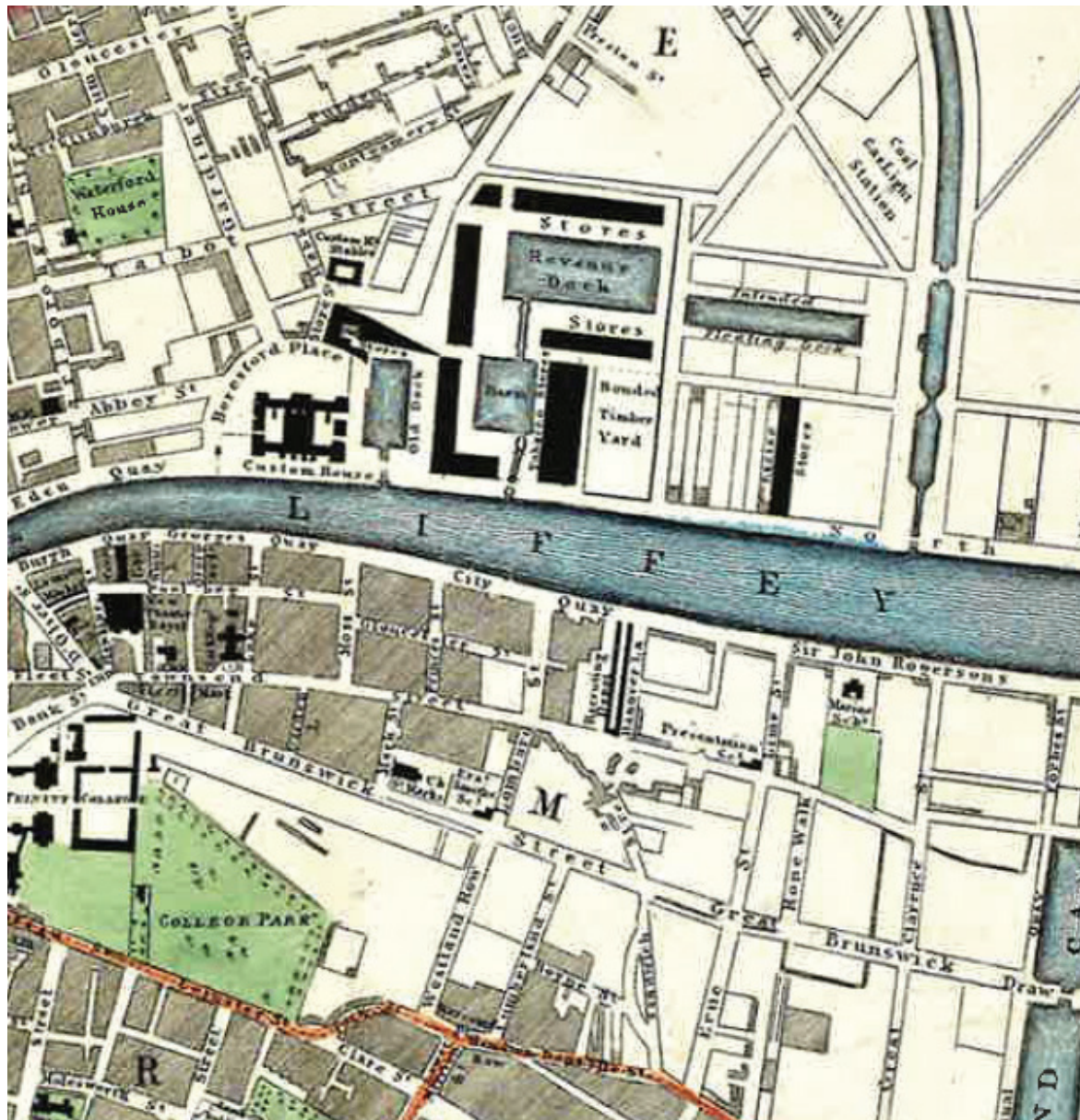


Canopy 2 & Pontoon at Custom House Quay

ARCHITECTURE



Architectural Heritage Impact Assessment

June 2023

Howley Hayes Cooney Architecture were commissioned by Urban Agency to prepare an architectural heritage impact assessment as part of a Part 8 Application for proposed development on lands at Dublin City Moorings, Custom House Quay, Dublin 1, and on the existing pontoon structure adjacent to the current Dublin Docklands office building. Custom House Quay, part of the North Wall (a protected structure), is also an RMP, included on the NIAH and is located within the River Liffey Conservation Area and is in a Zone of Archaeological Interest. This report will briefly set out the history and significance of the quay and its wider context. It includes brief description of the designated built heritage assets in the vicinity, a description of the site area, and concludes with an assessment of the impact of the proposed development.

This statement should be read in conjunction with Urban Agency's plans, drawings and documentation submitted as part of the planning application.

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1.0 Introduction

The embankment of the River Liffey was one of the largest and most important feats of infrastructural engineering in the early-eighteenth century city. Construction of the north shore (quay wall), east of present day O’Connell Bridge, to a point opposite Ringsend, commenced c.1715-25, with the quays becoming the centre of the Irish shipping trade, with storehouses and other businesses built along it.

In 1791 James Gandon’s new Custom House was completed further east on the north quay of the river, thus changing the focal point of shipping and mercantile activity in the city with considerable development in and around it following until the mid-nineteenth century, when Dublin Port moved eastwards.

This included three wet docks constructed directly to the north-east of it; the East Dock, or Old Dock, completed 1796, George’s Dock, 1821 and Revenue Dock, or Inner Dock (1824). George’s and Inner Docks were designed by renowned Scottish Engineer John Rennie, who was also responsible for the structurally innovative design of the tobacco storehouses constructed

alongside the docks. The East, or Old Dock, was also constructed to the designs of architect James Gandon, but was completely infilled in 1927, and no evidence of this structure remains. One warehouse, ‘Stack A’, was refurbished in 2005, and is now known as the CHQ building (RPS 2094).

In common with the rest of the Liffey Quays, Custom House Quay was robustly constructed in and around the earlier quay structure, and consists of coursed limestone ashlar walls with shallow curved granite copings. Between the quays and road on both the north and south quays, the ‘campshires’ are the stretches of land that generally contain vestiges of granite sett paving, former crane tracks and paths. The name derives from the various British military regiments, such as the Gloucestershires or Leicestershires, that would camp there before setting off or returning from overseas, making ‘campshire’, a portmanteau of ‘camp’ and ‘-shire’. First reimagined in the 2000s, the Liffey campshires are the subject of ongoing integrated public realm and flood defence schemes for the City.

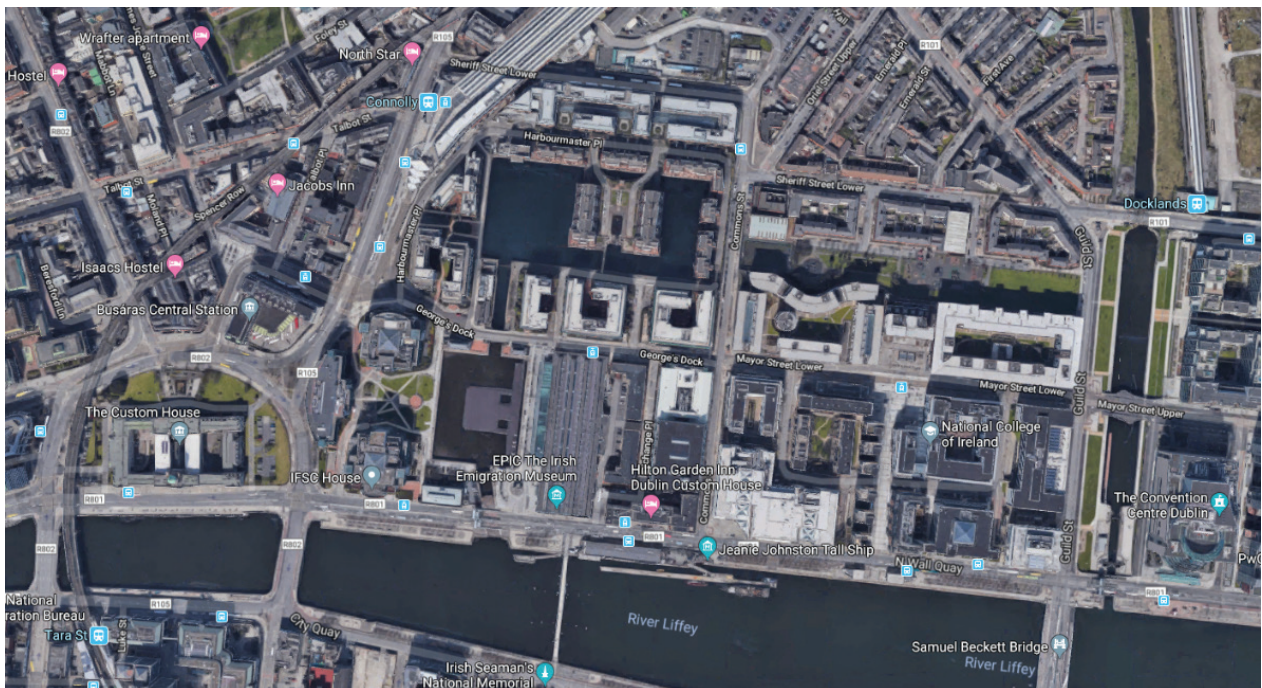


Figure 1 - Aerial view of the site

2.0 Historical Development of the Site

Early History

Dictated by its riverine topography Dublin development as an east-facing port had a profound impact on Dublin's subsequent history, when it evolved on almost flat reclaimed land adjacent to the Liffey. The first custom house in Dublin was constructed in 1621 upstream, on the south side of the River Liffey, close to the present day Grattan Bridge.

