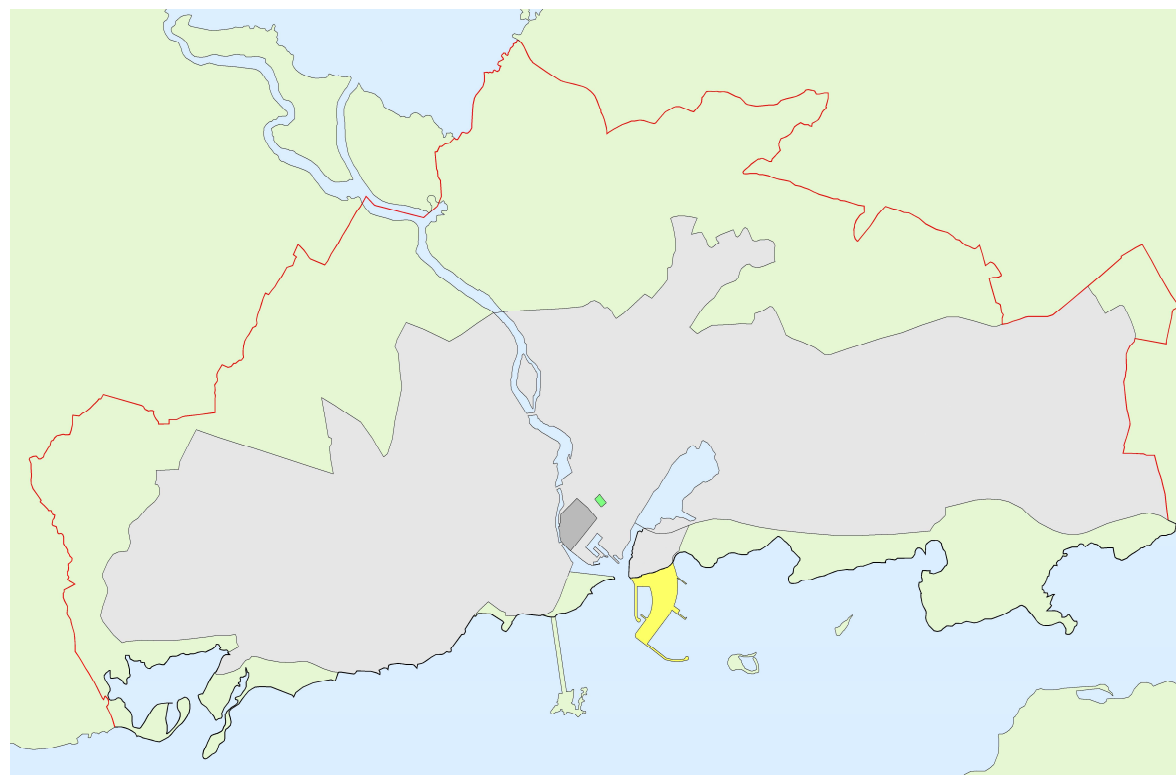


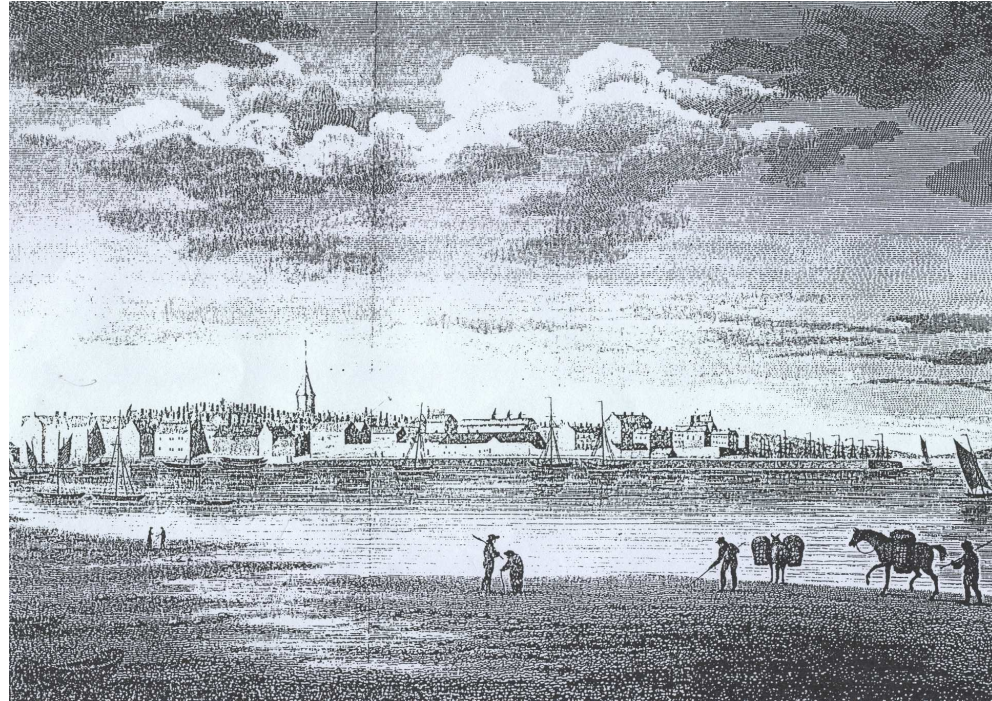
# GALWAY HARBOUR EXTENSION

**PHYSICAL • CULTURAL • ARCHITECTURAL STUDY**



*MAY 2013*





### ***Galway* by Oliver St. John Gogarty**

*A grey town in a country bare, the leaden seas between,  
When the light falls on the hills of Clare  
And shows their valleys green.  
Take in my heart your place again  
Between your lake and sea  
Oh city of the watery plain, that means so much to me.*

*Your cut stone houses row on row  
Your streams too deep to sing  
Whose waters shine with green as though  
They had dissolved the Spring.*

*Your streets that still bring into view the harbour and it's spars.  
The chimneys with their turf smoke blue that never hides the stars.  
Take in my heart your place again between your lake and sea  
Like crimson roses in grey walls your memories to me.  
It is not very long since you, for memory is long,  
Saw her I owe my being to, and heart that takes to song,  
Walk with a row of laughing girls from Salthill to Eyre Square  
Light from the water on their curls that never lit more fair.  
Take in my heart your place again between your lake and sea,  
Like crimson roses in grey walls your memories to me.*

*Again may come your glorious days, your ships come back to port,  
And to your city's shining ways the Spanish girls resort.  
And e'er the tidal water falls, your ships put out to sea  
Like crimson roses in grey walls your memories to me.  
Take in my heart your place again between your lake and sea  
Oh, city of the watery plain, that means so much to me.*

### **Foreword**

This poem written almost 90 years ago by Oliver St. John Gogarty, evokes the unique character of the historic city against the background of its natural features and geography. In particular it captures a city defined by water, both saline and fresh and the physical relationship between its natural and manmade landscape. The numerous references to the harbour and ships highlight the city's strong association with its maritime tradition. The lines "Your streets that still bring into view the harbour and it's spars" and "And e'er the tidal water falls your ships put out to sea" indicate the close urban/harbour link and even back then demonstrates the tidal constraints of the harbour waters. Gogarty's observations are still relevant today. Galway is more closely associated with its harbour than any other major city port in Ireland. This association results from its proximity, accessibility and visibility within the city. But the association is also subliminal, with the harbour etched into the very psyche and memory of the city, from its origins and evolution with the medieval town, to its immersion into the social and cultural life of its citizens.

The proposed port is the fourth incarnation of port development in Galway, from the first port located at the Fishmarket area between the 14<sup>th</sup> and 18<sup>th</sup> century, the second port location at the Old Mud Dock between the 18<sup>th</sup> and middle of the 19<sup>th</sup> century and the current port location at the Commercial Dock from the middle of the 19<sup>th</sup> century to today. Each incarnation arose from the pursuit of deeper waters to facilitate increasingly larger sailing vessels. A pursuit ironically still relevant and which persists today 750 years after the development of the first port.

This physical and cultural study looks at the impact of the proposed harbour extension for the city. In outlining the study it is necessary to expand the narrative beyond the mere physical intervention into Galway's unique geography. In order to get a more holistic understanding of the harbour extension, it is necessary to weave other elements into the mix, elements that try to reveal an understanding of what is at the core of Gogarty's poem, the symbiotic relationship between the city's physical, cultural, social and historic landscape.

This new harbour extension project has been evolving for over 6 years involving constant development, alterations and refinement, in response to various constraints, opinions and inputs. It is designed to address the various engineering challenges, further shaped because of planning requirements, later refined due to environmental factors and finally reduced as a response to new economic realities. As a project it is both exciting and challenging. Exciting in a sense that it forms part of both the physical and visual evolution of the city. Challenging in a sense that it is intervening in that unique and sensitive junction of Galway's land and seascape. This physical and cultural study is how the challenge is addressed to provide a new facility and dimension for the city.





Preface

Galway is part of a network of harbours and shipping routes that are spread across the globe. It was inevitable that Ireland, as a small island nation on the northwest periphery of Europe, would become part of that network, in order to connect to the European mainland and beyond. It is no coincidence that all of Ireland’s major cities, Dublin, Belfast, Cork, Limerick, Galway, Waterford and Derry are all costal port cities and strategically located at major river crossings. Today some 90% of the goods traffic to and from Ireland and the Euro zone region is transported by sea. For a sector that has its origins in ancient times, shipping is still the most predominant, economical and in an era of environmental awareness, the most sustainable form of goods movement across international waters, despite the growth in air travel in the last 50 years.

Galway at the mid-point of Ireland’s western seaboard is and will continue to be a regional port, relatively small by international standards to service its immediate hinterland on the west coast. Its harbour origins and growth since the 13<sup>th</sup> century reflect the birth and evolution of the city itself. Galway’s port history is one of sustained growth up to the middle of the 16<sup>th</sup> century and one of constrained growth since then. These constraints were both political and economic but in later years were and are physical ones. The current harbour dating back to 1842 has insurmountable scale, access, depth, size and tidal constraints to meet the constantly evolving demands of the maritime sector. In essence Galway is a 19<sup>th</sup> century harbour incapable of meeting 21<sup>st</sup> century requirements and the proposed harbour extension, is to address the stark reality of having to relocate or become redundant.

The scale of the new extension is large, both in terms of the existing medieval city and the outline of the existing harbour waters. Consisting of almost 24 hectares of land reclamation and protruding over 900 metres out to sea, it will have an impact on the physical and cultural reading of the city. And whilst it is designed in accordance with international best practice for a port of that scale, this impact study is about how it sits into the uniqueness that is Galway and how it is customised and sensitive to the city’s natural and built heritage.

Introduction

The development of a new port is a rare occurrence in Ireland. Whilst the expansion and development of an existing harbour is a common and often necessary feature in this country, a totally new facility, albeit one developed adjacent to an existing outdated facility, is the exception rather than the norm. Consequently from a public point of view there is little experience or understanding of the issues involved in developing a new port. Indeed an indigenous experience in both the design and assessment of such a facility is also limited. In addition the activities of ports in Ireland tend to operate under the radar in terms of public interest generally. There is little political, media or public commentary on port activities in this country in comparison to airport or railway operations. Obviously the transport of passengers generates more interest than the transport of cargo, even though shipping is the primary and vital component in our export/import trade. However when it comes to transport infrastructural projects, port developments have a far greater visual impact on a city than introverted railway stations or generally, out of town, airport developments. This is due to the fact that ports occur at that sensitive boundary between land and water and impact on the various characteristics of that amenity junction.

In order to address these various issues this impact study has been divided into three areas. In Section 1 – **Background Study**, we examine the diverse and complex ingredients that constitute ports, in order to get an overall understanding of all the issues and factors involved in their development and operation. It starts with the more global, generic nature of harbours and finishes with the local Galway harbour experience and its status and meaning to the city. This background study informs the second part of the document entitled **Design Study** which outlines the design approach to the new harbour extension from the larger city, urban and waterfront scale to the smaller, port site and architectural scale of individual buildings. It reveals the factors that influence the objectives at each scale of the development. Finally the third and final section – **Impact Study** examines the various impacts of the harbour extension on our physical, cultural and social understanding of the city, both visual and subliminal. Its objective is to give a clear and comprehensive impact of the port on our human experience of Galway.

To a large extent, this study seeks to resolve and accommodate subjective and objective assessment. Whilst we aim for objective description and assessment in the study, the reading and understanding of the physical and cultural landscape is often based on personal feelings and perceptions which are difficult to measure. Consequently because these are not black and white measureable impacts, the first two sections of the study are vital and necessary to our understanding of that grey area of how we perceive Galway’s physical and cultural environment. Finally this study seeks to communicate clearly the impact of the harbour extension on the city, to the general public, as well as the planning assessment system.

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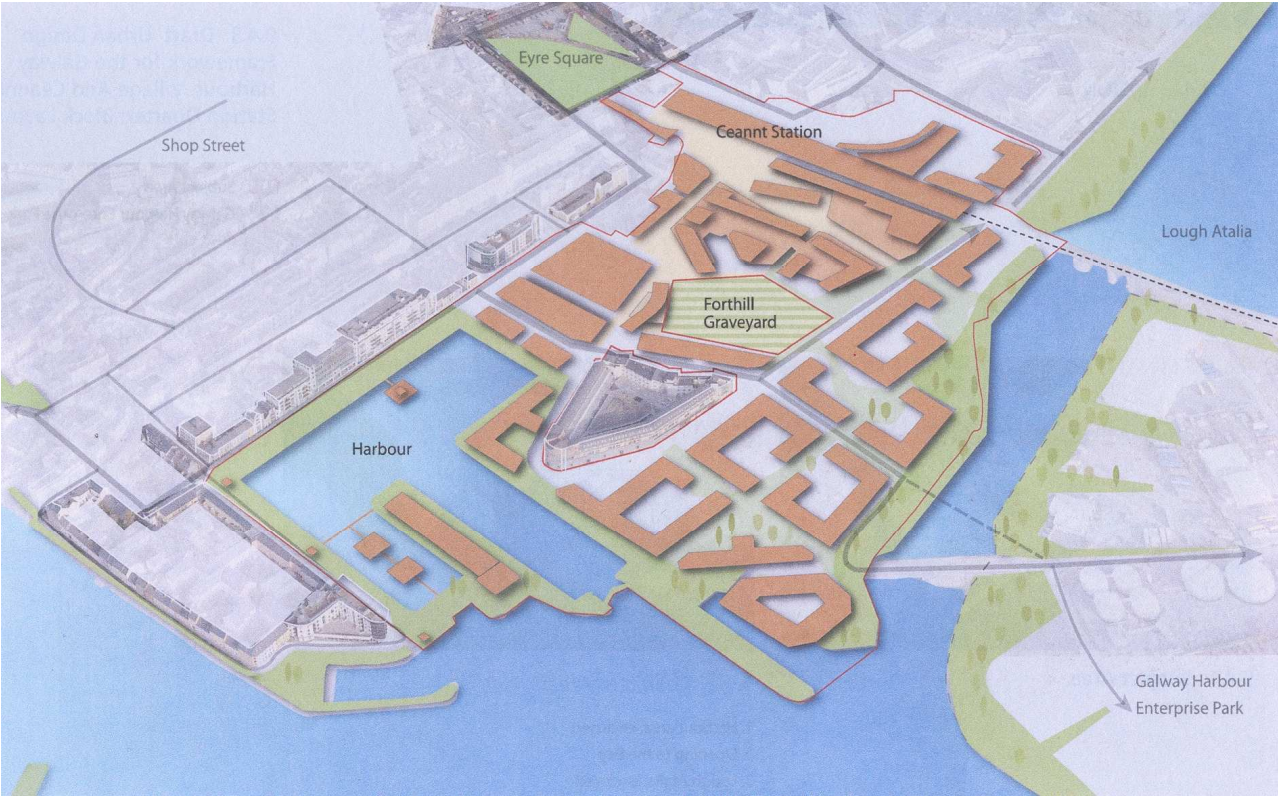
1.0 BACKGROUND STUDY

1.1 Context

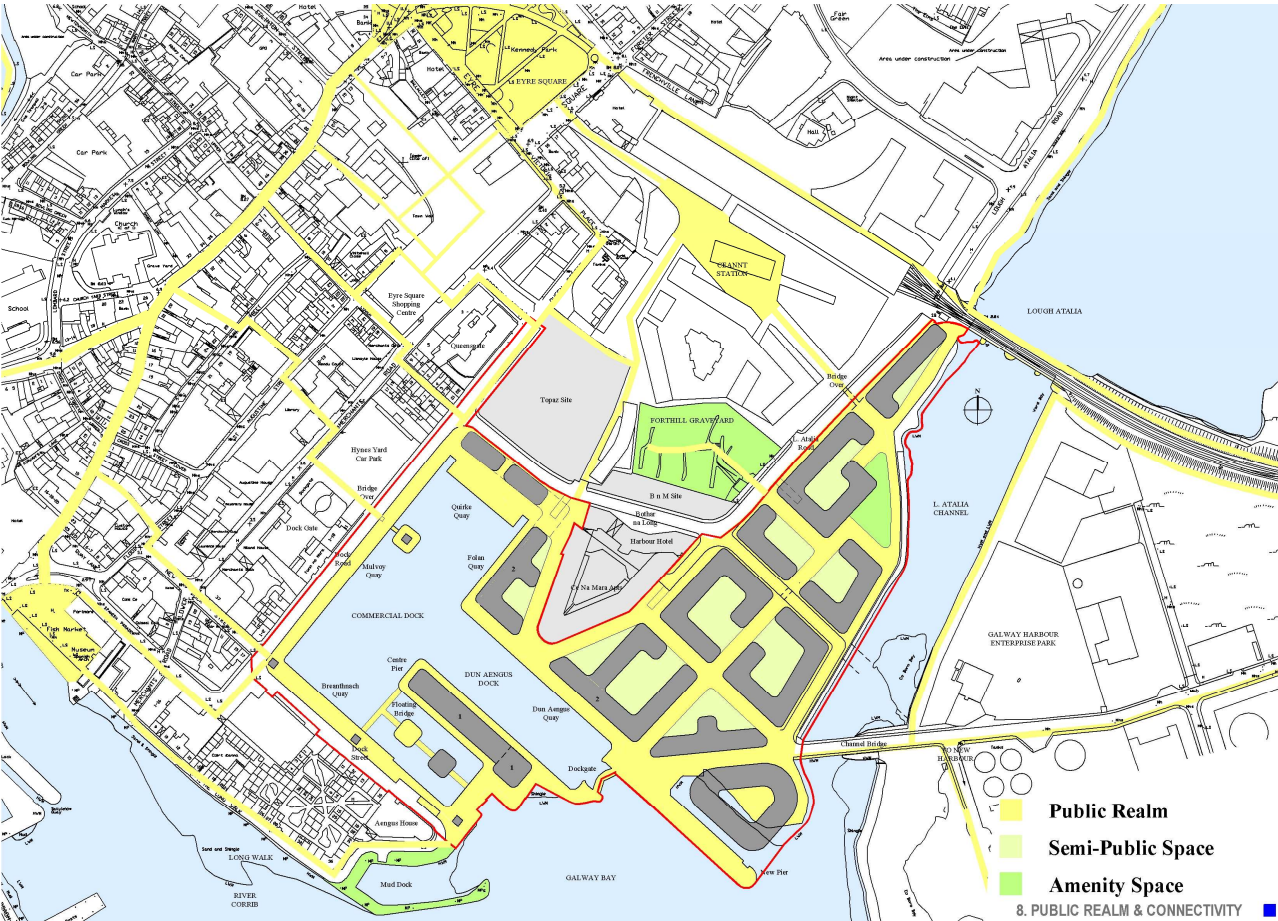
The context for the harbour extension is well documented in the E.I.S. To summarize, the existing tidal constraints, depth of water, width of dock access gate and scale of existing harbour, demands the construction of a harbour extension to meet modern shipping requirements. However the subtext to these harbour restrictions is the gradual advancement and expansion of the existing city centre into the existing harbour area. The accompanying map shows the extent of harbour related land use that has experienced new mixed development and urban renewal in the past 20 years. It is now accepted that the existing harbour lands will provide for the continued expansion of the city centre in the form of a Galway Harbour Village. This vision for the existing harbour is incorporated into an Urban Design Framework done in conjunction with Ceannt Station Quarter as required by the Galway City Development Plan and presented to Galway City Council in April 2010. This document outlines in detail the urban design objectives and overall vision for the existing inner harbour. The following is a summary of the objectives and vision from that document to transform the existing harbour into the Galway Harbour Village.

Objectives

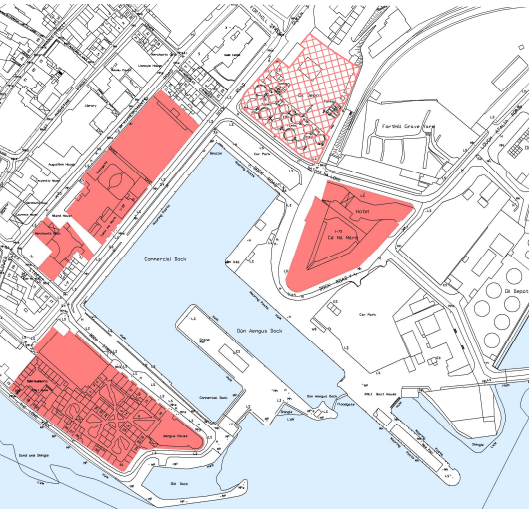
- Establish a second place of identity for the city.
  - Provide a new waterfront destination for the city & visitors.
  - Create a new vibrant urban waterfront community.
  - Orientate the city to the harbour waterfront.
  - Develop the harbour urban form.
  - Deliver a high quality public realm.
  - Provide an enhanced marina facility.
  - Create a primarily pedestrian enclave.
  - Foster “ownership” by the city.
  - Encourage investment in the area.
- The vision for the inner harbour area sees it becoming the second source of identity for the city, separate but connected, different but complementary to the main identity of the Eyre Sq. to Fishmarket pedestrian zone. It will have its own sense of place and its own title – the Harbour Area. It will also have its own separate function. If Eyre Sq. is the heart of the city, the Harbour becomes its lung, replacing the grass and plaza of the Square with the controlled waters of the Harbour.
- If the city centre is where we inhale the city, the Harbour is where we will exhale it. If Shop St. is the bustling spine of activity, the Harbour will have a more leisurely ambiance. It will however have the similar ingredients of place, people and things as the city centre.
- It will have the large scale urban setting and the small scale pattern of routes and spaces in an historical setting that spans from the 18<sup>th</sup> century to the Modern. It will accommodate a similar diversity and mix of people in a different backdrop. It will contain the same sequence and series of things – features, attractions, points of curiosity and interest. It will involve a similar journey but one around the water’s edge where the place, people and things connect and interconnect all within a primarily pedestrian enclave.



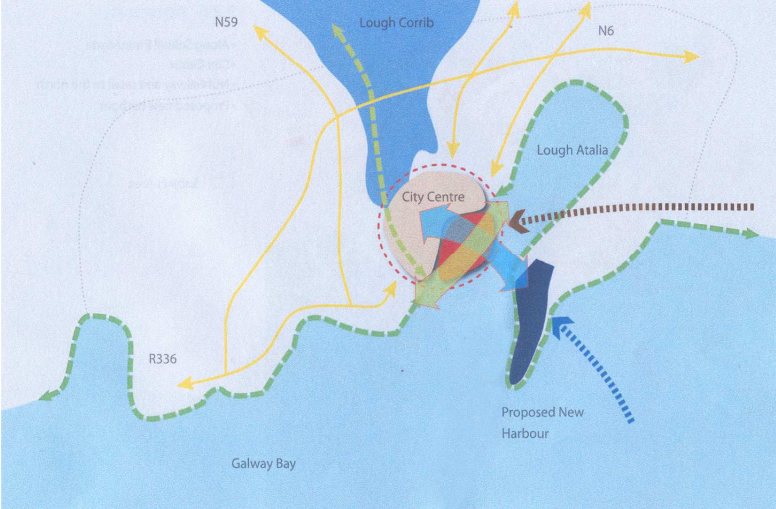
Urban Design Framework



Urban Design Framework



Harbour related Land Use Developed in the last 20 Years



Unlocking the City



1.2 Brief History of Shipping

The origin and development of shipping echoes the very origin and evolution of the earliest civilization from 3000 B.C. The ancient Egyptians were skilled in ship building as evidenced by the famous Khufa ship, a vessel of 44m in length, entombed in the Great Pyramid of Giza and discovered in 1954. By 2,000 B.C there is evidence of extensive ship activity in the Mediterranean and the Far East and by 1,000 B.C the ship had developed segregated hulls and sails. By 300 B.C wooden ships were up to 50 metres in length and further developed with tall masts and several sails, up to 115m in length. Celestial navigation was used as the main method of navigation until the mariners compass was invented in Europe around 1300. In the 14<sup>th</sup> century ships began to develop towers on their bow and stern and by the 16<sup>th</sup> century freeing ports became widespread in Galleon ships. By the 19<sup>th</sup> century sailing ships such as the Clipper became much faster but overall ship design stayed fairly unchanged until the industrial revolution of the late 19<sup>th</sup> century, with the ability to construct ships from metal, which triggered an explosion in ship design. The development of the steam engine in the 20<sup>th</sup> century made ships independent of the direction in which the wind was blowing. Today ships are divided into specialist categories such as cargo ships, passenger ships and warships. The largest cargo vessel, the oil supertankers are over 400m long and weigh one million tonnes when loaded. The largest cruise liners are up to 350m in length, weight 200,000 tonnes and with a capacity of 8,000 passenger and staff.

Whilst overland nomadic movement, transport and communication was the norm up to the middle ages the ship provided the two great defining features in world history and its economy from there on. Around 1500 the great seafaring tradition that had developed since the pre-Christian times, provided the voyages of discovery from Europe, which led to the exploration and mapping of the earth's surface and the expansion of influence and dominance of Europe in the World order, up to the middle of the 20<sup>th</sup> century. The second defining element was the change from the sailing ship to the steam ship at the turn of the 20<sup>th</sup> century, which reduced travel and journey time and gave birth to the global economy as we know it today.



1.3 Brief History of Ports

With the development of a network of maritime trading routes so also a network of seaports developed to service these routes. A common thread through the history of ports is that they were generally developed at a commercial nucleus, on the crossroads of land and waterway transport or near bridges, to become the mouth through which the population was supplied and fed. In many ways the history of ports is a good measure of the history of civilization from the earliest port of Babylon in Mesopotamia, where the cradle of civilization stood in 3,000 B.C.. From that period port cities defined whole eras of civilization. The port of Knossos developed in 2,000 B.C was the capital of the Minoan culture while the port of Marseilles was a Phoenician colony from 1,000 B.C.. Athens and its port of Piraeus came to define the Greek civilization from 500 B.C while the port of Carthage opened the gateway to North Africa. Alexandria the great Hellenistic port city was founded by Alexander the Great at the mouth of the Nile in 331 B.C.. Byzantium/ Constantinople/Istanbul developed a wealthy port on the border between Europe and Asia in 300 A.D. and became the capital of the Roman Empire and the stronghold of Europe until 1453.

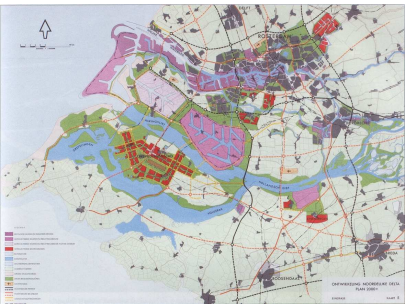
The Hanseatic port town of Bremen and Hamburg set up a powerful commercial network that spanned Northern Europe, with Venice and Genoa becoming the two Italian maritime and cultural centres of the middle ages. Bruges and Antwerp were the leading world ports during the 13<sup>th</sup> to 16<sup>th</sup> century, while Lisbon and Seville ports were central to the discovery and exploitation of the New World. Amsterdam and Rotterdam were the operating bases of the Dutch maritime Republic in the 17<sup>th</sup> century, with the ports of London and Liverpool becoming gateways to the British Empire in the 18<sup>th</sup> century. Saint Petersburg founded in 1703 was central to the Russian revolution, while Boston port sparked the American Revolution in 1773. New York port became the symbol of the New World in the 19<sup>th</sup> century, with Sydney's Botany Bay becoming the symbol of the conquest of Australia. Today, Shanghai, the largest port in the world is one of the symbols of China's current economic boom.



1.4 Ports as Environmental Battlegrounds

In wartime the capturing of ports was often the source of crucial battlegrounds. In peacetime the expansion of ports are often the source of environmental battlegrounds. Up to 1970, port development and expansion had absolute priority and was beyond criticism and debate. In 1969 Rotterdam was the first municipal authority to take into account economic, environmental, housing, mobility, transportation, social, recreational and cultural aspects in the planning of their port. Since then that policy has been enshrined in planning law in the form of Environmental Impact Assessment in the European Community since 1980 and Ireland since 1990. Since then, environmental legislation has been further reinforced with additional laws and directives, such as the EU Birds and Habitat Directive and Natura 2000, which has placed further responsibilities on port authorities planning port expansion. These environmental developments since 1980 also coincided with the birth and growth of the Green Environmental movement, which became established in Germany and Holland in the early 1980's. Since then Environmentalism in many places, originated in, or developed from anti-port protests, armed with the extremely potent tools of the new environmental laws and directives. In many ways this is not surprising, as harbour development impacts on the sensitive city port and nature port relationships. In particular new or extended ports impact on the delicate balance between the landscape and seascape, the urban and waterfront amenities, traffic and transportation, socioeconomics, cultural and character values plus hydrodynamic and biological activities. Consequently, European policy objectives to encourage the development of maritime and inland shipping, in order to reduce environmental pressure caused by road transportation, frequently clashes with their policy, to protect the environment and ensure biodiversity. The lack of a port specific guidance document on the correct implementation of these respective policies and in particular the correct interpretation of the respective laws and directives often adds to the confusion and uncertainty on both sides of the argument. Environmental legislation, similar to most legislation is often general in nature and rarely takes account of particular or specific exceptions. There is the added issue that various environmental legislation is open to interpretation as evidenced by the recent Supreme Court decision to refer and request the European court of Justice to interpret aspects of the Environmental legislation, relevant to the judicial review of the Galway City Bypass. Critically, it is clear that E.U. Environmental legislation is mainly dictated and has its origins in the larger, more developed central block economics of the E.U. Consequently, and in a similar way that the undeveloped emerging economies of the world have legitimately questioned the moral right of developed countries dictating uniform thresholds on CO<sub>2</sub> emissions given that developed countries were not subject to such thresholds in achieving their developed status, there is a question whether the developed regions of the E.U. can equitably impose uniform environmental legislation that applies to both developed and undeveloped areas, which in effect ensures a continued non-uniform development model throughout the E.U.

Finally, one of the ironies of Europe's pioneering predominance at the forefront of Environmental legislation is that major infrastructural projects such as port developments are not being assessed on the same level playing field as other competing world economies. Consequently it now appears at this time of uncertain financial world markets, that Europe runs the risk of being placed at a competitive disadvantage, in comparison to the U.S.A., China and the new emerging global economies, in regard to vital but environmentally sensitive infrastructural projects.



