT

The area for the proposed development scheme is at the extreme eastern end of the North Lotts planning scheme area and is centered around the Point Depot. The River Liffey is immediately to the south, with East Wall Road to the east and Sheriff Street to the north. To the east of East Wall Road are the lands of Dublin Port. These lands are currently given over exclusively to port related uses, but may in the future be subject to development.

The lands to the north across Sheriff Street are currently railway marshalling yards but are zoned for development under the terms of the *Dublin Docklands Area Master Plan 2003*. There is existing low rise and low density housing development in the East Wall area at some distance to the southwest.

13.3.0 METHODOLOGY

A three dimensional digital model of the proposed development and of other buildings in the area was constructed. Using the digital model, shadows were cast at several times of the day at the summer and winter solstices, and at the equinox. Shadows were cast both with and without the proposed development.

The results are presented in shadow study diagrams in Appendix 13.1. The existing development is shown in blue whereas the proposed development is shown in yellow.

Using proprietary daylight and sunlight analysis software, sample studies were carried out to establish the likely daylight factor that might be found within rooms in the development area. A 'worst case scenario' was studied whereby single aspect north-facing or east-facing rooms at ground floor level in the development were examined. Where this analysis examined rooms facing onto Sheriff Street or East Wall Road, it assumes that development of the same height as the proposed development would be in place on the other side of these roads.

13.4.0 CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

The proposed planning scheme relates to a site bounded by North Wall Quay to the south, East Wall Road to the east and Sheriff Street Upper to the north. The development consists of 7 no. zones as follows:

- Zone 1 will consist of development rising up to 6 storeys of commercial (with a
 possible additional two storeys on Sheriff Street and East Wall Road) on the corner of
 East Wall Road and Sheriff Street Upper. It is proposed that the gross floor area of
 the development in this zone will be 82,717 sq m, which will be used almost entirely
 for commercial purposes.
- Zone 2a, located at the northwestern corner of the planning scheme area, will
 comprise development of 6 storeys of commercial or 8 storeys of residential (with a
 possible two additional storeys on Sheriff Street). The development (24,676 sq m
 GFA) will be divided between residential and commercial uses at a ratio of 60:40.

- Zone 2b, located at the west of the planning scheme area, will comprise development rising to 6 storeys commercial or 8 storeys residential. The development (24,056 sq m gross floor area) will be divided between residential and commercial uses at a ratio of 60:40.
- Zone 2c, located at the southwestern corner of the planning scheme area, will rise to 6/8 storeys commercial or 8/9 storeys of residential (with a possible two storeys on Sheriff Street). The development (51,959 sq m GFA) may be divided between residential and commercial uses at a ratio of 20:80.
- Zone 3 (8,628 sq m GFA) is situated at the southeast of the planning scheme area and fronts onto East Wall Road. The five storey development will be used for commercial purposes.
- Zone 4 is located at the southern end of the planning scheme area and fronts onto North Wall Quay. The development (16,240 sq m GFA), which will rise to 28 m in height, will continue to house the Point Depot Venue and, as such, will be used for commercial purposes.
- Zone 5 (16,000 sq m GFA), at the east of the planning scheme site, fronts onto East Wall Road and will be used entirely for commercial purposes, specifically, as a hotel.
 The development will rise to a height of 100 m at its shoulder, with an overall maximum height of 130 m.

13.5.0 POTENTIAL IMPACT

The shadow analysis indicates that the proposed development has the potential for a significant impact on the industrialised areas of Dublin Port to the east and the larnrod Eireann lands to the north of the subject site, with shadows extending large distances in the afternoons and evenings throughout the year. The larnrod Eireann lands to the north are zoned for development under the provisions of the *Dublin Docklands Area Master Plan 2003*.

The proposed development also has a potentially slight to significant impact on residential areas in East Wall to the northwest of the planning scheme area, but these impacts are limited to periods at or near the winter solstice. Shadows cast to the west will fall within lands which are part of the North Lotts planning scheme resulting in moderate impacts in these areas.

Analysis of daylight factor in north and east-facing single aspect rooms on the ground floor of Zones 1, 2a and 2b shows that the daylight factor in these rooms would be less than 1%. This daylight factor is substantially below the desirable minimum. Examination of dual aspect rooms in similar locations reveals daylight factors in excess of 3%, which is acceptable. It is a conclusion of this analysis that ground or lower floor single aspect rooms would be undesirable from a daylighting point of view, except if these rooms faced towards the south. Otherwise, there could be a significant negative impact on the amenity of rooms where there is an inadequate daylight factor. Proper and adequate daylighting can be provided in Zones 1 and 2 if care is taken when detailed architectural design is being prepared.

13.6.0 REMEDIAL AND REDUCTIVE MEASURES

Whereas no remedial or reductive measures are proposed, impacts arising from shadows cast by buildings in the proposed planning scheme area may be less significant in the East Wall residential area than the impacts resulting from existing buildings or buildings likely to be constructed closer to East Wall.

Impacts arising on sunlight and daylight factor in rooms in Zones 1 2 of the proposed amended planning scheme can be mitigated by care taken when detailed architectural design is being prepared, such as the use of dual aspect rooms at those locations.

13.7.0 PREDICTED IMPACT

It is predicted that the proposed development will have a significant impact on the industrialised areas of Dublin Port to the east and the larnrod Eireann lands to the north of the subject site, with shadows extending large distances in the afternoons and evenings throughout the year. The larnrod Eireann lands to the north are zoned for development under the provisions of the *Dublin Docklands Area Master Plan 2003*.

There will also be a slight to significant impact on residential areas in East Wall to the northwest of the planning scheme area, but these impacts are limited to periods at or near the winter solstice. Shadows cast to the west will fall within lands which are part of the North Lotts planning scheme resulting in moderate impacts in these areas.

Single aspect ground floor and lower floor north and east-facing rooms in Zones 1, 2a and 2b may be subject to impacts resulting in limited daylight being received in those rooms.

14.0.0 MATERIAL ASSETS: TRANSPORT, TRAFFIC AND PARKING

14.1.0 INTRODUCTION

- 14.1.1 This strategic Transport Impact Assessment (TIA) has been carried out by Boreham Consulting Engineers Ltd., in association with Cunnane Stratton Reynolds, on behalf of the Dublin Docklands Development Authority.
- 14.1.2 It has been prepared following site visits, attendance at design team meetings, a review of available traffic and transportation data and information for Dublin City, in addition to scoping meetings and discussions with officers of Dublin City Council.
- 14.1.3 When considering the potential traffic and transportation implications of any proposals for the North Lotts Area, it should be noted that, although traffic issues need to be addressed, (given the timescales involved in the potential development of this site, approx 10 to 15 years), forecasting the local junction specific implications of a series of significant infrastructure projects and the wider impacts of public transport and policies initiatives designed to effect a modal shift to public transport would be subject to substantial margin of error.
- 14.1.4 As with the Docklands North Lotts Environmental Impact Statement completed in August 2001 it is considered prudent to focus attention on the many infrastructural and policy incentives both in the docklands area, but also across Dublin city and indeed the Greater Dublin Area. This is considered a particularly valid approach when considering that each 'individual' future development within the North Lotts area will be subjected to a detailed Traffic Impact Assessment (TIA) and guided by the prevailing infrastructural improvements, parking standards and public transport provision.
- 14.1.5 Arising from discussion with Dublin City Council, they key areas of concern, at a strategic level, are considered to be:
 - No direct access to the site should be proposed off East Wall Road;
 - Access to the site should encourage minimal traffic approaches the development site from East Wall Road;
 - Mitigation measures should be proposed to alleviate the impact of the sudden exit flow (12,000 people) from a function at the extended/larger Point Depot; and,
 - Parking provision/numbers should be minimal.
- 14.1.6 This TIA considers the multi-modal transportation impacts of the proposed North Lotts Development on the local network. This TIA also provides commentary on the ability of the existing and future proposed infrastructure to accommodate the development and the associated movement of people at peak periods. It also contains an assessment of the ability of future proposals to accommodate the multi-modal traffic associated with the scheme.
- 14.1.7 The report addresses the following:
 - The anticipated movement of people (broken down into proportions of pedestrians, cyclists, public and private bus users, heavy rail, LUAS, and car users),
 - The integration of the site with the surrounding area (i.e. the level of current and future multi modal transport accessibility to the site),
 - The ability of existing infrastructure to accommodate predicted increases,
 - The future transportation proposals that will impact of the proposed development,
 - Adequacy of the minimal car parking numbers being provided; and,

• The integration of the site with the surrounding area in terms of linkages and transportation.

14.2.0 RECEIVING ENVIRONMENT

14.2.1 The development site is bounded by North Wall Quay and Sherriff Street Upper, to the south and north respectively, and by Guild Street to the west and New Wapping Street to the east. The site is in close proximity to the main commercial area of Dublin City centre and is well placed to take advantage of the existing and future planned public transportation infrastructure and facilities for the City Centre.

Existing Road Conditions

- 14.2.2 The road network currently provides the primary means of accessing the area, either by private coach, by private car or by taxi. Existing opportunities to avail of accessible public transport are limited.
- 14.2.3 The road network in the area is oriented east-west, with Sheriff Street and North Wall Quay running parallel to the Liffey and linking the Port to the City Centre. East Wall Road runs along the eastern edge of the site and borders the port. East Wall Road connects to the East Link bridge, and extends to the north to link with North Strand Road.
- 14.2.4 The existing road network in the area experiences significant traffic congestion, particularly during peak periods. The traffic is a combination of commuter and port related vehicular movements. Large volumes of HGVs are currently using the North Wall Quays to access and egress Dublin Port, and these are contributing significantly to the existing poor traffic conditions.
- 14.2.5 Observations and analysis confirms that a number of the existing road junctions are operating at or close to capacity during the peak commuter periods. These include ; -
 - East Link Bridge Roundabout
 - New Wapping Street/North Wall Road
 - Sheriff Street/East Wall Road
 - New Wapping Street/Sheriff Street/East Road
- 14.2.6 As with all city centre sites, the local roads system cannot sustain the current levels of traffic growth, and the focus must be towards encouraging and achieving a modal split change to other more sustainable modes of transport than the private car such as pedestrian, cycling and bus and rail travel, and combinations of these. This can be best achieved through strategically located and well designed public transport interchanges.

Existing Public Transport

- 14.2.7 In the past, the low residential and working population in the area have conspired to adversely affect the commercial viability of attractive and regular public transport service opportunities. Bus routes 1, 3, 53 and 53A penetrate the area, though with infrequent services, and the main City Centre QBCs are a considerable walking distance away on the city's radial routes.
- 14.2.8 The terminus for most Dublin Bus services is the city centre and the closest interprovincial rail services operating to the North Lott's area including the Intercity, DART and Arrow services, in addition to the Luas, are all accommodated at Connolly Station, adjacent to the IFSC. However, it must be acknowledged that Connolly may be regarded by the majority of commuters and the public as a considerable walking distance from the site.

14.3.0 CURRENT PROPOSED TRANSPORTATION AND INFRASTRUCTURE IMPROVEMENTS

- 14.3.1 The redevelopment of the North Lotts site is at least in part dependant upon the implementation of essential public transport and infrastructure improvements. The DTOs "A Platform for Change Strategy 2006 to 2016" envisaged that improved high quality bus services will be introduced, that LUAS will be extended to the Point by 2006, and that the Interconnector would be operational by 2010.
- 14.3.2 In addition to the above projects, there are other infrastructural improvements that impact upon the site. These include Macken Street Bridge, Dublin Port Tunnel and Spencer Dock/Docklands Station.
- 14.3.3 Details of each of these key projects are outlined below; -
 - Improved Quality Bus Services;
 - Extension of LUAS to the Point;
 - Interconnector;
 - Macken Street Bridge; and,
 - Dublin Port Tunnel.

Improved Quality Bus Services

- 14.3.4 A comprehensive bus strategy is proposed by the DTO/Dublin Bus incorporating; -
 - The creation of a QBC serving the northside of the city serving the North docklands area;
 - Further improvements to the southside QBC network once the Macken Street bridge is constructed;
 - The creation of a central public transport spine along Mayor Street including provision for bus movements, in advance of Luas;
 - The extension of key services on most of the current radial QBCs terminating in Eden Quay, Aston Quay etc., to terminate in the North Lotts area; and,
 - Strong bus linkages to the key rail interchanges at Connolly and Heuston Stations.