The eighteenth century saw large-scale development of the port of Dublin with the construction of quay walls east of Essex Bridge, with the objective of making the Liffey more navigable by enclosing the river estuary. This started the process of shifting the port steadily eastwards, and resulted in land reclamation behind the quays that altered the hydrography of the bay while also providing new land for residential, institutional and industrial use.

In 1707 the Corporation for Preserving and

Improving the Port of Dublin, was established, later known as the Ballast Office. The committee of Directors appointed by the City Council was responsible for the management, maintenance and development of the Port, quay wall and bridge structures of the Liffey.

The north side of the Liffey in the vicinity of what would become the present day Custom House was embanked by the Ballast Office in c.1715-25. First known as 'Dublin Key', it was '...60ft at the top and badly constructed; the walls of black stone [possibly reference to the strengthening of the earlier embankment]; its foundations laid on the surface of the strand; on the side next the river it was 12 feet high but on the inside only 8 feet; the filling between the walls was sand used for ballast; the base of the foundations stood at least 6 feet above the bed of the river; the tide not only soaked under them but filtered in several places.' (Gandon's notes reported by De Courcy, 104-5)



Figure 2 - 1728 Brooking Map



Figure 3 - 1773 - Scale's Additions & Improvements to Rocque's 1756 map

By the late 1770s it had become difficult for large ships to navigate as far upstream to the Burgh's Custom House on Essex Quay. In 1780, a new Custom House, with associated warehouses and docks further downstream was proposed by John Beresford, Chief Commissioner of the Ballast Office. Beresford and a small coterie Dublin's wealthy elite, purchased almost a square mile of marsh land on the north side of the river opposite George's Quay, determined to relocate the city's customs and excise function to this location to enhance the value of their landholding.

Beresford was instrumental in getting James Gandon (1742-1823), Sir William Chambers' English-born assistant, to Ireland as the architect of the new Custom House, his first major commission in Ireland. Works on the new Custom House commenced in 1781 and took ten years to complete. Inspired by Chambers' recent work at Somerset House in London, Gandon's masterpiece of neo-classical civic architecture was a 'vivid expression of the optimism of the 1780s' (McParland, Gandon, 53).

By this time, recommendations were being made to demolish and rebuild the quay wall as it was in constant need of repair and in 1786, '...Gandon proposed that the quay wall be altered to lie parallel to the Custom House, and this change was accepted by the Ballast Board' (De Courcy, 104-5). Malton's 1793 view depicts it as having timber fenders and a timber kerb secured to a stone retaining wall, and both Scale's 1793 map and Faden's 1797 map simply call the entire quay

the North Wall. Christine Casey attributes the designs for the quay wall, completed in 1796, to innovative Scottish engineer, John Rennie. A keen and experienced engineer, Rennie had already completed dock commissions in London, Hull and Grimsby, and was an engineer interested in modern techniques in maritime construction. T.S. Roberts's 1817 aquatint and etching depict the civic grandeur of the Custom House and its complementary stone quay wall and shows the curved entrance to the docks behind.

Gandon went on to design the first dock associated with the Custom House, initially called the Revenue Dock, though it came to be known as the East or Old Dock, and was completed in 1796. It was a simple rectangular basin, built of undressed battered stone walls, with a single set of gates and timber base at the entrance. Gandon's dock, with one gate, could only admit or release ships for a couple of hours either side of high tide, as it was still dependant on the tidal flow



Figure 4 - 1797 Faden's Map



Figure 5 - James Malton's 1792 View of the Custom House



Figure 6 - T.S.Roberts Etching 1817

Early Nineteenth Century

By the early nineteenth century plans for two additional docks were underway, to be located further to the east of the Old Dock to accommodate the growing number of ships arriving in Dublin. Dock engineering had continued to progress in the intervening years, and the east dock had become obsolete and was no longer fit for purpose. A trusted hand, John Rennie was commissioned in 1814 design and supervise the building of George's Dock, the Inner Dock and two substantial tobacco warehouses to the east.



Figure 8 - Triumphal arch George's Dock

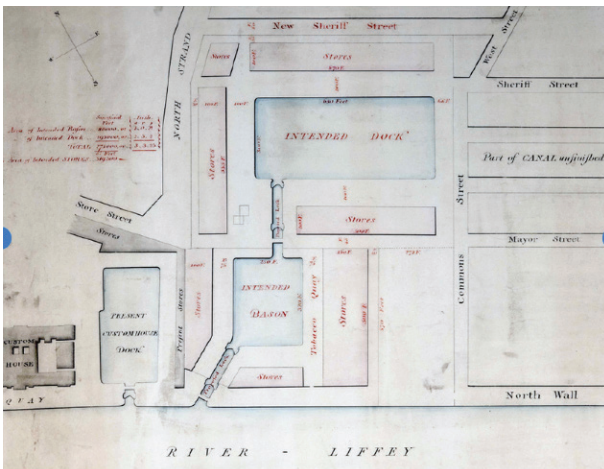


Figure 7 - 1813 map (Rennie, NLI)

Rennie's designs for George's dock and the Inner Dock incorporated many of the advancements of the late-eighteenth century, including brick and masonry bases at the entrance locks, two sets of curvilinear lock gates and curved walls. George's Dock was completed in 1821, and named after King George VI. Rennie died in October of that year, and the second dock, the Inner Dock, was completed in 1824 under the supervision of renowned engineer Thomas Telford.

The triumphal arch, constructed in 1813, also designed by Rennie, marked the formal entrance to the docks from Amiens Street, and originally stood to the east end of Eden Quay.

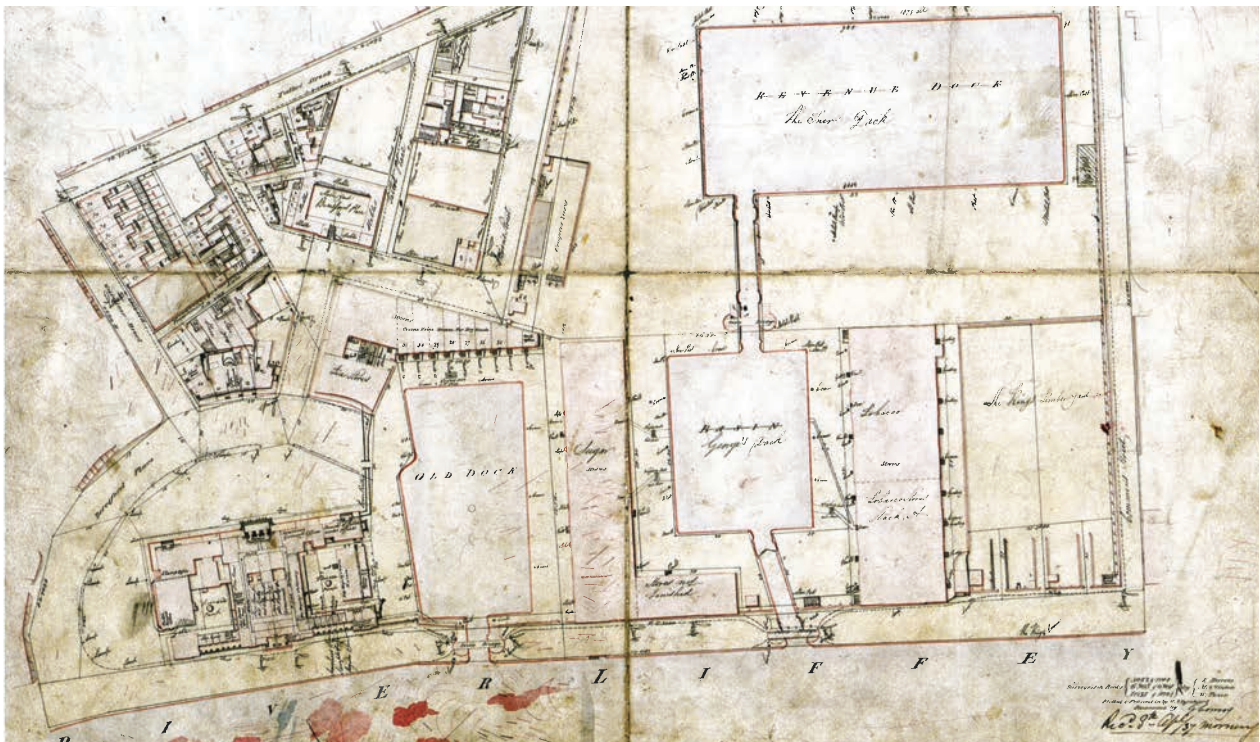


Figure 9 - 1836 North Wall from the preliminary OS Prelim Town Plan

Mid-late Nineteenth Century

In the 1860s the Ballast Board purchased the Custom House docks and warehouses from the Crown. Plans for the upgrade of the docks never materialised and focus instead shifted to the development of new docks further east, unhampered by narrow locks and better able to accommodate larger ships. By 1885, the extension of the North Wall was well underway.