Rotterdam Port



1.5 Image, Perception and Understanding of Ports

Ports have four very distinctive and defining ingredients which distinguish them from all other forms of transport infrastructure. These are the maritime element of ships and sailing vessels, the built element of quays and piers, the industrial element of cargo storage and movement, and finally, the amenity element of port waters and seascape. These unique combined features can either attract or detract depending on their location, form, layout, context, scale, visibility and accessibility, but particularly on the relative perceived proportion of their four component parts. Their combined effect can evoke different sensory and spiritual responses from the viewer.

Even though the evolution of ports since antiquity has reflected the evolution of the world's political, economic and cultural systems, ports have had very contradictory images throughout the ages. The great ports of the Pre-Christian age have become the stuff of myth and legend with two of them Alexandria and Knossos, being part of the seven wonders of the world. The lost city of Atlantis and other port cities had mystical status, some invoking the various gods, Portunus - the God of the Port, Neptune/Poseidon/Mercury – gods of the sea and water to offer protection. In Christian times St. Nicholas became the patron of sea farers and was equally invoked. Even up to the 20<sup>th</sup> century the symbols associated with ports, even pagan icons, such as the Statue of Liberty in New York harbour and the Little Mermaid in Copenhagen are prevalent. Harbours were also seen as vital gateways between historical eras. Athens, Carthage and Byzantium all defined evolving civilization and cultures while in recent times Pearl Harbour, Gdansk and New York have marked significant historical events. Harbours were sources of intense civic pride and independence. Ports like Marseilles, Odessa and Rhodes were built to display the grandeur and prestige of their era. Most importantly harbours were seen as conduits of free trade and merchandise, as symbolized by the Hansa Port cities of Bremen, Amsterdam and Rotterdam. Aesthetically harbours developed a distinctive port heritage in engineering and architecture, with Hamburg, Liverpool and Barcelona as prime examples. Finally harbours were a constant subject of artistic endeavour, including literature and painting. Artists such as Turner, Bril and Vernet all used ports as subjects or background material while writers and poets such as Simeon, Kazan and Whitman all found inspiration for their work from harbour settings. Today, some of the most beautiful cities in the world are port cities including Amsterdam, Bruges, Cape Town, Copenhagen, Seville, Sydney, Stockholm and Venice as well as smaller ports such as Honsfleur, Dubrovnik and Lubeck.

Conversely and particularly in the Industrial Revolution age, ports developed a more contradictory negative image. They were seen as tough, gritty and often hostile environments, sources of dust, stench and noise. Socially they became increasingly associated with the city sub-culture, a haven for the destitute. They developed a seedy element, the red light district for the city. Very often they degenerated into slum districts and a hotbed for criminal activity. Finally they became to symbolize oppression in all its form and in the case of international ports the background to poverty and emigration. In the later part of the 20<sup>th</sup> century, ports were often portrayed by environmentalists as ugly industrial areas, cultural wastelands, destroyers of the natural environment, prone to pollution, potential disaster areas and creators of increasing truck traffic.

Today the contradictory images of ports are still in evidence with ports having both the ability to attract and repel. Attract in a sense that ports with their variety of ships and their origins, the spectacle of modern cranes in operation and their own language of stevedores and chandlers still carry a curious fascination for many, and where the study of goods and cargo movement, can reveal a lot about the society it serves. For others however the tough, hard and muscular environment of trucks, machinery and containers make ports an unwelcoming, inhuman and hostile environment. Overall however, the public image of ports is somewhat ambiguous, removed and at times even indifferent. This perception is due to the ever increasing expansion of cities relative to harbour areas, the increasing and evolving complexity of society and the changing nature of ports within the city and society. In modern port cities the harbour is often no longer central to its maritime setting leading to a disconnection between it and the public.

In Ireland, with the odd exception, harbours do not generate a lot of commentary or publicity. The image of ships loading and unloading in Dublin Port is often used to portray our export and import trade, while the large cranes in the Harland and Wolfe shipyard has become one of the iconic symbols of Belfast. Being an island nation it was inevitable that our harbours are part of that great collective store of myths, legends and history from our storeybook past. In general however harbours in Ireland have a relatively neutral image, are seen as part of the geography, history and culture of our country, a part of the fabric of our economy and a sense that they have always been with us – a permanent if somewhat casual part of our consciousness.



Lost Port City of Atlantis



Venice Port by Turner



Statue of Liberty



Odessa Port



Liverpool Port



Sydney Harbour



Hamburg Port



Harland & Wolff, Belfast



Antwerp Port

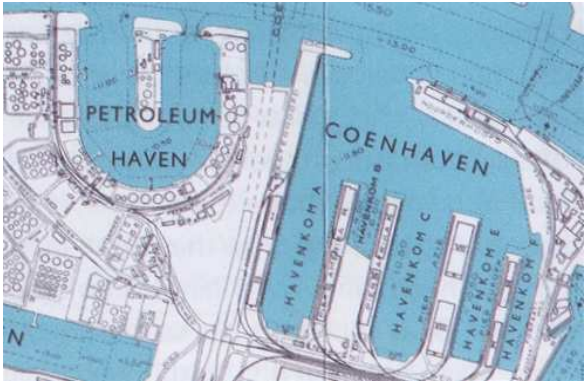


### 1.6 Design of Ports

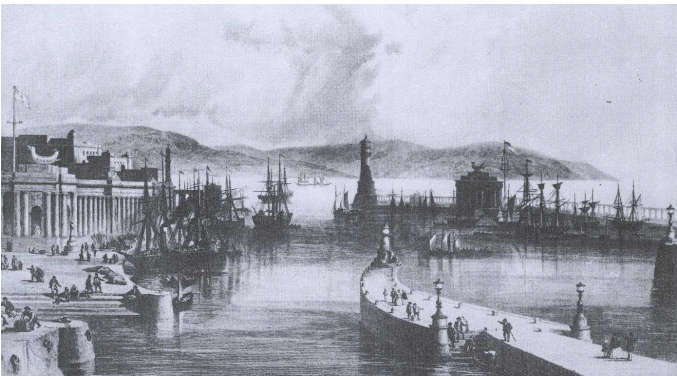
A harbour or haven, derives from the verbs, to “have” or to “keep” and is defined as a place where ships can seek shelter from stormy seas and load and unload goods. While some harbours are naturally formed the design of ports from antiquity was central in providing protection from storms, piracy and imperial threat. Traditionally the design of ports was an engineering challenge with Port engineering becoming a separate discipline in its own right, involving unique, manmade landscapes. The uniqueness is due to each port being individual and incapable of being mass produced. This is because a harbour layout is determined by solutions that nature has imposed and choices that man has made to achieve the optimum interconnection between water and land as well as between transport modes. The varied layouts of modern harbours and docks bear witness to some amazingly inventive approaches. Apart from the standard rectangular basin and docks, examples of polygonal, hexagonal, circular, “U” shaped, small inlet piers, parallel shore piers, highlight divergent layout of dock systems and how they interact between land, sea and water. Despite it being previously an engineering discipline, urban planners from the 15<sup>th</sup> and 16<sup>th</sup> century onwards have also recognised the potential in developing ideal port cities, where aesthetics as much as function were the key to developing a sense of civic pride and a city’s sense of itself. In addition the design of port buildings became an important area for architectural experimentation, as evidenced by the ports of Liverpool, London, Hamburg, Rotterdam and nearer to home Dublin, where the Customs House is one of the finest examples of port architecture. Harbour design must take into account both the permanent, manmade, landside, landscape in the form of piers, quays, cargo areas and buildings and the temporary, variable, seaside, landscape of ships and sailing vessels which contribute to creating the unique portscape that harbours provide. Today the development of new ports like Galway require a holistic, multi-disciplinary approach to address the various planning, environmental, economic, visual and transport issues involved.



Port of Carthage



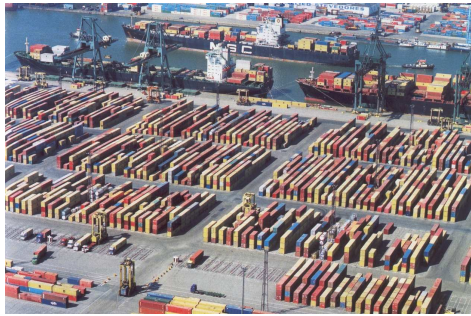
Amsterdam Port



Proposed Port for nearby Barna (1852)



Marseilles Port Development



Port Containers



Rotterdam Port



Helsinki Port

### 1.7 Recent Trends in Ports

The design and development of ports in recent times are governed by the ever changing demands of the shipping industry, particularly the growth in ship sizes and weight, the increased containerization of goods and issues of security. The main changes can be summarised as follows:

1. Increased scale of ports.
2. Development of deep berth facilities to cater for increases in ship tonnage.
3. Greater quay lengths to cater for increase in ship lengths.
4. Increased separation from the original urban environment towards the sea.
5. Increased dehumanization in the form of containers, terminals and automatic handling.
6. Sealing off of terminals and port areas for security and safety reasons through the I.S.P.S Code after the 9/11 attack.
7. Increased commercialization of port authorities away from the municipal or state system.
8. Increased demand for linear expansion through reclamation.
9. Absence of, and utilitarian design of port buildings.
10. An increased disconnect from the public consciousness and experience.

To counteract these trends, a number of initiatives have been developed to address the more damaging aspects of the changes. These can be summarised as follows:

1. Provision of leisure/recreational/amenity areas.
2. Maximizing public access to port activities.
3. Emphasis on high quality to the limited port architecture.
4. Greening of port environment.
5. Exploring the “soft values” of ports.

In general modern ports are a more sanitized version of older ports where the familiar noise, dust, smells and port atmosphere is replaced by a more streamlined, automated and generally cleaner environment and where the container has become the standard icon of globalization.

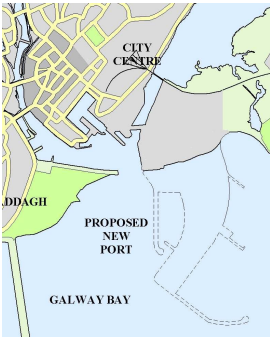
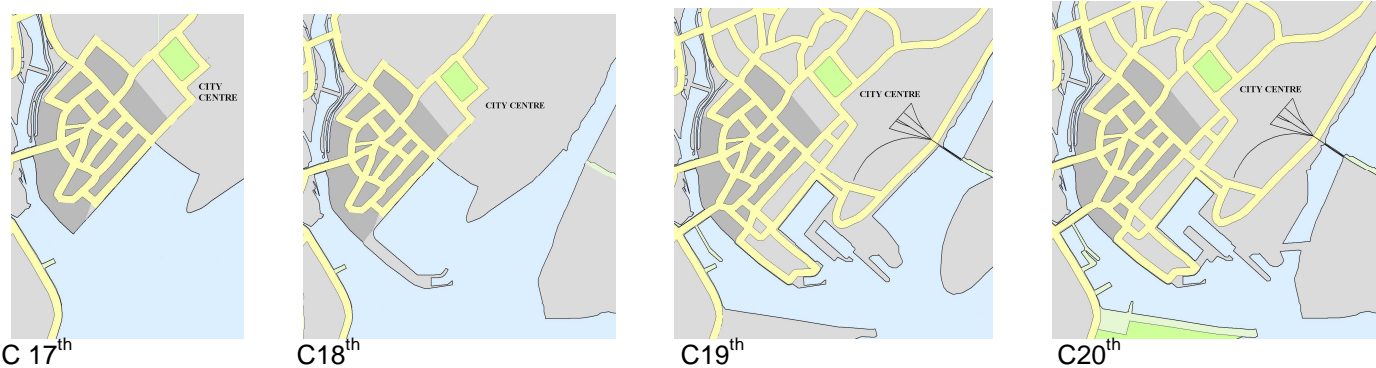


1.8 Galway Harbour – A Brief History

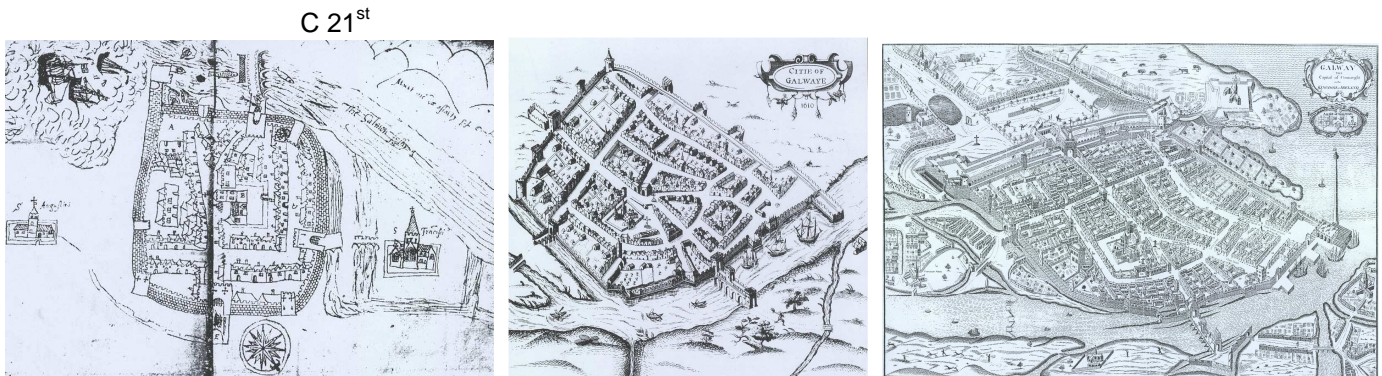
Galway's origin and name derives from its strategic location where the Bun Gaillimh or the mouth of the River Gaillimh (now River Corrib) enters the sea. Galway first appeared in recorded history as the place where, in 1124, Turlough O' Connor, King of Connacht erected his castle to create a strategic frontier fort, possibly supplanting an existing small fishing village. The next historical reference is not until the early 13<sup>th</sup> century with the Anglo-Norman invasion of Connacht when Richard de Burgo finally laid claim to the fort in 1235 and developed a centre of trade at this important river crossing. There is evidence of a strong sea trade developing by the middle of the 13<sup>th</sup> century. Successive raids by the displaced Gaelic families prompted the building of the City Wall in the latter part of the 13<sup>th</sup> century. The development of the church of St. Nicholas of Myra the patron saint of seafarers in the latter part of the 13<sup>th</sup> century suggested an already strong maritime base. Galway's status as a big commercial port in Ireland was well established by the middle of the 14<sup>th</sup> century with links to France, Flanders and Italy and in 1380 Richard II gave permission to Iberian and Galway merchants to intertrade. In the 15<sup>th</sup> century Galway was licensed as one of the four ports in Ireland along with Dublin, Cork and Waterford and developed lucrative trading links with European ports St. Malo, Dieppe, Lisbon, Seville and further afield to the West Indies and Newfoundland. Imports were wine, iron, lead, spices and silks, exports were wool, fish, hides, tallow and general provisions.

The port at that time operated from a quay at the now Fishmarket, between the Spanish Arch and O' Briens Bridge. The monument to Christopher Columbus in the Fishmarket area highlights the belief that the intrepid explorer stopped off at Galway and attended St. Nicholas Church during one of his voyages in 1477. The first half of the 16<sup>th</sup> century saw the apex of Galway's greatness as a maritime port but lead to a period of decline after the Cromwellian and Williamite wars, reflecting the ebb and flow of the city's economic fortunes from then on. These wars and previous subjugations since the Reformation, demonstrated the key role of the port in establishing a wealthy, independent, merchant class through sea trade and the fear of the protestant ruling class, of their strong links, with their own sworn enemies in Catholic Spain. (The term Tribes of Galway was either a derogatory term by Cromwell forces or a grand self proclaimed title by the merchant families, comparable with the seven tribes of Rome). Trade revived somewhat in the 18<sup>th</sup> century with a new dock for shipping at the old mud dock and the Long Walk by Edward Eyre.

The city experienced its greatest expansion during the 19<sup>th</sup> century, in the form of the town as we know it today, streets, merchant houses, church's, university and Court House, fuelled by water powered industries, following the development of a new dock in 1842, in the salt marsh area between Merchants Rd. and Forthill and the opening of the canal system in 1852. The famine of 1846 – 49 led to a decline in population of the city from 20,000 in 1851 to 13,000 in 1901. In 1850 the 800 ton steamer Viceroy, became the first transatlantic steamer to sail from the port, but sank on its trial run off the American Coast. Despite that scheduled sailings started to America again in 1880 and Dun Aengus Dock was developed in 1882. The transatlantic liner trade was re-established in 1927 and by 1933, 100 ships had called to the port on that route but that trade ceased in 1968 with the growth of air travel. In 1940 the outer channel was deepened and 1964 saw the deepening and linking of the Commercial and Dun Aengus Docks. 1998 brought the opening of the Enterprise Park and access bridge on reclaimed lands south east of the harbour.



Galway Harbour Evolution



Galway – Gooche Map 1583

Galway – Speed Map 1610

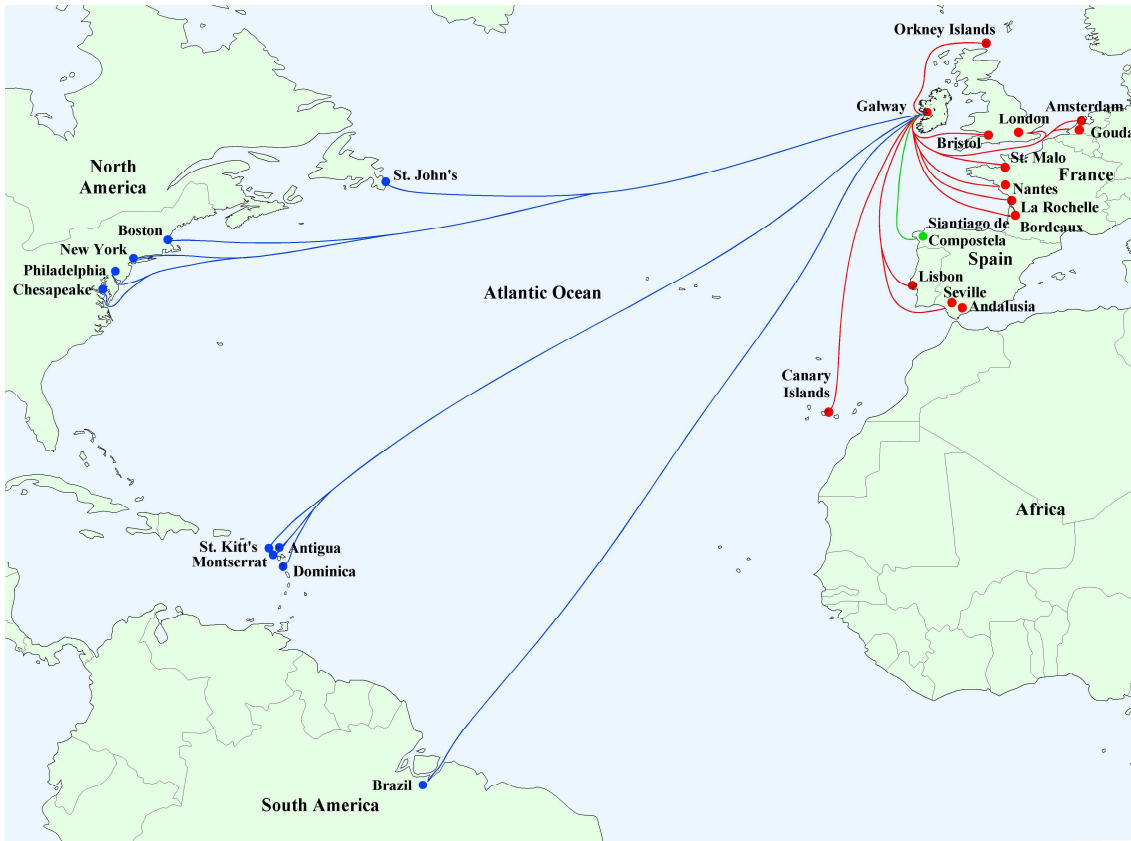
Galway – Pictorial Map 1651



Galway – Logan's Map 1818



Galway O.S Map – 1837 – 1842



Atlantic Shipping Routes from Galway Port (1350 - 1800)



1.9 Galway Harbour – Recent History

The Annals of the Galway Harbour Commissioners 1830 – 1997 published in 2000, charts the history of Galway Harbour drawing on Minutes of Harbour Meetings, local newspapers, Government reports and National Archives to record the story. Overall the story is one of struggle to overcome various obstacles, that impeded the Commissioners persistent goal to promote, develop and grow the harbour and its services. The story is also one of grim determination and endeavour to surmount those challenges. The impediments were both obstinate and recurring during their 167 years. First and foremost was the lack of power and authority that the Harbour had in controlling their own destiny. Overall port policy was dictated by central Government and in this case, up to the birth of the free state, by the British Government, who exercised a protectionist policy in relation to their own home ports of Liverpool, London and Southampton. These deliberate restrictions to growth of Galway Harbour was most evident in the post famine era, when thousands of Irish emigrants were forced to first sail east to England, before sailing west to their chosen destination of America, because the major British ports were threatened by the most western positioned port of Galway, as the most logical and more economical location for a major transatlantic port.

The next biggest impediment was funding, as administered by the Bord of Works in Dublin, who consistently protracted and delayed funds to improve and develop the harbour and its facilities and when funds were released they were often insufficient, short-sighted and wasteful. As an example, the development of Dun Aengus Dock to accommodate large vessels which took place in 1882, was completely underused until the deepening of the outer channel approach to the harbour which took place in 1940.

Economic recessions and the timing of those recessions were a major challenge to the very survival of the port. The major development of the harbour in 1842 was followed by Famine in 1846 which led to a period of protracted decline. Almost 100 years later the next major development works of 1940 was followed by the economic collapse caused by the Second World War, to the point in 1944, when the port was within one week of closing down. In the intervening period World War 1 had a devastating effect on both the revenue stream and development funding for the harbour.

A fourth obstacle was the whole issue of labour relations and restrictive practices amongst dock workers. The dockers union exercised considerable power, which facilitated considerable delays in loading and unloading goods, affecting ship turn-around times. These delays impacted negatively on the attractiveness of Galway harbour for ship owners and stunted its development in comparison to other competing ports.

Finally the harbour had to combat a series of periodic challenges in the form of storm damage resulting from its Atlantic exposure, protracted construction disputes in development works for the harbour and in latter year's planning permission difficulties and objections in their pursuit of enhancing their facilities.

Today the prime obstacle to growth is the absence of a deep water berthing facilities to accommodate vessels with tonnages unimaginable to both the harbour and shipping ancestors.

Since the enactment of the 1996 Harbour Bill and the formation of the Galway Harbour Company in 1997, authority and control of the facility is now within the control of the Harbour. However it is now ironic given the autonomy over their own affairs, that the new Harbour development should follow the unfortunate timing of its 1842 and 1940 major development works, of being caught in the web of another economic recession.

However the primary lesson that can be learnt from the Annals recording the 1830 to 1997 period is one of foresight and determination, to overcome all the struggles, in order to promote and develop a harbour for the benefit and welfare of Galway City and its regional hinterland.



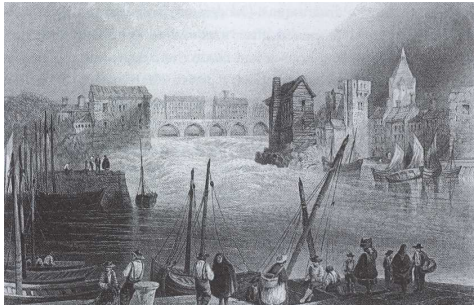
Galway – 1685



Galway Engraving – 1820



Galway Harbour – 1824



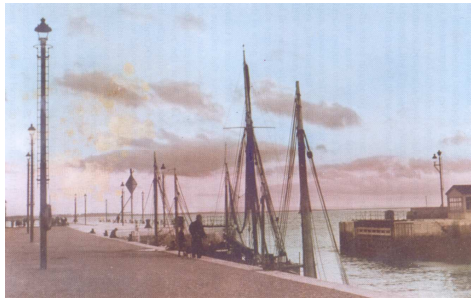
Galway Harbour – 1842



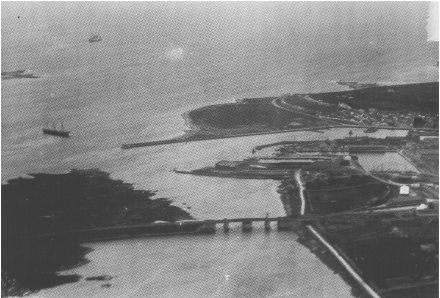
Galway Harbour – circa 1890



Galway Harbour – circa 1890



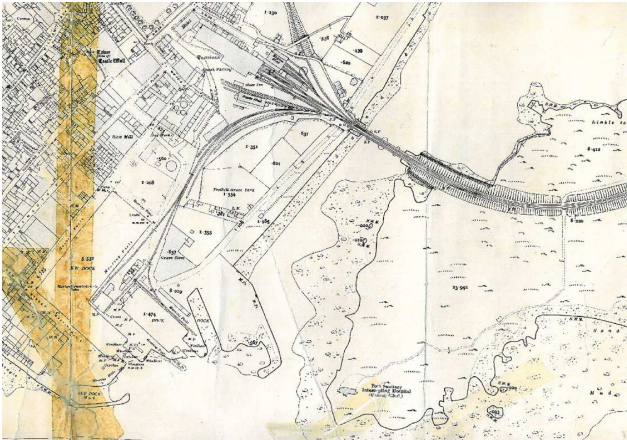
Galway Harbour – circa 1910



First Cruise Liners – 1927



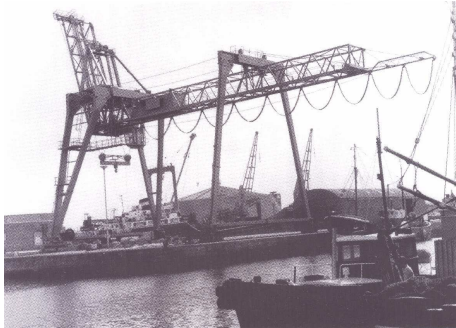
Galway Docks – circa 1930



Galway Harbour O.S Map - 1888 – 1930



Galway Harbour O.S. Map 2008



Galway Harbour – 1975



Galway Harbour – 1995



Galway Harbour - 2008



1.10 Harbour Impact on City

Galway's origin and growth was due to its strategic frontier fort location where the river Corrib meets the sea. While it shares with other Irish coastal trading cities the reality of being a bastion of conquest, it's common thread from its origin in the 13<sup>th</sup> century to today, is that of its maritime tradition. What impact has that tradition on Galway? What influences has the harbour brought to bear on the city from medieval to modern times, and what personality traits has it bestowed on its citizens?

The first obvious impact is economic. The harbour has been a conduit of trade with European and other international destinations, bringing a source of wealth and employment plus an outlet for exports from the city and its hinterland. With that source of income and its relative geographical isolation from the central seat of English power, the city fostered a sense of independence and autonomy, as evidenced by the famous "Tribes of Galway", a merchant oligarchy, who developed a de facto city-state in medieval times. That spirit of independence is nurtured up to today as the city expands its economic base into other spheres.

The second influence of the harbours trading network was the cosmopolitan flavour it gave the city from medieval times. The arrival of Spanish, Portuguese, French and Italian merchant ships into the city brought an international dimension to the city. Lombard St. the oldest surviving street name in the city was called after the Lombardi's of Italy who controlled much of the wool/hide trade in Ireland in the 13<sup>th</sup>/14<sup>th</sup> century. That cosmopolitan contact prevented an insular mentality and instead developed an outward, open-minded and welcoming personality, which still exists today, in the promotion and welcoming of tourists to the city.

The third impact of the harbour as an assembly point of foreign experiences was in the intellectual stimuli which led to the exchange and borrowing of ideas from other cultures. This exchange impacted on all areas of life in the city from buildings to food, from social life to work. A typical example is the origin and development of the famous "Galway Hooker" which derived and evolved from a type of Spanish Fishing boat in the 18<sup>th</sup> century. A contemporary example in the arts is the street theatre movement centred on "Macnas" which sought Iberian and Catalanian inspiration initially from Valencia in 1985 in the form of the "El Commediants" visiting theatre group. The Spanish Arch, the Claddagh Ring, the Galway Shawl and decorative ceramic plaques embellishing urban houses in the city all evoke the real and imagined influences between Galway and Spain.

The final influence of the harbour is on the personality of its citizens. Whilst this is difficult to define nevertheless port towns and cities do tend to share similar characteristics. These include an outspoken sense of freedom and independence, anti-establishment tendencies, a love of originality, a cosmopolitan attitude, a liking for intellectual and swiftness of thought and a solidarity that transcends economic class and social standing. Port towns tend to breed a diversity of opinion where neither single party political systems nor narrow minded extremism can prevail. A lot of these typical traits can be detected in the personality of Galway and can be attributed or influenced by its port status.



Eyre Square Fountain



Spanish Arch



Maritime Shop



St. Nicholas of Myra – Patron Saint of Seafarers



Galway Hooker



Macnas Parade



Claddagh Lost Fishermen Monument



Street Sculpture



"Lost Mariners" and "Christopher Columbus" monuments

1.11 Maritime Symbols of the City

Galway's seafaring tradition is the most common symbol used by various bodies whether institutional, sporting or commercial to depict their particular service or activity. The particular symbols vary from sea scenes to sailing ships, galleons to Galway Hookers and are found on everything from coats of arms, crests, emblems to company logos. Both Galway City Council and Galway County Council use nautical themes as their symbol which reflects the city's historical image as that of a maritime city. However the symbols are not just confined to representations of various bodies. All around the city are visual signs of the city sea relationship in buildings, painting, sculpture, monuments and even shops. So besides the obvious and prominent physical presence of the harbour itself, the city streets and its various bodies carry a constant reminder of a shipping legacy and a maritime past, by which it is defined and portrayed.



### 1.12 Contemporary City Image

At the birth of a new millennium it is worth reflecting on Galway's contemporary image – how the city portrays and brands itself and how it is perceived by outsiders and visitors. Galway's population and footprint increased dramatically in the latter part of the 20<sup>th</sup> century and was often referred to as one of the fastest growing cities in Europe. That growth changed both the profile and demographics of the city. During that time Galway expanded its industrial base, developed its educational facilities, nurtured its cultural life and increased its tourism business. The city consolidated its status as the regional capital on the western seaboard and now provides facilities and services comparable to any city in Ireland. With these changes the portrayal and perception of the city also shifted. At different times the city is branded a maritime city, a city of learning, a city of culture and in recent times a centre for healthcare or I.T. development. However its status as a very attractive and desirable destination for local and regional, national and international visitors that provides its predominant contemporary image, that of a Tourist Magnet. Galway has always had a strong tourist industry based on its attractive medieval core, the seaside base of Salthill and the scenic hinterland of Connemara, the Aran Islands and the Burren. However in the last 25 years the city has carefully cultivated and developed that industry to a point where it is now one of the largest economic sectors in the city. That development is centred on a strong Festival Calendar from March to November rendering it a veritable festival city. These festivals including St. Patrick's Day festival, Comedy Festival, Cuirt International festival, Early Music Festival, Galway Sessions Festival, Film Festival, Arts Festival, Macnas Parade, Galway Race Festival, Jazz Festival, Oyster Festival, Babero Children's Festival and Tulca Visual Arts Festival have succeeded in transforming the historic city of the "Tribes" into a modern city of the "Vibes" during the extended tourist season. This festival tradition allied to a bustling pub and hospitality sector, a vibrant cultural, music and arts scene, an ambient street culture, all against a background of a youthful population, has branded Galway as "Party City" and consistently voted the number one tourist destination city in Ireland.