Extension of LUAS to the Point

- 14.3.5 To date, LUAS has been implemented in accordance with the original plans, with each of the key lines from Tallaght and Sandyford in place, and the Abbey Street line extended to Connolly station. The Light Rail Order for the proposal to extend the LUAS through the IFSC area and down Mayor Street to the North Lotts site is currently pending submission.
- 14.3.6 The longer term planning strategies of the DTO 'Platform for Change 2000 to 2016' included a further Luas alignment penetrating the Docklands, approaching from the southside across Macken Street bridge and combining with line C at Guild Street to form a Dublin inner orbital route. The alignment will be protected by the DDDA to allow for this longer term development. In addition, sufficient capacity will be required to allow Luas to swing in either an easterly or westerly direction at this future intersection.

Interconnector

14.3.7 With the publishing and endorsement of the "A Platform for Change 2000 to 2016" strategy document, the proposal to create a second rail corridor serving the centre of Dublin through the area was seen as a priority by the Government. The scheme was supported by the Strategic Rail Review in 2003, and has also been included in the Governments new 10 year transportation plan.

14.3.8 This scheme, entitled "The Interconnector", will have a range of strategic benefits for the city and the area, including increased rail capacity, improved rail penetration to parts of the city and significantly enhanced access to the docklands area. Current estimates for the delivery of the Interconnector by Irish Rail indicate 2013 with a provision that it could be fast tracked and delivered earlier if required. The construction of an underground station at Spencer Dock has also been given approval in the Government 10 year plan.

Macken Street Bridge

- 14.3.9 Connecting Macken Street to the south of the Liffey with Guild Street to the north, the Macken Street Bridge will improve road and public transport access to the docklands area. Current estimates for the opening of the bridge are circa 2009.
- 14.3.10 A series of right turn bans and traffic restrictions are proposed to ensure that the Macken Street Bridge facilitates through traffic and is not used as an access route to the port tunnel thereby relieving traffic passing the North Lotts site on Sherriff Street and Northwall Quay.

Dublin Port Tunnel

- 14.3.11 The Dublin Port Tunnel is currently under construction with a programmed opening date in early 2006. It is intended that with the completion of the tunnel the majority of HGV vehicle movements in the docklands area will be reduced significantly. In addition the phased introduction of a HGV ban in the city by Dublin City Council, with the opening of the tunnel will ensure a significant reduction in HGV numbers.
- 14.3.12 The city council expect that 'through' traffic volumes on East Wall Road will increase with the opening of the tunnel however a series of turning restrictions and junction modifications are proposed to mitigate these impacts on the surrounding local area.
- 14.3.13 The impacts of this reduction in traffic will provide significantly increased capacity available for other road users at key junctions and will also result in significant improvements in environmental conditions and will also likely result in reduced severity and frequency of accidents.

14.4.0 NORTH LOTTS -MOVEMENT STRATEGY

Greater Dublin Area

- 14.4.1 In recent years there has been significant investment in public transport and sustainable modes in the Dublin area. This includes development of the two LUAS lines A and B, the Quality Bus Corridors (QBCs), investment in new rail cars (for longer trains), and station developments (e.g. DASH project, Heuston station upgrade, 4 new DART/suburban stations), the strategic cycle network, park and ride sites and cycle parking facilities.
- 14.4.2 There are a number of these developments currently under construction such as the Strategic Cycle Network, the Dublin Port Tunnel and completion of the M50 ring. There is also considerable future planned investment with projects such as the eastern bypass road, the Metro (including an Airport rail link), upgrades to the Kildare and Maynooth rail lines (including a new station at Spencer Dock) and an expanded DART and suburban rail fleet.
- 14.4.3 There are a number of schemes being progressed to increase the capacity and reliability of the current Irish rail services. Many key public transport initiatives are also in the pipeline for delivery such as the Interconnector, extensions to the Luas, integrated ticketing, the Metro, real time passenger information and an expanded Quality Bus Network.

14.4.4 The provision of additional light railway and Metro infrastructure will play a key role is addressing the projected worsening traffic and transportation issues in the Dublin area. As evidenced by LUAS to date¹, light rail offers the benefits of moving large numbers of passengers to their desired destination quickly, reliably and in an efficient cost effective manner, (in terms of land take required and distance travelled), with additional environmental benefits.

North Lotts Area

- 14.4.5 The underlying Masterplan transportation strategy for the Docklands area aims to maximise public transport accessibility, quality and capacity, in addition to creating a high quality pedestrian and cycling friendly environment. The central aim is to minimise car traffic and its impact on the area. The Dublin Docklands Development Authority fully supports the DTO Platform for Change 2000 to 2016, document which has a target modal split of 90% in favour of public transport.
- 14.4.6 As an example of the external influences on the site area and indeed on Dublin city centre, the travel demand management proposals currently being considered by Dublin Transportation Office (DTO) are intended to have significant influence on current transport policy decisions made and future modal split in the Dublin area, and in particular on the docklands site.
- 14.4.7 The DTO are considering options such as workplace parking charges, congestion charging options for the city centre and much lower car parking allowances on new developments, particularly at city centre sites and area of high public transport penetrability. These travel demand management measures are considered to form an essential element in encouraging the significant modal shift required to meet the Platform for Change targets.
- 14.4.8 When considering the extended 12,000 seat capacity Point Depot the limited parking supply proposed (700 spaces), will also encourage the use of public transport and sustainable modes of travel. Allowing an occupancy rate of 2² per vehicle, the public car park will have a capacity to accommodate 1,400 people attending the Point Depot. This accounts for 12% of the new 12,000 seating capacity. Table 14.1 illustrates the expected modal split for the Point Depot at full capacity.

Table 14.1 - Modal Split

Table 14.1 - Modal Oplit		
Mode of Transport	% Users	
Car	12%	
Public Transport (bus, rail, taxi)	66%	
Cycling	2%	
Pedestrian	20%	

14.4.9 With the car park accommodating an estimated 1,400 people, this leaves 10,600 of the large exit flow immediately after an event at the extended Point Depot building. Table 14.2 illustrates how it is expected that these people will exit the site.

¹ http://www.rps.ie/?id=20&newsitem=36&sc=1

² http://www.scotland.gov.uk/Resource/Doc/37428/0009575.pdf

Table 14.2 – Modal Split of Exit Flow

Mode of Transport	% Users
Car	1,440
Public Transport Bus Rail Taxi	7,920 1,300 6,260 360
Cycling	240
Pedestrian	2,400

14.4.10 Table 4.2 assumes that:

- The extended LUAS is in place serving the Point and tram frequencies are increased to accommodate 5,000³ people per hour to the city centre,
- The Interconnector is in place with Spencer Dock station being in full operation;
- The upgraded (such as pedestrian bridges to the southside quays), and more open pedestrian friendly and active nature of the area encourages more pedestrian activity in the area and towards the city centre;
- The additional uses on the site such as the availability of restaurants and recreational uses such as public houses encourages people to exit the site over a longer time period;
- Specific (Private, perhaps subsidised) shuttle bus services to the city centre are laid on, and allowed for in the final design of the development, to serve the Point Depot for the exit flow time period of 1.5 hours;
- Taxi services are also accommodated in the new development with taxi ranks located at strategic points around the development;
- Secure cycle access and parking facilities are provided; and,
- The Point Depot public car park is linked into the city centre car park VMS system to notify people when it has reached capacity, which would encourage them to avail of city centre car parks and travel onto the Point by Luas/Private bus.
- 14.4.11 In order to satisfy the expected modal split (Refer to Table 14.2), it is considered critical that the planning and design of the development is undertaken in conjunction with significant improvements and additions to public transport facilities.
- 14.4.12 It is estimated that with the new extended building there will be 4 exit points available. Each of these exits, it is assumed will be double door arrangements of 2m in width. The UK 'Green Guide⁴ gives an approximate maximum rate of passage (egress) guide, for safe exit, of 109 people per meter width per minute. With an estimated four exits available, of 2 m wide each, this gives a maximum exit flow of 872 people per minute. Considering the extended capacity of 12,000 people, this equates to a total egress time period of 14 minutes. Table 14.3 illustrates the total time period required to exit the site assuming no diversions to the other attractive uses on site.
- 3 Measures such as discounted Luas tickets could be offered as part of the ticket price for the Point Depot function/show
- 4 The Green Guide (fourth Edition). Guide to Safety at Sports Grounds. HMSO London. 1997 (ISBN 011000952)

Table 14.3 – Estimated Average Time required to fully exit site

Mode of Transport	Minutes
Prepare to leave	5
Exit Point Depot building	14
Travel to exit point, (Luas, Car Park, Bus, etc).	5
Acceptable wait time for Public Transport ⁵	6
Total Time	30

- 14.4.13 It is estimated that within the first 30 minutes of a function ending, 8,000 people will have exited the site⁶, with 4,000 remaining. With the remaining public transport capacity, (Luas, Bus and Taxi), it is estimated to take a further 30 minutes to clear all people from the site. This is considered acceptable given the additional uses on the site such as the availability of restaurants and recreational uses such as public houses, encourages people to exit the site over a longer time period.
- 14.4.14 In order to further encourage the use of alternative modes of travel to the private car, a docklands area-wide 'Mobility Management Plan' (MMP) will be promoted by the DDDA to existing and future businesses/tenants in the area. A key feature of the MMP should be to facilitate and encourage the use of the 'Central Public Transport Spine' along Mayor Street, which was highlighted in the 2002 Docklands North Lotts Planning Scheme.
- 14.4.15 Localised traffic impacts of specific development proposals, which will be subject to separate planning applications, can be assessed individually. However, an 'area wide' or 'collaborative' mobility management plan has the potential to significantly reduce private car use in a defined area and promote the use of sustainable modes. (For example, a docklands area wide cycle network would be more successful in encouraging cycle use than partial stretches of cycle lanes or ad hoc/non-integrated facilities implemented as part of each individual development).

⁵ http://www.atsltd.co.uk/ultra_pdfs/ultra_text3.pdf

Based on assumed public transport capacity and all peds, cyclists and car drivers having left in the first 30 minutes

14.5.0 CAR PARKING PROVISION

- 14.5.1 Parking standards are progressively being tightened across the city to encourage greater use of public transport and alternative modes of travel to the private car. It is expected that with the introduction over the coming years of significant public transport facilities and service to the North Lotts area, car parking standard will be further tightened. It should be noted that there is significant existing surface car parking provided on the site which serves the Point Depot. This surface car parking area/capacity will no longer be available with the redevelopment of the site.
- 14.5.2 Parking provision for the residential and office elements of the development will be in accordance with the requirement of the approved 2002 North Lotts Planning Scheme. In addition, viable mobility management plans will be required for all commercial office developments on the site of 10,000 sqm and over and may also be requested, at the discretion of DDDA, for smaller commercial developments on the site.
- 14.5.3 On street car parking will be refused in line with Dublin City's objective for the area, to promote continuous efficient traffic flow and avoid any potential queuing, particularly at peak hours.
- 14.5.4 The proposed provision of a 700 space public car park, (for public use only), which would also cater for any operational parking requirements, to serve the entire site with a mix of uses such as retail, restaurants and pubs, leisure, hotel and also theatre/auditorium, is in itself considered a 'cap' on the amount of traffic which will access the development.
- 14.5.5 For example, the draft amended planning scheme for the North Lotts site sets out as one of the potential developments within the site, a net retail floorspace of 25,000m2 for a district centre scale retail development located on the site.
- 14.5.6 Using the established TRICS⁷ database for assessing traffic generated by developments, classifying the uses as mixed use and assuming a gross floor area of 30,000 m2, TRICS estimates that the maximum required number of parking spaces will be 903⁸. (For the Saturday peak).
- 14.5.7 The TRICS data, (for the retail element only), indicates that on a Saturday, the proposed 700 space car park will be full by 12pm and will not have capacity again until 5pm. It should be highlighted that the TRICS estimation was based on the retail element of the site development only assuming a gross floor area of 30,000m2.
- 14.5.8 This restriction on available parking will encourage the use of other sustainable modes such as the Luas, bus, cycling and walking and may also encourage the practice of parking in the city centre car parks and using public transport to access the site.
- 14.5.9 Secure cycle parking shall be provided at strategic locations around the site and the parking standards for such will meet those standards set out in the approved North Lotts Planning Scheme.