The 1893 Goad Fire Insurance Plan shows the area in and stack 'A' and 'T', and describes the quay (here called Custom House Quay) as 'stone paved quay on piles'. Long narrow structures called 'transit sheds', located approximately where the Mooring Centre building stands today, bordered it at this point.

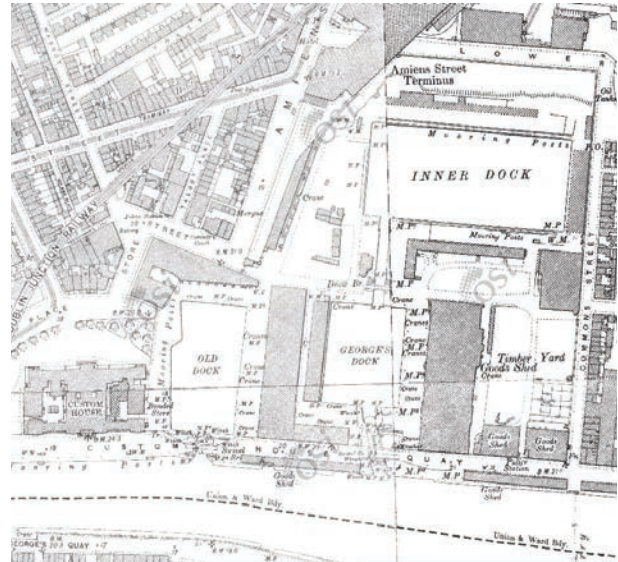


Figure 11 - 1888-1913 OS Map 25"



Figure 10 - View of entrance to docks (NLI Lawrence Collection c.1880-1900)



Figure 12 - 1853 Bird's Eye View by E Smyth

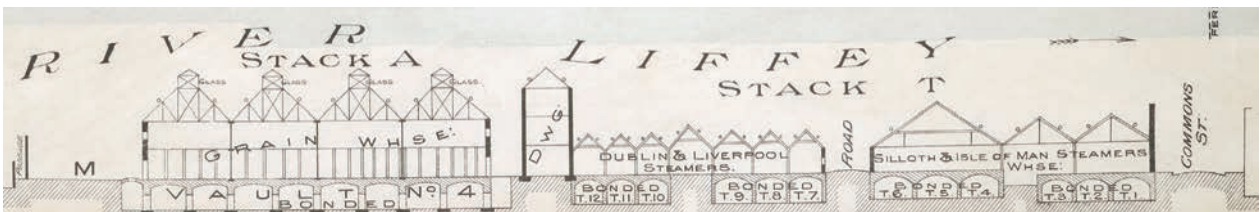


Figure 13 - Section from GOAD 1893 showing Stack A & T

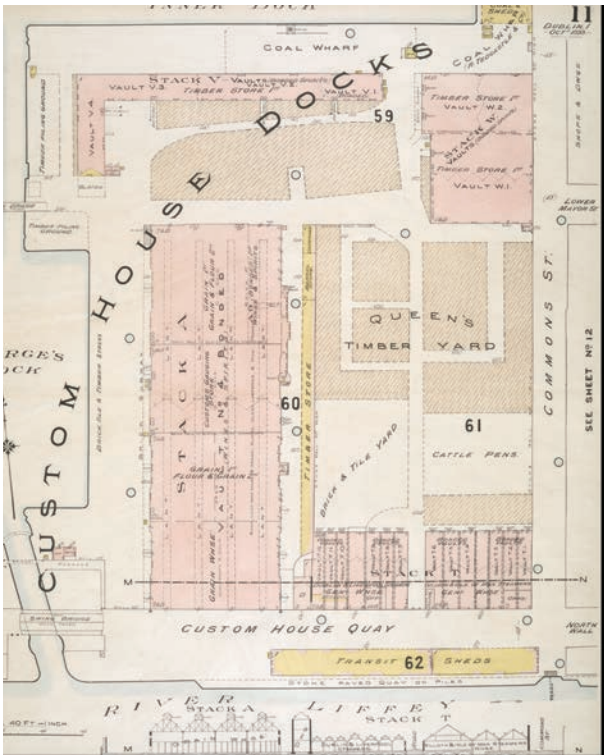


Figure 14 - 1893 Goad Insurance plan showing Stack A

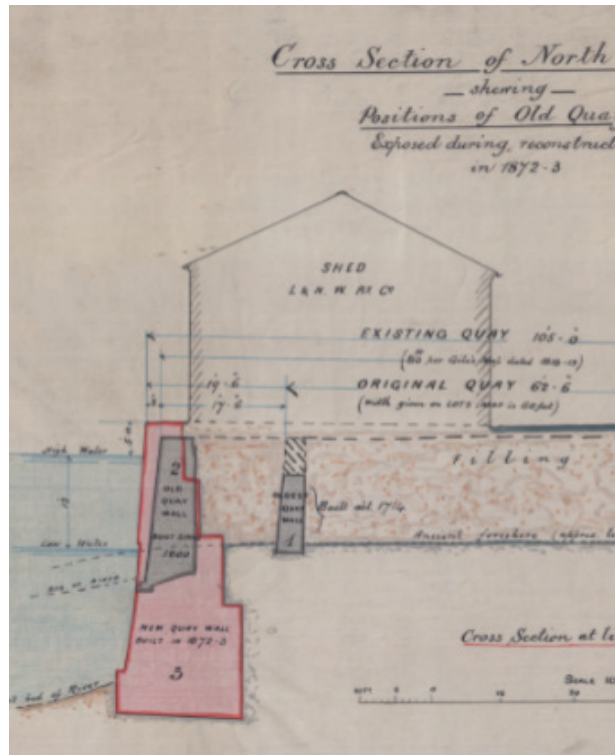


Figure 15 - Cross Sections of North Quay Wall showing positions of Old Quay Walls

The Twentieth and Twenty-first century

In the early twentieth century the docks provided one of the largest sources of unskilled labour in a city that was at that point riven by poverty and cholera and had the worst slums in Europe. Pay and working conditions were appalling and the docks were at the centre of the notorious 1913 Lockout.

The two Scherzer bridges, or lifting bascule bridges, were erected in the 1934, replacing an older narrow swing bridge along Custom House Quay. These wrought iron bridges would lift to allow ships enter the dock, but are no longer in use. A matching pair, constructed in 1911, still exist further down the quay, at Grand Canal Dock. Housing various government departments, the Custom House, symbolised British rule in Ireland, and during the Irish War of Independence the building was the target of an IRA attack in May 1921. Burning for five days, much of Gandon's interior was lost, and the copper dome melted and collapsed. In the rebuilding by the newly established Irish government Edward McParland states '...certain external alterations were tolerated.'

In 1927 the Old Dock was infilled to make way for the Memorial Road, or extension of Amiens Street. By the mid to latter part of the twentieth century the demand for coal began to wane, as oil became a more popular source of fuel, and the docks eventually fell into disuse.

Established in 1987, the Dublin Docklands Development Authority (DDDA) sought to redevelop eleven hectares of land, including the docks and warehouses for commercial and residential use. This resulted in the relocation of the triumphal arch in 1988 to its current position outside the CHQ building. Between 1988 and 1994, a number of new commercial developments were erected around the docks, including the International Financial Services Centre (IFSC), situated directly west of George's Dock, and No. 1 Harbourmaster Place, north west of the dock, and directly west of the middle lock. A marketing centre, as noted on the Ordnance Survey map of 1994, was constructed on the North Wall in front of Stack A.