### 1.13 Volvo Ocean Race

The Volvo Round the World Ocean Race which had a stopover in Galway Harbour for a fortnight in the summer of 2009 generated the biggest and most successful festival event ever staged in the city. The festival which was expected to bring 140,000 people to Galway had final attendance figures of 650,000 generating €60m for the local economy. The event was so successful that Volvo chose Galway over 80 cities as the finishing port for the next of the tri-annual events in 2012 the first time a non Swedish port had been picked for the concluding stage in the history of the 40,000 mile race. Despite being four days shorter, the 2012 finale stage and event was even more successful with attendance figures of 800,000 and was worth €80m to the local economy. Both festivals were unique in that they drew people from all sections and areas, young and old, singles and families, sailors and non-sailors, local, national and international visitors. It is interesting to reflect on why the events caught the imagination of so many people. Firstly the events had a novelty factor as they were the first ever Irish stopover and finishing stage. The stopover event coincided with a period of unbroken hot sunny weather, unusual in the west of Ireland context, while the finale event enveloped the whole greater Harbour seafront area of the city. In addition Galway had already established a reputation as a great festival city so its track record ensured a large interest. Finally Galway is well established as an attractive destination in its own right which the Volvo Ocean Race was able to utilize and complement.

However there were other significant issues at play in the success of the events. Surprisingly, they were the first festival events ever to take place in Galway Harbour and confirmed its latent potential as an ideal festival location. As a harbour it is small, intimate, semi-enclosed and a natural arena. It is adjacent to the city centre with its attractions and has the great amenity resource of the harbour waters looking out into Galway Bay. The second factor is more subliminal. Being an island nation, people have grown up with a conscious and unconscious association with the sea. The Volvo Ocean Race tapped into that memory reservoir of myths, legends and history from St. Brendan the navigator to Grannuaile, from the Vikings to the Emigrant ships.

The final and critical ingredient to the success of the festivals, was for the first time in Galway, there was a perfect marriage of the historic maritime tradition with the contemporary festival tradition. It proved to be a potent mix and has clearly established the status of the harbour, as capable of catering for the cultural and tourist life of the city, as well as the shipping industry.



### 1.14 Existing Harbour Relationship to City

In providing a harbour extension for Galway, it is important to examine and understand the relationship between the existing harbour and the city, as a key informant to the new facility. The ties between Galway and its harbour are strong historically, physically, socially and culturally. The first key to that tie is its proximity to the existing city centre, located just 200m from Eyre Square making it the most adjacent harbour in Ireland to the main shopping and business district. It is also highly accessible, located on one of the three main east/west traffic routes through the city and consequently easy to access for both locals and visitors to the city. In addition it has high visibility within the city centre which is not confined to a general view. The whole operation and workings of the harbour are in full view, from the loading and unloading of ships as symbolized best by the mountain of scrap metal frequently located in the Centre Pier and ironically overlooked by two high-end apartment developments directly to either side. Another key to its tie with the city is its intimacy. There are very few commercial harbours in Ireland where you travel on a busy traffic route within 10 metres of berthed ships and where you can physically touch the various ships from different parts of the world. In addition the harbour is a very attractive feature in the city. The harbour has an enclosed, intimate and sheltered horseshoe form which combined with the amenity value of its waters provide a seductive urban setting. The fact that the city has extended and enveloped the harbour in recent times has added to its sense of urban enclosure.

Another important relationship with the city is the ever varying visual scene as the animation of the harbour is constantly changing with ships arriving and departing. These multi-level floating “buildings” bring a sense of the exotic and romance from distant ports and a reminder that the city is connected to the outside world. At the larger city scale, Galway's relative lack of boating and yachting facilities and tradition in comparison to Dublin or Cork means that Galway Bay whilst very attractive against the backdrop of the Clare Hills lacks the use and animation that sailing craft bring to an urban seafront. Because of that, the sight of ships entering and departing Galway Bay is a powerful maritime image and is part of the city's cultural, visual experience and consciousness. Finally, Galway harbour's tie to the city is formed by the fact, that it was and still is, to a certain extent, a self contained village district within the city, where shipping, fishing, boating, residential, commercial and industrial uses all coexist and are integrated within a port setting.

The strong relationship between the city and harbour means that its proposed relocation brings a certain cultural loss to the city. That loss is difficult to quantify because even though the harbour is a full working harbour with all its associated apparatus, machines and general messiness, it has a curious and abiding fascination for a lot of locals and visitors. If Eyre Square is Galway's living room, then the Harbour is its kitchen, utility and garage and for some, you can learn as much about the real Galway, from studying its service area, than examining its main reception space.

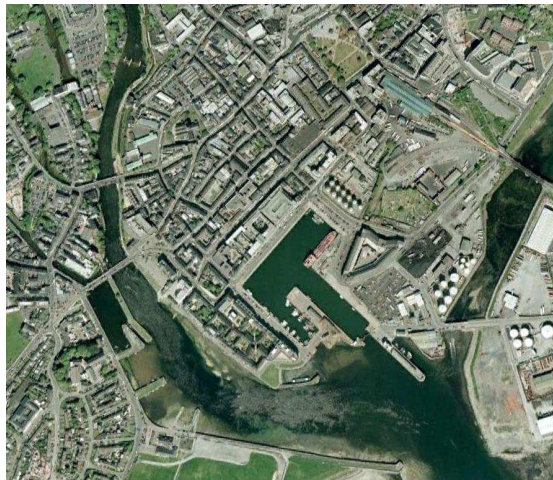


### 1.15 Cultural Heritage

Ireland's policy on conservation in regard to our built heritage is very similar to the European model and informed by the 1972 Unesco Convention concerning the protection of world cultural heritage which Ireland ratified in 1991. It is based on the objective of conservation which is to prolong the life of our cultural heritage. This objective is achieved by defining, identifying, protecting, conserving, presenting and transmitting to future generations our architectural, or other cultural heritage, “handing down to future generations a system of cultural references” This policy was included in Ireland's Planning and Development Act 2000 in the form of “protected structures” and “architecture conservation areas” which replaced the record of “listed buildings”. To date the record of “protected structures” as prepared by Local Authorities to comply with the Act, often appears to be based on a quantitative, rather than a qualitative assessment, of our built heritage worth conserving. Nevertheless it is now a generally accepted approach to conservation especially in the European context.

However it is worth reflecting on alternative attitudes to conservation which other different cultures exhibit. The Eastern culture and in particular countries like Japan and India display a different view of conservation. They have no difficulty with removing buildings or structures which we in Europe would identify as worthy of conservation, because “they have a deeper connection with the past”. Whilst this difference can be seen as a clash of cultures, it can also be seen as the difference between a surface connection and a spiritual connection to our past. It is possible to argue that in Europe our conservation policy is superficial, barren and facile and contrary to the more spiritual idea of decay, death and rebirth.

What is the relevance of this debate to Galway Harbour? In the context of the harbour extension, it raises the question of the merits of conserving the function of Galway harbour, as against the apparatus of that function. In the Galway City Development Plan 2011 – 2017, various elements of the existing harbour are “protected structures” including the quay walls, embankments and bridges which date back to different eras in the last 160 years. Yet these elements are just the apparatus of the function of the shipping trade, which has its origins in the birth of the city over 750 years ago. It is that maritime tradition and legacy which is far more important than its visual symbols and goes to the very core and essence of the city's cultural heritage. And whether or not we view this proposed development as the death of the old harbour and rebirth of a new harbour, its key outcome is maintaining, extending and prolonging the legacy and life of a 750 year old maritime tradition, which is far more important than merely conserving the symbols of that tradition.





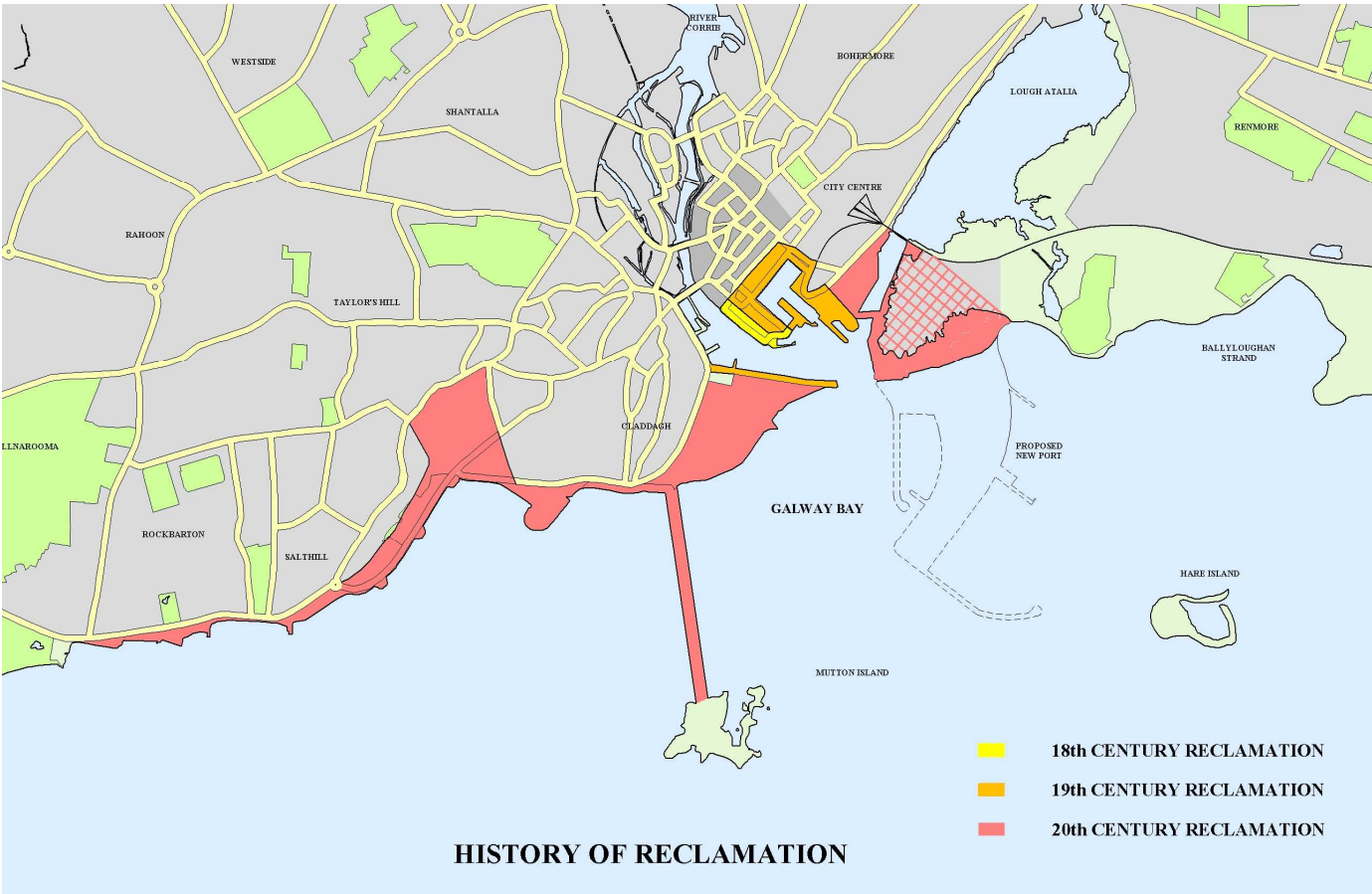
### 1.16 Organic & Planned Growth

It is worth reflecting on the evolution and growth of Galway City and the harbour relative to the introduction of Planning Control. Galway celebrated its quincentennial or 500 years as a mayoral city in 1984 making it today a 529 year old chartered city, even though the origins of the city date back to over 200 years earlier. The Planning Control Act was introduced in 1963 just 50 years ago which means that the city evolved for approximately 480 of its 529 years development without effective Planning Control or over 90% of its evolution.

In terms of the harbour and with the exception of the ancillary Enterprise Park the new port is the first major port development in its 750 year port history, that is subject to strict Planning Control. The relevance of this lies in the natural, uncontrolled, evolution of a city as against a planned controlled evolution. Up to 1963 major infrastructural projects were subject only to political will, allied to financial considerations and in the case of the harbour, the added dimension of an engineering challenge. This resulted in a freedom and flexibility to plan and act on a relatively unrestricted scale. The introduction of the Planning Act was a necessary control to the unrestricted freedom at the start of our post-recession boom period of the 1960's. With that control however also came to a certain extent a curtailment of our ability to do the daring and the unexpected. Galway's identity as a city is defined in the main by its medieval core and to a lesser extent by its inner city area. That overall area's growth and development was not subject to specific planning control and in a way it explains its primary attraction, that of a quirky, organic and informal Irishness that appeals to our desire for the surprising and unexpected, which planned and controlled growth rarely provides. This is not a reflection on our planning system, but an acknowledgement that with every law and regulation that society imposes on itself, it can curtail freedom, invention and expansion, restrictions that society's predecessors were not subject to.

Of course there is an irony and paradox to this regulated present and unregulated past. As an example, some of our prime national monuments and treasures such as the Rock of Cashel and Clonmacnoise and more local to Galway, Dun Aengus and Kylemore Abbey would all today probably fall foul of Planning Control and yet ironically are rightly "protected structures".

Whilst this is a somewhat simplistic analysis given that every society develops its own laws and regulations appropriate to their period, nevertheless, the proposed new port is subject to control and regulations unimaginable to Edward Eyre when he developed the Long Walk and Mud Dock in the 18<sup>th</sup> century, or the Harbour Commissioners when they developed the Commercial harbour, in its present form in the 19<sup>th</sup> century. And whilst planning assessment is both open and democratic based on stated objectives, regulations and laws, ultimately it is done on a subjective interpretation of these objectives. The relevance of this reflection is that we are proposing to add a highly regulated extension to a city that owes its predominant form to a generally unregulated past. More importantly we are looking and assessing the physical, visual and cultural traits of the planning controlled harbour extension against the physical, visual and cultural characteristics of the uncontrolled, unplanned existing city. Finally and critically in terms of the harbour extension, we are providing a planned, segregated and predominately single land use facility, as distinct from an unplanned, integrated, multi land use, in the existing harbour, which highlights the fact, that planned growth in the form of Planning policy, is a major contributing obstacle to providing an extension with the complexity, diversity and public attractiveness as organic growth, as represented by the existing harbour.



### 1.17 Tradition of City Reclamation

If one compares the earliest map of the city with present maps, the most significant changes after the growth of the city is the considerable tracts of land reclaimed from the sea shore and tidal zone since the 18<sup>th</sup> and 19<sup>th</sup> century. The first reclamation to take place was the construction of the Long Walk and Mud Dock in the 18<sup>th</sup> century. During the 19<sup>th</sup> century the city expanded southwards into the tidal marshes with land reclaimed to construct a new dock and sea walls. The reclaimed land was set out in a series of parallel streets which over time was developed as warehouses and homes for the Merchant class of the city. If one envisages that the original south/east wall of the medieval city extending from the present Eyre Square Shopping Centre to the Spanish Arch fronted onto tidal water it gives a clearer picture of the level of reclamation that took place in the 19<sup>th</sup> century to create Merchants Rd and the present harbour. Across the mouth of the river from the harbour two significant reclamations took place. The 19<sup>th</sup>/20<sup>th</sup> century reclamation of the South Park was defined by the reclamation and construction of Nimmo's pier in the 19<sup>th</sup> century. In Salthill the 20<sup>th</sup> century saw the reclamation of Grattan Park, Claude Toft Park and seapoint promenade, whilst in the 1990's further reclamation took place between Grattan Park and South Park to construct the Mutton Island causeway. The last reclamation took place in 2000 to complete and form the current harbour Enterprise Park.

These various reclamation projects resulting in the reforming of the seashore since the 18<sup>th</sup> century are illustrated in the accompanying land reclamation map. This map both highlights the evolution and development of the city as it expanded into the bay and illustrates the history and legacy of the city reclaiming from the sea.



1.18 Tradition of Infrastructure to Amenity use

Galway’s development and growth is punctuated by a series of infrastructural projects undertaken to address particular issues in the growth of the city. There are numerous examples. The Long Walk and Mud Dock were built in the 18<sup>th</sup> century to cater for larger ships coming into the port. The Canal System was developed in the 19<sup>th</sup> century to harness water power for mills to stimulate industrial development. In the 20<sup>th</sup> century the Mutton Island causeway was constructed to provide access and servicing to the Mutton Island sewerage treatment plant. All of these projects of which there are further examples such as Nimmo’s Pier, the Commercial Docks and the Lake harbour were built as a response to a deficit in the city’s infrastructure. In time however and particularly in the second half of the 20<sup>th</sup> century, these projects morphed into another use, that of an amenity for the city’s citizens and visitors. A typical example was the reclamation from the sea at Grattan Road, for use as the city dump and is now the South Park sports and recreational grounds. This change particularly in the water fronted projects was facilitated by a marked change in the city’s attitude and perception of water, which historically was one of exploitation mixed with fear. Consequently the canals were only seen as a source of power, the lake and river for inland navigation and supply of salmon, the sea as a livelihood in the form of fishing and trading, but in the background a sense of the dangers inherent in water. This is best captured in Synge’s “Riders to the Sea” with the immortal lines “They’re all gone, there’s nothing more the sea can do to me”. In recent times our values changed and the various city’s water bodies were primarily seen as amenity and so began the start of the exploitation of these previous infrastructure projects for their amenity value. Today we can now reflect on the tradition of infrastructure to amenity use as both the changing nature of a city and the changing attitude of society within that city which is relevant to the infrastructural status, yet amenity potential of the harbour extension.



1.19 The Long Walk as Model

In providing a harbour extension for the city it is worthwhile to consider the historical models or reference points for this type of facility. In many ways the development of the Long Walk and Mud Dock at the turn of the 18<sup>th</sup> century is an appropriate model. That development instigated by Edward Eyre provided a new quay wall stretching from the Spanish Arch to Crow’s Rock (a salmon netting mark of old in the river estuary) with a new dock basin at its tip. The references to the new port project are obvious. The Long Walk was also developed to cater for larger ships requiring greater depths of water. It also involved reclamation from the sea to ensure the required water depths. In terms of scale the Long Walk extended 350 metres out to sea and developed to an area of over 1 hectare. However at the time the city was still largely confined within the curtilage of the city walls, with some limited settlement around the Medieval Common (now Eyre Square) with an overall area of 40 hectares and a population of 6,000. In comparative terms therefore the Long Walk was proportionately larger than the proposed new port extending 917 metres with an area of 24 hectares in a city now extending to an area of about 2,500 hectares and with a population of around 75,000.

In visual terms the Long Walk significantly altered the physical, cultural and water character of the city, in that the city now extended out to sea beyond the Medieval Walls for the first time and with the development of houses and warehouses in the 19<sup>th</sup> century, visually separated the Claddagh Fishing Village from the City Harbour for the first time. The completion of the Long Walk building development in the 20<sup>th</sup> century completed the separation of the harbour from the west side of the River Corrib and also completed the new city frontage edge where the Corrib enters the sea. Critically the development of the Long Walk and the construction of the Railway line in the 19<sup>th</sup> century, screened the visibility of the harbour from the east and west of the city and confined it to a city centre visibility only.

It is now interesting to reflect 300 years on, the impact of the Long Walk new harbour on the city and the then human experience of the city. It is also interesting to consider that the Long Walk is now a symbol of the city, a recurring photographic image of Galway and the quintessential depiction of Galway’s fishing and maritime past.



## 1.20 Galway Bay Study

In this section we look at the city's immediate waterfront edge fronting onto Galway Bay in terms of its profile, landscape characteristics, amenities, trails, features, attractions and tradition. The objective of the study is to outline its amenity, cultural and social asset to the city and the human response to the land/sea experience. The boundaries of the study are from Seaweed Point to the west, to Roscam Point to the east which effectively bookends the picture frame of the Bay from the City and Salthill. It also more or less corresponds with the existing public access and trails along the seafront shore in the city and consequently is a useful baseline and reference for studying the impact of the proposed new port on the coastal edge. The following is a summary of the various study maps;

**Map 1:** Indicates the extent of the study and the type of land/seascape which in the main consists of a central, developed, manmade landscape flanked at either end with an undeveloped natural landscape.

**Map 2:** Shows the provision of pedestrian/cycle trails which runs almost the full extent of the study area, how it interacts with the riverside trail and outlines the potential for future trails. The oldest trail is that of the popular and historic "walking the prom" route between Salthill and Blackrock and the tradition of "kicking the wall"

**Map 3:** Demonstrates the various character areas of the waterfront. It highlights the variety of the land and seascape from Blakes Hill to Roscam from natural to altered, meandering to formal, exposed to sheltered, quiet to bustling.

**Map 4:** Highlights the primary shore and sea use of the Bay area, from walking and leisure to bathing and recreational, and from fishing and shipping use to private and limited use.

**Map 5:** Indicates the range, extent and sequence of the various seaside attractions, features, points of interest and transition areas which punctuate the experience of the bay waters, from natural to manmade, historical to modern, beaches to parks, buildings to bridges.

**Map 6:** Shows the relevant "protected views and prospects" from the Galway City Development Plan 2011 – 2017 with the various "Perception" zones as outlined below.

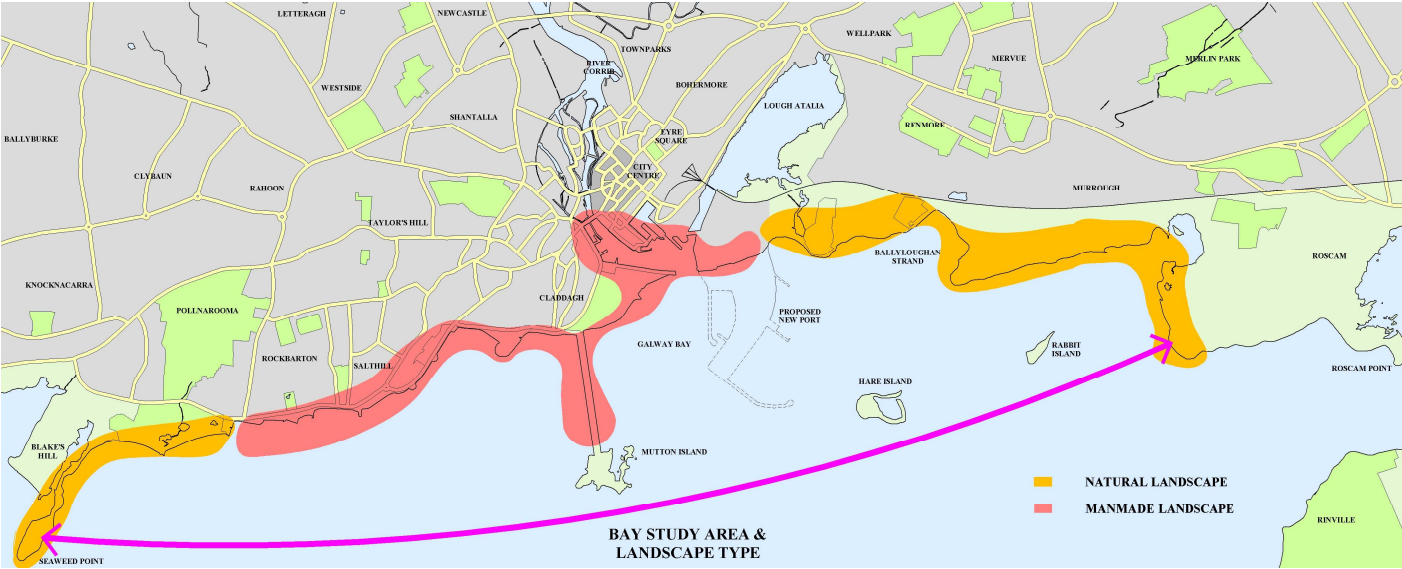
Whilst the above is a useful pointer to the human experience of the bay, it does not convey the full picture. As a further layer to understand the amenity attraction of the seashore, it is necessary to outline the feeling and perception as one moves along the waterfront route and the primary views in the picture frame. For the purposes of this exercise it is confined to the public accessible routes, using the transition areas as boundary markers and starting from both ends of the study area to conclude at the Harbour Enterprise Park – the base and connection point for the new harbour.

- 1. Seaweed Point to Blackrock:** A sense of being removed from the hustle and bustle of the city in a quiet, natural and wild landscape with the head of Seaweed Point offering the best elevated, panoramic views of the Bay, estuary, Aran Islands, Clare and Connemara coastline.
- 2. Blackrock to Mutton Island:** A feeling of being part of the popular and traditional prom walk with extensive activity, features, attractions and distractions, and an intimate and immediate engagement with the water. Salthill brings a bustling sense of variety and village type feel with the scenic Clare Hills being the primary view.
- 3. Mutton Island to Wolfe Tone Bridge:** A quiet, removed experience on a more recently developed walk. Less intimate engagement with the sea due to water depth, rock armour, rocky shoreline and pier. Lack of features and attractions until the Claddagh Quay. Primary views to Rinvile and Roscam are similarly featureless until the Long Walk view comes into the picture frame.
- 4. Wolfe Tone Bridge to Harbour:** A sense of a threshold into the city to experience its urban drama and excitement. Great engagement with the city and its sense of history through a wonderful sequence of urban spaces and views from Wolfe Tone Bridge, Fishmarket, Long Walk and Harbour.
- 5. Roscam Point to Ballyloughan Strand:** A feeling of being in a removed, natural and wild stony shorescape against the backdrop of an agricultural landscape. The main views are the city outline, Hare Island and Mutton Island causeway in the distance.
- 6. Ballyloughan Strand to Enterprise Park:** A perception of being in a local, quiet, natural and undisturbed landscape and seascape against an elevated landmass or railway line backdrop. Primary views are the city outline, Mutton Island causeway and the industrial enterprise park.

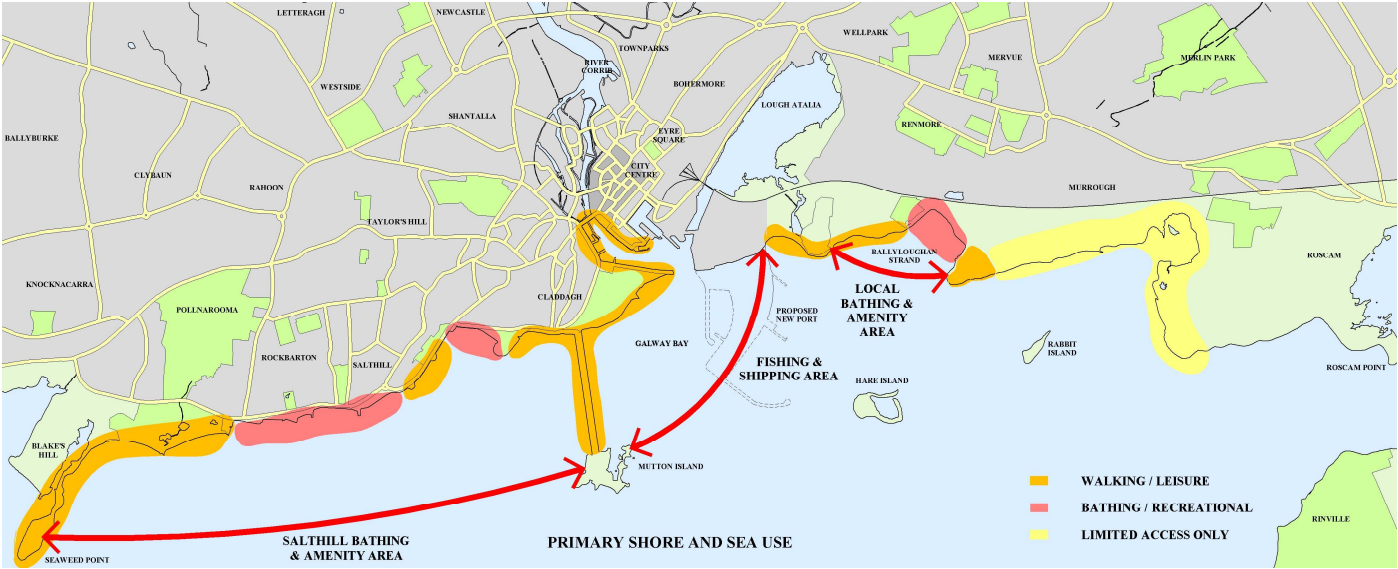
**Bay Estuary Experience:** In view of the proposed cruise liner trade into the new port, it is important to outline the experience of sailing into the city through Galway Bay, which is a natural inlet, bounded by the Connemara coastline to the north and the Clare shoreline to the south with the Aran Islands acting as a gateway to the bay. Initially the bay experience is quite dramatic with the Twelve Pins mountain range and the Clare Hills acting as an attractive and scenic backdrop. Sailing towards and into the city is somewhat disappointing and an anti-climax given the initial scenery. With the exception of its environs, the city itself is situated on a relatively low, uniform landscape. Without a prominent elevated backdrop, the profile and silhouette of the city is rather flat and featureless. In addition the built shoreline to Salthill and Renmore is neither coherent nor defined and does not provide a strong waterfront edge. In general whilst the approach to the city is attractive and interesting, it lacks the drama and excitement of the great port cities.