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⁸ It should be noted that when the actual split of the 30,000 retail GFA across different uses, it is expected that the trip rates and therefore the parking requirement will be higher.

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- The 'Trip Rate Information Computer System' (TRICS) database was used to ascertain vehicular generation associated with the proposed retail element of the development. TRICS is established in Irleand and contains information on arrival and departure rates for a range of differing types and sizes of development.
- 14.5.10 As the area develops and in particular with the opening of the Dublin Port Tunnel and the Macken Street bridge it is expected that Dublin City Council will monitor traffic flows in the area and make continuous traffic management modifications to aid traffic flows and address problems arising within the area. It is expected that any traffic management measures proposed as part of a scheme for the site will be consistent with and indeed compliment, the strategy being pursued by Dublin City Council.
- 14.5.11 Properly designed, tested and controlled servicing access and arrangements will be required throughout the site in order to ensure the development operates in an efficient and safe manner. In particular HGVs access routes should be segregated from pedestrian and cycle areas.

15.0.0 EFFECT ON THE ENVIRONMENT: MATERIAL ASSETS – RETAIL IMPACT

15.1.0 INTRODUCTION

- 15.1.1 This report forms part of an Environmental Impact Statement on the proposed amendment to the North Lotts Planning Scheme 2002 and assesses the impact of the retail element of the proposed amendment.
- 15.1.2 The report focuses on retail and related policy issues, including the nature of existing convenience and comparison retail provision within the catchment of North Lotts and the vicinity, the relationship of the amendment site to the city centre and the contribution that a new district shopping centre in this location would make to retailing in the North Lotts catchment and the Dublin Docklands as a whole.
- 15.1.3 In doing so, a quantitative assessment has been carried out on the future need for convenience floorspace in the drive-time catchment area and specifically in the Dublin Docklands area. Dublin City Development Plan and the Greater Dublin Area Retail Planning Strategy for the Greater Dublin Area (RPS) stipulate a needs based assessment for proposed convenience floorspace within Dublin City. However, assessment of the impact of new comparison floorspace is not subject, in accordance with the City Plan and the RPS, to the same needs justification. The convenience need has been based, in part, upon population projections for the area contained in the Dublin Docklands Master Plan 2003. Quantification of the future need for comparison floorspace has been based upon the findings in the RPS.
- 15.1.4 An appraisal of the proposed development and the existing and future retail floorspace within the catchment area was undertaken to demonstrate the retail impact.
- 15.1.5 The proposed development is consistent with the objective of the approved North Lotts Scheme 2002 to provide for the development of a District Shopping Centre at the Point Village. It is stated in the North Lotts Scheme 2002 that "retail use should be provided to compliment the existing entertainment, events and tourism function in the form of a 'district centre' (Section 4.4, p.29).

15.2.0 PLANNING CONTEXT

Retail Planning Guidelines 2000

- 15.2.1 The Retail Planning Guidelines set out three key policy objectives, which are to provide the framework for accommodating growth in an efficient, equitable and sustainable manner. These include the need to:
 - Facilitate a competitive and healthy environment for the retail industry in the future;
 - Promote forms of development which are easily accessible, particularly by public transport in a location which encourages multi-purpose trips; and,
 - Support the role of town and district centres as the preferred location for new retail development.
- 15.2.2 Paragraphs 36 54 deal with the function of development plan retail policies. Paragraph 36 sets out in some detail those matters to be included in any broad assessment of the requirement for additional retail floorspace. Such assessments should take account of;

"both emerging demands in the retail market and a general estimate of future requirements based on projected changes in the local population and consumer

spending.....These assessments....are intended to provide broad guidance as to the additional quantum of convenience and comparison floorspace provision. They should not be treated in an overly prescriptive manner and should not seek to inhibit competition. (Paragraph 40).

15.2.3 Paragraphs 48-52 address the "Large Convenience Store Floorspace Cap" imposed on new foodstore development. Within the Greater Dublin area, the floorspace cap is set at 3,500m² (paragraph 50). Paragraph 51 clarifies that the cap is to apply to all new retail development and relates to the total net retail sales space of superstores. The glossary in Annex 1 of the Guidelines defines net retail sales area as;

"the area of a shop which is devoted to the sale of retail goods (including the area devoted to checkouts)."

- 15.2.4 Where an application for retail development is made which the local authority considers to be large scale in relation to the existing town centre, the onus will be on the applicant to demonstrate that it will not have an adverse impact on the vitality and viability of the appropriate town centre. Under Section 25 of the Dublin Docklands Development Act 1997 the retail element of this proposed Amendment can be assessed for its impact on whether it will:
 - 1. "Support the long term strategy for town centres as established in the development plan and not materially diminish the prospect of attracting private sector investment into one or more town centres;
 - Cause an adverse impact on one or more town centres, either singularly or cumulatively with recent developments or other outstanding planning permissions, sufficient to undermine the quality of the centre or its role in the economic and social life of the community;
 - 3. Diminish the range of activities and services that a town centre can support;
 - 4. Cause an increase in the number of vacant properties in the primary retail area that is likely to persist in the long term;
 - 5. Ensure a high standard of access by both public transport, foot and private car so that the proposal is easily accessible by all sections of society;
 - 6. Link effectively with an existing town centre so that there is likely to be commercial synergy"

District Shopping Centres

15.2.5 The proposed retail element of the Amendment is to function as a district centre. The retail provided in close proximity to the Point Depot will function as a district centre consistent with its zoning in not only the Dublin City Development Plan 2005 – 2011 but will fulfill the requirement in the approved 2002 Scheme to provide a district shopping centre. The Retail Planning Guidelines states in relation to District Centres (paras. 71 and 72):

"purpose built district shopping centres are normally provided within the built up area of major conurbations or in the suburbs of large towns. They are usually anchored by a large foodstore and contain a range of unit shops and non-retail service outlets, (such as banks, post office or hairdressers). They perform an important retail function for the local community living within a 15 – 20 minute drive time of the site. There is no clear size threshold for a district centre although, depending on the density of population in the catchment area, they are likely to comprise about 10,000

Cunnane Stratton Reynolds for Dublin Docklands Development Authority July 2005 Page 228 sq. metres in or adjacent to the main towns and up to 20,000 sq. metres within some parts of Dublin. Development Plans will identify the need for new district centres or extensions of existing centres. Normally, the provision of additional centres will be based on major growth in population or a clear proven level of existing under provision..."

The catchment used later in this chapter to assess retail impact is consistent with this advice. The amount of retail proposed as part of the Amendment is consistent with the broad range of floorspace above identified as being suitable in a city location subject to substantial population growth such as in the Docklands.

Dublin City Council Development Plan 2005-2011

The relevant policies and objectives are set out as follows:

- 15.2.6 Chapter 8.0, of the adopted City Plan, states that Dublin City Council is committed "to maintaining and consolidating the role of the city centre as the main retail centre for comparison goods in the State".
- 15.2.7 It is the policy of Dublin City Council "to ensure that the required quantum of retail floorspace over the plan period can be accommodated in a manner that develops the retailing base of the city, and makes the city a more attractive location for shopping and recreation.
- 15.2.8 Policy S3 of the adopted City Plan sets out to maintain the dominant position of the Central Shopping Core as the premier shopping area in the State.
- 15.2.9 Policy S18 states that new shopping facilities should be located next to public transport where possible.
- 15.2.10 In Chapter 8.2.1, of the adopted City Plan, it is stated that the provisions of the Retail Planning Strategy for the Greater Dublin Area (RPS) 2001 are incorporated into the Dublin City Development Plan. The provisions of the RPS are outlined below:

Retail Planning Strategy for the Greater Dublin Area

- 15.2.11 In accordance with the Retail Planning Guidelines 2000, the Retail Planning Strategy for the Greater Dublin Area (RPS) was published in 2001 in order to quantify future need in the Area and inform the criteria for the assessment of retail planning applications. The key points arising out of the RPS are as follows:
 - The RPS proposes a five-tier hierarchy of retail centres based on the National Retail Planning Guidelines. Dublin City Council has accepted this hierarchy as the basis for future planning for retail floorspace subject to some minor amendments to reflect the very large number and range of district centres within its area.
 - The RPS recognises the dominant role of the Central Shopping Area and proposes that this dominant position would be protected in terms of comparison goods, and especially higher order comparison goods.
 - There is a projected demand for a relatively large additional quantum of comparison floor space both in the city centre and more particularly in the rest of Dublin City Council area.
 - Under the terms of the RPS, demand for additional convenience goods floor space to 2011 is projected to be relatively small across the Greater Dublin area. However, given a continuation in population growth within the city centre and changing retail formats and locations, it is likely that additional convenience goods floorspace above that projected in the RPS will be required. It is policy to facilitate required additional convenience floor space within existing centres and

- where this is not practical or possible in accordance with the sequential approach to retail location.
- It is considered that there is sufficient land zoned to cater for the projected retail floorspace demand. There would appear to be potential demand for additional retail floor space to be located in the south inner city in the immediate future. Dublin City Council will consider proposals for the development of additional retail floor space contiguous or adjacent to the existing south inner city retail core.

Docklands Master Plan 2003

15.2.12 The overall objective of the Master Plan is as follows:

"The overall objective of the Master Plan must be to secure the sustainable social and economic regeneration of the Area, with improvements to the physical environment being a vital ingredient."

15.2.13 Section 4.9.1 of the Master Plan states that "the retailing requirements of the Docklands cannot be viewed in isolation and retail policies must have due regard to the future provision elsewhere within Dublin City and Region. In the Greater Dublin Area Retail Planning Strategy 2001, it is estimated that the city centre, including the Docklands, could accommodate between 29,000 – 51,400m² of comparison retailing floor area. A district shopping centre has been designated, in the Master Plan, at the Point Village and this has been confirmed by the Dublin Retail Strategy. It is proposed that this district centre would include, along with the comparison element, a superstore (more than 2,500m2 of gross floor area) or a supermarket (no more than 2,500m2 gross floor area) and a mix of uses in order to attract multiple purpose trips. It is also envisaged that this district centre would be accessible by both private car and public transport. This Amendment seeks to increase these floor areas consistent with national and regional policy.

North Lotts Planning Scheme 2002

- 15.2.14 A district shopping centre is provided for in Section 4.4 of the Planning Scheme. It is stated that retail use at Point Square should serve the existing and future population of the area and that the convenience element should not exceed 3,000m2. The total amount of floorspace, the number of units and the phasing should respond to market conditions. This proposed Amendment seeks to increase this floor area.
- 15.2.15 It is envisaged that the Point Village would be a vibrant new urban quarter playing host to a mix of uses such as residential, commercial, retail, entertainment and tourism, etc. A residential density of 325 units per hectare at the upper level is provided for and it is stated that the public open space at the Point Square should incorporate public seating and landscaped areas and should be designed to accommodate the proposed Luas stop.

15.3.0 RECEIVING ENVIRONMENT

The Amendment area benefits from its strategic location close to the city centre, the IFSC, the residential area of East Wall, its potential as a key element of a redeveloped North Lotts area, and finally by its potential to mix retail with entertainment uses, restaurant and leisure.

The Docklands area north of the river Liffey is poorly served at present in terms of convenience retail facilities. Apart from the city centre (1km away and not convenient for the purposes of a weekly shop), residents of the area have to travel to the Phibsborough Shopping Centre, which is 2.5km away, in order to carry out a weekly grocery shop. The existing convenience offer in the area is primarily small to medium sized convenience outlets. The development of the proposed District Shopping Centre would improve the

quality of life and level of amenity within the north Docklands and East Wall areas and would give rise to more sustainable patterns of shopping travel.

Given the densities anticipated, the total population estimated for the residential development accruing from the scheme approved in 2002 and proposed amendment No.1, and the location of existing district centres serving the North Lotts area the proposed amendment to the retailing component is justified. The area within which the proposed retail will be located will be subject in terms of the whole docklands area of an additional 25,000 additional residential population. On top of this there will be a substantial level of employment provided within this area all of which will generate a substantial demand in itself for additional retailing facilities. This will be in addition to the retail requirements of the East Wall community who do not currently have much by way of retailing to serve them.