Figure 16 - Scherzer Drawbridge with arch to right

More recent development around the proposed site area has been considerable larger scale development on Custom House Quay, including the large grained eight-storey hotel directly to the north of the quay. A further addition to the quayside was Rowan Gillespie's Famine Memorial of 1997. Opened in 2005, the Sean O'Casey pedestrian bridge was major intervention in the fabric of Custom House Quay, and over the years a number of utilitarian gangways and pontoons servicing boats using the quay have been added. Rennie's Stack A became the CHQ shopping mall and, more recently, the home of EPIC, The Irish Emigration Museum.

In the last twenty years, public realm works along the quay have included the integration of areas of paving, cycle paths, public seating, lighting, signage and bollards.

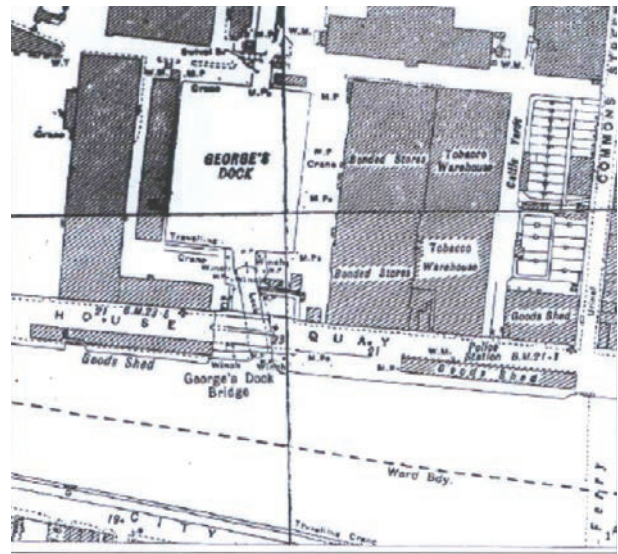


Figure 17 - 1937/8 OS Map



Figure 18 - Reconstruction of part of North Wall quays to provide deeper water berths c.1905 (DPA)

3.0 Description and Condition

Quay Wall & Campshire

The historic sections provide details of both the original quayside structure at the North Wall, built in the early eighteenth-century, and its subsequent nineteenth-century replacements / additions. The present (visible) quay wall in this area dates from c.1870 with its earlier incarnations presumably buried beneath is composed of neatly-faced, regularly coursed limestone ashlar walls, with shallow curved copings. The quay wall in the subject site area breaks forward of the main section of Custom House Quay / the North Wall.

Based on a visual inspection it would appear that, as expected with a robust masonry structure of this type, the quay wall is in quite good condition. Notable observations included:

- Settlement is evident in places;
- There is damage to the slightly curved edges where more recent services have been added;
- There is loss of mortar, particularly below the granite coping stones; and
- Vegetative growth where the mortar is missing;
- Seaweed growth is evident, where expected, below the water mark.
- There are a variety of different types and ages of ladders recessed into the wall, with some removed and crudely infilled with concrete blocking.
- Patch repairs / infilling are evident in places;
- No mooring rings, granite setts or crane tracks appear to survive in this area and modern non-native stone paving and setts have replaced them;

- Few curved sections of historic railing survive adjacent to the quay wall and sit uncomfortably with the visually intrusive security railings and razor wire associated with the long, poor quality single-storey 1990s structure constructed for the DDDA. This appears to have been added to in an expedient ad hoc way over the years. This structure projects slightly over the quay and is characterised an expanse of small paned plastic fenestration addressing the Liffey. Its poor quality glazed entrance is located at its western end. Bland defensive brick walls front north onto Stack A and add little to the activation of the area.

- The Sean O’Casey bridge landing point removed sections of stonework on the quay wall.
- More recent utilitarian gangways and pontoons servicing boats using the quay and the Jeanie Johnston have been added.

Setting

The grain, scale and character of the immediate setting of the site area has changed considerably since the development of the IFSC and the subsequent redevelopment of the Docklands and the former Stack A building. These buildings have entirely glazed facades fronting onto the quay. The rather monolithic and undistinguished eight storey stone and brick-clad Hilton Garden Hotel dominates this stretch of the quay.

A number of mechanical structures survive around the perimeter of the docks, including - three iron winches, two on the south end, and one by the Inner dock, and a dock crane on the east wall of George’s dock, all dating back to the early nineteenth century. The wrought iron Scherzer Bridges are examples of a bascule bridge which originated in Chicago, designed by William Scherzer, and became immensely popular throughout the world.



Figure 19 - Panoramic view towards George's Dock, CHQ and Custom House Quay



Figure 20 - Existing structure bordering Custom House Quay



Figure 21 - Elevation of existing Dublin Docklands office bordering the quay



Figure 22 - Existing quay wall, building and pontoon, Custom House Quay

4.0 Designations

Custom House Quay does not appear in its own right on Dublin City Council's RPS nor on associated mapping. It is, however, part of the broader North Wall, which is a Protected Structure (RPS 5835), and an RMP (DU018-020564), so should be considered as part of its curtilage. Both it and North Wall Quay form part of the River Liffey Conservation Area and are within a Zone of Archaeological Potential. The North Wall is also recorded on DCC's DCIHR.

Custom House Quay (Reg No. 50060555) is recorded on the NIAH as being of Regional merit for architectural, social and technical special interest.

Designated Assets within the immediate setting of this section of Custom House Quay

- 'Stack A (whole) and Stack C (vaults) warehouses' are included on DCC's RPS 2094.

The NIAH (Reg No. 5001003) gives Stack A a national rating for its architectural, historical and social special interest. It describes it as '...having undergone a sensitive renovation which has managed to retain the material and

structural integrity of what is considered the most impressive late Georgian industrial building in Dublin. Historically, the building constituted the largest single interior space in the city during the nineteenth-century...Fronting onto the River Liffey and onto George's Dock, the former warehouse represents the largest historic element in the revitalised Docklands area...'

- Rowan Gillespie's 1997 Famine Memorial, a group of six human figures carrying bundles, one carrying person followed by figure of dog, all facing east on Custom House Quay. It is recorded on the NIAH (Reg No. 50010002) as being of National importance for its artistic, historical and social special interest.



Figure 23 - NIAH Structures

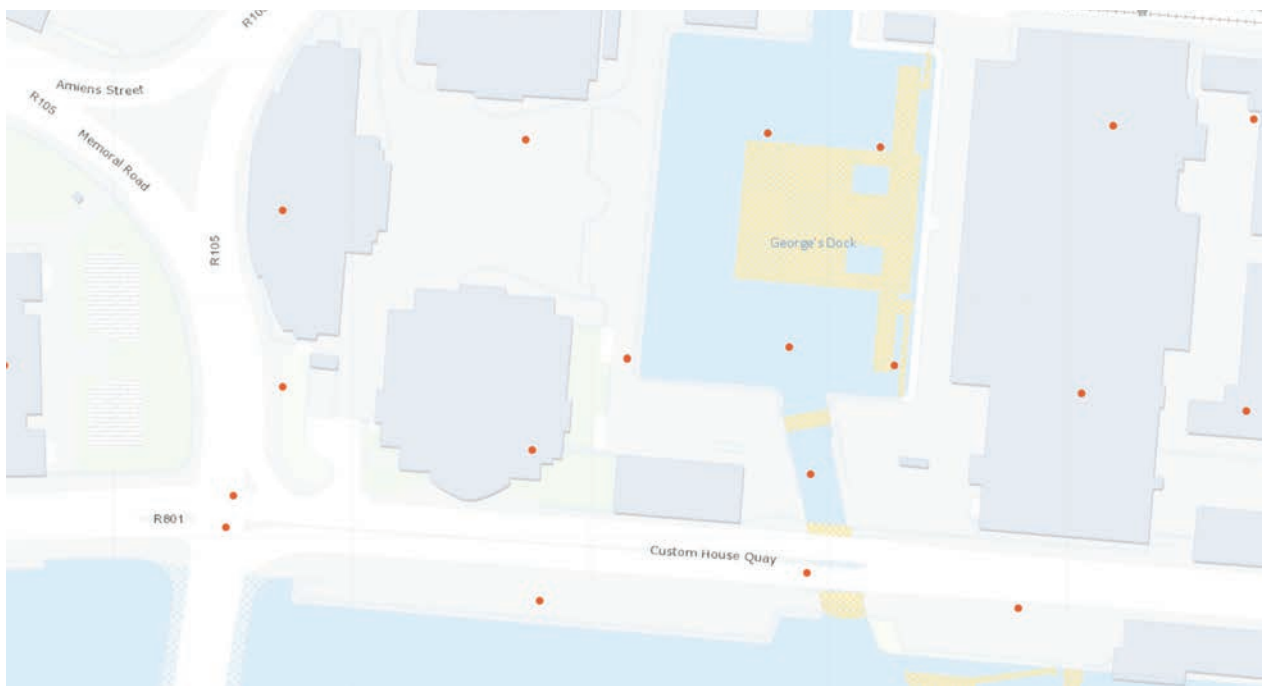


Figure 24 - DCIHR Map

There are a number of Protected and NIAH structures within the wider setting as follows:

- James Gandon’s Custom House (RPS 2096) is given an international rating by the NIAH (Reg No 50010133) for its architectural, artistic, historical and social special interest. The DCIHR also gives it a national rating.
- The Schrezezer bascule bridge (NIAH Reg No 50010001) is given a regional rating for its architectural and technical special interest.
- Standing close to the west of Stack A, the freestanding limestone triumphal arch, built 1813 and moved to Custom House Quay from Amiens Street in 1998, is given a regional rating by the NIAH (Reg No 50011219). It is constructed in ashlar and has a plinth, impost course and with moulded string course to parapet level.
- The Lock leading to George’s Dock (Reg No 50010131) is given a regional rating for its architectural, historical and technical special interest.
- The pair of cast and wrought-iron winches, erected c.1830, to either side of south lock to George’s Dock (NIAH Reg. No. 50010006) are given regional rating for their historical and technical special interest. They consist of iron cog wheels on axles and two crank handles supported on pair of iron brackets fixed to granite paving with replacement steel grille covering chute to dock below;
- The former 1824 sugar store to the west of the quay, next to George’s Dock, is recorded by the DCIHR but has been all but rebuilt bar fragments of wall and remains of basement from original store surviving at basement level.ity Quay
- Embanking the area directly south (opposite Custom House Quay), City Quay (NIAH Reg No 50020258) is given a regional rating for its architectural, social and technical special interest.



Figure 25 - DCC Designations, with approxiamte site area circled

5.0 Statement of Significance

Assessing Significance

The guidelines to the Burra Charter state that: Cultural Significance is a concept, which helps in estimating the value of places. The places that are likely to be of significance are those which help an understanding of the past or enrich the present, and which will be of value to future generations.

The guidelines go on to state that what is significant about a place should help determine how to look after it and what changes are appropriate. Whenever changes are made, including new interventions or development, these should be designed so as not to detract from the significance of the place.

Cultural significance is assessed through a number of different categories including: aesthetic; historic; scientific; social or spiritual value for past, present and future generations, many of which overlap or are interdependent. Of the various categories used to ascribe the cultural significance of a place: architectural, technical,



Figure 26 - 19th century view of quay wall by John Brandard (NLI)

historical and social will be used to assess Custom House Quay. The significance of features adjacent to or within its wider setting are dealt with in Chapter 3.

Architectural, Technical

Constructed and reconstructed in several phases, the present Custom House Quay and its related docks were part of the relocation of Dublin's customs and excise operations in the 1780s, and sit east of James Gandon's neo-classical masterpiece, the Custom House, part Dublin's North Wall. They were a massive feat of civil engineering and were as representative of the impressive achievements of the Georgian era in Dublin as the Customs House itself or the residential developments of Mountjoy or Merrion Square. Its creation out of reclaimed land was both part of the expansion and formalisation of Dublin's docks but also ultimately provided additional land on which to further speculatively develop the city. It was designed by world class pioneering engineers in several phases.

James Gandon's involvement in the design of the Old Dock, now filled in, is of significance. The engineering and construction methods utilised in George's dock and the Inner dock were pioneering in their day, and implemented by two engineers of note, John Rennie and Thomas Telford, the latter of which is generally considered to be one of the greatest British engineers of the time. The site is of considerable industrial archaeological significance as is the Stack A warehouse, a cast iron and brick structure, with a roof construction highly regarded by construction historians.

Well-executed in ashlar granite, Custom House Quay walls attest to the high level of skill and artisanship employed in its construction and in civil engineering at the time. The broader site is of industrial archaeological significance due to the innovative engineering designs executed by Rennie, in particular of the construction methods employed on Stack A, now the CHQ building / EPIC.

Historical, Social

The relocation of the shipping operations to the Custom House Quay and docks area had a significant social impact on the city. It resulted in new (reclaimed) development land and affected the fortunes local merchants and shipping magnates, and resulted in reduced property values further upstream and increased ones in the new location. Custom House Quay, with Gandon's noble edifice at its heart was in its eighteenth century heyday the single-most important collection point in the Irish revenue system (Casey, 183). It became integral to the development of transport infrastructure in Ireland and the movement of goods to and from the centre of Ireland to Dublin and world beyond via Dublin port. More particularly, it permitted ships to draw alongside for loading and unloading, and provided employment for many in and around the docks and further afield within the city. It was also the location where many departed Ireland in the post-Famine era.

In the early twentieth century the Custom House itself had become such a symbol of British power and wealth in Ireland, it was the focus of an attack by the IRA, that not only destroyed large sections of the interior but robbed Ireland of much archival material. The wet docks and warehouses which have survived are significant remnants of the city's maritime development.

Factors that detract from significance

The existing poor quality single-storey structure sitting on the campshire projects into the river and detracts from both the immediate designated historic quayside and setting, and also impacts on existing views along and across the river, which are part of the conservation area. Similarly, the crudely designed existing pontoons and gangways detract from the character and appearance of the quay and its setting as does the undistinguished and monolithic Hilton Garden Inn where Stack T used to be.



Figure 27 - James Gandon's Custom House

6.0 Proposals

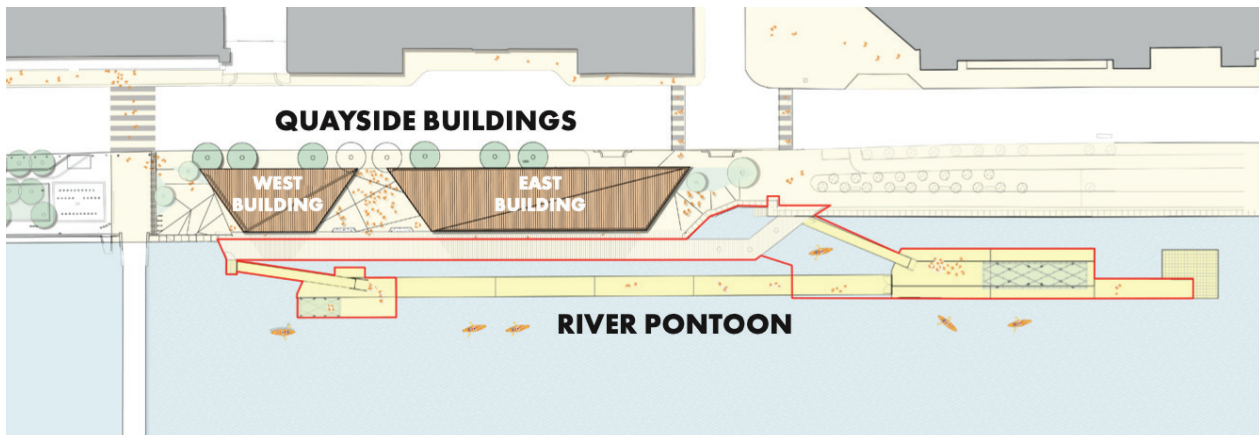


Figure 28 - Urban Agency's overall plan layout

The proposed development should be considered alongside the permitted development of the Quayside Buildings (application ref. 3833/19 for provision of water based recreational facility at George's Dock and at Custom House Quay, Dublin 1), which includes for the replacement of the former Dublin Docklands Development Authority office building at Custom House Quay.

The proposed pontoon redevelopment will accommodate two new glazed canopy structures which would be used in connection with the use of the new Quayside Buildings, and will function as a hub for the water tours and other water-based activities taking place on the River Liffey. It will include ancillary landscaped public open space between the new East and West Building and a new walkway on the Liffey side.

The proposed works have been designed to minimise impact on the historic quay, and where possible they will be reversible in nature. Localised repairs will be carried out where the capping stones are lifted and reinstated.

Extended Projecting Boardwalk

In order to provide greater accessibility and visual amenity in and around the narrow quay, it is proposed to construct a projecting boardwalk. This, it is proposed, will be 6m wide and will be of galvanised steel frame construction, using steel spreader beams resting on the quay wall at 5m centers. It will cantilever out over the existing

wall capstone and be supported on four piled columns that will rest on the Liffey bed therefore not necessitating any connection with the historic quay wall at this point. This elevation creates a route for the ductway north of the site beneath the footpath and avoids excavation into the quay.

The proposed design carefully negotiates the existing quay wall by stepping out at the point where the historic projection ends, providing a natural transition point for the boardwalk and permitting the historic quay wall to be read. To the east of this a specially designed detail will, as elsewhere in the Boardwalk in Dublin, fix it discreetly into the joint of the quay wall rather than its stone face, as a minimal and reversible intervention. Steel spreader beams will rest on the quay wall, on a grout bed at 5m centres as indicated in fig 40. It is proposed that a frameless glass balustrade will sit at its edge permitting views to across and from the river.