Map 1



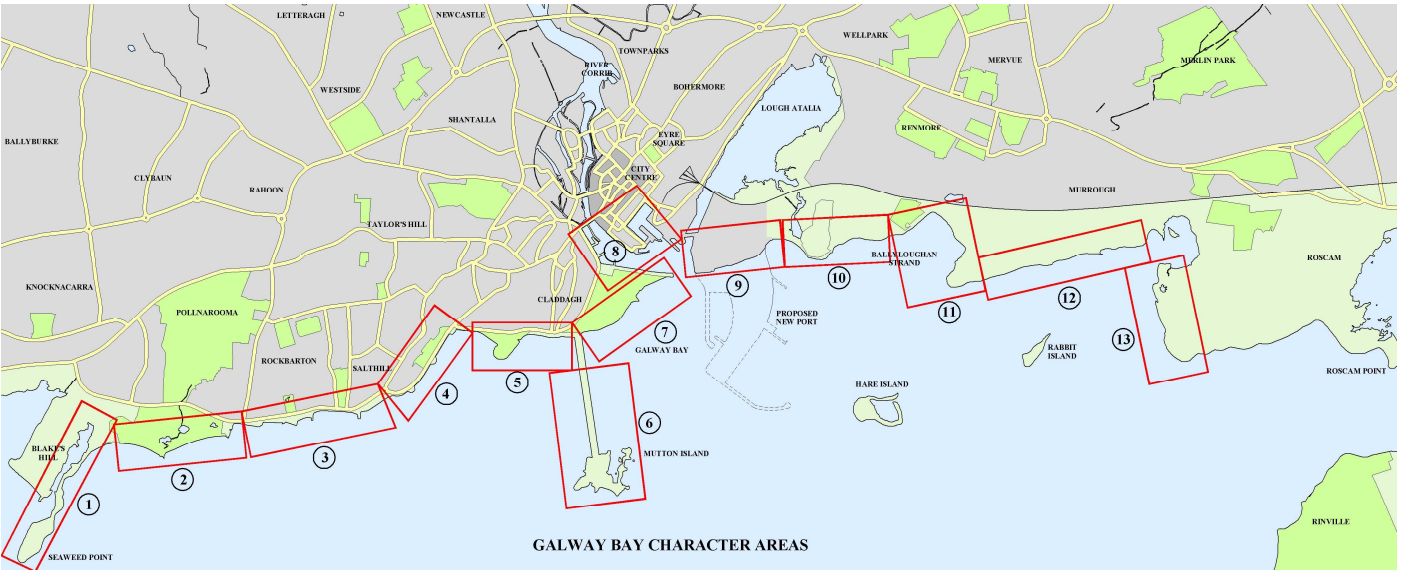
Map 4



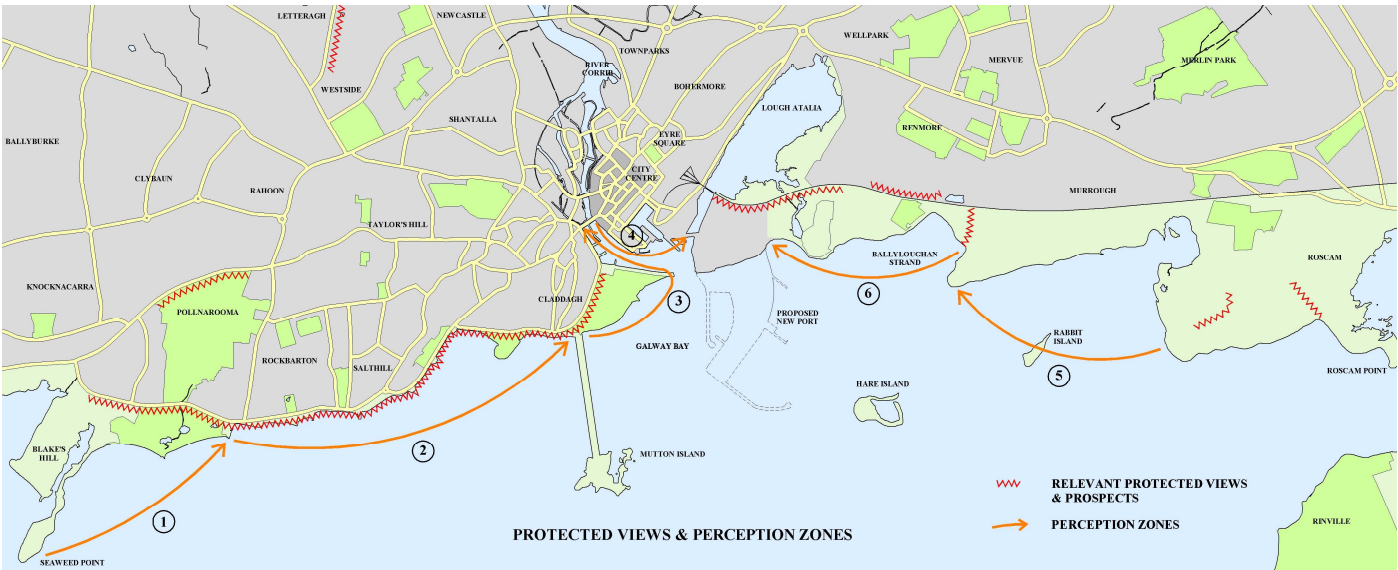
Map 2



Map 5



Map 3



Map 6



Galway Bay Study - Character Areas



1. Natural wild headland and causeway.



2. Stoney shore onto cultivated golf course.



8. City Quays and street edges to river and harbour.



3. Beach promenade fronting road and street edge.



4. Rock armour shore with road and park edge.



9. Manmade rock armour edge to industrial lands.



10. Stony shore line edge to natural land area.



5. Beach and rock armour shore onto road and landscaped ground.



6. Manmade causeway to Mutton Island.



11. Sandy beach with green amenity surround.



12. Natural shoreline fronting open land area.



7. Rock armour and pier edge fronting green park area



13. Natural shoreline fronting open land area.



2.0 DESIGN STUDY

2.1 The Challenge

The primary challenge in providing a harbour extension facility for Galway is addressing the requirements of the brief and accommodation for the project whilst at the same time responding and respecting the uniqueness of the site location against the background of the city's physical and cultural landscape. In many ways this is not just a new harbour but a new type of harbour for the city. It will have a marked difference to the existing facility. It will protrude into the sea rather than be an inlet from the sea as is the existing harbour. It will be open and exposed rather than enclosed and sheltered, predominately single land use rather than multi land use, large scale rather than small scale, removed rather than immediate to the city centre, be constructed over a ten year period rather than evolve over hundreds of years, have minimum built structures as distinct from the an abundance of building types, more automated than human orientated, more secured than accessible and finally will have a more formal rather than intimate relationship with the medieval city. Despite this change in port type, the challenge is to adapt this new type of modern facility so that it is sensitive to the city's natural and urban setting and connect with its cultural, social and historical landscape. The previous section titled Background Study gives the context for the fusion of project brief and project place and is an important informant to the new facility and how it relates to the city and its citizens.

Finally, this Design Study and following Impact Study allows us to assess and measure the harbour extension proposal against the objectives and targets of the Galway City Development Plan 2011-2017 in regard to Material Assets and Cultural Assets. These objectives and targets can be summarised as follows:

- 1. Materials Assets: To maintain and improve the image of the city by promoting a high quality built environment, improvements in the public realm and encourage sustainable modes of transport.
- 2. Cultural Assets: To promote cultural, built and linguistic heritage.



Site location towards Hare Island



Site location towards Mutton Island

2.2 Description and Significance of Site

Whilst technically the site exists at Seabed level, the fact that it is to be reclaimed from the sea means “site description” does not apply in this case as no visible site exists at present. However it is relevant and worth describing the proposed reclaimed created site. In summary the site will be similar both in level and formation as the existing Enterprise Park site consisting of a uniform and flat profile, dry and naturally drained, with a gravelled hardcore surface in its unfinished state, free from growth and vegetation. It will have a mixture of sheet pile walls to its vertical face edges (quays and piers) and rock armour to the remaining sloped edges at the boundary junction with the seafloor. The reclaimed site derives its significance from its location and prominence in the outer harbour waters and its visibility from both the city centre and the east and west city foreshore areas. It occupies the symbolic and strategic extension of the point where the River Corrib enters the sea and where the salt water lake of Lough Atalia connects within the Bay. Its location will ensure the creation of new views, vistas and backdrops to and within the bay area. In particular it has a strong visual connection with the Long Walk/Dock Road area of the city centre, the South Park and historic Claddagh area to the west and the residential area of Renmore and Murrough to the east.

In terms of the bay waters, it is located between the Mutton Island causeway amenity walk and the Ballyloughan strand amenity area and forms part of the picture frame of the immediate bay features and reference points including Mutton Island and Hare Island.

Finally in terms of incoming and outgoing sea traffic, it occupies the prominent new point of arrival and departure from the city landmass.



Enterprise Park from Nimmo's Pier



Enterprise Park from Renmore Beach



Enterprise Park interior



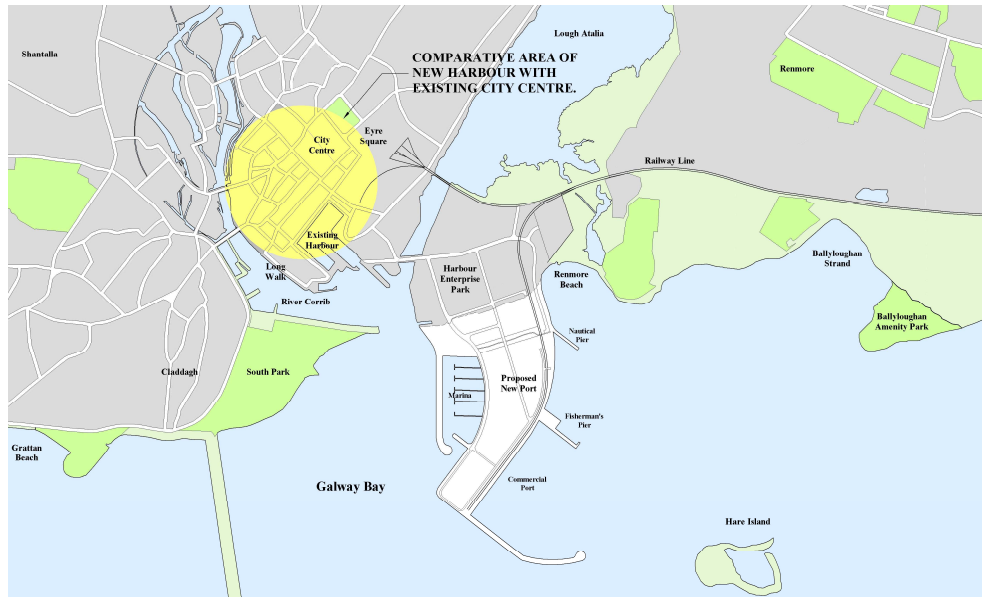
Enterprise Park interior

2.3 Harbour Enterprise Park

The existing Harbour Enterprise Park is the connection and starting point for the harbour extension reclaimed landmass. The existing park of 16 hectares consists of an Industrial Area east of the existing harbour and south of and adjoining the Galway – Dublin railway line some of which was previously reclaimed from the sea over 10 years ago. It is accessed by bridge over the Lough Atalia channel which separates it from the existing harbour area. The southern seaside boundary of the existing Park forms part of a general foreshore line that extends from Salthill, South Park to the Murrough, Roscam area. The existing Park is generally screened from view by the existing harbour area to the north east and the railway line to the north. However, the Park has a high visibility from the seaward tip of the Long Walk and the general Claddagh, South Park area directly to the east. It also has high visibility toward the end of the stony shore walk from Ballyloughan Strand to Renmore beach. The road layout of the existing Park consists of a gridiron footprint laid onto its irregular shaped site. Almost all of the sites have been developed consisting of a mixture of industrial units, warehouses and oil depots, most of which are harbour related. It is envisaged that the site will continue to expand similar to its present trend, in particular to cater for the relocation of the existing oil depots from the general harbour area.

In many ways the Enterprise Park has currently the status of detached backlands to the existing harbour yet is relatively prominent from the general river area. Its new function of being the entrance point to the harbour extension, changes its status in terms of its visibility, prominence and importance as the point of arrival to the new facility. At present the area has a hard, uncompromising industrial feel to it where the title “Park” is somewhat misleading as there are minimal landscaped green areas. The road network is incomplete and overall lacks coherence and with a sense of it being a work in progress. In particular the visible section of the park to the adjoining waterfront environment lacks coherence, definition and a coastal frontage edge, presenting a negative industrial aspect to these areas.

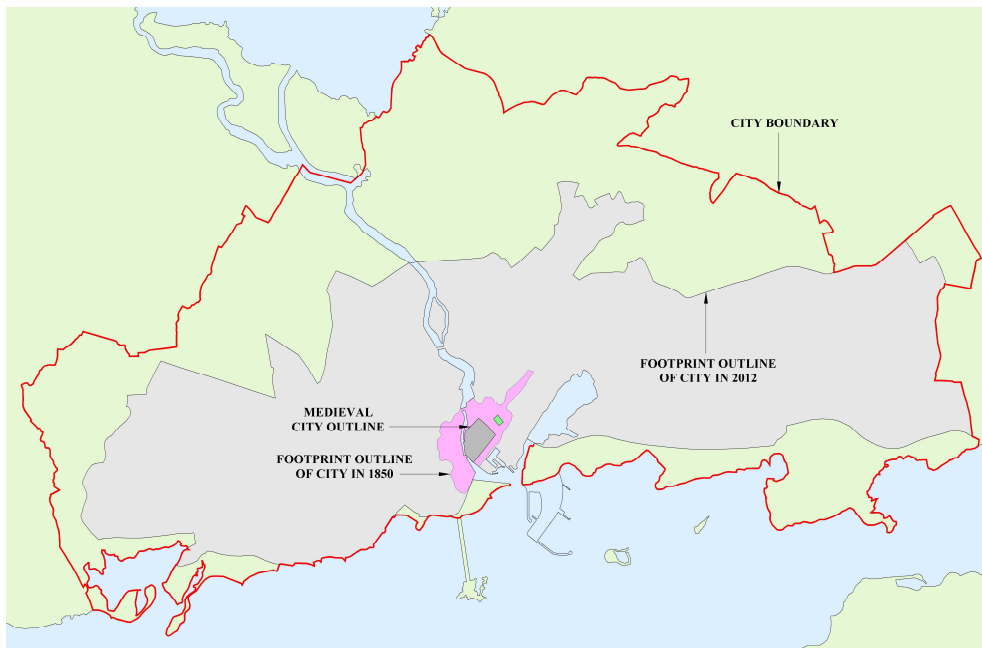




#### 2.4 Scale & Visual Context

At approximately 24 hectares, the area of the harbour extension is equivalent to Galway's commercial city centre footprint stretching from Eyre Square to the River Corrib and from the existing Harbour to Woodquay. However, the scale of the reclaimed lands whilst obvious from a map or from a height can not be truly “read” at ground level. In reality its visual impact is determined primarily by its perimeter edges, in particular it's western and eastern edges. These edges are visible from the South Park/Claddagh to the west, existing harbour/Long Walk to the north west and from Renmore/Murrough/Roscam to the east. Another important aspect is the form and profile of its perimeter edges. In general and with the exception of a small number of buildings which are insignificant in the context of the overall lands there is an absence of an overground built environment in the proposed development. This results in the new landmass having a predominately linear, horizontal and flat profile with the only verticality and animation being provided by the “temporary landscape” of shipping, sailing craft and cargo storage. This dominant horizontality reflects the horizontality of other infrastructural elements in the bay area such as Nimmo's Pier and Mutton Island causeway which provide a useful form and line reference comparison for the new harbour.

In general the scale of the development must also be seen in the context of the growth and scale of the overall city. The present harbour dates back to the middle of the 19<sup>th</sup> century when the population of the city was 13,000 and with an area of 70 hectares. The harbour extension is consistent with and reflects the almost fortyfold increase in the city's physical growth and sixfold increase in population growth since then. In many ways the harbour extension is playing “catch up” with the growth of Galway city and its hinterland that it serves.



#### 2.5 Urban Waterfront Objectives

In order to achieve the aim of matching the requirements of the project brief with the sensitivity of the site and the city's physical and cultural landscape a number of objectives were identified as being vital to the process. These objectives were as follows:

1. Harbour extension to be visible, accessible and attractive.
2. Provide a form appropriate to its bay setting
3. Maintain its umbilical cord to the city.
4. Establish connections to the city and waterfront routes.
5. Respond to its nearest land boundaries.
6. Provide for the public realm.
7. Create a new maritime identity in the bay.
8. Provide a positive arrival for Cruise Passenger traffic.
9. Separate pedestrian, vehicular and rail movement.
10. Exploit its amenity, recreational, leisure and event potential.

#### 2.6 Vision for Harbour Extension

Given the scale of the proposed development and the resultant physical impact on the city, it is important to establish a clear urban waterfront vision for the harbour extension. This vision will be unique and particular to Galway's physical and cultural circumstances in order for it to be deemed appropriate and acceptable to both citizens and visitors to the city. The genesis for the vision has been established in section 1 - Background Study and involves a number of strands. Firstly, from a historical perspective the existing harbour is rooted in its 19<sup>th</sup> century past while the city has expanded dramatically since then. Secondly, in terms of evolution, the harbour whilst visible from all sides of the city and environs up to the 19<sup>th</sup> century when the Long Walk and Railway Line development confined its visibility to the city centre only. Thirdly, the harbour has strong visual and symbolic connections to the city's medieval commercial centre. Fourthly, the city has developed a trend of changing or using infrastructural projects for amenity and recreational use. Finally, Galway is now a tourist and welcoming city.

The vision for the harbour extension sees it re-establishing its maritime presence and visibility in a modern expanded city from the “old city” of the Long Walk and Claddagh area to the “new city” of Renmore and Murrough to Salthill. In doing so, it retains its visual and symbolic connection to the city centre whilst extending the city's network of waterfront amenity routes, leisure facilities and recreational areas, which enhance the process of turning the city towards the sea. As a tourist city, it extends a welcoming hand to all sailing craft from passenger cruise liners to racing yachts and provides a positive seapoint arrival to the city. In the context of the Bay, it creates a new harbour identity and portscape to bring life and animation to its waters, which enhances the maritime vista and experience in the city. Finally, the vision for the harbour extension sees it having its own title and status. With the existing harbour renamed the Inner Harbour - inward looking and a glimpse at the past, the harbour extension will be titled the Outer Harbour - outward looking and with a view to the future.



2.7 Description of Project

The proposed development consists of extending the existing Enterprise Park lands southwards by reclaiming approximately 24 hectares from the sea to form a new linear harbour peninsula protruding towards the sea channel between Mutton Island to the west and Hare Island to the east. The development will provide a new commercial port and fisherman’s pier on its western boundary, a new marina on its eastern boundary and bulk cargo storage area to its centre. The development will have both a perimeter and central road access and network, connecting to the existing road network of the Enterprise Park. In addition, it will have a freight rail line along its eastern boundary linking the new quay berthing area to the existing railway line to the north. The development will provide a new recreational parkland area on its north eastern connection to Renmore beach, amenity walks around the marina on its western boundary and a central amenity “industrial” parkland linking both areas. The project will provide a Harbour office building to its western boundary, a Cruise terminal building on its eastern boundary and a warehouse building on the north west boundary with the Enterprise Park with future indicative proposals for harbour or marina related units fronting onto the marina. It will provide a new horizontal landmass, vista and backdrop when viewed from the South Park/Claddagh/Mutton Island causeway to the west, Renmore/Murrough/Roscam to the east and the existing Harbour/Long Walk/Dock Rd to the north west.



2.8 Reading and Understanding the Harbour Extension

In response to the fact that this is not just a new harbour but a new type of harbour it is important to understand and read the primary characteristics and features of the new facility and how it responds to its particular location. In general the harbour extension consists of a “soft” perimeter skin and a “hard” core. The “soft” skin contains the more appealing elements of the port such as the public amenity, leisure and recreational areas, the limited number of public, semi public and private buildings, the main shipping and passenger quays and berthing areas, the fishing and shipping piers and even the rail link to the main railway line. The “hard core” contains the less appealing elements of the port such as storage and related facilities for all general cargo, fishing, containers, fuel and waste materials. This separation and semi screening of the skin from the core gives it an “avocado” effect where the soft “green” outer layer conceals the hard “brown” centre. However in this case there is no attempt at total concealment or taking an “out of sight, out of mind” attitude to the central bulk storage areas. Part and parcel of port activities is the function of storage and movement of inward and outward goods and cargo which comes in all shapes and sizes and is a contributing element to the “portscape” of modern harbours as evidenced by the scrap metal waste mountain in full view in the existing harbour. So while the “soft” perimeter elements of the harbour extension will be the most visible for the surrounding or immediate adjoining environment the “hard” central elements will also be noticeable, albeit with filtered or screened views.

A feature of the harbour extension as highlighted in the Galway Bay study is the close and adjoining coastal relationship between shipping, fishing, leisure, recreational, amenity and bathing functions. In effect they all utilize a common ingredient which is the bay waters, so they have a complimentary ability to coexist adjacent to each other which is acceptable, natural and appropriate. The harbour extension combines all these functions in relatively close proximity and are not diluted or deemed inappropriate by the presence of the central bulk cargo storage area and facilities, which is and always has been a feature of Galway’s harbour activities. In essence the proposed new development is a combination of a commercial port and a recreational harbour, a duality and mixture that borrows from and is consistent with Galway’s existing harbour.

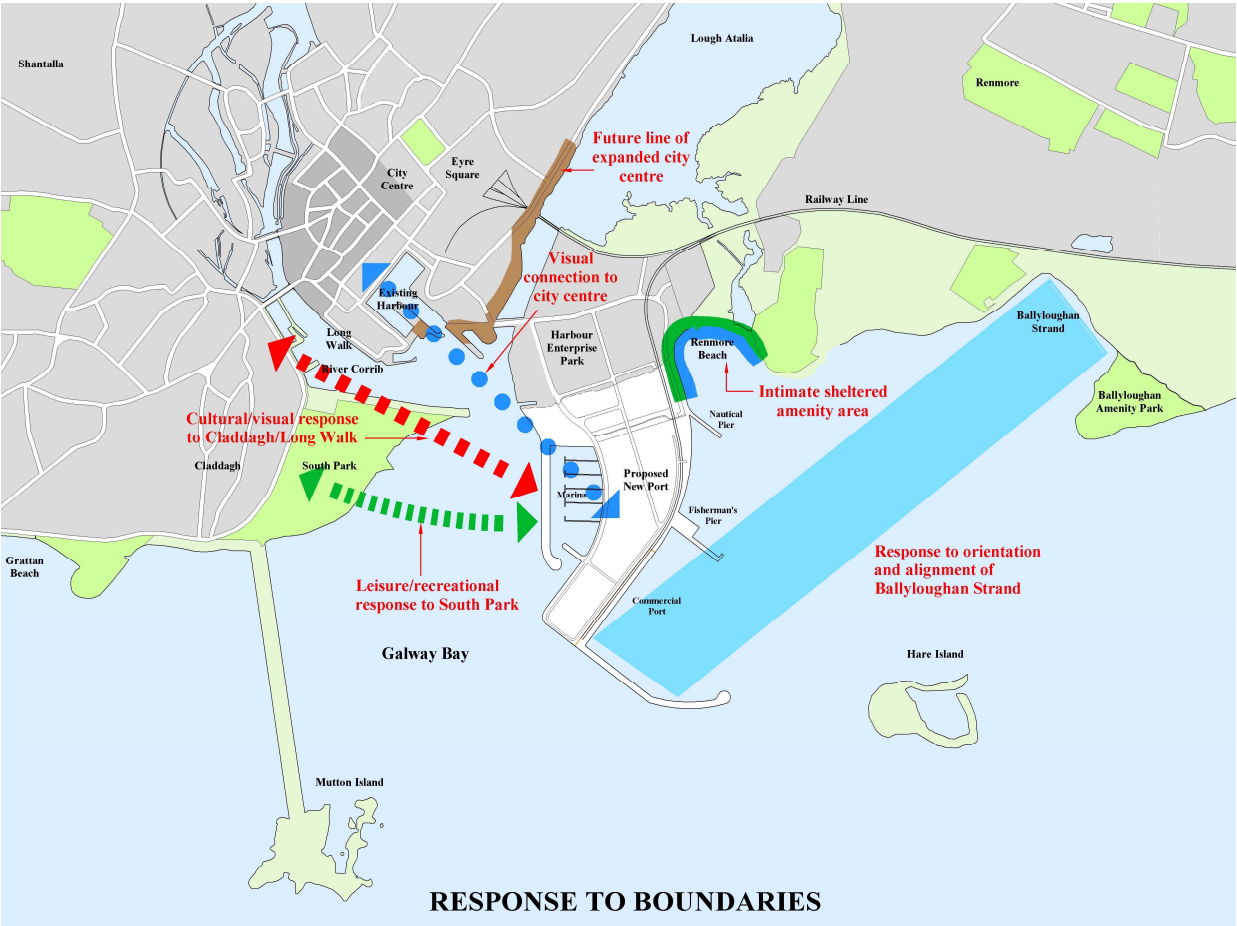


2.9 Form and Response to Boundaries

The overall form of the harbour extension and how it responds to its nearest land boundaries is the key to how it sits comfortably into its bay setting and reflects the physical landscape of the city. The overall form of the port (which interestingly and appropriately looks like a fishing hook!) is in the main, irregular with a curved “banana” outline to its primary footprint. However its component parts made up of quays, piers, jetties and lagoons have a regular, straight line profile. In this way the overall form reflects that of the bay itself which consists of a combination of irregular or natural projections and headlands out from the sea shore with regular straight line manmade piers, causeways and promenades as component parts of the waterfront. This reflected form ensures a consistency and sensitivity to the existing bay landscape and seascape. It is interesting to note that the form, orientation and alignment of the harbour extension is quite similar to the existing harbour dating back to the 1840’s, which indicates that 170 years later, the issue of shelter and protection from wind and weather is still relevant today and the primary driver behind the key design decisions.

The harbour extension response to its nearest land boundaries can be summarised in three areas:

- 1. Existing Harbour/Long Walk/City Centre:  
Given the existing harbour’s close link with the city the relationship between the harbour extension and the city centre is critically important. Whilst the new port is removed from the city centre area and is now divided from the city by the Lough Atalia Channel, the Urban Design Framework for the existing harbour provides for the expansion of the existing city into the existing harbour area, so that in time, the new extended city centre will again be adjacent to the new facility. In addition the harbour extension is highly visible from the existing harbour and occupies the full picture frame of the aperture from the original port. This new adjoining and visual connection ensures that the symbolic umbilical cord connecting the city to its harbour whilst stretched, remains intact.
- 2. Claddagh/South Park Area:  
Because of the Claddagh’s renowned history of being a self-contained, autonomous, Gaelic fishing community and the South Park being a reclaimed recreational area, the response of the harbour extension is both cultural and visual. The provision of a new shipping, fishing and sailing harbour portscape from the Claddagh provides both a symbolic, cultural and visual connection between both areas and is an appropriate image from that traditional seafaring community, as represented by the existing, operational Claddagh Quay. The presence of the marina on the western flank of the harbour is an appropriate sea-based, leisure facility response, to the land based recreational facility of South Park.
- 3. Ballyloughan Strand/Renmore Beach:  
The existing physical and visual relationship between the Ballyloughan and Renmore beach with the Enterprise Park is redefined and made more coherent. In particular the harbour extension provides a more positive edge to the exposed, incomplete and haphazard nature of the Enterprise Park. The curved form of the harbour extension and the commercial Portscape and fishing piers is a corresponding response to both the geometry and orientation of Ballyloughan strand and its complementary function as a local bathing and amenity area. The creation of an intimate, sheltered and south facing horseshoe form for Renmore beach provides for a very attractive and semi enclosed local recreational area and where the elevated form of the rail link to the harbour extension provides both a barrier to the existing Enterprise Park and a sense of enclosure to the amenity. The enhancement of Renmore Beach exploits the potential and access to this previously hidden and largely unknown passive amenity.