15.4.0 EXISTING RETAIL PROVISION

- 15.3.1 Owing to the established function and character of the North Lotts Scheme Amendment area there is currently no retail provision there. For the purposes of this Retail Impact Assessment, the retail offer of the wider Docklands area north of the river Liffey is quantified in some detail as this is where some impact will be felt. Within the rest of the catchment area (see Appendix 15.1) attention has been paid to the city centre and the existing District Shopping Centres in accordance with the requirements of the Retail Planning Guidelines. It is likely that if there is to be any effect on any existing centres then this is most likely to occur in existing district centres.
- 15.3.2 The table below shows the hierarchy of shopping facilities relevant to the proposed district shopping centre. It shows in particular the other district centres within the catchment area.

Shopping Centre	Convenience Floorspace	Comparison Floorspace
Dublin City Centre*	43,112sq.m.	163,815sq.m.
Phibsborough District Shopping Centre	2,000sq.m.	2,000sq.m.
Swan District Shopping Centre	3,500sq.m.	3,000sq.m
Merrion District Shopping Centre	2,000sq.m.	2,000sq.m.
Other**	14,900sq.m.	15,000sq.m

Table 15.3.1 The Relevant Retail Hierarchy

Source: Working Paper 4 of the GDA Retail Planning Strategy

There is approximately 4,771m² of convenience floorspace and 19,083m² of comparison floorspace proposed within the catchment area (either approved or awaiting approval). See Appendix 15.2 for a list of proposed retail developments within the catchment area.

The existing district centres are considered robust and thriving and are all considered a reasonable distance away from the district centre proposed at North Lotts. A review of likely future large retail schemes indicates that there are none likely to be prejudiced in any way by the proposed amended retail element of the approved scheme. We are aware that a large docklands scheme is being prepared for the Grand Canal area and that this will provide an additional population of 7,500 to the locality which would further Cunnane Stratton Reynolds for Dublin Docklands Development Authority July 2005

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^{*} The Central Shopping Core/Dublin City Centre is considered as one shopping centre for the purposes of this Assessment.

^{**} Other includes the smaller retail facilities within the catchment area and represents an approximation based upon the GDA Retail Planning Strategy figures.

justify the retail being proposed as part of the proposed Amendment. We note that there will be approximately 14,000m² of retail provided in that location. This would be consistent with the provision of a local shopping centre functioning as an ancillary centre to the proposed district centre at North Lotts.

15.3.3 The level of retail provision in the Docklands Area north of the river Liffey is primarily confined to small convenience outlets (net sales area not more than 500m2) and corner shops. In the main, these shops provide nothing more than a 'top-up' facility for the local community in the East Wall area and in the vicinity of the IFSC. The existing local retail provision in the immediate area is illustrated in Table 15.3.2.

Shop Location Shop Type Floorspace Spar George's Dock Small Convenience Outlet < 100m². Mayor Street Convenience Outlet < 500m². Spar Marks & Spencer Mayor Street Supermarket 500m². 500m². Mace Mayor Street Supermarket The Happy Apple" Amiens Street Corner Shop < 100m². $< 100 \text{m}^2$. 'K & A Stores" Amiens Street Corner Shop Corner Shop East Wall Corner Shop < 100m².

Table 15.3.2 Local Retail Facilities in close proximity to North Lotts

15.3.4 The catchment area has been established based on a 20 minute drivetime from the site of the proposed district shopping centre. It is considered that this catchment is reasonable and consistent with the policy advice in the Retail Planning Guidelines for establishing retail catchments. It also takes account of the proximity of Dublin City Centre (Central Shopping Core) and the existence of several existing and established district shopping centres and we believe it is therefore robust.

Corner Shop

< 100m².

Projected Population for the Dublin Docklands Area

East Wall

- 15.3.5 A critical consideration in describing the receiving environment is the increase in population proposed as part of the development of the Dublin Docklands. The Dublin Docklands Area Master Plan 1997 set a population target of 25,000 for the Area by 2012. This target has been reiterated in the 2003 Master Plan and represents a substantial concentration of population growth within the catchment area. Such an increase in population will demand a commensurate increase in the provision of retail floorspace within the Dublin Docklands.
- **15.3.6** The population of the catchment area, which includes part of the city centre, is 203,028 in the base year (2005). The projected population for the design year of the retail proposed (2009) is 242,049 people.

15.4.0 PROPOSED DEVELOPMENT

"XL Stop 'n Shop"

- 15.4.1 It is proposed to develop a district shopping centre comprising 3,500m² of net convenience floorspace and approximately 21,500m² net comparison floorspace. The proposed district shopping centre would be located on the north eastern corner of the proposed Point Village (see Appendix 15.3).
- 15.4.2 The building in which it is proposed to accommodate the district shopping centre will rise to a height of 5 storeys with the possibility of an extra storey set back from the building

line. The shopping centre is proposed to open out onto the new Point Square. It is anticipated that 700 public car parking spaces will be provided to serve the shopping centre.

15.5.0 RETAIL NEED AND IMPACT

- 15.5.1 This section introduces the methodology for calculating the retail impact of the proposed district shopping centre. A step by step market share methodology has been used to assist with the assessment of the retail impact. The methodology will be of most relevance for the assessment of the convenience retail impact on the basis that the comparison element can be regarded as meeting demand forecasted in the GDA Retail. It is stated in the Dublin City Development Plan and the GDA Retail Planning Strategy that the development of large-scale **convenience** floorspace will need to be the subject of a needs-based assessment. The methodology to meet this requirement is set out as follows:
 - 1. Establish the primary trading or catchment area of the proposed replacement store (Study Area).
 - 2. Estimate the population within the defined study area at the current or base year and at the design year i.e. the time at which it is anticipated that the store would be trading.
 - 3. Establish current per capita spending rates for convenience and comparison goods as defined in the Retail Planning Guidelines. Project forward expenditure levels to the design year. Calculate the volume of convenience and comparison expenditure currently available within the study area at the base and design year.
 - 4. Estimate the floorspace of convenience of existing and committed convenience stores and centres within the study area at the design year (2009).
 - 5. Estimate the convenience floorspace requirement in the design year by subtracting from projected total convenience floorspace requirements the existing and committed facilities in the study area utilising projected turnover per square metre for the design year (2009).
 - 6. Estimate the retail impact of the proposed convenience retail floorspace within the Amendment area upon the catchment area.

In terms of base assumptions/conventions, the assessment has been prepared on the following basis $\dot{\hat{}}$;

Price Base Year - 1999 Base Year - 2005 Design Year - 2009

Estimates of spending, floorspace and turnover are expressed for convenience. It is assumed that the city centre is the preferred location for any additional comparison retail floorspace. The definitions adopted are based on those given in Annex 1 of the Retail Planning Guidelines.

^{*} All figures are based upon those contained in the Greater Dublin Area Retail Planning Strategy.

The design year of 2009 allows sufficient time for achieving Ministerial approval, construction of the retail element and allowing the proposal to establish a settled trading pattern.

Calculation of Base Information

15.5.2 Study Area - Step 1

The study area for the purposes of this project was defined by carrying out a desk top drive time analysis based on a 20 minute drive time isochrone. The catchment area represents a reasonably accurate and robust measure of the proposed shopping centre's likely retail draw.

15.5.3 Population – Step 2

Total resident population within the catchment area is based on research carried out by Gamma Consultants. Appendix 15.4 sets out the population figures for the area. In the base year of 2005, the total population of the catchment area is 203,028.

Population growth within the catchment area has been broadly in line with national trends. The area experienced a population growth rate of approximately 1.8% per annum between 1996 and 2002. This rate has been assumed for the purposes of projecting a population for the base year. It is considered reasonable to use this growth rate in order to project forward to the design year, 2009, particularly given the proposed residential densities within the North Lotts Planning Scheme (as high as 325 units per hectare in parts). This gives a population figure of 242,049 in the 2009.

Table 15.3.3

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	Population 2005	Population 2009
Catchment Area	203,028	242,049

15.5.4 Expenditure – Step 3

Per Capita Convenience and Comparison Retail Expenditure

The following table shows per capita expenditure for the base year and design year for convenience and comparison.

Table 15.3.4: Estimated Expenditure Per Capita on Comparison & Convenience Goods

Year	Comparison	Convenience
2001	€2,778	€2,738
2005	€3,667	€2,940
2009	€4.734	€3,113

Convenience Expenditure

In calculating per capita expenditure on convenience and comparison goods regard has been had to the figures in the Retail Planning Strategy for the Greater Dublin Area 2001.

Based on the convenience per capita expenditure of €2,738 contained in the RPS for 2001 and assuming the growth rate of 1.8% used in that Strategy, a convenience per capita expenditure of €2,940 is attained for the base year 2005 and a convenience per

capita expenditure of €3,113 is attained for the design year 2009 using the more conservative rate of growth of 1.3%, also used in the RPS.

By multiplying the projected per capita expenditure on convenience goods for the Greater Dublin Area by the projected populations for the catchment area in the base year and the design year, figures for the total convenience expenditure of the future design year residential population can be arrived at as follows:

Base Year 2005: €2,940 multiplied by 203,028 = €596,902,320 expenditure
Design Year 2009 €3,113 multiplied by 242,049 = €753,498,537 expenditure

15.5.5 Turnover of Existing and Committed Retail Facilities at Base and Design Years – Step 4

Existing Facilities

The turnover of retail facilities has been determined by reference to the RPS.

Based upon figures in the Greater Dublin Area Retail Planning Strategy (RPS), the existing convenience floorspace within the catchment area is 43,112m². From our knowledge of retail provision within the city and of the retail market in general, we believe that this figure has not been subject to substantial change.

Proposed Facilities

There are no other district centres proposed from our review of planning policy and from our knowledge of the area within the catchment of the amendment area. Significant increases in shopping floorspace will occur within the city centre on an ongoing basis up to the design year of 2009. However, in impact terms the district centre proposed being located within the city centre would not be expected to compete with either the central shopping core of the city centre or with the smaller district centres all of which are located outside the city centre.

15.5.6 Estimate of convenience floorspace requirement – Step 5

This section sets out the convenience turnover of existing retail facilities in the study area with the amount of available convenience spending to determine the spare capacity of convenience goods expenditure in floorspace terms.

When we divide the projected available convenience expenditure within the catchment area for the design year (€753,498,537) by the projected turnover per square metre of €13,268 a convenience floorspace requirement of 56,790m² for the design year (2009) is arrived at.

The projected spare capacity for the catchment area is therefore 5,407m² based upon the subtraction of the projected floorspace requirement (56,790m²) from the existing and committed floorspace (51,383m²). In addition to the list of committed schemes in Appendix 15.2, the Grand Canal Scheme will provide a quantum of convenience floorspace consistent with its function as a local centre and this figure has been incorporated into our assessment. The balance of convenience retail floorspace will be provided in the District Shopping Centre at the Point Village.

15.5.7 Expected Potential Impact

Convenience

From the assessment carried out above, it is clear that there will be sufficient expenditure in the design year, generated from population increase within the catchment area and

within the Docklands in particular, to justify the level of convenience floorspace proposed at projected 2009 expenditure and turnover levels.

Comparison

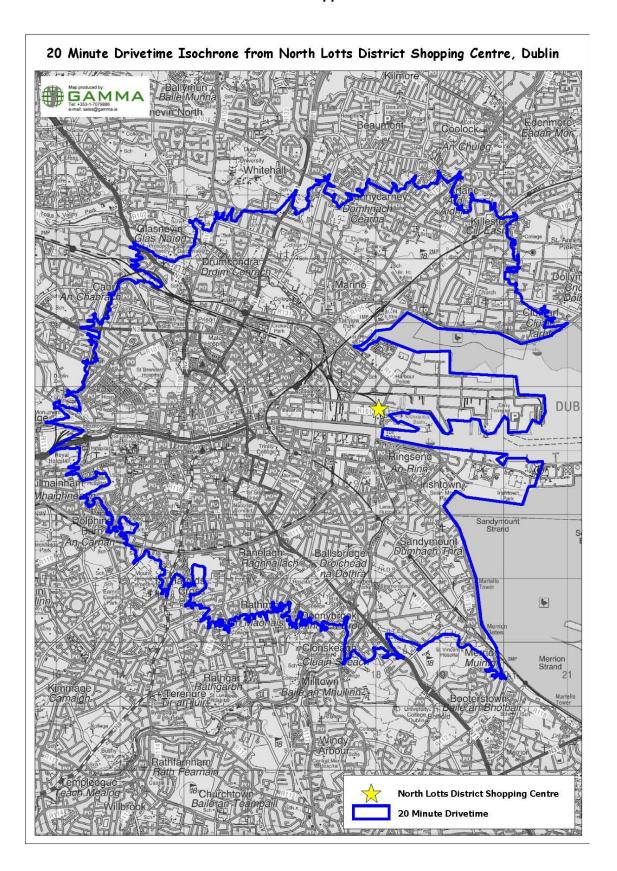
The RPS states that comparison floorspace proposed in the city centre and not necessarily in the defined Central Shopping Core will not be subject to the same needs assessment as convenience. The effect of the proximity of the proposed District Shopping Centre to the Central Shopping Core will be to reinforce the city centre at the apex of the retail hierarchy of the Greater Dublin Area and is therefore supported in policy terms. This is particularly the case given the recent and continued likely significant extension of comparison floorspace in out-of-centre locations such as Dundrum. This particular location would be ideal for niche retailing to compliment the existing city centre retail comparison offer.