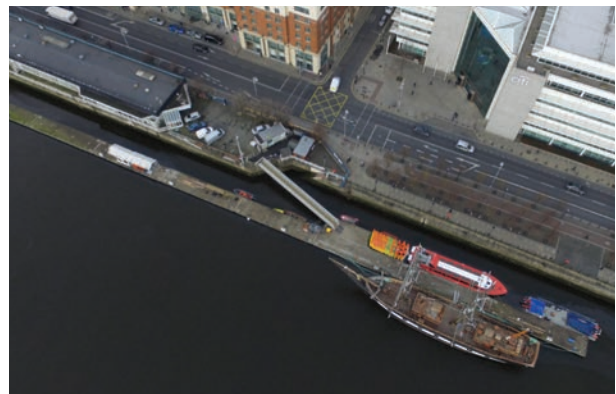


Figure 29 - Existing Pontoon

Pontoon & Canopies

It is proposed to extend and redevelop the existing floating concrete pontoons to provide sufficient space for a comfortable and safe access from the quayside and boardwalk. This will be secured to the river bed and to the proposed new galvanised steel gangways, thus not affecting the fabric of the quay wall. It is proposed to locate the canopies on top on this. The main canopy (canopy no.1) will be located towards the east of the new facility, to provide a sheltered area for gatherings and safety briefings for kayak tours and rentals. It will also provide racked and caged storage for kayaks and canoes, as well as for equipment such as wetsuits, paddles, boots and helmets.

The proposed pontoon would be accessible from the Quayside Building eastern courtyard via the

relocated existing gangway no.1, as this would ensure better handling of the activities due to the availability of a wider and more protected space. The smaller proposed canopy (Canopy no.2) would be located on the western end of the proposed pontoon, and would be accessed via a new gangway (Gangway no.2), located between the Sean O'Casey Bridge and the Quayside Building West. Its function will be to provide a protected area for visitors to the Jeanie Johnston.

It is proposed that both canopies will be constructed of an lightweight prefabricated elegant Glulam structure designed to defer to, and harmonise with the river, and existing structures adjacent in terms of its location, arrangement height, subtle lowering of roof incline and visual permeability.



Figure 30 - 3D of proposed pontoon and boardwalk (Urban Agency).



Figure 31 - 3D View (Urban Agency)

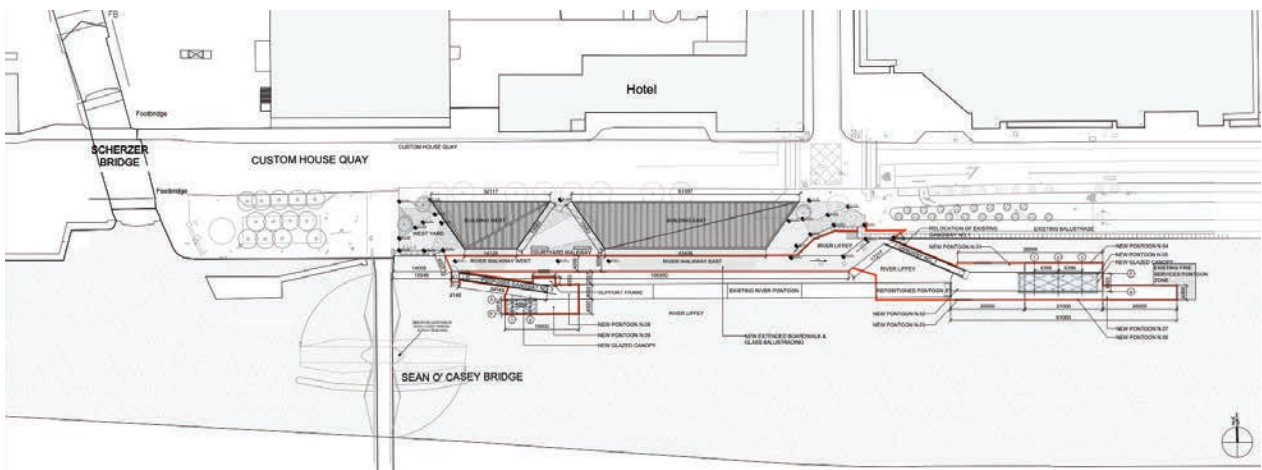


Figure 32 - Proposed Site Layout

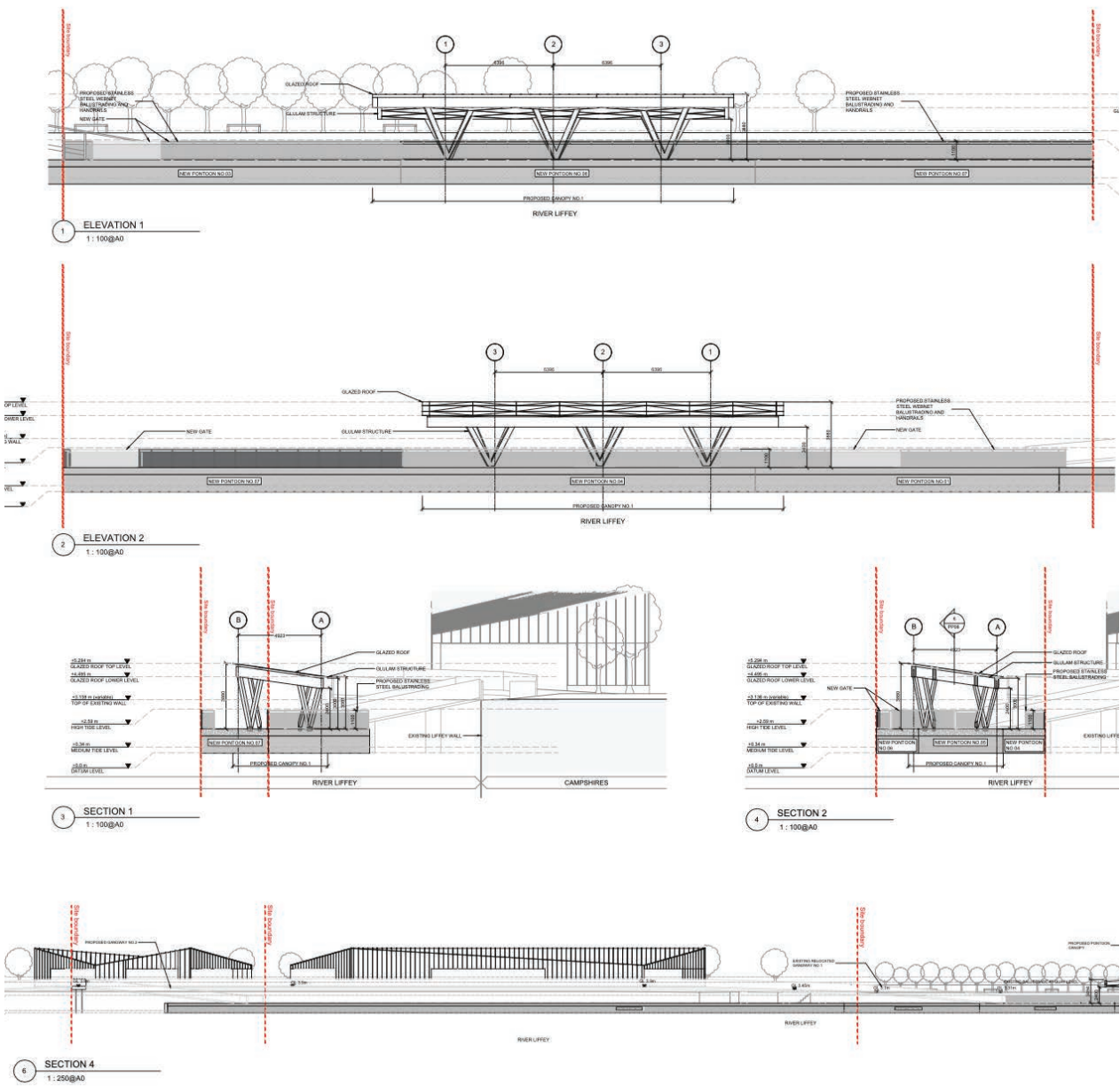


Figure 33 - Elevation of proposed canopies and pontoon

7.0 Impact Assessment

The proposals to provide greater accessibility, functionality and visual amenity, have given great consideration to the significance of the fabric of the existing designated quay wall and to buildings in its broader setting and the character and appearance of the River Liffey Conservation Area.

In terms of impact on the historic fabric itself, the boardwalk fixings and attachments have been designed in such a way as to minimise impact on the existing granite cap stones to the quay wall. The details provided by the landscape architects (figs 36-38) indicate the retention of the quay wall capping stone, with the provision of a 'buffer' between the granite and new concrete. This will be formed of a stone cobble on a mortar bed. Between the cobble and the concrete a separating membrane consisting of a flexcell type material with a separating geotextile sheet will be installed. These layers will form a protection layer between the new construction elements (concrete) and the existing historic granite cappings, and will allow for easier removable later, should these interventions ever be reversed.