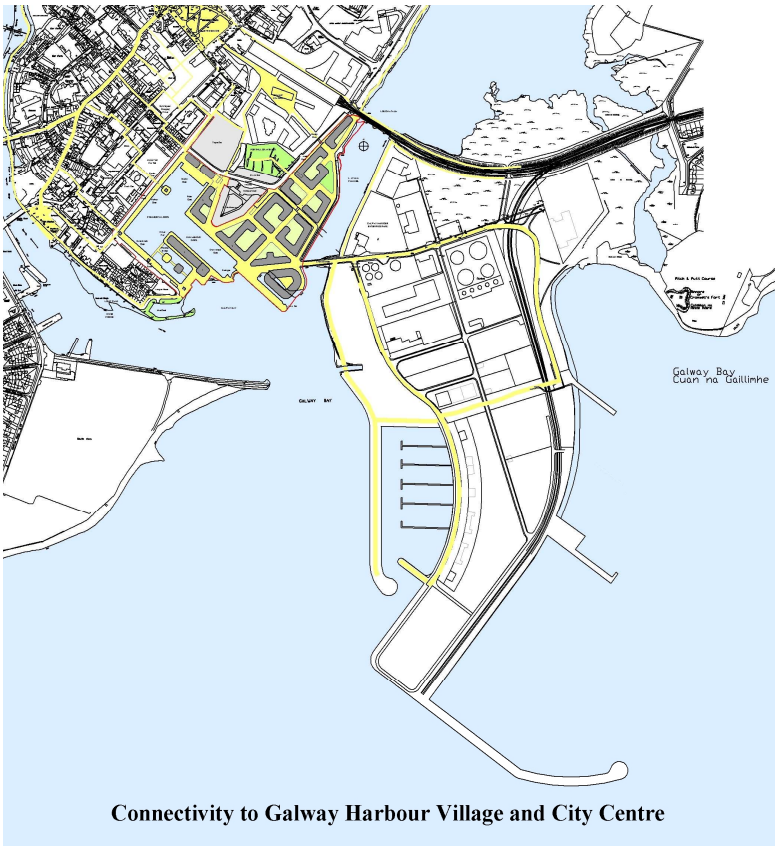
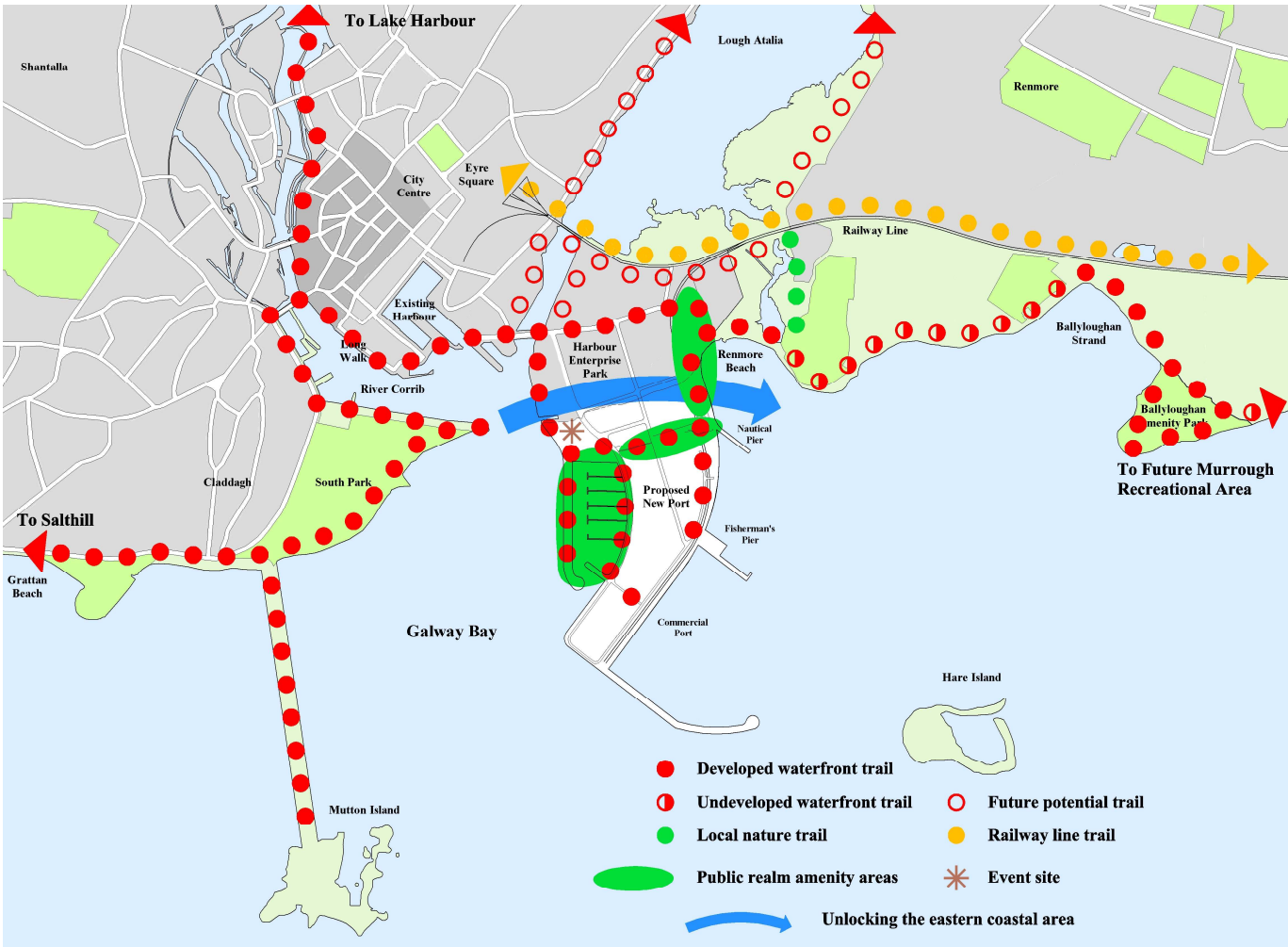
### 2.10 Connectivity and the Public Realm

The provision of connectivity and the public realm to the harbour extension is the single most important element in maintaining the “cultural” link to the existing city and ensuring continuity with the legacy of the existing harbour. The objective of both optimizing connectivity and the public realm has resulted in a series of routes, trails and links combined with a series of amenity spaces, leisure facilities and recreational areas which adds considerably to the existing stock of waterfront trails and amenity areas in the city. The Urban Design Framework for the existing harbour has established the objectives and strategy for connectivity and the public realm in the existing facility and highlights its future status as providing the key link between the city centre and the new harbour. In turn the harbour extension builds and responds to the core principle of the Urban Design Framework Document particularly in terms of connectivity and the general policy of the Galway City Development Plan 2011-2017 which supports the linkage and connection of natural heritage areas with a specific objective of creating an extensive coastal greenway from Oranmore to Barna and linking with riverside walkways. Critically the new port unlocks the eastern coastal area and links for the first time, the western and eastern seafront trails. The connectivity can be summarized in three key areas as follows:

1. **City Centre Connection:** With the harbour extension now separated from the city centre by the Lough Atalia Causeway the key connection areas are the two bridges – the road bridge and railway bridge. The road bridge provides the main pedestrian/cycle links between the city and port. This bridge may in time be for pedestrian and cycle use only if the option of a second bridge for vehicular traffic in the Urban Framework Plan is provided. The existing railway bridge also has a pedestrian route on its northern side which is possible to access indirectly from the new port area. In addition the Urban Framework Document provides for the possibility of a new pedestrian bridge over the Lough Atalia channel beside and immediately south of the railway bridge to provide an additional and more direct future link.
2. **East/West Connection:** The Urban Design Framework for the existing harbour provides for a new potential East/West trail linking Salthill to and around Lough Atalia via the road bridge and the underpass to Lough Atalia east allowing a loop of Lough Atalia. The harbour extension provides for an equally exciting east west seaside route from Salthill to Renmore/Murrough. This route will connect for the first time the two primary recreational beach areas on each side of the city – the popular Salthill Beach to the West and the local Ballyloughan Strand to the East via Renmore beach, a meeting of the “public” and “private” city.
3. **North/South Route:** With the provision of the harbour extension and the future regeneration of the existing harbour, the north/south River Corrib trail will be extended southwards to the new marina. In effect this trail will provide for the connection of the existing Lough Corrib lake harbour of Eglington Pier to the new sea port between Hare and Mutton Island.

The provision of the public realm can also be summarised in three areas:

1. **Marina/Event Site:** The western flank of the new port is primarily occupied by a new enclosed marina with a perimeter pedestrian/cycle pier. This marina will cater for all types of boating and sailing craft from pleasure cruisers to yachts and provides an attractive nautical edge to the harbour. Immediately north of the marina is a waterside area allocated as the Marina boatyard and occasionally as a Tented Village site to cater for maritime events such as boat shows or exhibition craft.
2. **Renmore Beach Parklands:** This amenity and recreational area is centred on the existing Renmore Beach a relatively inaccessible, unknown and undeveloped area adjacent to the existing Enterprise Park on the north eastern corner of the new port. The proposed development of this area consists of a new landscaped green parklands between a rock armour hard edge on the western shore of the beach and the rail freight connection to the main railway line. The resultant recreational area provides an intimate, sheltered and semi enclosed space south facing onto Hare Island and the bay and defines the manmade landscape of the new port parkland with the natural landscape of Renmore Beach.
3. **Central Link Industrial Parkland:** This route strip of landscaping links the new marina to the west with the Renmore Beach Parklands to the East, separates the primarily vertical form of the Enterprise Park with the primarily horizontal form of the harbour extension and provides a novel feature on the waterside trail from Salthill to Ballyloughan Strand. This greenway route invites the public to explore the mostly hidden industrial “architecture” of port areas from large oil storage tanks to the craneage and fork lifting of cargo goods. Similar to some restaurants that open their kitchen to the full view of their dining customers in order to expose them to the scents, smells, drama and experience of cooking, this landscaped lung at the centre of the overall port peninsula exposes the unknown, but vital industrial service area of the city, which for some people can reveal a lot about the nature of the city and hinterland it services. It provides an opportunity for the city to study a living portscape and Galway’s most visible symbol of globalization.





### 2.11 New “Portscape”

The creation of a new portscape in the bay is the most visual impact of the harbour extension facility. For some this is a positive and appropriate intervention given Galway’s maritime origins and evolution and reflects the accelerated expansion of the city in the last 50 years. For others it may appear as a negative, given Galway’s tourist and coastal amenity attractiveness. Consequently, it is worth commenting and reflecting on the concept of “Portscape” in order to give a better understanding of it and how it relates to the Galway experience.

Portscape is defined as all the components and elements of a working harbour’s facilities and operations that defines its distinctive character and identity, and make it legible and easily recognisable. In a modern port “Portscape” includes the permanent fixed structures of quays, piers and harbour buildings to the temporary, moveable structures of ships, cranes and cargo. For the proposed Galway New Port the portscape is concentrated on its relevant western and eastern flanks. The western flank portscape is defined by the new marina and piers containing sailing and pleasure craft, some incidental harbour buildings and container storage to its southern end. The eastern flank portscape is defined by the commercial port quay and berthed ships, the fisherman’s and nautical piers with the bulk cargo storage area and associated mobile cranes in the background to the central area. In general the new portscape consists of the nautical elements providing a soft filtering to the storage elements behind. Overall the harbour extension is promoting a portscape of maritime and open, industrial storage compound characteristics which is seen as appropriate and not unexpected given Galway’s coastal trading status and location.

In many ways the portscape reflects both the seaside landscape and urban presentation of the city. Galway’s landscape as highlighted in the Galway Bay Study consists of a manmade and reformed landscape to the west with a natural and undisturbed landscape to the east. Similarly the city itself consists of manmade and refined urban streets and spaces while the new port represents the raw and edgy side of that “packaged and presented” urbanism. All of these elements have their place in a modern city and provide their own different attractions for different people. It is clear that certain ports, particularly in Europe, have recognised the potential attraction and subsequent success in catering for the interest in modern port landscape, technology and atmosphere. Both Antwerp and Rotterdam have dedicated information centres and visits to their port facilities. Indeed Rotterdam have provided recreational facilities and vantage points for shipspotting whilst Antwerp offer grandstand views of their port operations. In Hamburg, probably the most innovative port in the world for this type of interaction, public beach clubs have been developed to overlook their busy container terminals and cranes which are seen as an essential component of the beauty of a modern port city. In Tokyo several carefully designed public parks overlook container terminals. This approach recognises the curiosity and fascination that working seaports can provide and is central to the promotion of Galway’s harbour extension.

Galway’s attraction as a destination is primarily centred on Eyre Square and its Medieval Core with the coastal amenity facilities overlooking the Clare Hills also a major attraction. The new portscape is seen as adding to that stock of attractions and places of interest. Whilst the Medieval core is about soaking up the unique character and ambiance of the city, the recreational waterfront is about enjoying the natural amenity of water and scenery, the new port is about satisfying the fascination with the unique maritime and industrial characteristics of ships, port technology, port cargo and general port operations. Indeed the observation of port activities has been and continues to be an ongoing pastime for the city, since and before, the existing harbour was constructed in 1842 and the harbour extension is a continuance of that tradition and interest in Galway’s portscape.



Hamburg Port

### 2.12 Approach to Architectural Design

Consistent with all modern ports there is a lack of a built environment to the new harbour. There are many reasons for this, including the single use zoning of new ports, the increased containerization of goods, the requirement for open rather than enclosed storage, and the gradual phasing out of the traditional harbour related processing plants. These changes have resulted in a new type of port typology which is based on an open, flat, constructed, landscape mostly devoid of permanent built structures. This is a marked change from traditional harbours such as Galway’s existing harbour where both associated and non-associated buildings formed the landscape, to the new typology, where the limited number of buildings are set in and are incidental to the landscape. This poses a challenge architecturally in that the dispersed structures are either lost or are an aberration in the new harbour portscape rather than forming a backdrop as in traditional harbours. It is further compounded in a new reclaimed site from the sea where there are no existing site references or context other than the adjoining Enterprise Park. In addition there is the added challenge of an intention to develop a curved line of stand-alone pavilion buildings related to and act as a backdrop to the new marina but cannot form part of this application because of the S.I.A. restriction to port only related uses. This restriction provides a difficulty in trying to create a coherent, interim backdrop that is also capable of being a permanent solution in the event that the future proposal fails to materialize. In addition the buildings at both ends of the proposed curved street frontage must be capable of existing on their own or as part of that possible future discontinuous frontage to the new marina.

Finally, all of the limited number of buildings to be provided are generally dispersed around the perimeter of the site with the exception of the Harbour and Marina Management buildings which form an adjoining pair at the point of arrival to the marina. These perimeter locations ensure that the buildings will have a high visibility from both the west and east of the new harbour. Despite the limited number of buildings provided there is a diversity of building types from warehouse to management building, from offices to passenger terminal and consequently from private to semi private use, from occasional public use to semi public use which offer distinctive architectural possibilities. The core objective in the approach to architectural design was to create and provide high quality buildings that set the tone and context for the overall reclaimed and newly created environment, and act as a catalyst and blueprint for future buildings. To address the above issues, the following are the objectives in the architectural approach:

1. Develop a hierarchy of building types based on function.
2. Study the hierarchy of relevant building types in the existing harbour.
3. Learn from generic prominent coastal building types.
4. Exploit the brief and accommodation for each building to optimize its public face.
5. Respond to each particular site location and proposed context.
6. Develop an architectural form appropriate to its setting, visibility and function.
7. Start the process of creating an appropriate modern port architecture.
8. Create an architecture that is rooted in the Galway City tradition.
9. Buildings to meet the requirements of their functions and end users.
10. Exploit the green sustainability potential in the building designs.





Warehouses



Former Iodine Plant



Steamship Co. Offices

### 2.13 Existing Harbour Building Types

The existing Galway harbour contains or contained a number of generic building types which are a useful reference for the harbour extension in terms of their function and architectural expression. The study of these buildings can inform and offer a model for the new buildings albeit with a contemporary interpretation. The existing types can be divided into three categories as represented in the accompanying photographs.

- 1.0 Warehouse: The terraced gable fronted warehouse is typical of not just Galway but of other Irish and even European port cities. These 19<sup>th</sup> century buildings fronting onto Dock Rd which were demolished in 2000 were used for grain storage and consisted of a render finish with a deep open plan footprint covered with parallel pitched roofs on steel trusses, a typical construction for that use and period. Most of the warehouses were double height and some contained ancillary office and staff accommodation to the street front.
- 2.0 Processing Plant: This stand alone former iodine factory and kelp store also dating back to the 19<sup>th</sup> century occupied a full city block and dominated the central area of Galway harbour consisting of a six metre high perimeter rusticated limestone wall with brick dressing to all openings. It originally had a barrel vaulted roof and covered an area of over 1 acre. The original "listed" wall and openings were preserved and incorporated into a new urban renewal mixed development of apartments and hotel in the latter part of the 1990's.
- 3.0 Offices: This early 20<sup>th</sup> century building built by the Limerick Steamship Company as their office headquarters in Galway is one of the very few brick buildings in Galway's city centre but again is typical of other port office buildings in Ireland from that period. Originally a single storey building, it was constructed in red brick with limestone dressings which demonstrates the desire to provide a higher quality, office use building and distinguish it from the more basic quality, surrounding warehouse use at that time. The front "listed" facade was incorporated into a larger scale urban renewal office building in the mid 1990's.

The above buildings not only highlights the diversity of the building types in the existing harbour but also the variety of architectural expression and materials from stone to brick to render treatment in order to portray the hierarchal nature of their uses. These relatively simple forms but varying treatments provided the harbour with a distinctive if somewhat dispersed port architecture.

### 2.14 Sustainability

The promotion of green and sustainable design principles are central in the design of the various buildings. In general the buildings are designed to comply with Part L (Energy Conservation) of the Building Regulations and in particular as amended in 2008 and 2011 to take account of additional sustainable principles and changes such as Energy Performance Co-efficient, Carbon Performance Co-efficient, U Value compliance, Air permeability, Minimum Boiler/A.C Efficiencies, Minimum specific Fan Power and Minimum overheating requirements. However it is proposed to significantly exceed the minimum energy saving targets as set out in the Building Energy Rating Assessment (B.E.R. Certificate). The objectives for all the buildings, is to achieve an A Rating with A3 as a minimum target where in comparative terms B3 would be typically compliant. It is proposed to achieve this at detailed design stage by specifically focusing on elements to achieve improvements over and above the minimum building regulation requirements. These elements in order of well researched effectiveness are as follows and will be informed by computer aided model testing in the form of Thermal Analysis, Air Flow Simulation and Lighting Simulation.

1. Lighting Control System.
2. Improved Glazing System.
3. Natural Ventilation.
4. Energy Efficient Lighting.
5. Improved Insulation.
6. Improved Infiltration.
7. Improved Renewals (particularly zero primary energy renewals such as wind turbines, photovoltaic and solar water heating).

However, the weak link in any Green Sustainable Energy proposals for buildings is not at design stage but at construction and operational stage. Consequently, it is proposed that a rigorous on-site monitoring programme is in place during the construction phase backed up with Technological Test aids such as Thermal Imaging and Air Tightness Tests to ensure construction complies with the design specification. Post construction it is proposed that clear and unambiguous training and guidelines are provided to the Building Management, staff and occupants to ensure that the monitoring, performance and operation of the building and its various systems are utilized to the optimum sustainable limits.

In terms of the most effective area to ensure energy efficiency, the following is a more detailed outline:

1. Natural Ventilation and Daylighting: Two of the major consumer's of energy in buildings are air conditioning and artificial lighting, both of which can be mitigated by the use of natural daylight and ventilation. It is proposed that at design stage all public and working areas have good quality natural lighting and access to natural ventilation, preferably cross ventilation.
2. Artificial Lighting Strategy: Modern lighting strategies seek to address the key question "what is the appropriate lighting level, at the appropriate place at the appropriate time?" These issues of function, location and time will be addressed at detailed design stage by linking the appropriate lighting levels to ensure comfort with occupancy sensors and occupancy schedules within the building management system.
3. Energy Efficient Facades: The use of high performance facades can lead to a major reduction in energy consumption. The detailed design stage will examine and consider the use of double or triple skin facade systems and possibly integrated with an internal blind system to optimise efficiency particularly in the larger glazed areas.
4. Water Harvesting and Recycling Strategies: The growing demand for water has both an ecological and economic impact in terms of storage, treatment, distribution and leakage. It is proposed to consider at design stage the minimum consumption of treated public water supply by harvesting rainwater, recycling greywater and implementing water saving technologies in the various buildings.



2.15 Future Development Control

Because the harbour extension will develop on a gradual phased basis into the future, particularly in relation to the provision of new buildings to complete the proposed curved road frontage buildings to the new marina, it is important to establish a framework control for the development, in order that the appropriate and desired port architecture is maintained. This control is also necessary to ensure an ordered, consistent and coherent development of the highly visible seafront edge of the harbour extension and to prevent any discordant, negative or inappropriate interventions into the built environment. Having said that, the framework is not overly prescriptive and will allow scope and encouragement for individual customization and personalised design for known end users subject to it making a positive contribution and dependent on the function and brief for the building, but still set within the context of the overall control parameters. The main elements of the framework control are as follows:

- 1. In general, buildings to have a simple, legible form unless its proposed function and particular site location demands otherwise.
- 2. Buildings to present their “public face” to the seaward aspect.
- 3. In general, and with the exception of focal buildings i.e. the Harbour office building, building heights to be restricted to 10 metres.
- 4. Overall colour to be restricted to matt, neutral, monochrome shades with only incidental use of colour permitted.
- 5. Signage to be confined to lower level of building facades and restricted to contrasting and neutral coloured “silhouette” lettering.
- 6. Materials to be restricted to materials of Harbour Management and Marina Management buildings unless the function and site location is appreciably different where the additional palette of materials provided in the Harbour office and Cruise Terminal building can be considered.
- 7. In general, fenestration to be kept simple and legible.
- 8. Main entrances to be restricted to seaward facade.
- 9. Building scale to recognise both the smaller human and larger port scale.
- 10. Public elements of the buildings to be obvious and preferably transparent.

2.16 Future Development Potential and Aspirations

The development of the harbour extension is seen as a phased reclamation and construction programme over 10 years. However, ports are constantly changing and evolving reflecting the changing nature of society that it serves so it is worth considering possible future trends, potential and aspirations beyond its 10 year building programme. Whilst this is a speculative exercise it is necessary at times to peer into the distant future in order to inform the immediate present. The context to this vision into the future has a number of strands. Firstly the history of Galway harbour has demonstrated its consistent evolving nature even over relatively short periods of time. Secondly, living in an age of peak oil and pursuit of alternative energy sources will impact on the new port into the future both physically and commercially. Thirdly, the rail freight link future proofs the harbour extension and this model of cargo interchange and sustainability is likely to commercially favour ports with this facility into the future. Fourthly, the development and predicted growth of the Cruise Liner business brings a totally new dimension to the harbour extension operations and potential. Finally, the continuing exploitation of the “soft” amenity, tourist and cultural values of port areas is likely to continue and accelerate. The examination and consideration of the future development potential and aspirations for the harbour extension can be studied under 6 headings as follows:

- 1. Multi Land Use: Whilst the predominant land use of the harbour extension will be for port operations and port related activities, the continued restricted zoning to this single land use into the future will not only hinder, but harm its potential public attractiveness. One of the reasons for the attraction of older harbours is their diversity of use of which Galway’s existing harbour is a prime example. The harbour extension needs to aspire to providing different ancillary land uses which are both complementary and contrasting with the primary land use in order to exploit its potential as a destination in its own right. These uses which can vary from hospitality to commercial/residential use will be necessary to both add to its public appeal and reinforce its waterfront public realm. Whilst this future development needs to be ordered and planned in a sequential and sustainable basis from the regenerated existing harbour there is also merit in considering a pre-emptive phasing of such work to act as a catalyst for the harbour extension and in particular the new marina, in the years after the construction phase is completed.
- 2. Rail Link: The proposed rail link from the harbour extension to the existing railway line is to facilitate direct cargo transfer from ship to freight train and vise-versa. However given the new Cruise Liner business, there is an obvious future potential in doubling the function of the rail link to provide a passenger rail shuttle from the Cruise Ship to the proposed new Ceannt Station intermodal Rail and Bus Terminal. This would be consistent with the objective of promoting and encouraging integrated and sustainable transport modes. In addition given Galway’s status as a tourist city the use of the rail shuttle in reverse, to open up the harbour extension to its tourist potential can also be a future aspiration.
- 3. Security: The I.S.P.S. code following the 9/11 attack has resulted in the sealing of ports from public access providing screened and gated harbour compounds with restricted access only. This anti terrorist blanket ban on access has led to an increased disconnection between public and port and fails to take sufficient account of size, location and type of port in determining local risk and degree of security that is warranted. Hopefully a more sensible future review of the code will allow for more relaxed security measures that are sensitive to local conditions like Galway Port which will facilitate better public access and enjoyment of the port operations and atmosphere into the future.
- 4. Tourist Attraction: The Volvo Ocean Race and the numerous European ports referred to in the Background study has highlighted the potential of harbours to generate tourist interest and activity. Given Galway's high tourist population, the harbour extension has potential to harness a selected interested section of that visitor volume to explore port activities. This invitation to sample port atmosphere could take the form of the rail shuttle as outlined above, shuttle bus service, part of the tour operator’s bus itinerary or on the route of a general Galway Bay tourist ferry service.
- 5. Cranage: The harbour extension will continue the system of cranage used in the existing harbour to load and unload cargo, consisting of mobile cranes of different sizes depending on the tonnage of the cargo. It is predicted that this method of cargo handling will persist indefinitely into the future. However with the projected increase in port business, the trend towards containerization and the likely importance of rail freight, at some stage in the longer term a permanent trackable gantry crane may be required. This type of crane is likely to further identify the already well established harbour extension in the urban waterfront, add to the spectacle of its portscape and become a significant urban landmark and reference point for the city and coastal environment. To reflect Galway’s now well established cultural creative economy, the crane should be specifically designed and tailored for Galway’s unique natural and built environment so that it aspires to being a highly visible and innovative maritime sculpture in its urban waterfront setting.
- 6. Energy: The existing harbour is centrally located to both the Dept. Of the Marine Institute across the harbour waters in Rinville and to N.U.I.G. upstream on the River Corrib at Newcastle where they have already established linkages in terms of Marine research and Development. With enhanced facilities, the harbour extension has the potential to intensify those linkages to both state institutions, in particular for the development of Wind and Wave Renewable Energy as an alternative to our fossil fuel dependency.



2.17 Harbour Office Building

The Harbour office building is the headquarters of the Galway Harbour Company who own, manage, operate and promote Galway Harbour and its various activities. As such, it is the control hub for the new port and its most significant building in terms of its function and focus. It is also the most prominent building in terms of location and visibility, centrally sited on its western perimeter edge at the head of the new marina and enjoying a focal vista from the public areas of the city centre, Long Walk, Claddagh and South Park. The building provides a range of accommodation consisting of public reception and waiting areas, general office, a series of single offices, V.T.M.S, board room, archive storage, staff facilities and externally accessed staff and ancillary facilities for dockworkers. The following were the design objectives for the building:

- 1. To establish a positive, maritime identity for the company.
- 2. To provide a focus in the new port that is attractive and inviting.
- 3. To present a distinctive contemporary building at the symbolic sea gateway to the city.
- 4. To establish the quality and context for all port buildings.
- 5. To reflect its marine location and image as a port.
- 6. To create a focus for the port coastal environment.
- 7. To provide a positive first image of the city for incoming sea traffic.
- 8. To resonate with prominent coastal building types.
- 9. To provide an attractive working environment for harbour staff.
- 10. To develop a modern innovative sustainable building.

Design Approach

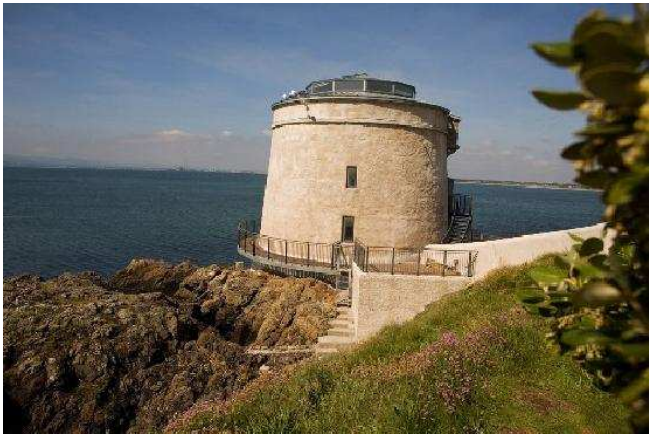
The primary design decision was focussed on creating a focal reference point in the outer harbour waters similar to the way the Mutton Island lighthouse achieves the same presence. This was done firstly by creating verticality in comparison to the other port buildings and to act as a counterpoint to the dominant horizontality of the port landmass. Secondly, a strong, simple and recognizable form was deemed essential. In that regard the circular footprint of other coastal building types such as lighthouses and martello towers were obvious references. However the cylindrical drum form of large oil storage tanks was also informing. Thirdly, the sloped outer skin creates a distinctive silhouette inverting the traditional batter of indigenous masonry and invoking the form of nautical hull design. Fourthly, the regular but unaligned fenestration assists in providing a formal informality to the facade. Finally the choice of rust coloured metal cladding panels gives it a distinctive and considered appearance with echoes of Galway hookers and uncoated ships and all finished with an illuminated top hat. The images fused in the building design are both nautical and maritime but also traditional and industrial in order to deliver a sculptural building that is appropriate to its place and setting. It provides an attractive and dominant focal point against the lower and more open industrial backdrop.

Internally, the building form is reflected in a central circular circulation core, flood lit from the top, which gives access to all the accommodation on the perimeter edge at each level. The glazed core cap is lit, powered by photovoltaic cells which provides a guiding torch in the bay and to the surrounding coastal community.