The comparison element would not compete with the city centre in turnover terms. The comparison element of the proposed Amendment would generate turnover of €104,148,000 in 2009 based upon turnover/m² figures from the RPS. This could easily be accommodated within the spare expenditure capacity projected for the catchment area including the city centre in the RPS for 2006 (some time before the design year of 2009) which is €776m. Even though this expenditure would likely increase to 2009, which is the design year, a further 22,000sqm of comparison floorspace could be accommodated within the catchment area of North Lotts. This gives a relatively generous scope for new comparison retailing elsewhere in the city centre and in the Central Shopping Core in particular. It is worth bearing in mind also that there are no other new district centres providing proposed / designated within the catchment which would potentially take up projected available comparison expenditure.

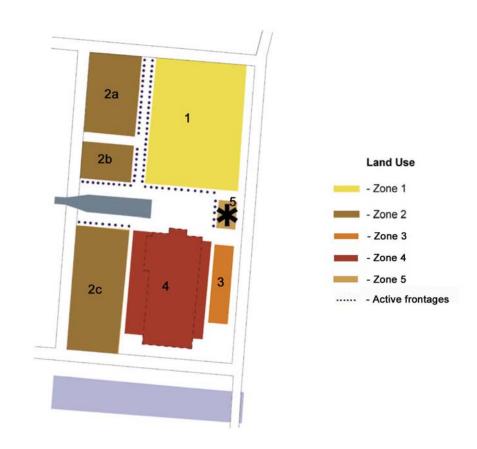
15.6.0 CONCLUSIONS

- 15.6.1 The existing area of North Lotts and surrounding catchment is relatively poorly served by both convenience and comparison shopping.
- 15.6.2 The docklands area is projected to have an additional population of approximately 25,000 people over the next 15 years. Significant retail is needed to meet expected demand likely to be created from this additional population. As well as meeting the convenience needs of its catchment, the provision of substantial comparison will take advantage of this unique location and provide a range of retail providing higher order and niche outlets to compliment those existing facilities within the city centre and the central shopping core in particular.
- 15.6.3 The Point village and the area the subject of the proposed amendment is identified in both the Dublin City Development Plan and in the 2002 approved Planning Scheme as a district centre and the provision of retail proposed in the amendment is consistent with this designation.
- 15.6.4 A considerable need has been identified for additional **convenience** floorspace, notwithstanding the site's designation as a proposed district shopping centre, indicating that there would not be any harmful effect on any existing district centre located within the defined catchment area of the amendment site. In calculating the floorspace requirement we have adopted expenditure and turn-over per square metre projections taken from the Retail Planning Strategy for the Greater Dublin Area. These projections would be considered fairly conservative and we believe therefore that the needs assessment is robust.

15.6.5 In regard to comparison whilst there is not the same requirement in policy terms to justify comparison need for proposals located within the city centre we believe that there is sufficient comparison expenditure available to accommodate significantly more than the amount of comparison proposed. The provision of comparison will compliment city centre provision in the face of competition from substantial comparison in out-of-city centre locations such as Dundrum shopping centre. The Amendment area is a relatively short distance from the Central Shopping Core of the city centre and significant public transport is proposed.



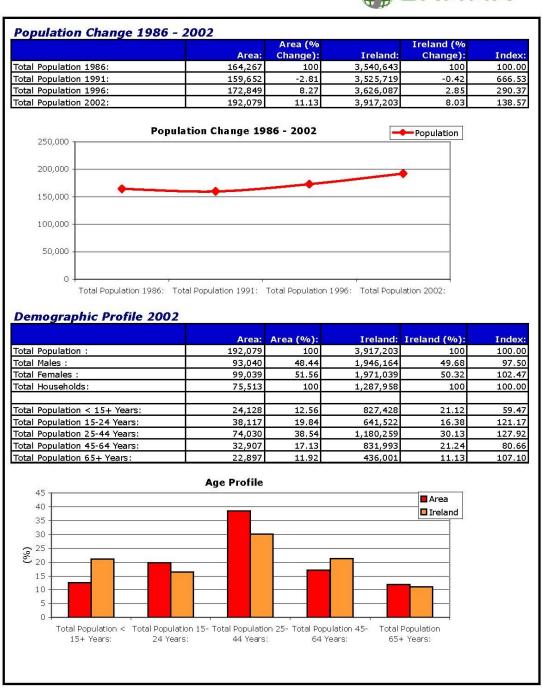
			Appe
Operator	Town	Gross Area (sqm)	Net Area (sqm)
Londis	49 Botanic Avenue, Drumcondra, Dublin 9		10.73 sq.m
Aldi	Rathmines Plaza Hotel, Lower Rathmines Road,	1349	692
Aldi	Junction with Church Road and East Wall Road, Dublin 3	1324.6	881.5
Unknown	St. John's Road, West/Miltary Road, Kilmainham, Dublin 8 (known as the Eircom St. John's Road Depot).	3038 <i>s</i> qm	2,430
Unknown	Merchants Yard, East Wall Road, Dublin	1,553sqm	1,242
Unknown	4/4A East Road, Dublin	591 sq.m	472
Unknown	Clancy BarracKs, South Circular Road, Dublin 8	2,003 <i>sq</i> m	1,602
Unknown	Phibsboro Centre, Phibsboro road, Phibsboro	7763sqm	6,210
Unknown	South Circular Rd adjacent to Rehoboth Place, The Coombe Maternity Hospital, St Teresa's Garden's, Dunmore Av and St Catherines Av, Dublin 8	8205sqm	6,564
Unknown	Dermot O' Hurley Ave, Irishtown Rd, and No. 1 Fitzwilliam Street, Dublin 4	1,090sqm	872
Unknown	South Bank Rd.,Dublin	1726	1,380
Unknown	Cork Street to NW, Cameron Street to the NE, 46-56 Fingal Street to the SE and vacant commercial premises to the SW., Dublin 6	522sq.m	417
Unknown	Golden Lane & Chancery Lane, Dublin 8	657sq.m	525
Unknown	11 Fitzwilliam Quay, Ringsend	237 <i>s</i> qm	189
Unknown	13 Orwell Road, Rathgar	473	378



Market View Area Totals

Location: 20 Minute Drivetime from North Lotts, Dublin Docklands





GAMMA Ltd., 21/06/2005

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16.0.0 EFFECT ON THE ENVIRONMENT: CULTURAL HERITAGE - ARCHAEOLOGY

16.1.0 INTRODUCTION

The following report comprises the results of an archaeological, historical and cartographic paper survey of the area of the proposed scheme. Figure 1 shows the location of the Amendment area.

16.2.0 NATURE AND EXTENT OF DEVELOPMENT

Residential

Residential development will be focused in the western portion of the area. All proposals for residential development will have to have regard to other noise sources, including the Port and the Point Depot.

Retail

The Point Village has been identified as a suitable location for the development of a district centre scale retail scheme with related cinemas, restaurants, etc to serve the Docklands. The north eastern area of the subject area, bounded by Sheriff Street and East Wall Road should be developed with a particular concentration of these uses. The Authority will seek to ensure that approximately 25,000 m² of net retail floorspace is to be developed in the Point Village in order to achieve critical retail mass in the centre. Provision has also been made for retail development in other areas of the site. The maximum floor area of any single convenience retail development should not exceed that specified in any relevant applicable Ministerial Directive.

Cultural/Social Infrastructure

The Point Depot is identified as an important cultural use with city-wide significance. The Authority will seek to support the development of the Point Depot to ensure its future viability as a venue and to provide a world class venue capable of attracting significant performances. The protected status of the Point Depot will need to be addressed in any future design proposals. A full noise assessment shall be submitted as part of any Section 25 application for the redevelopment of the Point Depot as amusic venue.

Public leisure and community uses are envisaged to be provided in the Point Village in association with other commercial uses. The Authority will seek the provision of a public leisure centre/swimming pool, crèche, medical centre and a library in the area. A place of public worship will also be encouraged

Public Car Park

The 700 space public car park will be located underground or alternatively any multistorey car park above ground will not front onto the Square, the quays or the north south street along the western boundary of the area.

Zonings

The zonings detailed below apply to the area (see Figure 2). Those uses falling in the 'permitted' category will be those which should be the principal uses for the relevant zone. Those falling within the 'open for consideration' category will only be permitted where they do not undermine the provision of uses promoted in the permitted category. Retail use will include bars, restaurants and other public counter uses associated with a district centre. Land Use zones are indicated in figure 2.

Open for Consideration

Residential, office

Zone 2 <u>Permitted</u>

Mixed use in accordance with Policy 4.12 (2) of the 2002 Planning Scheme, with a predominance of ground floor retailing.

Open for Consideration

Reduction in residential where provision of residences would result in disamenity for future residents.

public car park

Zone 3 Permitted

Hotel, leisure, cultural, offices, social infrastructure, active ground floor

Zone 4 Permitted

theatre, major public/civic use

16.3.0 BASELINE SURVEY

Introduction

For the purpose of setting the proposed development within its wider archaeological and cultural heritage landscape, and to assess the archaeological potential of the site, a comprehensive paper survey of all available archaeological, historical and cartographic sources was undertaken.

Recorded archaeological sites and monuments

The Record of Monuments and Places were consulted for the relevant parts of Dublin City. This is a list of archaeological sites known to the National Monuments Service. The relevant files for these sites contain details of documentary sources and aerial photographs, early maps, OS memoirs, OPW Archaeological Survey notes and other relevant publications. These were studied in the Sites and Monuments Records Office. There is one recorded archaeological monument within the subject area namely the quay at North Wall Quay/Custom House Quay (DU018:020(564) (see Appendix 16.1)

Recorded archaeological finds

The topographical files in the National Museum of Ireland were consulted to determine if any archaeological artefacts had been recorded from the area. This is the National archive of all known finds recorded by the National Museum. It relates primarily to artefacts but also includes references to monuments and has a unique archive of records of previous excavations. Other published catalogues of prehistoric material were also studied: Raftery (1983 - Iron Age antiquities), Eogan (1965; 1993; 1994 - bronze swords, Bronze Age hoards and goldwork), Harbison (1968; 1969a; 1969b - bronze axes, halberds and daggers) and the Irish Stone Axe Project Database (Archaeology Dept., U.C.D.). All streets within the study area were assessed. Only one archaeological find is recorded in the vicinity of the proposed planning scheme (see Appendix 16.2).

Cartographic sources

Reference to cartographic sources is important in tracing land use development within the area as well as providing important topographical information on sites and areas of archaeological potential. Primary cartographic sources consulted consisted of the Ordnance Survey maps, first and later editions (T.C.D. Map Library). Earlier cartographic sources included Thomas Philips' 'A survey of the city of Dublin', 1685, Charles Brooking's 'A map of the city and suburbs of Dublin', 1728 and John Rocque's 'Plan of the city of Dublin', 1756.

Previous Excavations

The excavation bulletin website (www.excavations.ie) was consulted to identify previous excavations that may have been carried out within the study area. This database contains summary accounts of excavations carried out in Ireland from 1971. The available *Excavations* publications were also consulted. No archaeological excavations summaries from the vicinity of the site have been published. Monitoring of predevelopment bulk excavation at North Wall Quay has been recently published in Archaeology Ireland. The monitoring revealed the remains of a primary shoreline associated with the River Liffey and the remains of at least two Mesolithic fishtraps.