Where the boardwalk sits over the existing quay wall (fig 40) the spreader beams will sit on a grout bed, which could be removed at a later date. As this intervention is reversible its impact is considered to be acceptable.

Where the aluminium decking is added to the wall the fixings will all be to the new concrete quay wall, sitting above the historic granite cappings, as shown on figs 36 and 38. The aluminium decking, a Graepels type product, is lightweight and contemporary in nature, providing a good visual contrast with the solid quay wall (fig 39). The impact of the installation of the new concrete and spreader beams will be managed through the protection of the existing fabric.

More particularly, the proposed boardwalk, gangways, pontoon and canopies have been carefully designed and located and arranged to ensure minimal impact on the fabric of the historic quay walls and its broader setting and are reversible. They will read as contemporary

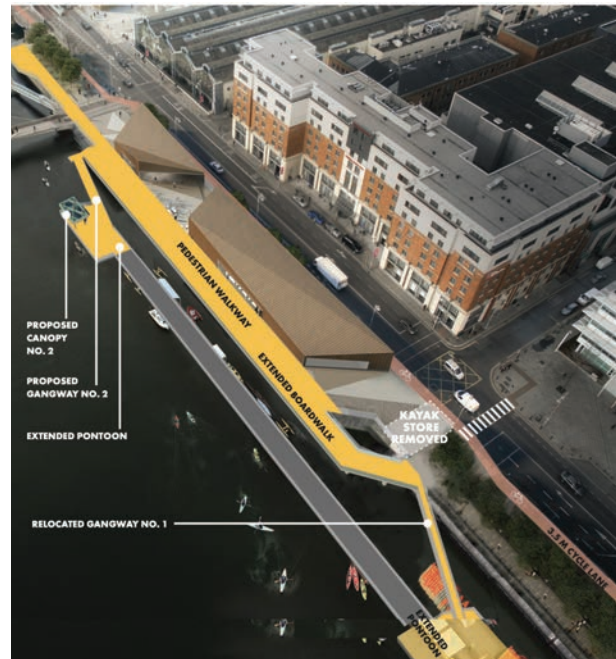


Figure 34 - Extent of proposals (Urban Agency)

insertions, less permanent than the robust quay wall itself, and subsidiary to this impressive masonry structure.

A minimal amount of low level external lighting is to be incorporated into the scheme which will allow sufficient light for safe access during the winter evenings and also provide atmospheric lighting to highlight the presence of this structure. It has been designed to respond sensitively to the landscape treatments and ensure minimal light pollution, with zero direct upward light to the sky. The lighting will not overwhelm the quayside and will be designed in accordance with best practice.