Study References



Typical Lighthouse



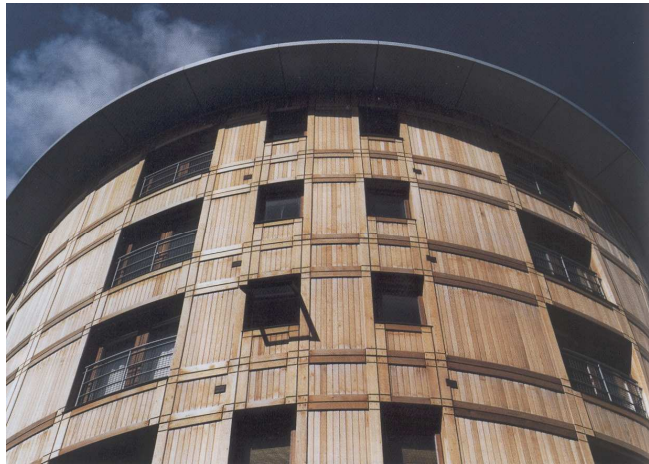
Martello Tower



Oil Storage Tanks



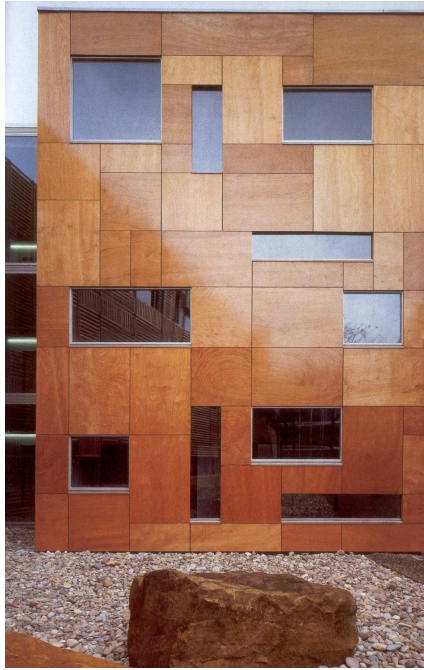
Proposed Zeebrugge Port Building



Dublin Docklands Building



Campus Building – Germany

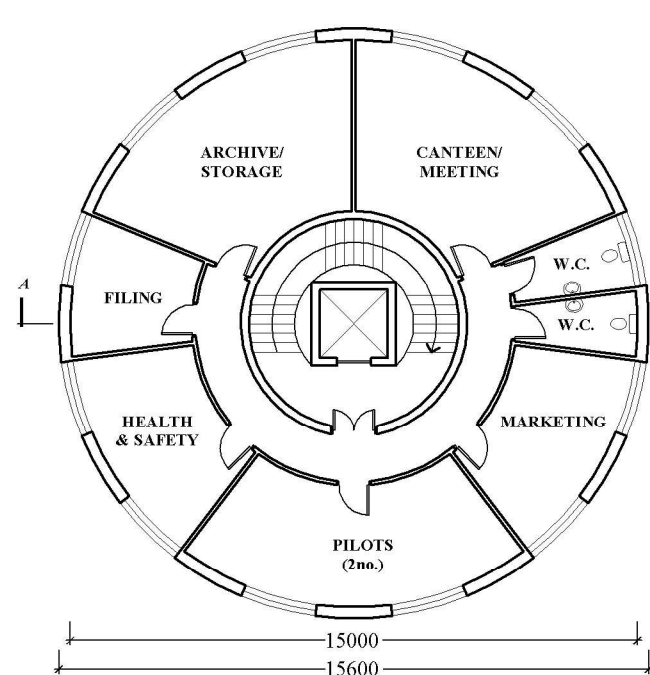


Campus Building - Holland

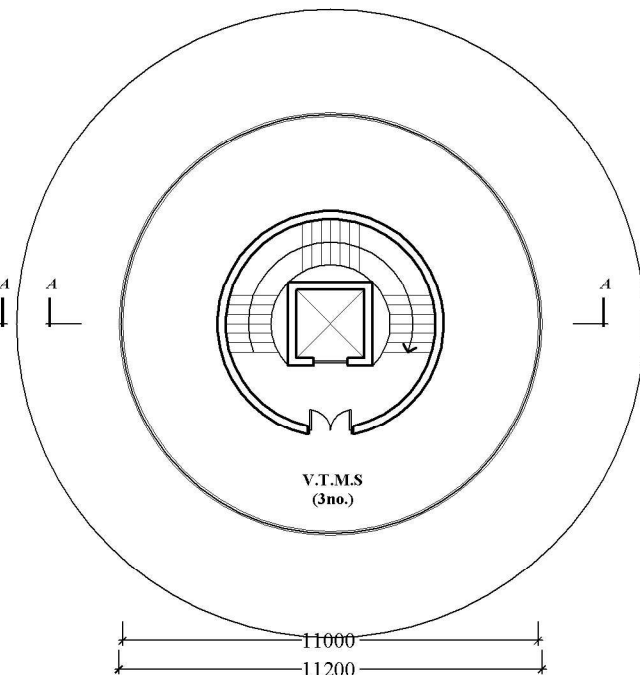


Trespa rainscreen cladding pane

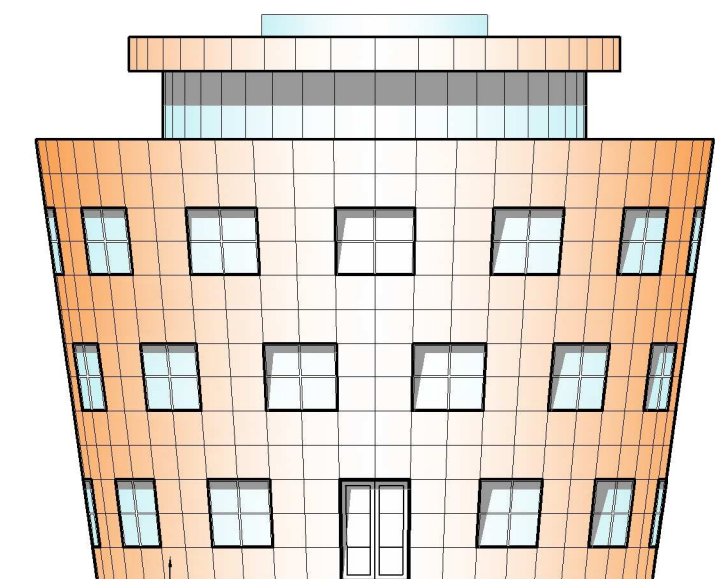




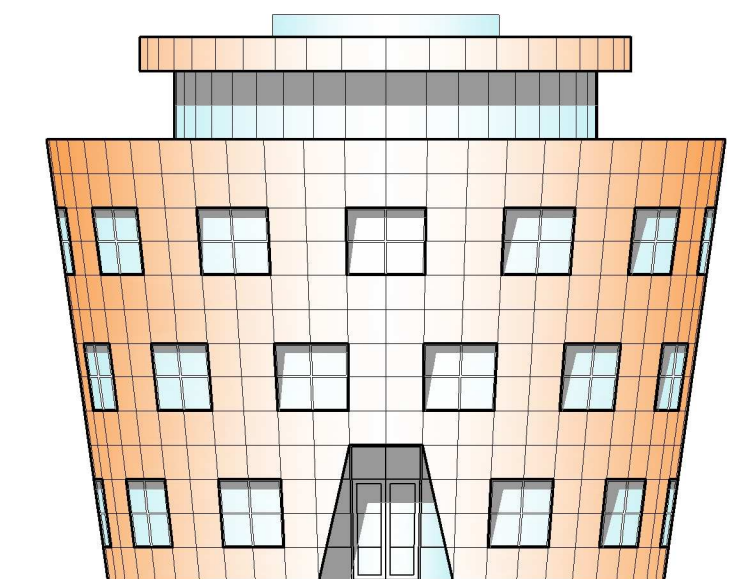
**FIRST FLOOR PLAN**  
177m<sup>2</sup>



**THIRD FLOOR PLAN**  
113m<sup>2</sup>

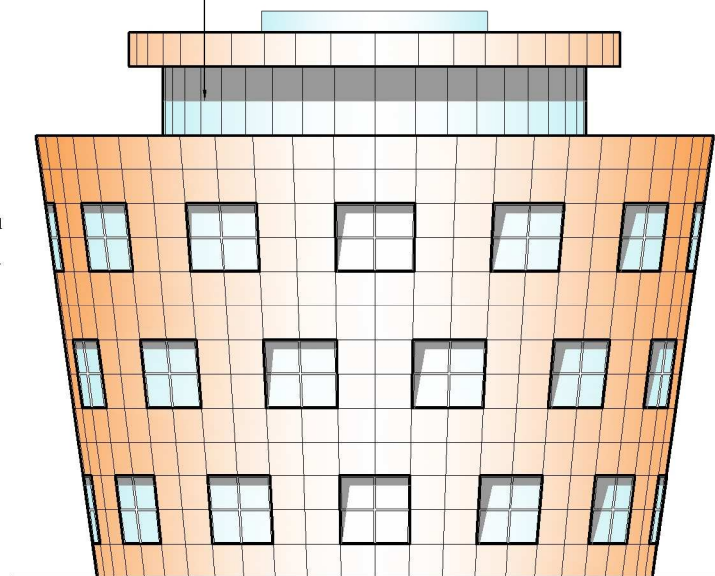


**REAR ELEVATION**

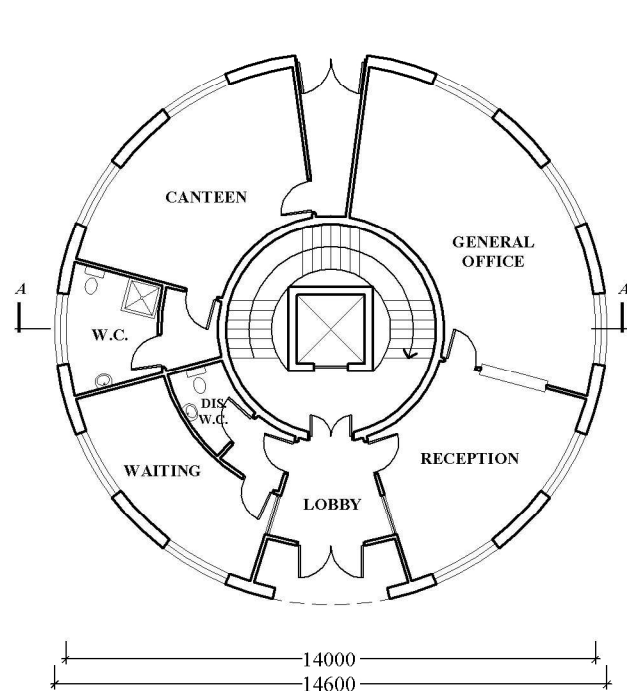


**FRONT ELEVATION**

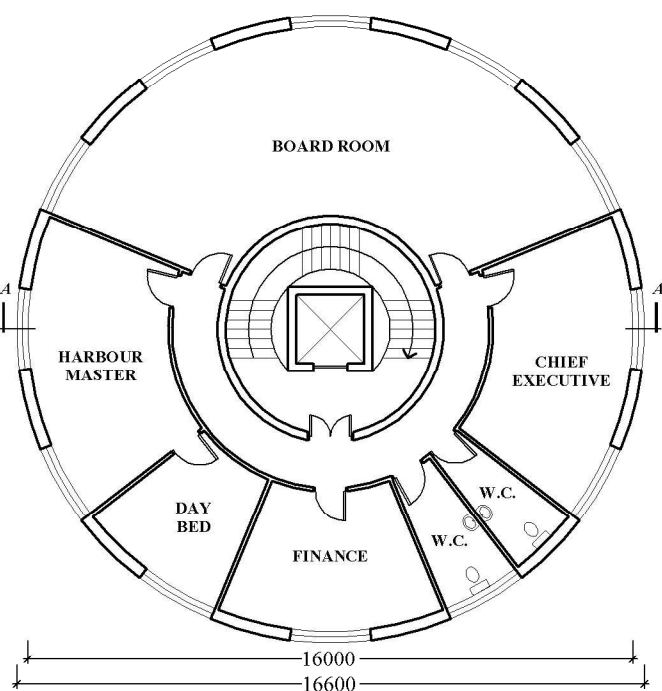
Triple glazed aluminium screen and windows with black powder coated finish.



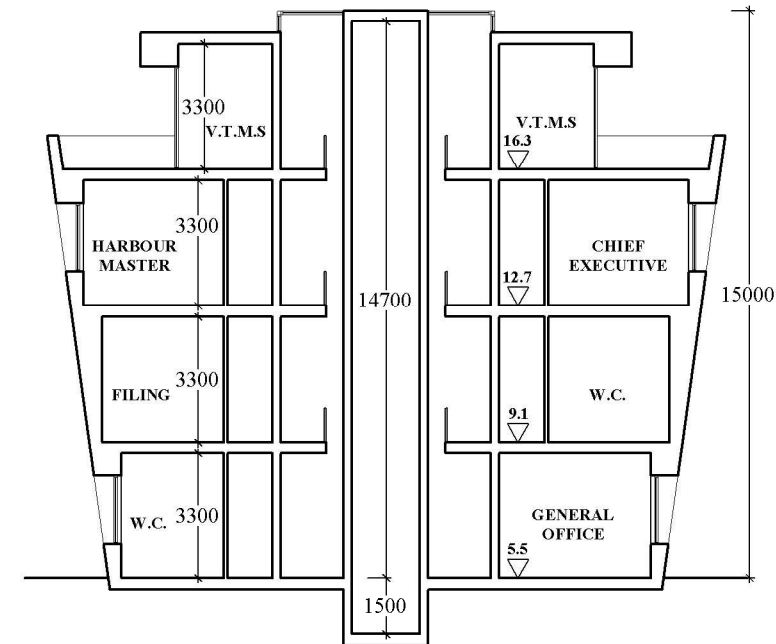
**SIDE ELEVATIONS**



**GROUND FLOOR PLAN**  
154m<sup>2</sup>



**SECOND FLOOR PLAN**  
201m<sup>2</sup>



**SECTION A-A**



**Roddy Mannion Architects Ltd.**  
 ARCHITECTURE • INTERIOR DESIGN • PLANNING

3 Commerce Court,  
 Flood Street, Galway,  
 Co. Reg. No. 425951

Tel. 091 564160  
 Fax. 091 563289  
 Email r.m.a@kole

Project	New Port of Galway	Drg. no.	01 - 0110
Client	Galway Harbour Company	Scale	1 : 200
Title	Harbour Company Offices	Date	Jan 2013

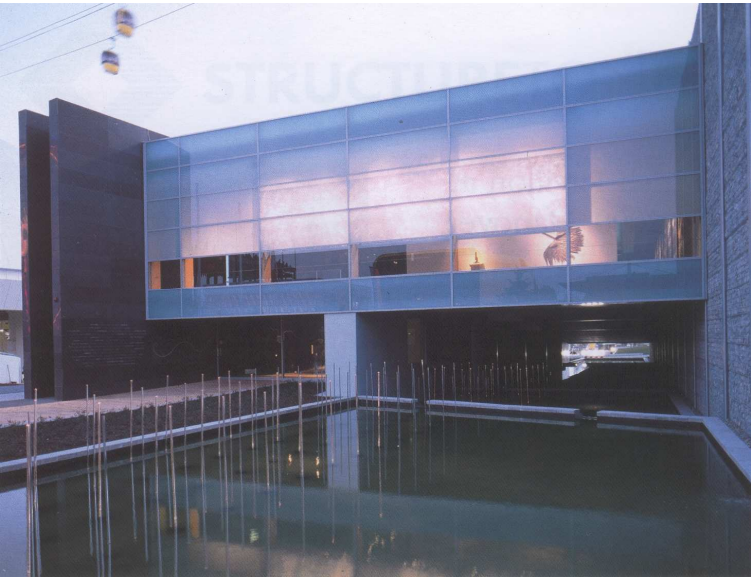


2.18 Cruise Passenger Terminal Building

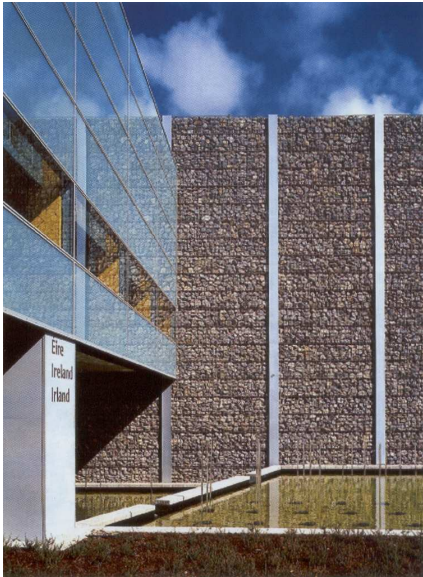
With the development of the Transoceanic Cruise Liner Business the new port becomes a border control point of entry into the Irish state. Consequently, the primary function of the Cruise Terminal building is to act as a customs and immigration checkpoint, as passenger transfer from the waterside cruise ship to the landside transport modes of bus or taxi. The building is essentially seen as a sheltered transit control area, channelling and filtering passengers as they move and interchange between transport modes. It is designed on the basis of catering for ships in transit rather than Galway acting as a cruise company homeport base. The primary accommodation consists of a large passenger terminal hall, broken down into queuing, control and waiting areas with additional ancillary facilities including staff offices, public and staff toilets and interview rooms. The size of the main passenger hall was determined by the projected volume and flow of passengers and the limited standard of service provided. Consequently, catering for cruise ships of up to 4,000 passenger capacity of which there is an average 50% disembarkment rate, broken down into controlled and scheduled volumes of 250 passengers at any one time, with a space standard of 1.4m<sup>2</sup> per person, provides a passenger hall of 360m<sup>2</sup>. Because of the typical cruise ship turnaround time and duration stay, averaging 48 hours, no provision is made for baggage allowance or control. Similarly, there is no provision for concession spaces or hospitality areas within the passenger hall because of the speed of passenger transfer, the availability of such facilities on both the cruise ships and the passenger destination and the fact that Galway will not act as a cruise ship homeport.

Design Approach

The approach to the architectural design of the cruise terminal centred on providing a high quality, contemporary, introductory building to Galway for cruise passengers that relates to the more immediate context of its setting rather than the overall port environment. In contrast to the harbour office building it does not seek to make a statement in the overall harbour water setting but confines its references to the surrounding commercial pier, berthing quay and cargo area. Consequently, the building has a relatively modest, restrained and ground hugging, horizontal appearance with the emphasis on the quality, choice and suitability of materials. Its form and layout is determined by a rear flanking spine wall containing the main ancillary elements of the accommodation including entrance and exit area, staff offices and public toilets which act as a buffer between the cargo storage areas to the back and the passenger hall to the front. The spine wall extends beyond the footprint of the building to emphasize its screening function and acts as an axis for moving through the building. The passenger hall is divided in two by the central control area which is expressed externally with a solid feature element to the main elevation. The queuing and waiting areas are fully transparent and are orientated towards the pier quay and distant views to the Clare Hills and the city. Externally the building is broken down into planer elements of solid and void under a wide, flat, oversailing roof overhang which contains the various elements of the accommodation. The building utilizes a palette of three materials, curtain wall glazing to the main passenger hall, render to the rear ancillary accommodation and stone to the spine wall and central front projection. The stonework consists of large stone gabions in contrasting bands of limestone and granite to reflect the fact that the new port is aligned with the Lough Corrib geological dividing line that separates the Galway East limestone from the Galway West granite. Overall the building seeks to create a positive first impression and point of arrival to Galway, using materials that resonate and are indigenous to the city but with a contemporary interpretation and expression.

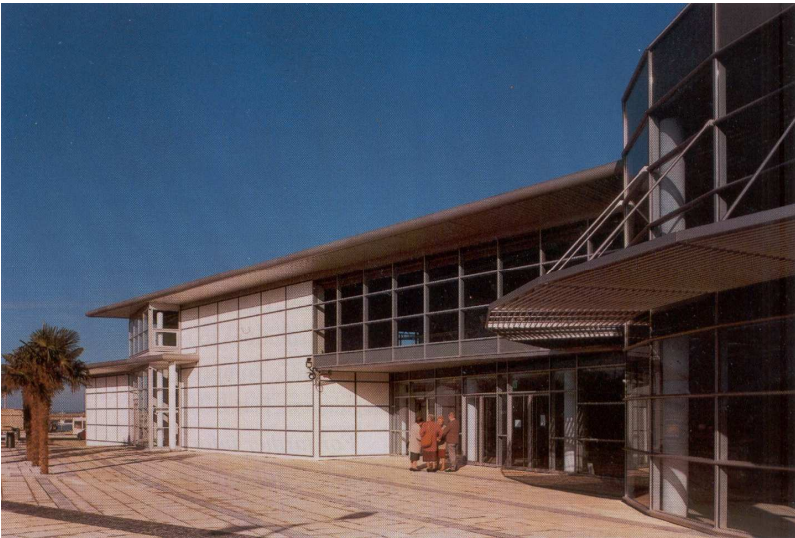


Irish Expo Building – Germany



Irish Expo Building – Germany

Study References



Dun Laoirghe Port Terminal Building

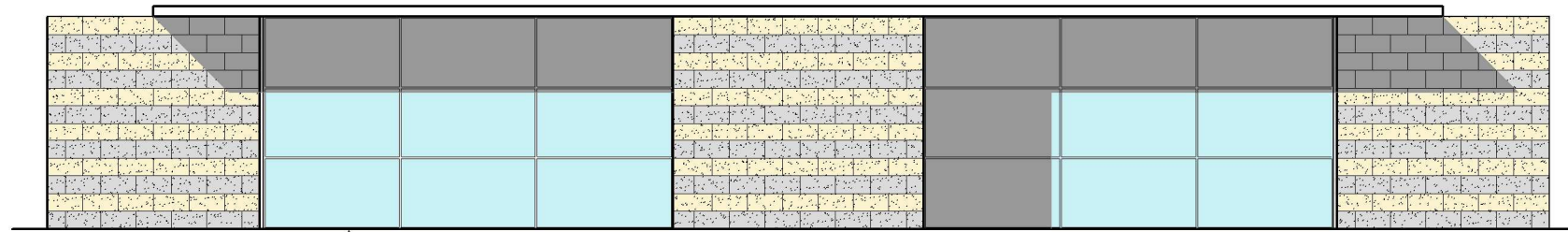


Rosslare Port Terminal Building



Dublin Port Terminal Building



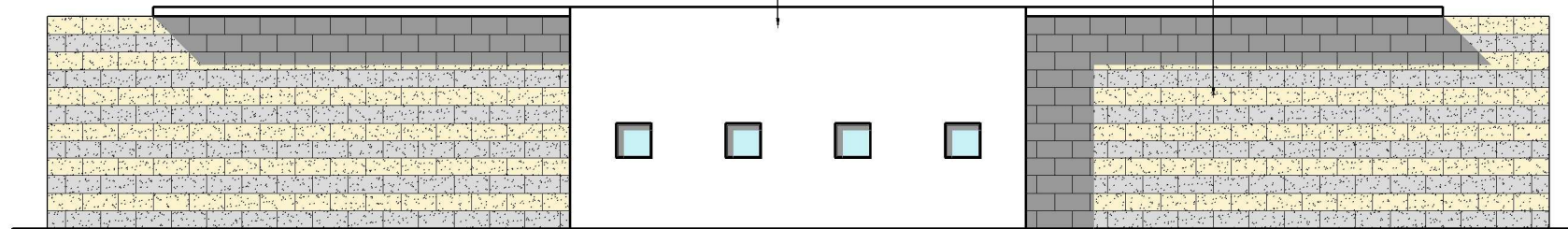


**FRONT ELEVATION - 1 : 200**

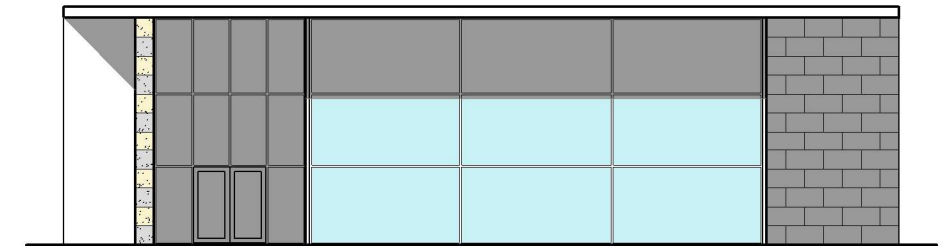
Triple glazed aluminium curtain walling  
with black powder coated finish.

Plaster render finish.

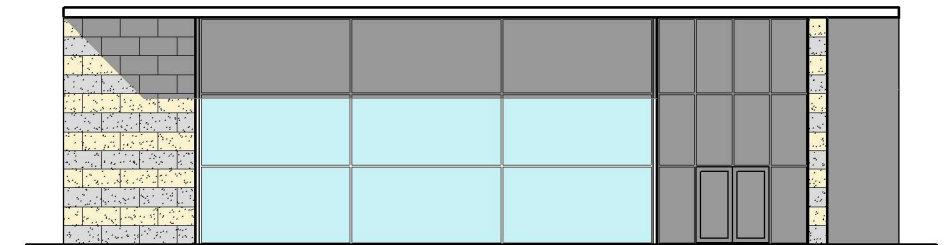
Stone gabions in contrasting  
bands of granite and limestone.



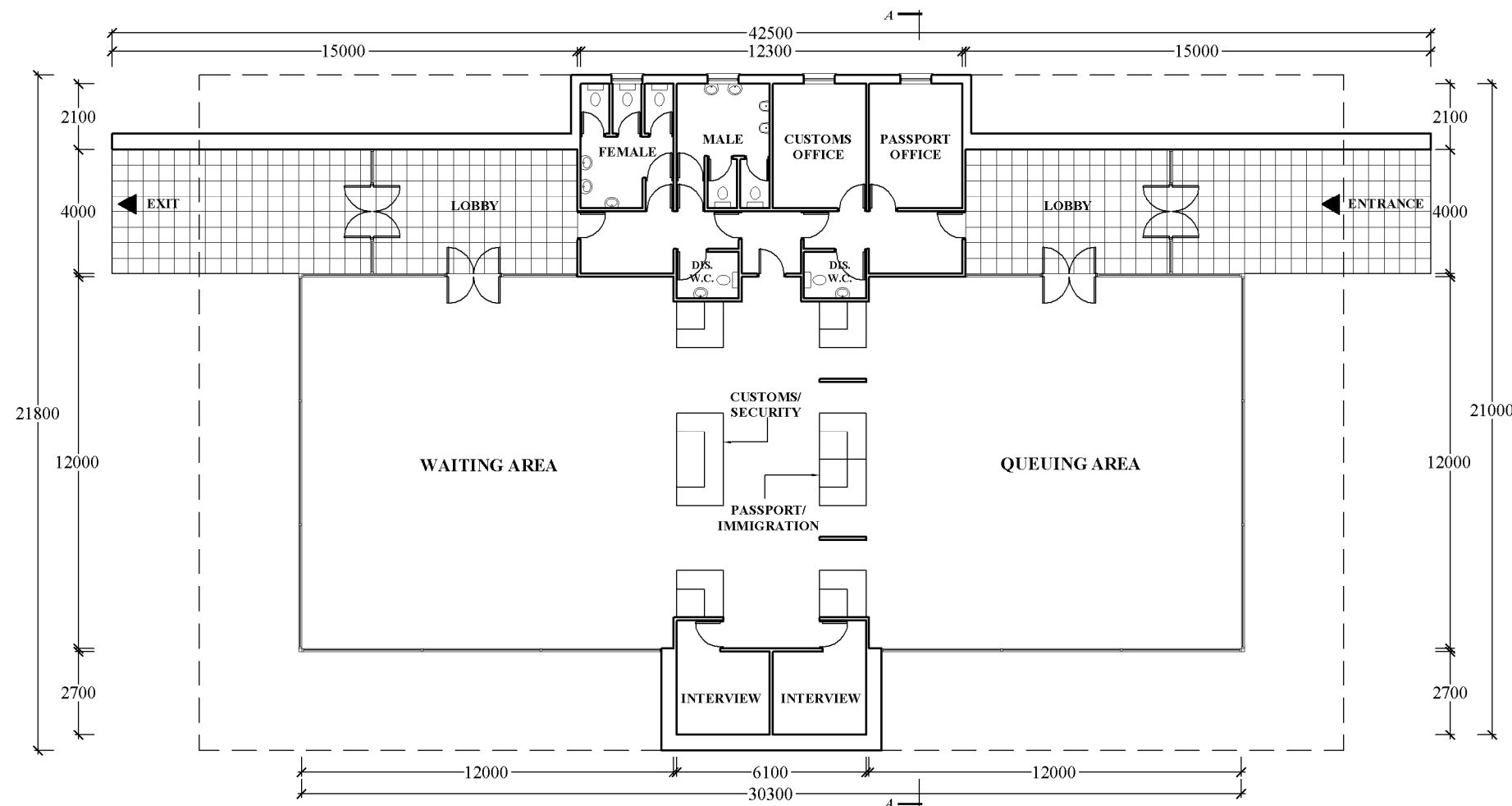
**REAR ELEVATION - 1 : 200**



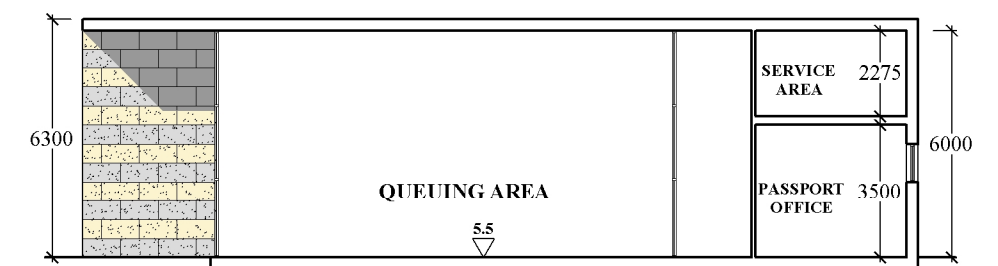
**SIDE ELEVATION - 1 : 200**



**SIDE ELEVATION - 1 : 200**



**GROUND FLOOR PLAN - 1 : 200**  
**512m<sup>2</sup>**



**SECTION A-A - 1 : 200**

<b>Roddy Mannion Architects Ltd.</b> ARCHITECTURE • INTERIOR DESIGN • PLANNING		3 Commerce Court, Flood Street, Galway, Co. Reg No. 425851	Tel. 091 • 564160 Fax. 091 • 563289 Email r.m.a@jolie
Project	New Port of Galway	Drg. no. 02 - 0110	
Client	Galway Harbour Company	Scale 1 : 200	
Title	Cruise Terminal Building	Date Jan 2013	



2.19 Marina Management Building & Screen Wall

The function of the Marina Management Building is to provide management facilities for the operations and activities of the new marina, as well as amenities and facilities for both berth holders and visiting sailors to the marina. The building is located at the entrance to the marina on the main public access route from the city to the harbour extension. It provides a range of accommodation including entrance/reception area, management and reception offices, toilet, shower and changing room, laundry, washing and drying facilities, chandlery and concession spaces plus ancillary storage and kitchen areas.

Design Approach

The location and design of the building is significant for three reasons.

- 1. It acts as a gatepost to the new marina.
- 2. It sets the tone and context for future marina fronted buildings.
- 3. It occupies the corner junction of the access to the marina and the central landscaped greenway route through the middle of the overall port peninsula.

In keeping with the stated objectives of the overall design approach to the port buildings it was decided, similar to the harbour offices, to adopt a strong simple form, in this case an L shaped footprint extracted from a square cube. Given its relatively small scale covering a footprint of just circa 270m² and the extremely exposed weather beaten nature of the environment the cubic form lends itself to a strong, robust and powerful presence at the entry point to the marina, in what is a large, open, maritime and industrial compound, landscape environment. The elevation treatment responds and reflects the internal accommodation to give a mannered informal skin to its formal form. This design approach signals the desired approach to creating a new coherent port architecture in the new port for future marina fronted and sea facing buildings. It is considered that the simple form and modelled skin provides the most appropriate language and framework, for further stand-alone pavilion type buildings, in an exposed setting with high visibility, such as boat clubs, hospitality or commercial uses.

Internally the accommodation responds to its various aspects with the main corner entrance and public areas to the seaward face, the chandlery and facilities entrance facing and acknowledging the central greenway route, the offices turning the corner on the opposite side to the future frontage buildings, with surveillance onto the marina and all the service areas to the middle or rear of the building.

The external finishes consist of flat modular metal cladding coloured white with black recessed horizontal shadow joints and powder coated triple glazed aluminium windows, doors and screens coloured black. This limited colour tones of white with black accents gives the building a sharp, clean and clinical appearance reflecting the streamlined and automated environment of modern ports and the increasingly sleek and pristine design of sailing and pleasure craft.

Screen Wall

The screen wall is a long curved screening barrier between the new marina/public realm and the central open storage compound area of the new port. It extends from the Marina Management building to the Harbour offices. Its primary function is to replace the role of the future indicative marina fronted buildings not included in this application to act as a visual screen between the marina and harbour cargo area.

Design Approach

Because of its port location and its temporary nature, it was felt that the design solution should reflect both its port environment and its transient status. The design approach was inspired by that most utilitarian yet increasingly standard part of our global transport systems – the freight shipping container. The container or “transient multicoloured cargo warehouse” is now regarded as the symbol and icon of globalization. However despite its primary function of facilitating the transport of cargo, it has, because of its symbolic and iconic status and association, also being adopted for other uses and functions. The most notable example of its adoption and its elevation to high art, is its use as the main construction component and image, for the Nomadic Museum, illustrated here in its location in New York harbour. Nearer to home the freight container is the main element in the architectural competition winning entry for the Market and Performance space in the Point Village Square in Dublin Docklands, which utilizes 200 shipping containers to form the main space, stalls and stage arena.

For the screen wall it is proposed to utilize the main side panel design of shipping containers linked and joined at 6 metre intervals to form a curved screen barrier between the cargo area and marina. This use is both appropriate and symbolic given the nature of the environment and the “temporary” status of the screen which will facilitate the phased development of the future marina fronted buildings.

The screen are staggered and fixed to circular steel columns to allow for its gradual curved form and to provide a shadow line at each intersection. The columns protrude above the curved screen to emphasize the jointing arrangement and to provide a nautical rhythm along its full extent. The container panels are finished in alternative neutral colours of cream, white and grey to give a subtle and restrained variety to the curved visual barrier.

Study References



Dun Laoighre Marina Building



“The Box in the Docks”, Dublin



Waterways Ireland Visitor Centre



Kilrush Marina Building



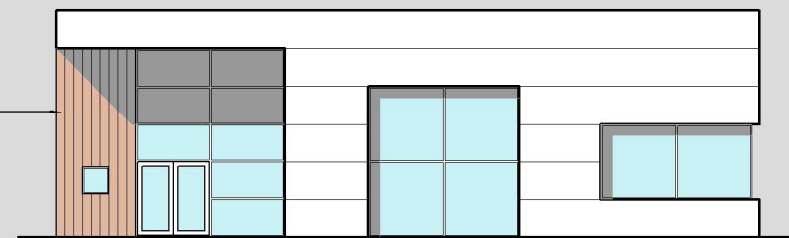
Dublin Docklands Point Village Square



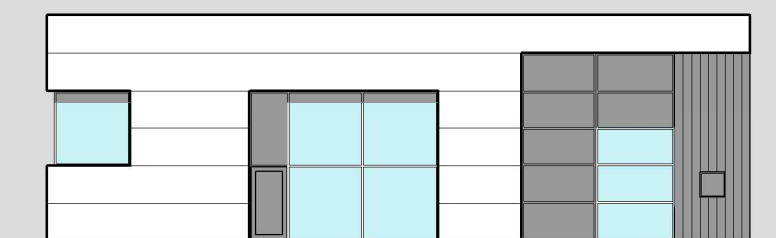
New York Harbour Nomadic Museum



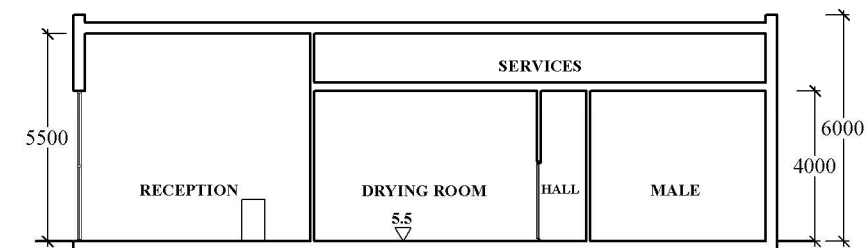
Cedarwood  
timber cladding.