Historical research

Historical sources consulted included *The Liffey in Dublin* (De Courcey 1996) and the *Dublin Docklands Architectural Survey* (University College Dublin School of Architecture, 1996), the *Royal Historical Society Bibliography* (<u>www.rhs.ac.uk/bibl</u>), the *Planning Architecuture Design Database Ireland* (<u>www.paddi.net</u>) and the *British and Irish Archaeological Bibliography* (www.biab.co.uk).

16.4.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Prior to land reclamation projects in the early 18th century the area in which the proposed development is located was tidal and formed part of the estuary of the River Liffey (see Figure 4). While permanent occupation during the prehistoric and medieval periods may have been problematic, the area may have been used on a temporary basis exploiting local resources including fish and wild fowl. Archaeological material associated with this form of exploitation includes fish traps and other fishing structures and dug out boats. Movement through the estuarine landscape would have been assisted by the dumping of brushwood or the construction of hurdle panels or timber trackways (O'Sullivan 2001, 131).

Recent archaeological monitoring at North Wall Quay has uncovered archaeological material associated with the use of the estuary during the prehistoric period (McQuade 2005, 6). The monitoring revealed a primary shoreline associated with the River Liffey which descended into silt deposits which had accumulated to a depth of approximately 3m. The remains of at least two fish-traps, constructed of hazel, were revealed between 1.2m and 12m from that shoreline (McQuade 2005, 6). Radiocarbon dating has returned dates between 6100 and 5720 cal. BC placing them in the Mesolithic period (McQuade 2005, 6).

In 1682 the City Assembly conducted a suvey on land at the north-eastern end of the River Liffey and divided the area into 152 lotts. These lotts were awarded to members of the Assembly and other selected officials. In 1686 the development was abandoned as the area, which was still subject to inundation at high tide, had not been fully protected from flooding (De Courcey 1996, 268). Efforts to reclaim the northern side of the estuary recommenced with containment works undertaken by the Ballast Office in 1710 (De Courcey 1996, 268-9). Woven baskets or 'kishes' filled with stones, gravel and shingle were laid along the line of the intended wall by small sailing vessels (University College Dublin School of Architecture 1996, 171). In 1716 it was recorded that 'we are carrying the Kishes up towards Mourney's Dock' and in 1717 Bolton's map of the North Lotts shows the bank built at the future Custom House site and forming part of what he named Dublin Quay. In 1717 a committee reported to the City Assembly with a number of proposals including the rerouting and canalisation of the River Tolka, the making of a new grid of streets and the construction of a grand guay (School of Architecture UCD 1996, 171). The newly made ground behind the kishes was surveyed and a number of new streets including Sheriff Street, Commons Street, Guild Street and Mayor Street were laid out (Clerkin 2001, 132). The land was divided into 132 allotments, each consisting of two lotts facing either North Wall Quay or one of the new streets. The lotts were subsequently sold by public subscription (De Courcey 1996, 269).

The construction of a stone river wall, to replace the earlier embankment, began soon after. Brooking's map of 1728 depicts the new wall running east to a point opposite the Donneybrook River at Ringsend before turning north (see Figure 5). Newly made ground to the north of this is 'Walled in but as yet overflow'd by ye tide'. Brooking's map is augmented by 'A Prospect of the City of Dublin from the North' which clearly shows the area behind the river wall inundated with water. The only structure depicted is located at the junction of the North Wall and East Wall and appears to be a small six-bay, two-storey house which may have been used as a watch house. The area had been fully reclaimed by the mid-18th century and Rocque's map of 1756 depicts the completed road and plot pattern (see Figure 6). A series of narrow plots is depicted running between North Wall and Mayor Street with larger plots to the north between Mayor Street and Sheriff Street. The quay at North Wall Quay is a recorded archaeological monument (DU018:020(564)).

In the 19th century residential, and commercial development was concentrated to the west of the subject area due to the completion of the Royal Canal and Royal Canal Docks. The industrialisation of the North Lotts itself is also evident with a large Glass Works, Vitriol Works and Vinegar Works depicted in the area. Along the east side of East Wall Quay there is a Light House and other buildings associated with the quayside slips. A 'Patent Slip' protected by a large shingle bank is depicted at the east end of Sheriff Street. Only minor development occurred within the subject area including the construction of the Bath House at the corner of Mayor Street and East Wall, a small structure on the north side of North Wall, and a walled garden on the south side of Mayor Street (see Figure 7). By 1864 a short residential terrace marked Florence Place had been built on the west side of East Wall

An annotated Ordnance Survey map dating from 1846-7 shows two proposed railway spur lines running through the area. That marked as the 'Liffey Branch Railway' ran south from the Dublin and Drogheda Railway main line towards a terminus to the east of the Royal Canal Docks. It was developed by the London and North Western Railway company as a new passenger terminal for its Irish customers (see Figure 8). A second proposed spur line running southeast from the main line to a terminus at the junction of North Wall and East Wall and was developed later by the Great Southern and Western Railway Company (see Figure 9). A large goods station was built there between 1875 and 1878 (later to become the Point Depot). The construction of the railway line and goods depot removed a short residential terrace marked Florence Place which is depicted on the west side of East Wall on an Ordnance Survey map dating to 1864-6. The development of canal, rail links and dock facilities provided impetus for further industrialisation in the area and two saw mills and large oil stores were constructed immediately to the west of the station (see Figure 8).

The Dublin Port and Docks Board replaced the Ballast Board in 1867 and the eastward extension of the North Wall was begun by them in 1871 (see Figure 8) (De Courcey 1996, 4). The construction of the North Wall Extension facilitated the later development of Alexandra Basin and the further infilling of ground to the east of the subject area (see Figure 9).

Archaeological and historical significance of the subject area

There is one recorded archaeological monument within the subject area namely the quay at North Wall Quay/Custom House Quay (DU018:020(564)). Prior to the canalisation of this section of the River Liffey in the early 18th century, this area would have been situated on the foreshore of the Liffey estuary. The possibility exists for the discovery of archaeological material associated with the use of the estuary during the prehistoric and medieval periods including fish traps and other fishing structures, dug out boats and brushwood, hurdle or timber trackways. Recent archaeological monitoring undertaken at a site at North Wall Quay has revealed a primary shoreline associated with the River Liffey and the remains of at least two fish-traps dating to the Mesolithic period. The possibility of uncovering quay walls and revetments of different periods, constructed of

either stone or wood also exists as does the uncovering of basements and other structural remains of 18th or 19th century date.

16.5.0 POTENTIAL IMPACT OF THE PROPOSED DEVELOPMENT

There is a possibility that the development could impact on a recorded archaeological monument (DU018:020(564)) and previously unrecorded material or finds could be encountered during ground disturbance phases associated with the subject scheme.

Should any archaeological features occur below ground within areas that will be disturbed by the subject scheme, then there is a high probability that they will impacted by construction works.

16.6.0 RECOMMENDED AVOIDANCE, REMEDIAL OR REDUCTIVE MEASURES

There is a possibility that the development could impact on a recorded archaeological monument (DU018:020(564)) and previously unrecorded material or finds could be encountered during ground disturbance phases associated with the subject scheme. Thus it is recommended that a programme of further archaeological mitigation be undertaken as follows:

Liaison

The developer will be required to give notice to and consult with the city archaeologist, National Monuments Section of the Department of the Environment, Heritage and Local Government and other relevant authorities regarding the nature of specific works associated with the scheme and the proposed archaeological mitigation planned.

Monitoring

Monitoring by a suitably qualified archaeologist(s) should be undertaken during the ground disturbance phases of the scheme.

Should any archaeological features or material being uncovered during the course monitoring or any phase of the construction works, works should cease immediately, and the National Monuments Section of the Department of Environment, Heritage and Local Government should be informed. Time must be allowed for a suitably qualified archaeologist(s) to inspect and assess any such material. If it is established that archaeologically significant material is present full archaeological excavation and recording will be required. Adequate financial and logistical provision should be made for any such archaeological excavation, related post excavation, testing and/or conservation work and for publication of the results. Please note that the recommendations given here are subject to the approval of the National Monuments Section of the Department of Environment, Heritage and Local Government.

North Lotts Planning Scheme Draft Amendment No 1 - EIS

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Figure 5: Extract from Charles Brooking's 'A map of the city and suburbs of Dublin', 1728.

Figure 6: Extract from John Rocque's 'Plan of the city of Dublin', 1756.
Figure 7: Extract from Ordnance Survey Dublin map sheet 18, 1837.
Figure 8: Extract from Ordnance Survey Dublin map sheet 18, 1875.
Figure 9: Extract from Ordnance Survey Dublin map sheet 18, 1907.

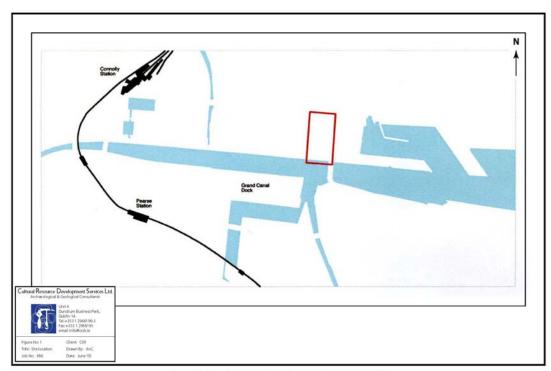


Figure 1: Site Location and Context (source Brady, Shipman, Martin).

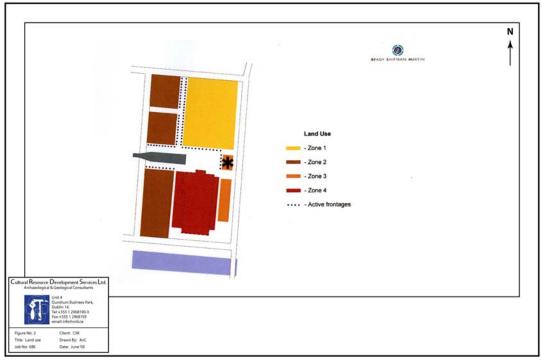


Figure 2: Proposed land use (source Brady Shipman Martin).

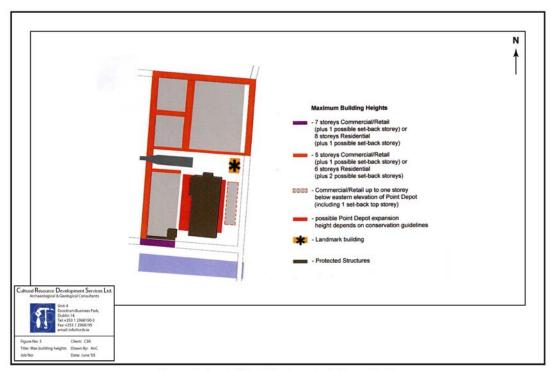


Figure 3: Maximum Building Heights (source Brady, Shipman, Martin).



Figure 4: Extract from Thomas Phillips' 'A survey of the City of Dublin', 1685 showing the area prior to reclamation (not to original scale).

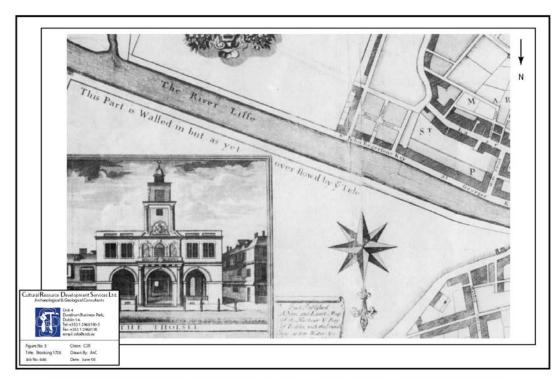


Figure 5: Extract from Charles Brooking's 'A map of the city and suburbs of Dublin', 1728, showing North Lotts area (not to original scale).

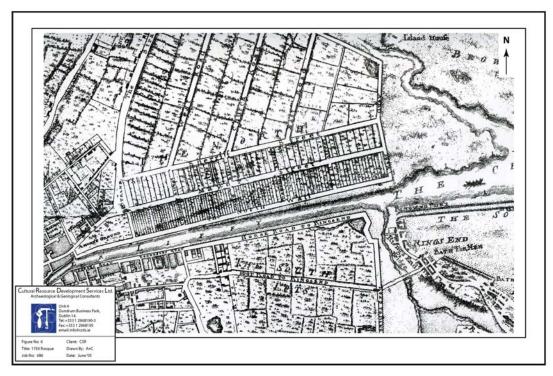


Figure 6: Extact from John Rocque's 'Plan of the city of Dublin', 1756, showing North Lotts area (not to original scale).

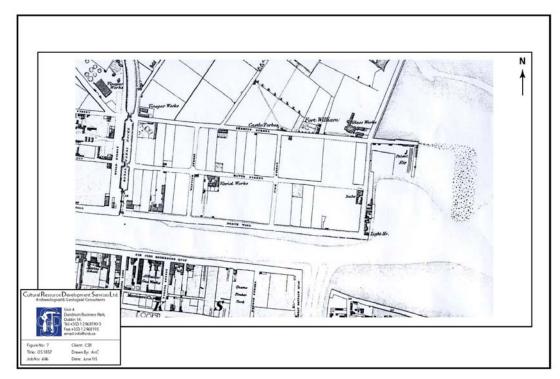


Figure 7: Extract from Ordnance Survey Dublin map sheet 18, 1837 showing North Lotts area (scale 1:10,560 at 150% of original).

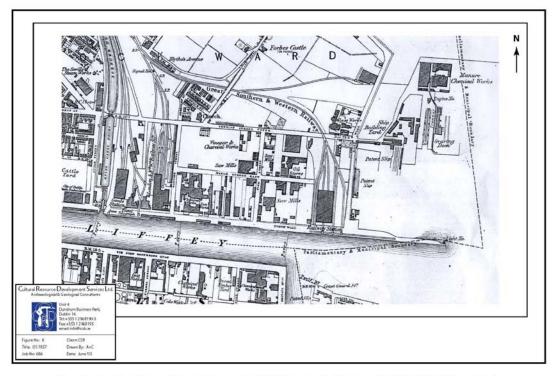


Figure 8: Extract from Ordnance Survey Dublin map sheet 18, 1875 showing North Lotts area (scale 1:10,560 at 150% or original).

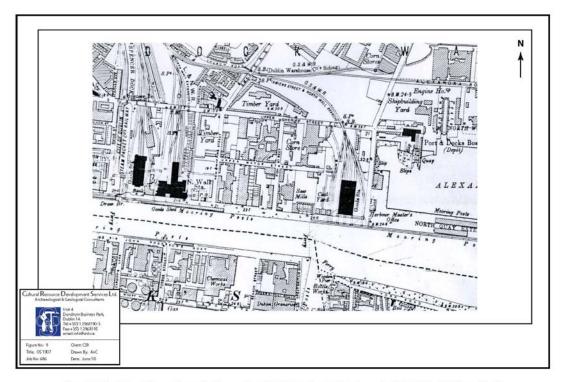


Figure 9: Extract from Ordnance Survey Dublin map sheet 18, 1907 showing North Lotts area (scale 1:10,560 at 150% or original).

APPENDIX 16.1

Recorded Archaeological Monuments and Places

The recorded archaeological monuments and places within the proposed scheme are listed below, all noted in the Record of Monuments and Places for Dublin City and Urban Archaeological Survey for County Dublin (Bradley unpublished). The monuments are listed in a standard format as follows:

RMP No. Classification
Location Description
NGR
OD'

List of monuments and places:

DU018:020(56 Quay 4) See Above Custom House Quay / North Wall Quay 31801/23439

Archaeological Finds

The recorded archaeological finds in the vicinity of the site are listed below, all noted in the National Museum of Ireland files, Kildare Street, Dublin 2, in local journals, or in other published catalogues of prehistoric material: Raftery (1983), Eogan (1965; 1983; 1994), Harbison (1968; 1969a; 1969b) and the Irish Stone Axe Project Database. The following Dublin Streets were assessed;

Sherrif Street, Mayor Street Upper, Castleforbes Street, New Wapping Street, North Wall Quay and East Wall Road.

Of these, archaeological finds have been recorded from East Wall Road. The finds are listed below in a standard format as follows:

Museum No.	Townland
Classification	

List of Finds:

NMI 1954:1968	East Wall Road
Iron Knife-shaped object	

Ref: I.A. 166/54

Object found in the foundations of New Church at East Wall Road. Foundations were approximately six feet deep and sitting on a gravel bed formerly part of the foreshore of the Liffey; shells etc. also noted. Found by Hugh O'Neill Esq. (building contractor).

17.0.0 CULTURAL HERITAGE - BUILT AND ARCHITECTURAL HERITAGE

17.1.0 INTRODUCTION

Paul Arnold Architects were appointed by the Dublin Dockland Development Authority on the 18th February to provide professional advice on the architectural conservation of the Point Depot, in accordance with the Dublin Dockland Development Authority's brief issued on the 19th January 2005 and supplementary information issued on the 7th February 2005.

This Architectural Heritage Impact Assessment includes the key data noted in Appendix B of the Department of the Environment, Heritage and Local Government Architectural Heritage Protection – Guidelines for Planning Authorities 2004.

17.1.1 Brief - purpose of the assessment

The primary objective for Paul Arnold Architects is to generate guidance which will allow the modification and extension of The Point Depot venue to accommodate up to twelve thousand spectators, and to provide a large stage suitable for a variety of performance types, together with improved back stage facilities and foyer facilities, while respecting the heritage and architectural value of the existing building. Proposals are to be consistent with the State's policy on Architecture Heritage, as expressed inter alia in the Architectural Heritage Protection Guidelines formally launched in 2005.

In addition to providing guidance, Paul Arnold Architects will develop a realistic proposal for the building which will meet the criteria for the design of a venue of the proposed size and be consistent with the State's policy on architectural heritage.

The final guidance and proposals will be incorporated into an amended planning scheme and Environmental Impact Statement to be put on public display on the 18th July 2005, prior to being issued to the Minister for the Environment, Heritage and Local Government for formal adoption.

17.1.2 The Team

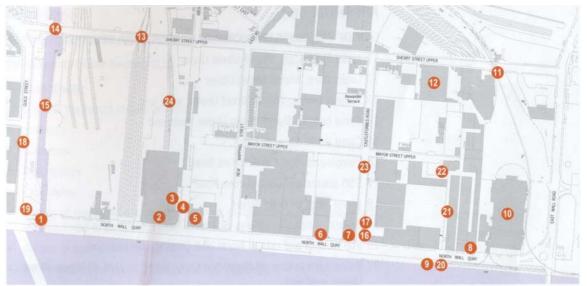
Paul Arnold Architects' Project Team included Horan Keogan Ryan Architect Directors Donal Friel and Nick Sutton, who were involved in the design of Croke Park Stadium and the original Point Depot Development respectively. The input of team members PHMcCarthy Structural Engineers and BDP Mechanical and Electrical Services Engineers was not required for the purposes of this report.

17.2.0 CORE DATA

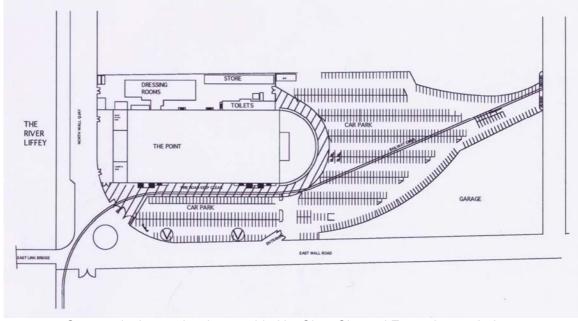
17.2.1 Location

The landmark status of the former railway goods depot known as The Point Depot is heightened by its prominent siting on the corner of North Wall Quay and East Wall Road, and has been further enhanced in the recent past by its proximity to the East Link Toll Bridge. The Ordnance Survey Map reference for the building is OS 1/1000; 3264.02/03/07/08.

The building is located on the site of what was the historic confluence of the River Liffey with Dublin Bay. The building derives its name from a former lighthouse which marked the mouth of the river before the construction of the extended harbour at Alexander Basin. The reclamation of land, arrival of the railways and development of the surrounding area upon which the Point Depot was constructed, is clearly visible on the historic maps of Charles Brooking (1728), John Rocque (1756), Taylor's (1816) and the Ordnance Survey Map of 1876.



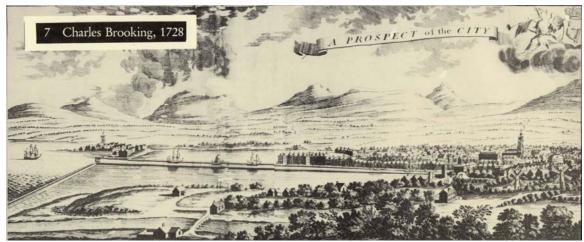
Map from the Docklands North Lotts Planning Scheme July 2002 showing The Point (No. 10)



Current site layout drawing provided by Clear Channel Entertainment Ltd.

17.2.2 Cartographic Research

The commencement of the gradual reclamation of the land upon which the Point building was to be sited is indicated on Charles Brooking's map and illustration of 1728, where it is noted that 'this part is walled in but as yet overflow'd by Tide'. Founded in 1708, the Dublin Ballast Board initiated the channelling of the Liffey with masonry walls in their efforts to control the persistent silting of the river.

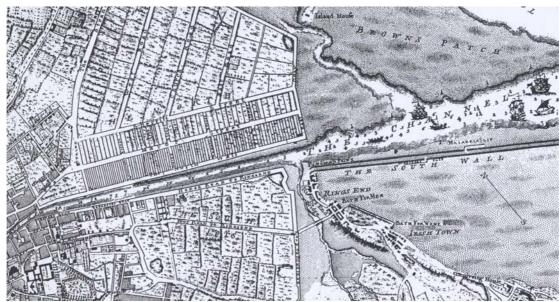


Extract from map of Charles Brooking, 1728: The National Library of Ireland, Historic Dublin Maps



Extract from map of Charles Brooking, 1728: The National Library of Ireland, Historic Dublin Maps

John Roque's map of 1756 indicates the subdivision of the reclaimed land along the north bank of the River Liffey. These regular plots are referred to as 'The North Lots' in William Duncan's map of 1821, and the Royal Canal, which was constructed in the 1790s, is also indicated on this latter map. Unlike the area to the west of the Royal Canal, the North Lots were largely undeveloped until after the reconstruction of the river embankment in the 1860s and the arrival of the railways.

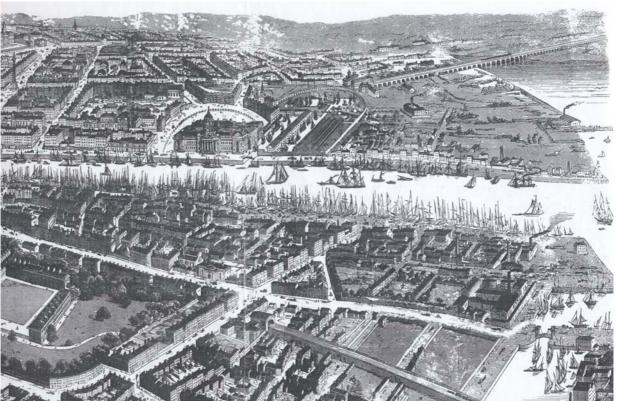


Extract from map of John Rocque, 1756: The National Library of Ireland, Historic Dublin Maps



Extract from map of William Duncan, 1821: The National Library of Ireland, Historic Dublin Maps

The prominence of this important landmark site originally occupied by The Point lighthouse is very clear on the illustrations from the *Illustrated London News* of 1846 and the 'Panoramic View of the County of Wicklow and The City and Intervening Scenery of the County of Dublin' by T.R.Harvey, c.1850.