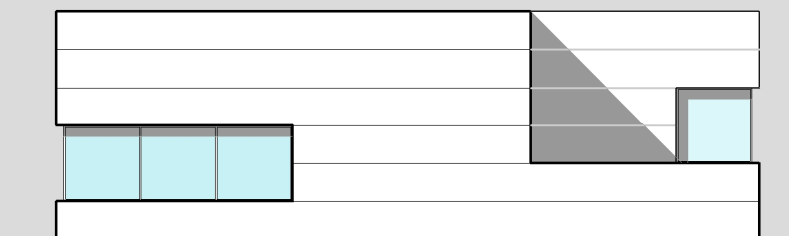
FRONT ELEVATION - 1 : 200



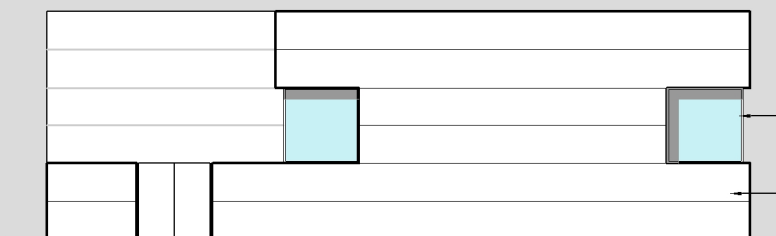
SIDE ELEVATION - 1 : 200



SECTION A-A - 1 : 200



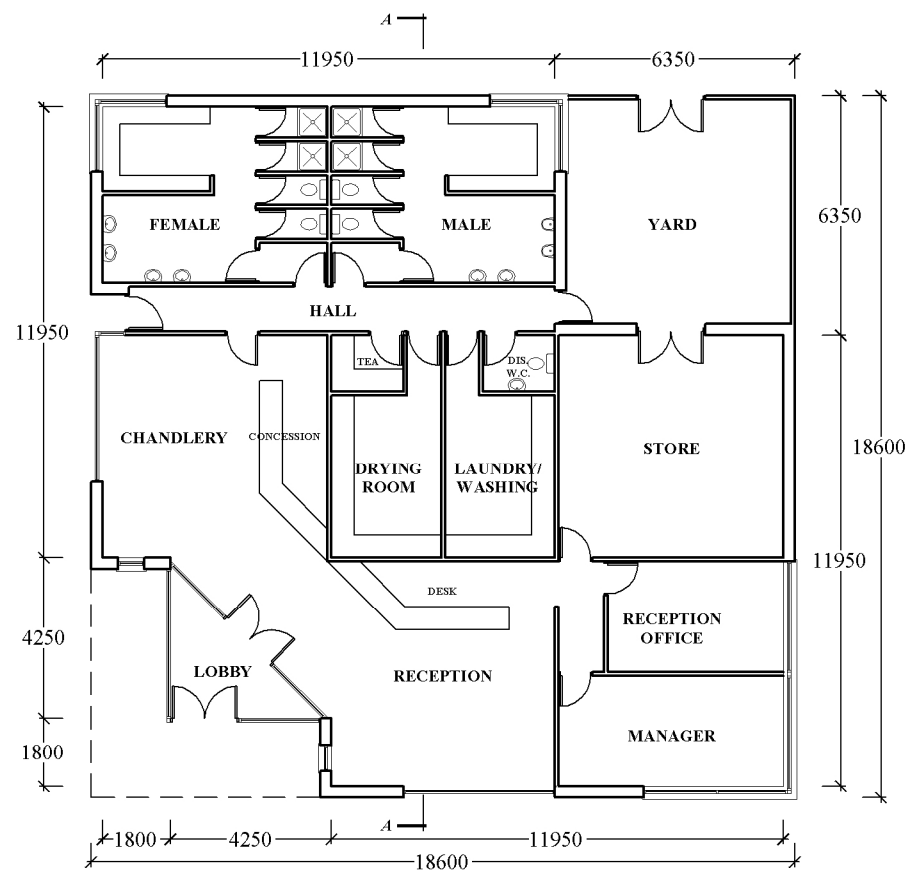
SIDE ELEVATION - 1: 200



REAR ELEVATION - 1 : 200

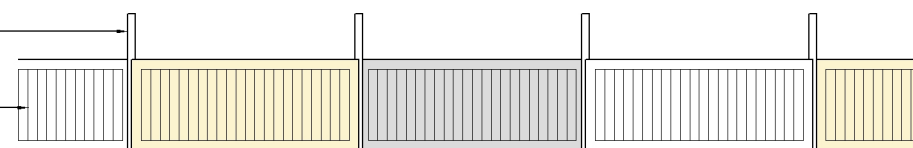
Triple glazed  
aluminium windows  
with black powder  
coated finish.

White flat modular  
metal cladding with  
black recessed joints.

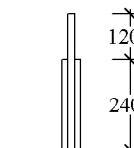


GROUND FLOOR PLAN - 1 : 200  
270m<sup>2</sup>

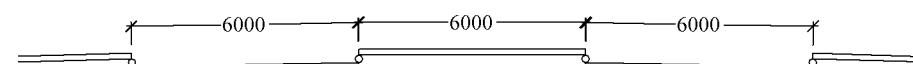
3.6m high 150mm diameter  
galvanized steel post coloured black.  
6m x 2.4m galvanized steel freight  
container panel in alternate colours  
of white, cream and grey.



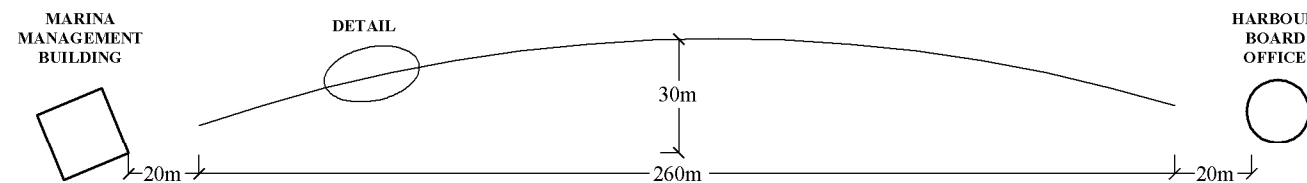
DETAIL ELEVATION - 1 : 200



DETAIL SECTION - 1 : 200



DETAIL PLAN - 1 : 200



SCREEN WALL KEY PLAN - 1 : 2000

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Project	New Port of Galway	Drg. no. 03 - 0110	
Client	Galway Harbour Company	Scale 1: 200/ 1: 2000	
Title	Marina Management Building & Screen Wall	Date Jan 2013	



2.20 Harbour Management Building

The Harbour Management building caters for both temporary and permanent storage of all port machinery, equipment and supplies and for the upkeep, maintenance and repair of port related apparatus. The building is located on the western side of the new port landmass, north of the central landscaped greenway and prior to entering the new marina area. The primary accommodation is a large warehouse storage area to cater for a diverse range of machinery and equipment including cranes, forklifts, excavators, dump trucks, fire fighting equipment, oil spill containing equipment, navigation buoys/aids, garbage containers and road signs. It also includes ancillary accommodation including repair workshop, stock control and staff facilities.

Design Approach

The location and design of the building is significant for a number of reasons:

- 1. It acts as a gatepost to the central greenway route in the middle of the port peninsula.
- 2. It sets the tone and context for future warehouse buildings in the existing Enterprise Park.
- 3. It forms a pair with the Marina Management building in providing a framework for the future curved street frontage buildings onto the new marina.

Because of its primary warehouse status and the general objective of providing buildings with simple forms as outlined in the design approach to the Marina Management building, the Harbour Management building adopts a simple rectangular form to its main volume. This volume allows it to be assimilated into the existing volumes already established in the Enterprise Park which are of a large, industrial nature. The ancillary element of the accommodation is extracted out of the main mass of the building to create a smaller volume element to its seaward and public frontage. The purpose of this separation is threefold:

- 1. It presents the softer and more human occupied spaces to its public face in what is primarily an introverted storage building.
- 2. It breaks down the mass of the building on its most visible and sensitive seafront elevation.
- 3. It provides a dual scale to the building where the main volume space relates to the scale of the overall port and the small volume element relates to the immediate human scale.

Internally, the accommodation follows the obvious and predictable form of the building, with the warehouse occupying the main space to the rear and the repair workshop, stock control and staff facilities occupying the secondary ancillary area to the front.

Externally, the finishes are similar to the Marina Management building consisting of white, flat metal cladding and black triple glazed aluminium fenestration. However, the design objective in this building is slightly different, in that the primary aim, is to elevate the status of the building from a utilitarian warehouse to an elegant box, in what is, in essence, a basic storage building. This has been done by articulating both the roof and wall planes and the corner elements of the building. The roof and wall planes are extended beyond the footprint of the building to the front and back which emphasises the public skin on its seaward elevation and the future expansion wall on its rear elevation. This sliding of the vertical and horizontal planes also provides a shadow line and in its interaction with the glazing elements, helps to break down the volumetric mass of the building. The corner elements of the building are articulated by the glazed fenestration turning the corner at various levels with generally high level glazing to the main warehouse and generally low level glazing to the ancillary areas. This variety gives an informality to the elevational treatment in what is a very formal building profile. At a distance, the simple, white form gives a fresh and crisp contemporary appearance, consistent with the cleaner and automated modern nature of new ports. Up close the varying scale, and informal treatment of planes and fenestration provides both articulation and interest to the facades.

The overall approach delivers a distinctive design to what would otherwise and normally be, a very functional and unpromising building type and provides an appropriate blueprint for future port warehouse buildings. The white colour treatment to the facades help in breaking down and integrating this large volume building into its environment, as white is both the most positive, reflective, expressive and yet forgiving of colours in the overall colour spectrum and in combination with black accents, provides a distinctive, but appropriate language and framework for Galway's new port architecture.

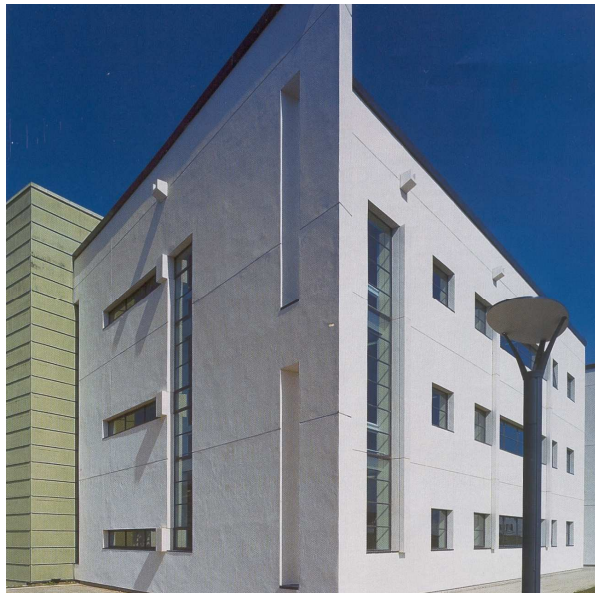
Study References



E.S.B Portlaoise



Volex Castlebar



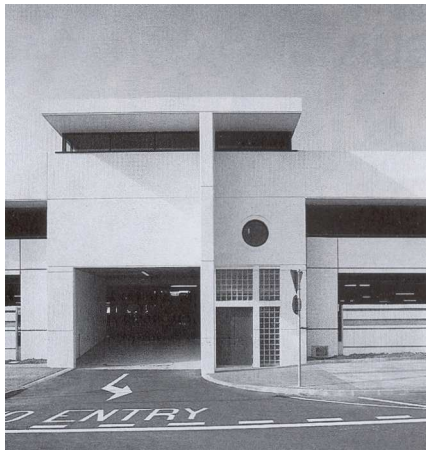
Carlow Institute of Technology



I.B.M Dublin



Dublin National Aquatic Centre

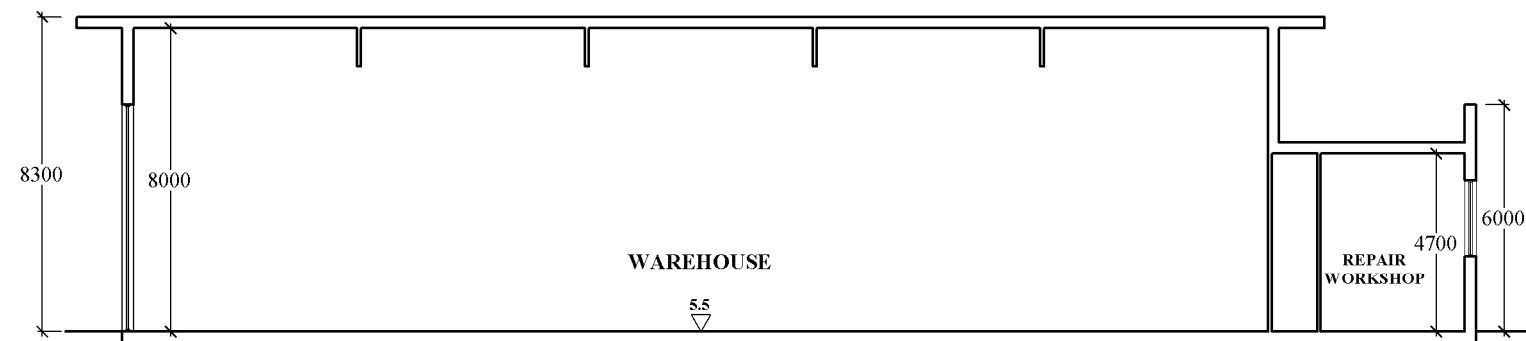


Dublin Airport

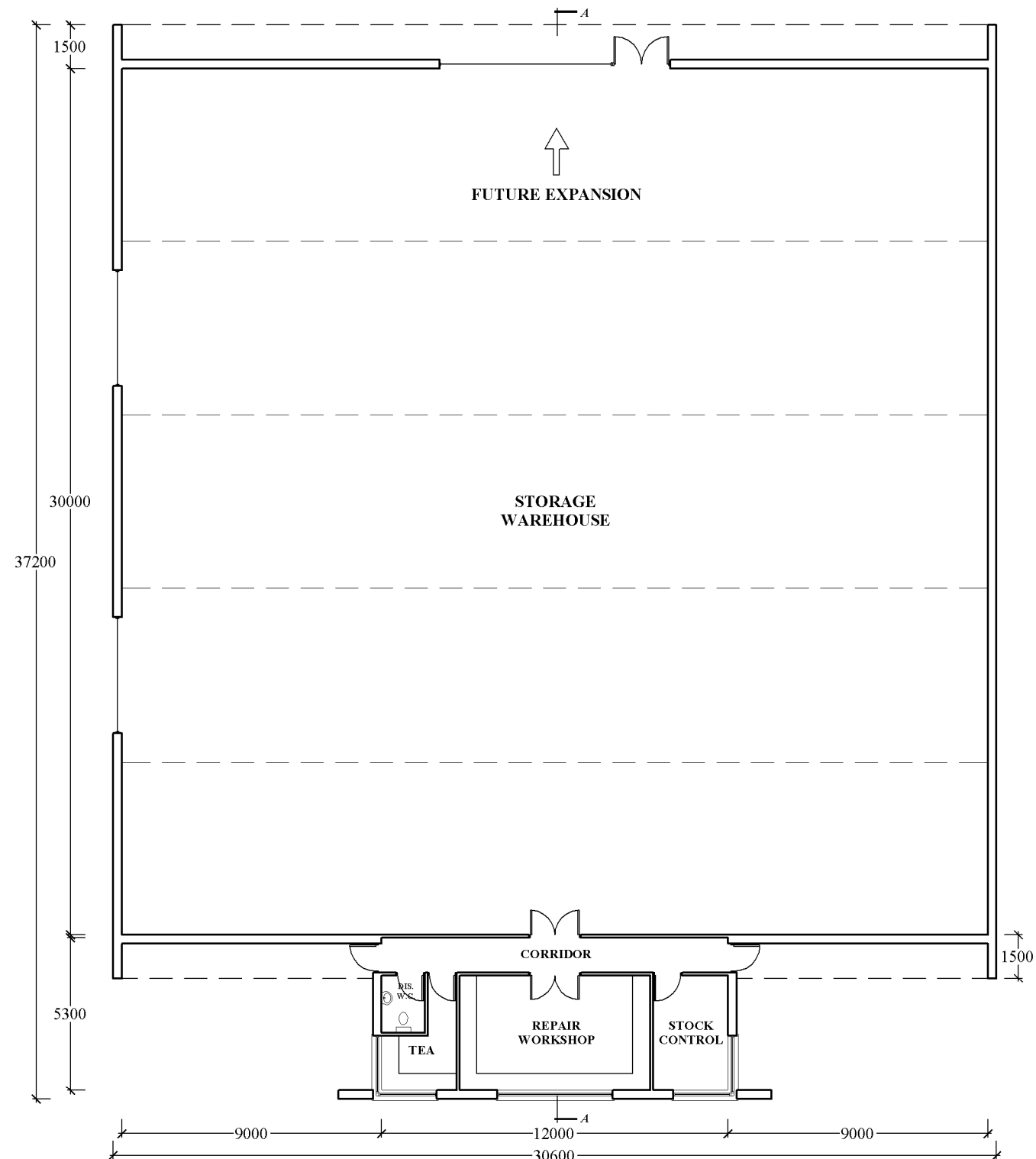


U.K Industrial Park





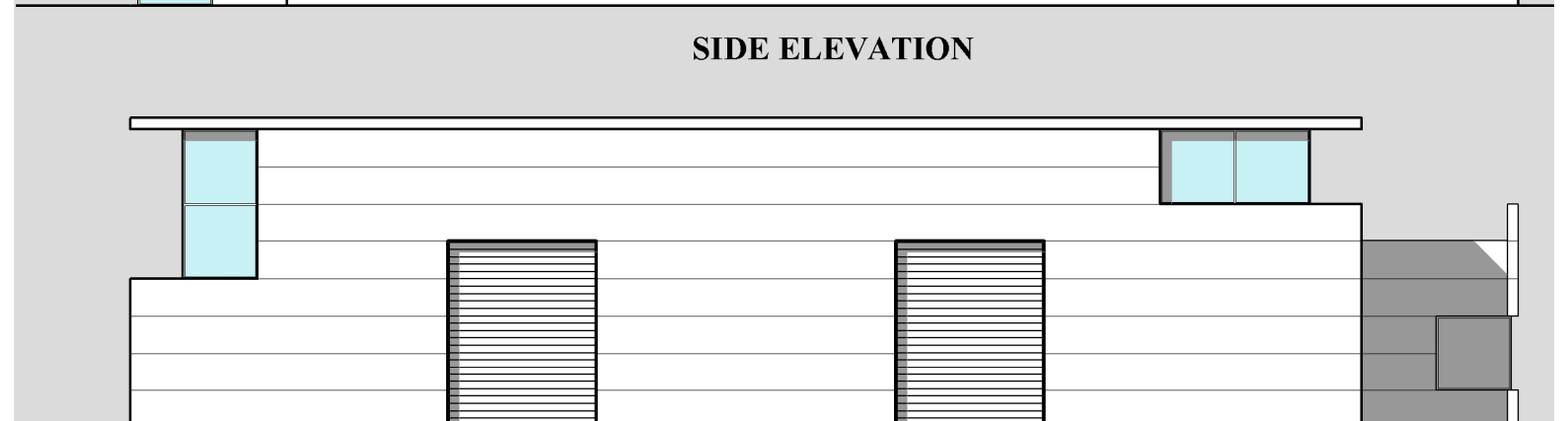
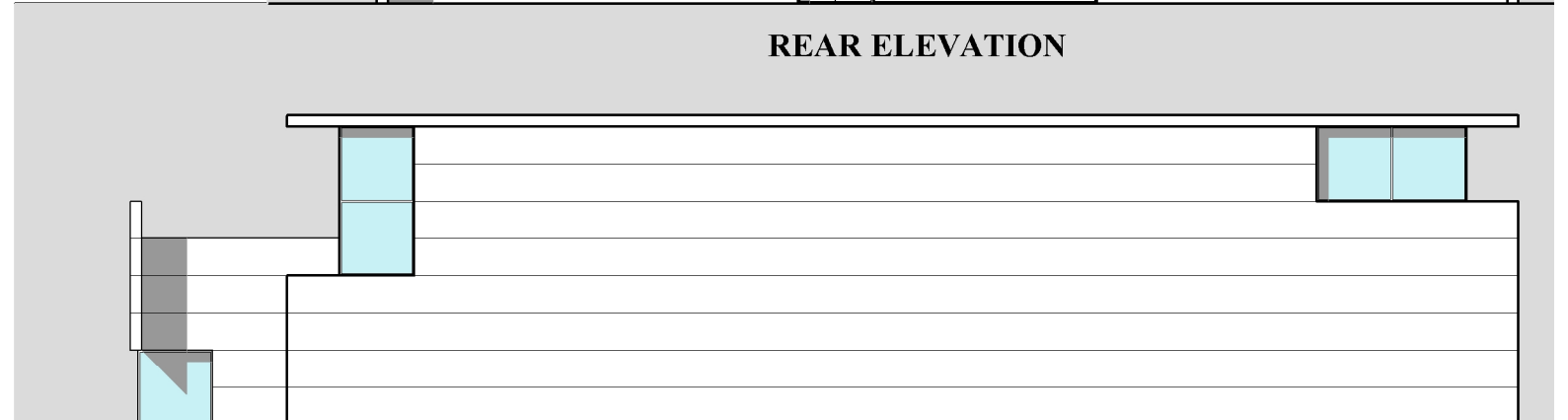
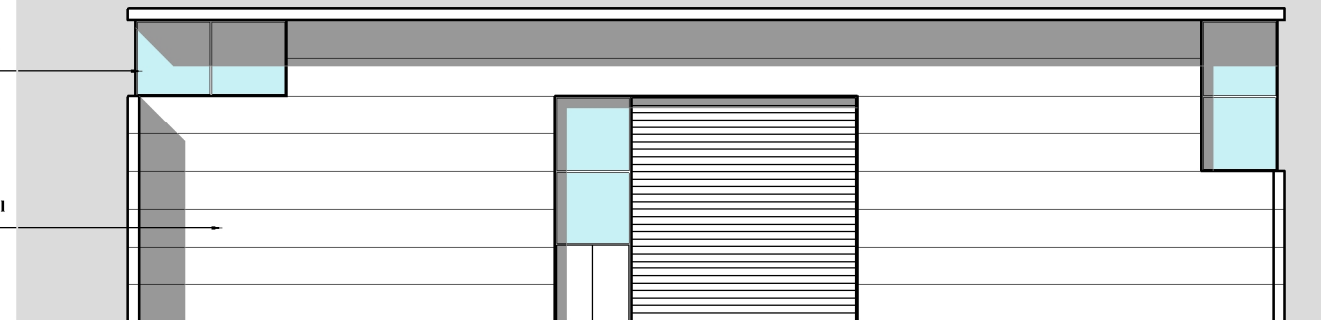
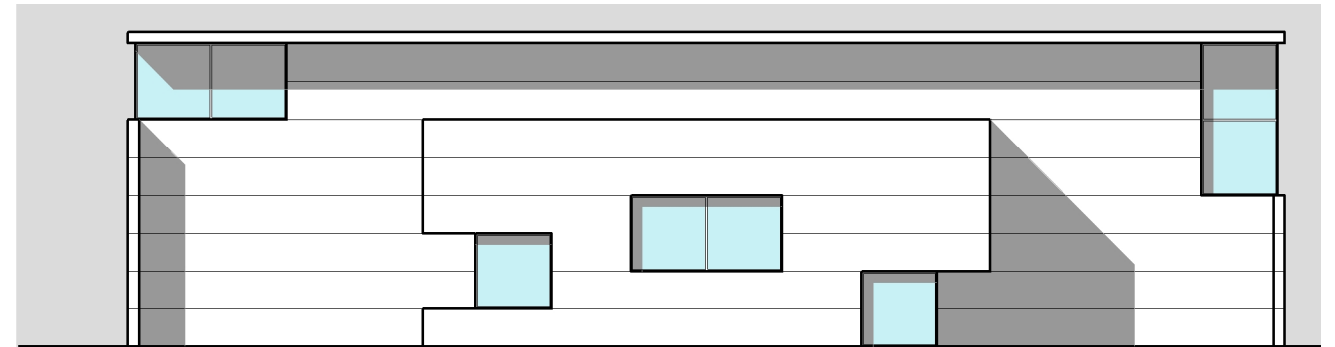
SECTION A-A



GROUND FLOOR PLAN - 965m<sup>2</sup>

Triple glazed aluminium windows with black powder coated finish.

White flat modular metal cladding with black recessed joints.



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Project	New Port of Galway	Orig. no.	04 - 0110
Client	Galway Harbour Company	Scale	1 : 200
Title	Harbour Management Building	Date	Jan 2013





Harbour Office Building



Cruise Terminal Building







Marina Management Building



Harbour Management Building





### 3.0 IMPACT STUDY

#### 3.1 Introduction

The Impact Study is a critical element of the overall study. In summary we are assessing and evaluating the physical and cultural impact of the harbour extension on the city and its environment. Galway is a city with a very definite sense of place and a strong cultural image. It is a city defined by both its unique natural and built heritage characterised by its medieval core and inner city straddling the mouth of the River Corrib as it enters Galway Bay. Its setting and myriad of water bodies from sea to lakes, river to canal is the dominant informant of “place”. Galway’s high quality of life factor derives from this fusion of natural and urban landscape combined with its social and cultural attractions and the diverse range of services, amenities and facilities it offers. It is against this backdrop that we are studying the impact of the harbour extension. Given the scale of the project, the impact is not just concerned with the immediate environment around the proposed site but encapsulates the whole city and beyond in order to provide an overall and comprehensive study of its impact.

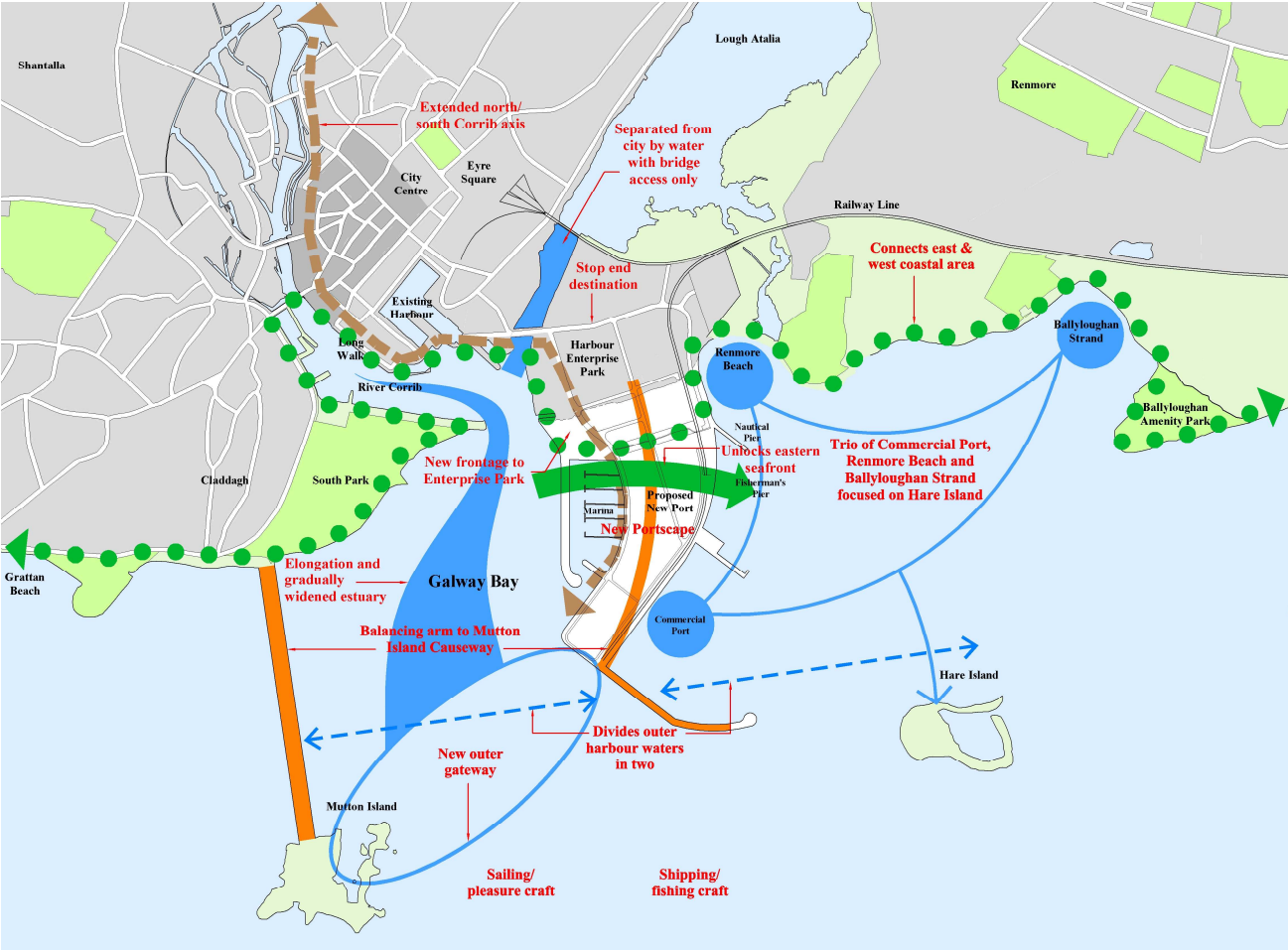
#### 3.2 Types of Impact

The Impact Study examines two categories of impact, Physical and Cultural Impacts. Physical Impacts focuses on the extent to which the new port impacts on the physical character of the city. Cultural Impacts is concerned with more tradition and social assets, as well as other less tangible and primarily non- visual impacts, such as the Historical and Tourism Impacts of the new port, which tend to effect the perception and image of the city in a more subliminal way. All of the above categories and sub-categories are studied individually. However, given the interaction and interrelation of all of these topics, combining and cross-examining them gives a more holistic understanding of the new port impact on the city. It should be noted that the proposed harbour development has been significantly changed and reduced from earlier design proposals over the past six years. These measures have helped to reduce the scale of the design in what is a sensitive and prominent seascape and assisted in assimilating the port into the city’s cultural and built heritage.

#### 3.3 Viewer Types

One of the challenges in assessing and evaluating impacts, is to try and represent the typical average viewer and gauge their response to the harbour extension. The difficulty in this objective is that there is no reliable scientific measure of establishing and recording the perception of a standard human response as that standard is non-existent. In addition, our preconception and image of ports will also bias our reaction, as how we perceive something is a combination of what we see and what we think and feel i.e. it is not possible to separate our visual from our thinking/feeling process. How the new port is perceived may or may not vary considerably. Any variation is likely to reflect the variety of viewer types which is infinite and can fall into an endless list of category headings such as origin, age, gender, background, education, occupation, attitude and values. For example a citizen of the city may view the new harbour different to a visitor, a younger person to an older person, male to female, (modern harbours tend to be very masculine environments) etc. These variables in human response which are beyond the scope of this study are captured best in that well worn cliché “Beauty is in the eye of the beholder”.

In the absence of a typical viewer type, this report endeavours to comment on the various topics and views in as fair, reasonable and objective fashion as possible whilst acknowledging that all perceptions are ultimately subjective and personal.



#### 3.4 Urban Waterfront Impact

The reclamation of lands from the seashore to create the harbour extension will lead to a permanent change in the shape of the existing coastline and cause loss of natural sea element. The intervention of the harbour extension peninsula will have a physical and cultural impact on the urban waterfront experience. These impacts will change both our perception of the outer harbour waters and how we visualize and read the new facility located in its new setting. It will also alter both our understanding and image of “port” relative to the existing harbour and the physical form and movement pattern of the urban waterfront. These changes can be summarized as follows:

1. The harbour extension is separated from the city by water for the first time in the form of the Lough Atalia channel with bridge access only.
2. It becomes a vehicular stop end destination rather than part of a through route as in the existing harbour.
3. It divides the outer harbour waters in two creating two separate and distinctive character areas.
4. The west waters redefines the existing river and Lough Atalia outlet as currently defined by the Long Walk, Nimmo’s Pier and the Harbour new pier by creating an elongation of the gradually widening channel entrance to the city between South Park and the new port. It also provides a second arm to balance the Mutton Island causeway projection into the bay creating a new outer sea gateway to the city.
5. The east waters becomes a more intimate sub-area containing the trio of Ballyloughan strand, Renmore beach and the Commercial port with Hare Island as the central focus in the bay.
6. It unlocks the hidden potential of the eastern coastal area and connects and links for the first time the mainly developed waterfront trails to the west of the city and River Corrib with the mainly undeveloped waterfront trails to the east of the city and river.
7. It extends the north/south Corrib axis of the city connecting the existing lake harbour to the new sea port by a riverfront trail.
8. It ensures legibility for all sea traffic, separating the function of shipping, fishing, sailing and pleasure craft and defining their access with shipping, fishing and junior only sail craft to the east between the new port and Hare Island, senior sailing and pleasure craft to the west between the new port and Mutton Island.
9. It creates a positive frontage to the currently industrial exposed nature of the existing Enterprise Park.
10. It provides a new portscape in the bay which identifies and highlights the location of the port for the city and surrounding coastal environment.



### 3.5 Cultural Impact

In order to assess the cultural impact of the harbour extension on the city, it is first necessary to define "cultural". Under E.P.A. guidelines cultural assets include physical assets such as architecture, settlements, features and structures to social assets such as folklore, tradition, literary and artistic. In the Galway City Development Plan it covers cultural, built and linguistic heritage. For the purpose of this study we have interpreted it in its broader, societal meaning which is the arts, customs, tradition and institutions of the city which spans from the visual and performing arts and built heritage to the beliefs, memories and institutions of the city.

Under any definition, the existing harbour is one of the city's cultural assets, as vividly highlighted in the poem "Galway" at the start of this study document. It derives its cultural status from both its long standing shipping tradition since the birth of the city to the embedded memory and current visual image of ships arriving and departing its port. Its cultural association is also linked to the cultural heritage of piers, quays and dock buildings and the customs and traditions of docks and dockworkers. In summary Galway Harbour's physical, memory, customs and portscape is part of Galway's cultural makeup. A large part of that cultural attachment will transfer to the new port in particular the movement of ships in Galway Bay and the creation of a new portscape. Some of the cultural tradition will be lost to the existing harbour. However, that loss is insignificant, in comparison to the potential loss of the overall shipping industry to the city. Critically, the new port will secure and extend the life of that shipping and maritime cultural tradition indefinitely into the future.

What is the impact of the harbour extension on the overall cultural image of the city which is primarily defined by a combination of its unique medieval city centre and its cultural creative arts tradition? In trying to assess it on a overall city scale it is necessary to first break it down into the most relevant and adjoining component parts.

1. Existing Harbour/City Centre: The harbour extension is physically separated from the existing harbour and city centre by the Lough Atalia channel but maintains its visual link. The separation is sufficient to create two distinctive areas – the old inner harbour and the new outer harbour. The visual link ensures the symbolic connection between the city and harbour is maintained. Overall there is sufficient space separation to retain the integrity of the existing harbour and its protected structures but sufficient visual connection to retain its cultural tie to the city.
2. Long Walk/Spanish Arch/Fishmarket: The harbour extension will be visible from these cultural landmarks in the city but at a relatively removed distance of around 500 metres. That distance is considerable in the context of the intimate urban centre where these landmarks are located and plus the fact, that they are separated by water, will ensure that similar to the existing harbour, they will maintain their integrity and setting. Given the Fishmarket/Spanish Arch and Long Walk's function as the original and subsequent location of Galway Port, its visual connection to the harbour extension is appropriate and symbolic.
3. The Claddagh: Whilst the traditional fishing village and customs no longer exist, the place name, memory and family connections still do, so it remains a cultural if somewhat ignored asset within the city. The high visibility between the new harbour and Claddagh area is both appropriate and cultural. Similar to the Long Walk, Spanish Arch and Fishmarket, the Claddagh's traditional association with the sea, resonates in the harbour extension and marina and highlights the symbolic connection between both areas.
4. Creative Arts: Galway Arts and Cultural creativity is defined by the indoor Druid Theatre and the outdoor Macnas group, both of which through their innovative approach to their respective art forms have established Galway as a hub of cultural creativity and acted as a catalyst for the ambient street entertainment culture of the city. This cultural creativity hub is very much centred within the Latin quarters of the medieval city and into the Dominick St. area and consequently is not impacted to any extent by the new port development.
5. Galway Bay: The song "Galway Bay" is a well known folk ballad dating back to the late 1940's and made famous by the American singer, Bing Crosby. Despite its emigrant origins and displaying a typical over-sentimental view of Galway and its bay setting and rarely sang or heard in Ireland today, nevertheless it is embedded in the Irish consciousness and has immortalized Galway Bay in song, whatever about its overly romantic and nostalgic recollection and depiction of the place. Indeed, in terms of popular culture, Galway Bay is recalled in other songs by a diverse range of songwriters including John Lennon, Phil Coulter, Shane McGowan and Steve Earle. Consequently Galway Bay is both renowned and a cultural asset. The new ports impact on the Galway Bay "brand" however is negligible. This is because Galway Bay whilst covering a large area of water from the Aran Islands to Galway City is most associated with the Connemara coastline but in particular, Salthill where from the 1880's the tourist industry exploited the views of Galway Bay and the Clare Hills to establish a tourist resort that exists up to today. That traditional image of Galway Bay which stretched from Salthill to the Claddagh has been altered somewhat in recent years and now the contemporary association with the Bay within the city is from Blakes Hill through Salthill to the Mutton Island causeway where the primary panoramic vista can be viewed and enjoyed.

Consequently the harbour extension whilst technically located in Galway Bay is by association and image seen more as located in the outer harbour waters or inner bay character area.

6. Overall Cultural Image: Galway's overall cultural image is primarily defined by its natural setting, built heritage, cultural and social attractions, institutions, amenities and facilities. What impact has the new port consisting of a 24 hectare extension to its historically intact footprint and protruding out into its coastal waters? Firstly, it should be noted that the existing Enterprise Park developed between 1995 and 2000 with an area of 16 hectares partly reclaimed from the sea and tidal zone and presenting an industrial face to its waterfront edges attracted very little attention, publicity or commentary and had little or no effect on the cultural image or reading of the city. The harbour extension at 1.5 times the area of the Enterprise park and extending three times as far out to sea but with a softer marina and pier face to its waterfront edges is envisaged as having a similarly benign impact. This is due to its amenity edge treatment but also because the harbour extension has a combination of a maritime and open, industrial, storage compound character as distinct from the solely industrial character of the Enterprise Park. However the prime reason is because the harbour extension is located in the least distinctive and recognisable water character area within the city in comparison to Salthill, Lough Corrib, Lough Atalia, River Corrib and Canals. As highlighted in the Galway Bay study (1.20) the outer harbour waters where the harbour extension is located is the least engaging in terms of views, vistas, features, attractions, points of interest and reference points. In conclusion, because the proposed site for the harbour extension is located in the reclaimed waters of the outer harbour, a water area least associated with the waterfront cultural image of Galway it will have no adverse impact on the overall cultural image of the city. Conversely, what the harbour extension provides is a living, physical and visual reminder of Galway's maritime tradition, which is a core component of Galway's cultural heritage and origin.

### 3.6 Social Impact

Whilst the harbour extension will not impact on the city's evening or night time social landscape other than be a possible topic of conversation!, it will impact on the social and leisure tradition of coastal walking, which is popular to both east and west of the proposed site but considerably so to the west. In particular, the harbour extension will change the nature of the walking experience from Mutton Island causeway to Nimmo's Pier. However, that change is seen as positive in that the new harbour marina provides a new point of interest and attraction in the outer harbour waters, in what is the least interesting portion of the trail from Seaweed Point to Claddagh Quay. On the eastern side, the trail around Ballyloughan Strand and in the adjacent Ballyloughan amenity park is similarly impacted. Again the change is seen as neutral at worst, as the new harbour commercial, fishing and nautical quays provide a more positive, coherent and legible viewing focus than the existing exposed frontage of the Enterprise park and general surrounding backdrop. In summary, the impact changes of the new harbour vary from neutral to positive in terms of the immediate social and leisure pursuits enjoyed at both sides of the proposed development.

### 3.7 Historical Impact

Galway's historical landscape is related but separate to its cultural landscape. Consequently, the assessment of the historical impact is similar to the cultural impact .i.e. evaluating the large footprint extension to the city relative to its historical development, in a town that is rightly protective of its historic medieval centre and later 18<sup>th</sup> and 19<sup>th</sup> Century inner city area. The main historical impact of the harbour extension is the increased difficulty in reading the original medieval walled town as being adjacent to the sea and tidal zone because of the further land reclamation from the sea. However that difficulty was initially created by previous reclamations in developing previous harbour incarnations and the harbour extension is unlikely to radically alter the existing perception, that the original walled city is now separated from the sea. Instead the harbour extension becomes just another latest part of the history of reclamation in the city and its impact on the overall historical growth of the city. The clearest manifestation of that impact is examining the various city maps in the Background Study which demonstrates the growth of the city from the Middle Ages and compare it to the maps containing the new port proposal. Clearly future city maps will be different to accommodate the new landmass. However this is not an impact on the city's history but a part of the city's history and where the new port is just another link in the chain of the city's growth and development. So in the same way that the sequence of maps from the Gooche map, Speed map, Pictorial map, Logan map, 19<sup>th</sup> and 20<sup>th</sup> Century O.S. maps highlight the evolution of the city, the future 2020 O.S. map will confirm the continuing evolution. In summery the harbour extension is an altering part of the city's history, not an adverse impact on it.



**3.8 Tourism Impact**

In terms of tourism impact, it is first important to note that the harbour extension is part of, rather than apart from the tourist sector in Galway. There are a number of elements to this attachment and connection to the tourist industry. Firstly, the proposed development and growth of the Cruise Passenger business, with an anticipated potential of 50 liners carrying 200,000 tourist passengers, is a significant addition to both the tourist business and tourist numbers and widens the whole tourist base for the city and hinterland. Secondly, the success of the Volvo Ocean Race in 2009 and 2012 has exposed Galway in a worldwide event and established its tourist credentials to a global audience. It has also established Galway Harbour as an ideal event location, drawing on both the city's age old maritime tradition and more recent festival tradition.

Thirdly, the Volvo Ocean Race has spawned and acted as a catalyst for maritime tourism, which is another new but novel addition to Galway's ever developing tourist sector. This maritime tourism can be demonstrated by the ten tourist events held in the harbour during 2010 following the success and exposure of the 2009 Volvo Ocean Race. These events include the Western Dingy Championships in May 2010, Offshore Powerboat Championship – June 2010, Docks Discourse Exhibition – July 2010, SB3 Western Championships – August 2010 (It is proposed to host the national and international championships in future years) Galway City Marathon Start and Finish – August 2010, Arthur's Day Concert – September 2010, Galway International Oyster Festival Parade – September 2010 plus a series of public exhibitions and charity fundraising events. The harbour extension which provides for the separation of shipping and sailing craft functions, will allow the further unhindered development and growth of this maritime tourism with future potential, without the restriction of shipping movements, timetables and general port operations.

Fourthly, the development of the harbour extension will allow for the regeneration of the old harbour and create a second place of identity in the city for local, regional, national and international visitors. This will allow the city to provide an alternative tourist destination and attraction within the city, to the primary place of identity, which is the Eyre Square to Fishmarket pedestrian zone. Finally, the new port can attract tourists in its own right as demonstrated by the European Ports of Antwerp, Rotterdam and Hamburg, which provide facilities and vantage points for tourists to enjoy the spectacle of modern port operations and activities.

Before examining the impact of the harbour extension on Galway's existing tourist industry, it is first worth looking at tourism in the city. The tourist sector in Galway is a global term to describe a multiplicity of tourist types, categories and headings. These categories cover such elements as visitor numbers, visitor spend, visitors by month, origin, route and method of entry, purpose of visit, type of holiday, composition of party, age, gender, social class, duration of stay, type of internal transport and accommodation type. These are just a sample of the headings which constitute a complex and constantly evolving tourism business in Galway and has made it one of the larger economic sectors in the city today.

Assessing the impact of the harbour extension on tourism and the visual perception of such a large scale footprint extension to the city on the coastal edge of the city centre, is relevant because the city depends so heavily on the tourist sector to generate economic activity and benefits. As a first observation on the impact, it should be noted that the proposed new port is not an incompatible, imported function in the bay waters. It does not carry the imposed and alien associations of say, a power plant, a refinery or as in the case of the Mutton Island development during the 1990's, a sewerage treatment plant. What is proposed is an appropriate, compatible and for touring visitors a not unexpected development given Galway's coastal location and with either a known or assumed maritime tradition. Consequently, a harbour extension is unlikely to carry any surprises for tourists to the city, indeed a lack of port activities may be more surprising.

In terms of a tourist destination like Galway, tourists will gravitate to their own particular interest and purpose for visiting the city. Accordingly, the social tourist will gravitate to the hospitality scene, the shopping tourist to the retail outlets, the casual tourist to the city ambiance, the festival tourist to the selected festival and the cultural tourist to the cultural heritage. The harbour extension will not interfere or impact on the gravitational pull of the various tourist attractions offered by the city. In terms of tourist types, there is a category of any tourist population who are interested in studying and understanding the city they are visiting – to uncover the mask and facade of a city and learn what makes the city function. This type of cultural tourist will immerse themselves in the origins and history of the city and study its urban and social involvement. This is also the type of tourist who may visit and study the harbour extension to learn about the modern city and region – what and from where, it is importing and exporting. So besides the allure of modern harbours and their spectacle for some tourists as referred to above, the harbour extension will also attract a type of tourist interested in the city's makeup and the society it serves.

The final observation is in regard to the more fundamental issue of the nature of tourism and port activities. Notwithstanding the point of whether one economic sector in Galway can dictate the development of another economic sector, both tourist and harbour activities are part of the commercial sector which is the largest economic category in the city. The tourism element is larger than the shipping industry and both serve different functions, even in how the city is perceived. Galway is now portrayed and perceived as a tourist city rather than a maritime city, although maritime tourist events like the Volvo Ocean Race has blurred that distinction. One of the dangers and risks of being a desirable tourist destination is that its success brings accompanying negative factors. For Galway, the

doubling of the city's population in summer brings issues of overcrowding and traffic problems into focus which affects both citizens and visitors to the city. The increasing sequence of festivals during the tourist season can appear excessive and exploitative. Crucially, the continued success of tourist intake can alter the nature of a city. For Galway the influx of a large tourist population has gradually led to the loss of indigenous commercial business's in the city centre to accommodate the national and foreign retail multiples and brand names which has changed its nature to an "anywhere" city. Galway can easily become a victim of its own success, where a tourist spot can be perceived as a tourist trap, where its attractive city core becomes a medieval stage set for visitors and where the city centre ceases to be, and crucially perceived by discerning tourists, to be, a living, working and breathing city but instead colonized by the tourist industry for economic gain. In future tourism may start drifting towards a unique, authentic experience rather than to a packaged, universal experience. A positive impact of the harbour extension and an antidote to any perceived commercialism of the tourist city is its visible reminder that Galway is a native, functioning and operational city, grounded in local, indigenous and traditional commercial business's and displaying a confidence that the city can accommodate modern expansion and development without losing its tourist appeal.

In summary, the harbour extension will have a positive complementary addition to the tourist sector in the form of the Cruise business and facilitating maritime tourism events, whilst acting as a permanent counterbalancing contrast to the perceived negative impacts of the transient tourist industry and ensuring that the city remains rooted by accommodating non-tourist, indigenous and viable diversity. The tourist sector will perceive the harbour extension in Galway as a reflection of a growing and confident city with a local variety, complexity and diversity appropriate to a coastal city of 75,000 and projected to increase to 100,000 by 2025.

**3.9 Rebranding of City**

The development of the harbour extension will lead to a rebranding of the city over time in terms of a destination for visitors. This rebranding is not a disposable marketing exercise but a gradual, organic process in the way the city is portrayed, but more importantly perceived. The rebranding process involves three elements as covered under the previous section.

1. Cruise Business: The primary visitor route to Galway City is by road, followed by rail and in latter years, but to a smaller extent, by air. For the first time in over 40 years the new port will facilitate visitors to the city by sea through the Passenger Cruise Liner Business. This new route will also provide a change in the visitor type with the Cruise Business tending to attract an older and wealthier clientele. The projected numbers of 200,000 per annum is a significant addition to the existing visitor numbers, with corresponding economic benefits for the city and all channelled through the new port.
2. Harbour Village: The regeneration of the existing harbour into a Harbour Village, a new multi-use and multi-function pedestrianized precinct around the harbour waters will attract local, regional, national and international visitors and establish a second major focus of attraction within the city. This new area will widen the appeal base of the city and create a distinctive place of identity centred on the leisure, recreational and amenity value of a large city centre waterbody.
3. Maritime Tourism: The two Volvo Ocean Race events and other similar festival events hosted in the harbour since 2009 has established the harbour as a hub for maritime tourism which is likely to grow and develop into the future as the harbours reputation as an ideal water based, festival event location, spreads. These events will further widen the scope and base of tourism in the city.

The nett effect of the above developments is the new perceived association of Galway with its harbour. The harbour extension facilitates the rebranding of the city through this association and the shift of emphasis onto its harbour waters. The port will become both the conduit for visitors through cruise traffic and the focus for visitors through regeneration of the existing harbour and provision of maritime events. This rebranding, currently marketed by Galway Harbour Company as "Waterfront City", will bring a whole new chapter and dimension to the city. Despite Galway's myriad of watercourses and its general association with water, there is still a lack of connection and engagement between the city centre and its variety of waterbodies. This lack of exploitation of its waters can be traced historically to the construction of the Medieval Walled town, where its water exposure was seen as a threat. Despite only the remnants of the wall remaining, the medieval urban city form remains intact and even though the city has developed beyond its medieval enclosure, the physical and psychological barriers between city and sea are still there. The rebranding of the city will help remove those barriers and the harbour extension is central and key to that process of reopening and connecting the city to the sea through its harbour waters, cruise business, maritime events and Harbour Village.





### 3.10 Reinterpreting the City

One of the resultant benefits of the harbour extension development are the new opportunities being created from the various recreation, amenity and leisure areas provided. In creating a new landmass peninsula protruding out to the bay in close proximity to the city centre, new views are also created to exploit the aspect of the city and surrounding environs. These new views and prospects help in looking at the city anew. The new views will lead to a visual, reappraisal and understanding of the city. As an example the new views created from the end of the new western marina are similar to existing views experienced by shipping and sailing craft as they currently approach the city by sea. This viewpoint will also provide new views to the Claddagh and South Park across the inner bay waters. On the approach eastern side of the port the whole eastern foreshore of the city is revealed for the first time, creating new views to Ballyloughan strand, adjacent amenity park and general eastern environs.

The overall impact of the new views and prospects as created, is the visual reinterpretation of the city, its profile and its immediate western and eastern foreshore geography.

### 3.11 Nature and Understanding of Change

Whilst the impact study acknowledges that the proposed development represents a change to both the physical and cultural reading of the city, it indicates that the change is not detrimental to the city's strong physical and cultural image. However it is worth reflecting on change, the nature of change and our human response to it.

The eye is the most conservative organ in the body and consequently change can be both discomforting and unsettling. Our ability to accept change in the form of something new, different or altering depends on a lot of matters including personal issues such as age, attitude and values, to change factors, such as its nature, magnitude and context. It is the nature of cities to be forever changing. Cities rarely stay constant or static, they are always evolving, sometimes stagnating or declining but mainly developing and growing. Galway's growth and development since 1842 when the existing harbour was constructed has been sustained but particularly accelerated in the last 50 years. Most of that growth has been gradual and incremental and proceeding without undue notice or attention. Within the existing city, change is also occurring, existing building or business's are being constantly renewed or replaced, existing institutions expanded or retreated.

The change resulting from the harbour extension is more pronounced and noticeable by virtue of its scale and location. Its scale reflects the fact that the harbour has remained relatively unchanged for 170 years whilst the city outline has grown almost fortyfold since then. Its southwards expansion reflects the fact that it is the only possible area that the existing harbour can extend into, as expanding to the north, east or west is not an option due to the city's coastal geography. Galway city and its various institutions have the luxury of being able to expand landside. Its harbour is the only institution that has no option but to expand seaside.

The harbour extension will take up to a generation to fully integrate and become part of the human experience of the city. Its phased construction programme will help in its assimilation into the city's seascape and landscape memory. For some, the change will be easy and natural, for others it will be less easy or unsettling. Such is the nature of change.

### 3.12 The Cultural Seascape and its Designations

Galway Bay, formed as a result of geological and climatic processes is not, despite its visual appearance, an exclusively natural body of sea. The bay has been subject to human activity since the first settlers arrived in Galway in 6000 B.C. This activity was accelerated with the birth of the city in the 12<sup>th</sup> century and since then, the bay has experienced a variety of human imprints from fishing to shipping, boating to sailing, trading to invading, tourism to emigration, reclamation to reformation, piers to lighthouses, beaches to promenades, quays to harbours.

Consequently, the bay is a cultural seascape – a combination of the natural and artificial, nature made and manmade, fused over time to meet economic and social needs. The existing harbour and the shipping industry using Galway Bay as both its haven and highway, is the clearest and most visible manifestation of the interface between its natural and cultural systems.

Galway Bay is also a scenic amenity and a wonderful repository of wildlife species and habitat in the form of fish, plants and animals. The conservation of natural and ecological heritage is covered by its various designations, namely, candidate Special Area of Conservation, Special Protection Area and proposed Natural Heritage Area, as enforced by national, E.U. and international laws and conventions and overseen by associated local authorities and the National Parks and Wildlife Service.

This approach to conservation is now regarded as being somewhat misguided however, because it is too selective, punitive and too disregarding of the fact that no seemingly natural landscape or seascape is, or has been, immune from human cultural activity. The selection of particular sites, of which Galway Bay, is one of only a few in the country, with such a combination of designations, is no substitute for a general conservation policy, covering the whole country's landscape and seascape. In addition the policy of negative protection needs to shift to one of positive management, i.e. to manage change and development, rather than to prohibit it. Finally, the policy of protection by limiting human use, is contrary to the continuing evolvement of our seascape and landscape, which involves human society engaging with the natural environment.

The proposed harbour extension of Galway is an appropriate, managed development of physical, cultural, social, economic, ecological, environmental, transportation, recreational and planning processes, in a part of our rightly valued, inherited seascape and a recognition that it forms part of a historical continuum of human, economic and social activity in Galway Bay since the birth of the city.

### 3.13 Impact Summary

The impact study concludes that the new port will not impact negatively on the city's strong cultural image or its associated historical and social landscape. The impact study finds that the new port will result in the gradual rebranding of the city and will not adversely affect its prime image and one of its main economic sectors – tourism. Finally the study shows the physical impact of the new port varying from neutral to positive on Galway's urban waterfront.



#### 4.0 STUDY SUMMARY

This overall study has expanded beyond the required confines and guidelines for assessing the physical and cultural impact of the harbour extension. This expansion was deemed necessary and appropriate given the unusual and untypical circumstances of the project. These circumstances include the absence of a visible site, the sensitive location of the sea reclamation area, the proximity and visibility to the city centre, the city's tourist destination popularity and strong cultural image and finally the rarity and consequent lack of experience and understanding of the subject matter – a new port. The study has highlighted relevant issues and findings as follows:

1. Background
  - The harbour extension facilitates the city's expansion into a regenerated existing harbour.
  - There is a lack of guidance in respective European policies to encourage port developments and protect the environment.
  - Ports have both positive and negative images but perceptions are increasingly indifferent.
  - Ports are increasingly changing to larger, deeper, more removed, secured and automated environments.
  - Galway has a long and rich maritime tradition with a lasting impact and relationship with the city.
  - The Volvo Ocean Race combined the tourist and maritime tradition and acted as a catalyst for maritime tourism.
  - The harbour extension continues the Galway tradition of infrastructural projects with amenity potential.
  - The Galway Bay Study confirms the outer harbour waters character area.
  - The harbour operations is a cultural asset to the city and needs to be conserved.
  - The history of the existing harbour is one of struggle and growth.
2. Design Study
  - The challenge of creating a new type of harbour that is sensitive to its built and natural setting.
  - The harbour extension reflects the growth of the city since the construction of the existing harbour.
  - Objectives for the harbour extension are centred on its intervention into the urban waterfront.
  - Vision for the harbour extension is based on historical, cultural, visual, connection, tourist and portscape potential.
  - The harbour extension = has a soft skin over a hard centre.
  - The port form and response to its boundaries indicate an appropriate fit for its coastal environment.
  - The harbour extension caters for the public realm and connection to the existing city.
  - The harbour extension provides a new portscape in the bay.
  - Port buildings are designed to be sustainable and sensitive to their setting.
  - The harbour extension has further future potential.
3. Impact
  - Viewer experience is ultimately personal and subjective.
  - The physical impact on the bay is neutral.
  - It has no adverse impact on the cultural image of the city.
  - The social landscape of the city is not impacted.
  - It is consistent with the historical evolution of the city.
  - There is no impact on the city's tourist industry.
  - The new harbour provides for the rebranding of the city.

The harbour extension is a response to the fact that all ports have to constantly evolve, alter and adapt in order to attract and develop new markets and opportunities to cater for the ever changing demands of the shipping industry. Currently Dun Laoghaire harbour is planning to change from a commercial to a recreational port to attract the cruise business after the anticipated loss of the Stena Line ferry service. In the recent past Galway port's core business was oil imports and ore exports from Tynagh mines. In the intermediate future the challenge is to cater for larger ships, importing and exporting a variety of ever increasing cargo types and the growing cruise liner business, a market that is projected to double in capacity in the next ten years. The harbour extension learns from and is informed by the existing harbour in particular its dual commercial and recreational use, its strong relationship with the city and the importance of portscape as a key ingredient in the city's cultural landscape. Its design exploits the city port, nature port and recreational port relationships.

During the long gestation period of the project which was on continuous display in their dedicated website, Galway Harbour Company also consulted widely and extensively with various individuals, groups, organizations, business's, communities and parties culminating in a 2 day public consultation event on January 21<sup>st</sup>/22<sup>nd</sup> 2011 and a

16 page local press feature on February 9<sup>th</sup> 2011. The overwhelming and unanimous response was one of positivity and encouragement.

The overall response to all the consultation initiatives suggests that the city and its citizens support, encourage and would like to see the proposed development proceed. Obviously it is only when the application is submitted that objections may arise. However, on the evidence of consultation and feedback to date, it is likely to be an opposing vocal minority in contrast to the supporting silent majority.

Notwithstanding the various planning, environmental, transport, visual and economic issues involved, the planning assessment and decision in this application carries a heavy burden of responsibility, as ultimately it is deciding the fate and future of Galway's 750 year old maritime trading tradition and whether it is to eventually cease or continue. Its cessation would be a visual, cultural and psychological loss to a city that owes its origins and very existence to the fact that, it was and still is, a coastal trading centre. The diminution and transfer of Limerick's port activities to Foynes has had a negative impact on its maritime tradition and identity despite the port's less central location and role within the city and the fact that the nautical image of ships sailing in Shannon Estuary having less of a potency than a similar scene in Galway bay, as viewed from Salthill and Galway's coastal communities. The loss of Galway's sea trade would also resonate with the state's poor record of abandoning and disposing sustainable infrastructural transport systems such as railway lines, which subsequently and particularly in Dublin were reacquired and redeveloped at a high cost, after a belated realization that they were vital to future sustainable transport needs. There is the additional sustainability advantage that Galway is one of the few Irish ports with the feasibility and potential to connect to the national rail network, ensuring the completion of the circle of sustainability, that is shipping and rail combined.

On the basis that the general policy of Planning Control to achieve sustainable development, is to ensure a balance between development and protection of the environment, it is felt that the harbour extension fulfils that objective and that the study demonstrates that achievement in terms of its physical and cultural impact. Consequently, the conclusion of this study proposes and promotes the idea that Galway's maritime tradition can and should continue with the development of the new harbour.

Finally because of its cultural context and given that the study commenced with a literary theme in the form of a lesser known poem, it seems appropriate to conclude on a musical note in the form of a well known song. The distinctive features and activities of ports is probably best captured in a music analogy, in particular sheet music, where the fixed horizontal music lines represent the fixed horizontal harbour piers and quays and the varying music notes, represent the varying harbour portscape of ships and sailing craft. Accordingly old harbours are seen as folk music – traditional, familiar and comforting, whilst new harbours are more rock and roll – modern, edgy and challenging. With the development of Galway's harbour extension, perhaps in the future a more contemporary up-tempo version of the classic "Galway Bay" will be recorded with the following revised and updated opening lyrics:

*"If you ever go across the sea to Ireland,  
It may be at the closing of the day.  
You may sit on a pier in the outer harbour,  
And watch the sun go down on Galway Bay"*