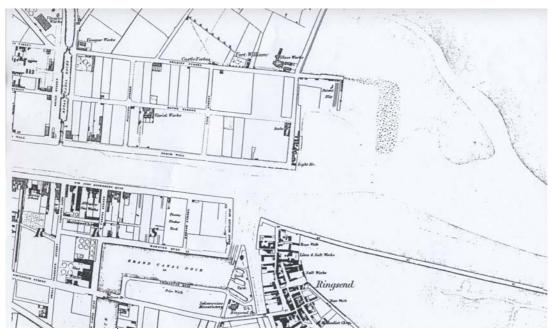
Taken from the Illustrated London News, 1846



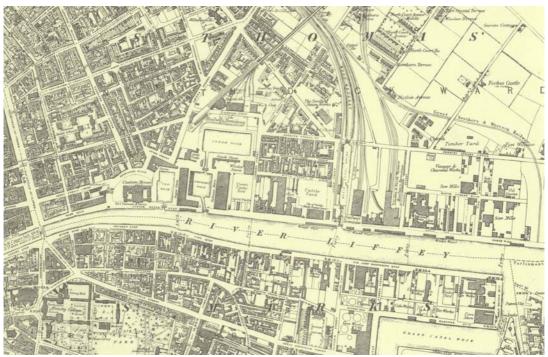
Extract from T.R.Harvey's 'Panoramic View of the County of Wicklow and of The City of the County of Dublin', 1850:

The National Library of Ireland, Historic Dublin Maps

The lighthouse which marked the mouth of the river on its northern perimeter before the construction of the extended harbour at the Alexander Basin is indicated on the 1st edition Ordnance Survey map of 1837, in which the North Lots remain largely undeveloped, as illustrated below.



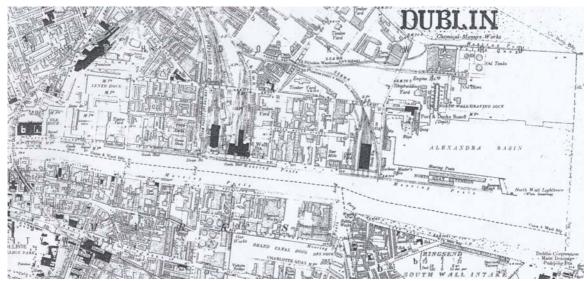
Extract from the 1st Edition Ordnance Survey Map of 1837:Archinfo



Extract from Ordnance Survey Map of 1876: The National Library of Ireland, Historic Dublin Maps

The Ordnance Survey Map of 1876 shows the connections of the Great Northern Railway Line and the London and North Western Railway Line to their separate termini, and the Great Southern and Western Railway line, which extended out to the North Wall Quay.

The 1907 Ordnance Survey Map includes the significant footprint of the 'Goods Station', now the Point Depot, constructed in 1878, with its railway lines extending out to the Quay side. The construction of this building on the most easterly part of the reclaimed North Lots plots necessitated the demoltion of Shalloway's Baths and Florence Place. The prominence of this site assisted greatly in establishing The Point as one of the most well-known riverfront landmarks in the City of Dublin.



Extract from Ordnance Survey Map of 1907: The National Library of Ireland, Historic Dublin Maps

17.3.0 Statutory Protection

The building is a Protected Structure under the provisions of the Local Government Planning and Development Act 1999, in the Dublin City Council Development Plan 1999 – current at the time of briefing (reference number 1461) and 2005–2011 – adopted on the 14th March 2005 (reference number 5948). The curtilege of the building is protected and includes the limestone gate piers, cast iron railings, bollards and adjacent train tracks. The building is also cited as a protected building/structure in Appendix 6(i) item 10 of the Docklands North Lotts Planning Scheme July 2002. This significant industrial building attracted a regional rating in the 1996 Dublin Docklands Study carried out by the School of Architecture, University College Dublin, and was noted for its architectural and group importance.

17.4.0 DESCRIPTION OF PRESENT BUILDING

17.4.1 Brief History of the Point Depot

The Point building was designed as a purpose built goods warehouse by Engineer Kenneth Bayley (b.1838 d. 1911) on behalf of the Great Southern and Western Railway Company, with Bills of Quantities prepared by Patterson and Kempster. The building was constructed by contractor S.H. Bolton in 1878, with specialist structural ironwork erected by Messrs Courtney, Stephen and Bailey.

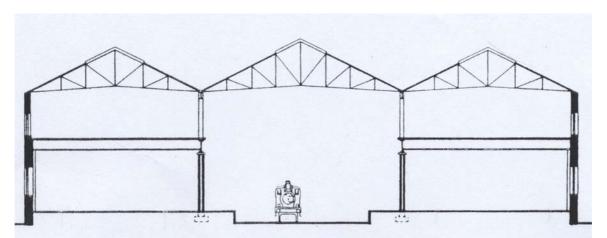
The building ceased to operate as a goods warehouse in 1976 and was in use by larnróid Éireann as a maintenance depot until it was sold to Henry A. Crosbie and Garth Collier in 1987. Thereafter followed the award-winning conversion of the building into a multi-purpose concert, exhibition, conference and sports centre, which opened in 1988, with the fly-tower added in 1989. Sheridan Tierney Architects were responsible for the works within the theatre space and Shay Cleary Architects designed the bars and restaurant overlooking the riverfront.

17.4.2 Building Description

The Point Depot originally comprised two main components: the formal east-west masonry arcaded block to the river front containing administrative records offices, and the north-south train and goods shed to the rear, with an overall floor area of approximately 10,100 square metres.

The simple form of the Point Depot expressed the building's functions as a railway goods depot. The goods trains entered the tri-partite parallel 'nave' and galleried 'aisles' within the train shed from the north, and exited through the corresponding masonry arches to the

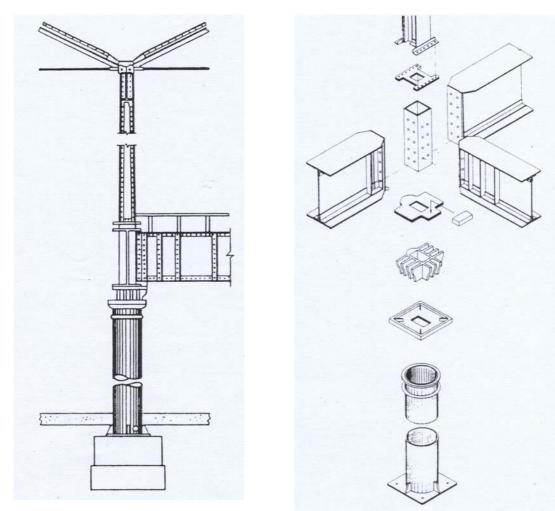
south, terminating at the edge of the North Quay shipping berths. The three bays with double pitched roofs terminated in a gabled elevation to the north, and the double pitched slated roof to the front range was partially concealed behind a high parapet. These parallel loading bays were equally subdivided along their length into eight structural bays, articulated by a series of cast iron columns bolted to granite padstone bases.



Original cross-section of the warehouse showing mezzanine floors and three parallel bays to train shed. Illustration from Brian J. McCann's report for the Transactions of the Institution of Engineers of Ireland, Volume 114, 1989 - 1990

The 19m wide central bay had a clear internal height of 12m high to the underside of the original roof trusses. Flanking the central bay were two side bays of approximately 16m in width, which incorporated mezzanine galleries, 8m above the main floor level for storage of goods. Goods were transferred to and from the timber mezzanine gallery by chain operated swing derricks mounted on the mezzanine columns and hoists mounted on the perimeter walls. Movement of the wagons was facilitated by a hydraulic capstan system.

The fine double pitched wrought iron roof trusses over the train shed were supported on lattice valley beams fixed to rivetted wrought iron columns at first floor level. These first floor columns were then supported on rivetted wrought iron girders, which in turn were supported on the ground floor cast iron columns on stone bases. The sturdy timber mezzanine floor was supported on rivetted wrought iron beams supported on the ground floor columns and external masonry walls.



Arrangement of structural columns at ground and mezzanine levels, with rivetted wrought iron beams supporting the timber mezzanine floor and isometric diagram of typical column head. From Brian J. McCann's report for the Transactions of the Institution of Engineers of Ireland, Volume 114, 1989 - 1990

(i) Front Elevation to the Riverfront



Front Elevation

The formal sixteen-bay two-storey symmetrical façade includes an arcaded limestone ashlar base and carved entablature. The three groups of triple arcaded openings at ground floor level with modern aluminium glazed windows and doors are separated by two Doric doorcases with limestone pilasters. Both doorcases are flanked by a pair of narrow arched windows. Modern timber panelled double doors giving access to the upper floor level are set within the two arched doorways, with limestone moulded archivolts, keystones and lintols. These doors are accessed by double flights of limestone steps with modern metal guardrails.

The first floor comprises Flemish bond brickwork set within limestone bevel edged quoins, stone entablature and granite coping, with modern timber eight-pane casement windows, having swept brick arches and limestone cills. The modern metal clad fly-tower structure is visible behind the slated pitched roof and brick chimney stacks to the front structure.

(ii) Side Elevations to the East and West

The gable-ended Renaissance façade to the river front contrasts significantly with the simpler coursed rock-hewn limestone walls to the side elevations, with their brick moulded cornices and brick dressings to window and door openings.

A number of openings have been altered and added on the east elevation to accommodate fire exits at ground and mezzanine levels and five new external steel fire escape staircases have been added to the elevation.



Altered opening and ground floor fire exit on east elevation



Typical fire escape staircase arrangement on east elevation



View south looking towards the north and east elevations

The west elevation has been partially obscured by a gable-ended metal clad three-storey annexe structure housing escape staircases, toilet and back stage facilities. Three external steel escape staircases have also been added and original openings altered and added to accommodate emergency fire exits at gallery, mezzanine and ground floor levels and backstage access for stage equipment also. A number of temporary porta-cabin structures have been located at the southern end to accommodate administration offices and ancillary facilities.



View of toilet block adjacent to north elevation



View along west elevation with toilet block in the foreground

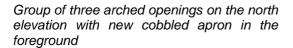
(iii) North Elevation



As with the simplicity of the detailing to the east and west elevations, the north elevation consists of three gables of coursed rock-hewn limestone and bevel edged limestone quoins, which give expression to the train shed behind. Mirroring the front elevation, there are three groups of triple arcaded openings arranged in a symmetrical fashion at ground floor level with cut stone voussoirs, imposts and bases. Modern aluminium glazed windows and doors are set within the arcaded openings, with the exception of the westernmost bay, which retains its original timber ledged braced and sheeted doors. The smaller window openings and occuli have simple brick dressings which match those on the east and west elevations.

A flat roofed entrance canopy has been installed in front of what is now the main entrance to the venue. This steel structure is supported on four of the original cast iron circular column bases taken from the building interior. A semi-circular cobbled apron with contrasting colour bands and semi mature specimen trees has been formed in front of the west façade.







Entrance canopy to north elevation with original columns

17.4.3 Alterations to the original structure

The transformation of the building into a multi-purpose exhibition and performance space resulted in the removal of part of the mezzanine floor along four structural bays on both sides and the insertion of fixed raked seating to those areas, creating a central multifunctional well.

It was decided to locate the main entrance on the north elevation adjacent to the carpark, which gives entry to the main vertical circulation in the entrance foyer provided by a central escalator and staircases up to mezzanine level. There is no visible trace of the original train tracks or platforms, and a simple painted concrete floor continues throughout the ground floor footprint, with a decorative mosaic panel inset at the base of the stairs and escalator in the entrance foyer.

The removal of the central columns improved the sight lines towards the stage area situated to the southern end of the space. Fixed raked seating at a higher level was inserted at the northern mezzanine link, resulting in an adaptable central space that was utilised for performances in the round, and for seated and standing concerts also. The mezzanine galleries were linked at both ends of the space to provide a continuity of circulation at the upper level for use as exhibition and break out spaces.

With the removal of the cast iron columns relocated from their original position along the central aisle, it was necessary to provide an alternative means of support for the roof trusses beneath the central valleys. This was achieved by the insertion of two 3.5m deep trussed girders from which the roof trusses were suspended, running along the length of the area where the original columns were removed. These girders also partly enclosed the fly tower and ventilation plant located directly behind the southern block. The steel framed flytower has a 21m clear ceiling height and 2m high gantry. For practical reasons, the central patent glazing roof lights to the truss apexes are permanently blacked out, so the interior is rarely viewed in natural light. The felt roof covering to the main roof was likely to have been a replacement for a slate roof. The felt was removed and replaced with a profiled metal double skin.

Ancillary office and sanitary facilities were accommodated in lightweight structures constructed adjacent to the eastern wall of the building. These simple functional structures were clad in lightweight profiled metal cladding. Surface mounted steel fire escape staircases were positioned on the east and west elevations of the building. Elements of the original cast iron column bases were incorporated into a large flat-roofed entrance canopy on the north elevation. The new elements were detailed in a simple and functional manner, and surface mounted building services were treated in a similar fashion throughout the building.