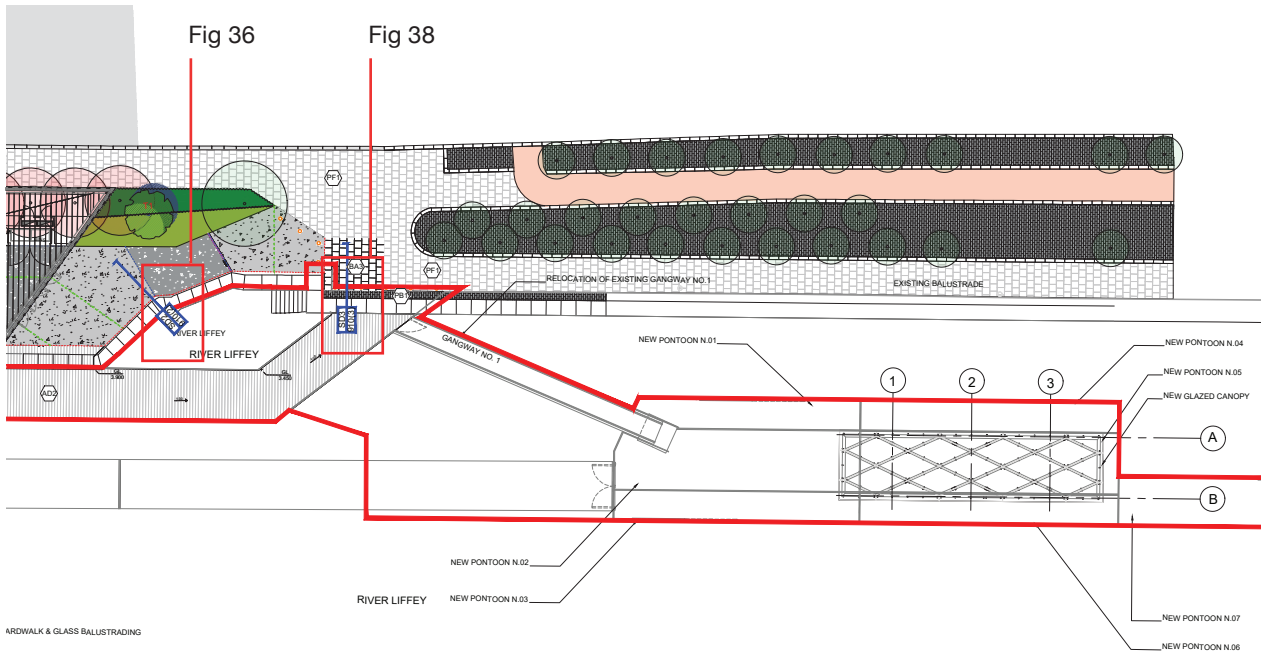


Figure 35 - Plan of the gangway and pontoon proposed

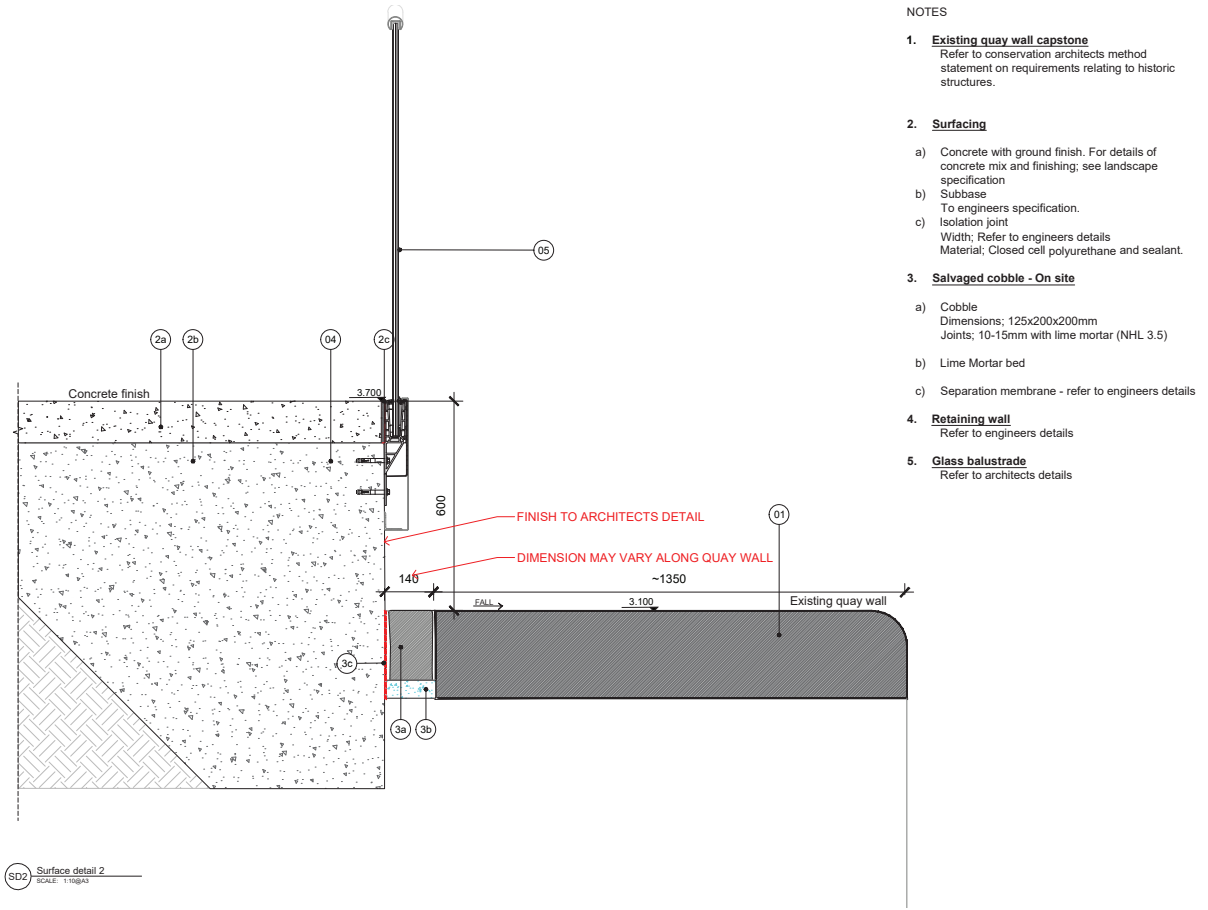
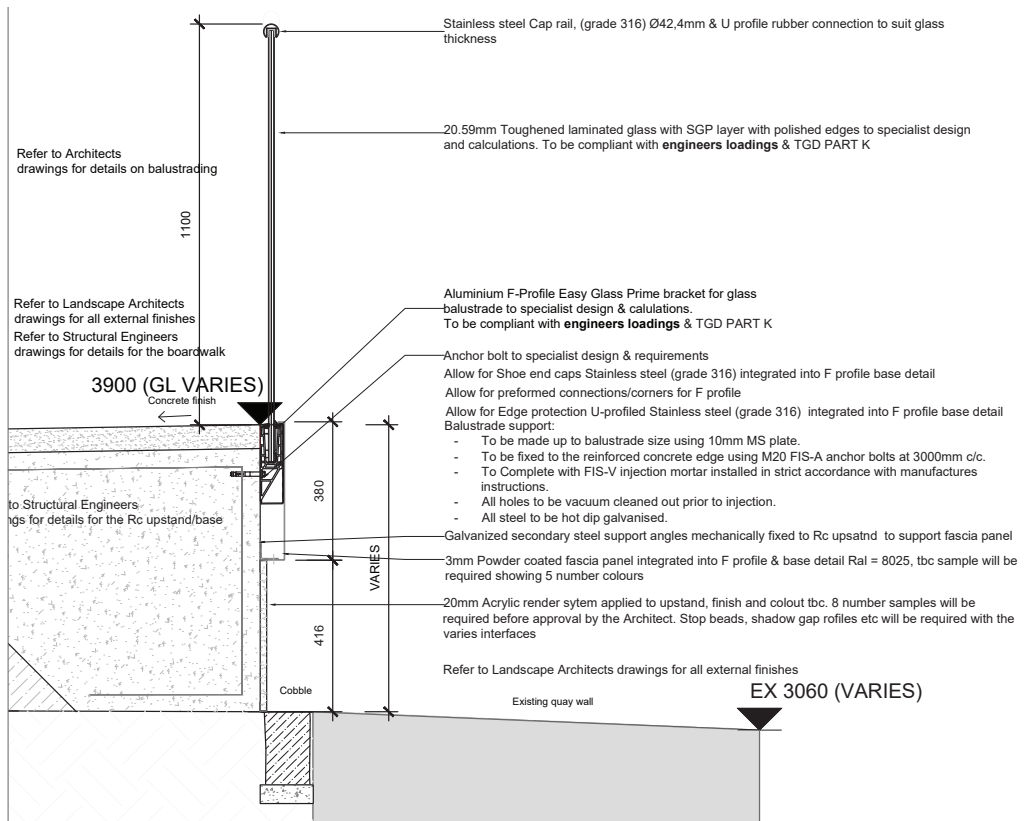
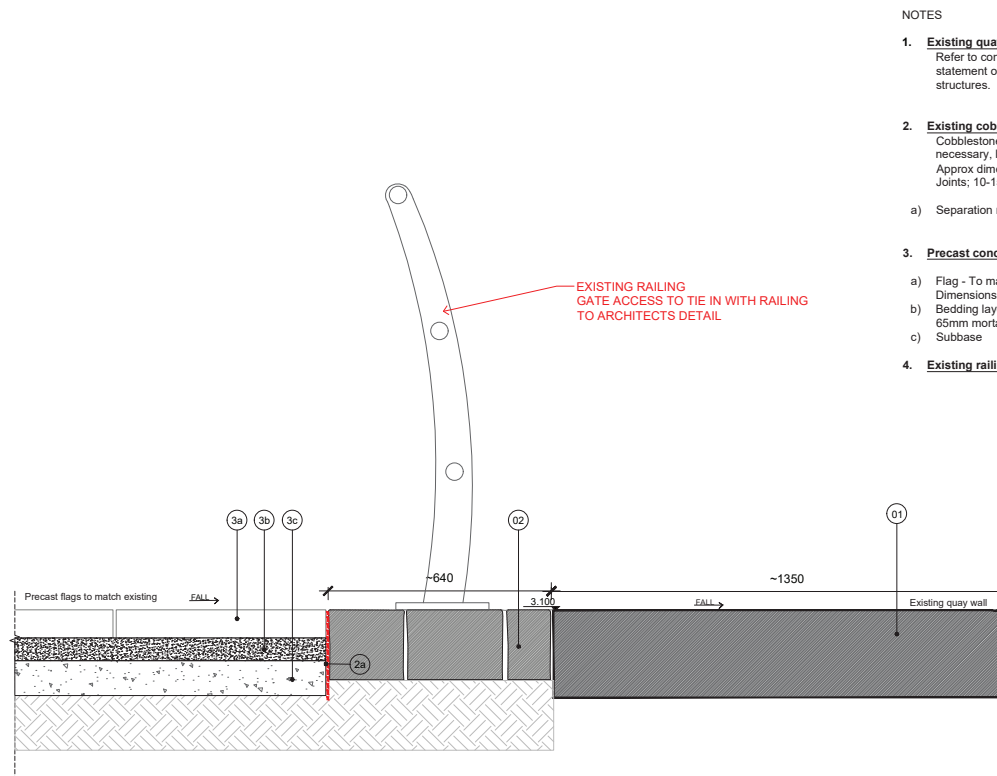


Figure 36 - Surface detail SD2 (on plan above) showing existing quay wall arrangement with the concrete structure behind



5 EAST YARD SECTION THROUGH QUAYSIDE WALL
1:10@A1

Figure 38 - Architects fixing detail for the glass balustrade to the quayside



SD3 Surface detail 3
SCALE: 1:10@A3

Figure 37 - Surface detail SD2 (on plan above) showing existing quay wall arrangement with the concrete structure behind

NOTES

1. **Existing quay wall capstone**
Refer to conservation architects method statement on requirements relating to historic structures.
2. **Existing cobblestone**
Cobblestone to be protected and repaired where necessary, laid on a lime mortar bed.
Approx dimensions; 125x200x200mm
Joints; 10-15mm with lime mortar (NHL 3.5)
a) Separation membrane - refer to engineers details
3. **Precast concrete flags**
a) Flag - To match existing flags
Dimensions; 600x600x65mm
b) Bedding layer
65mm mortar bedding layer to BS7533 7:2010
c) Subbase
4. **Existing railing**

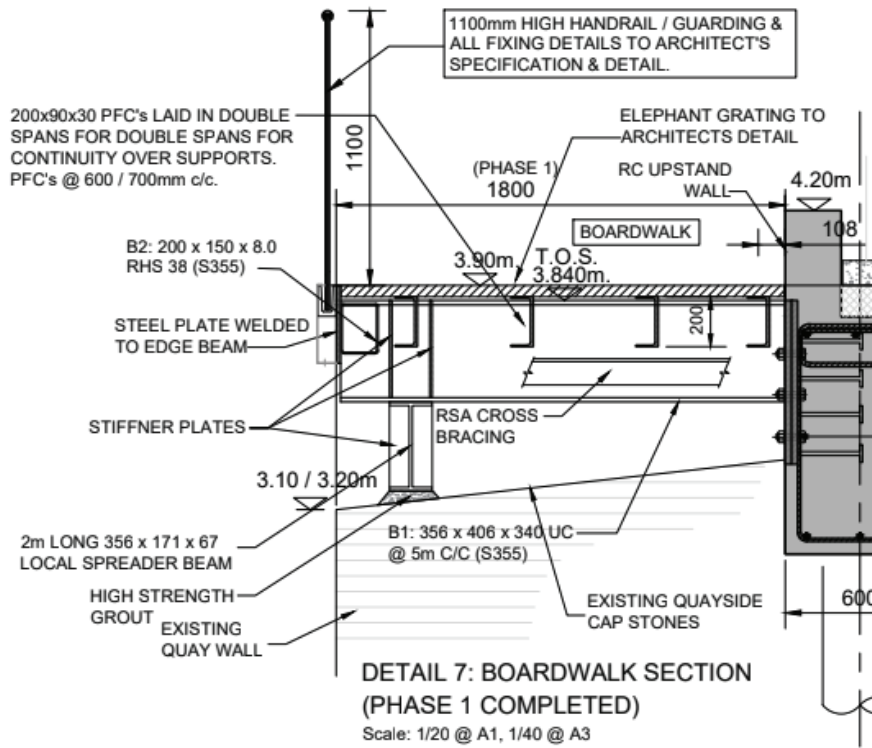


Figure 40 - Proposed support for the boardwalk with spreader beam sitting on high strength grout

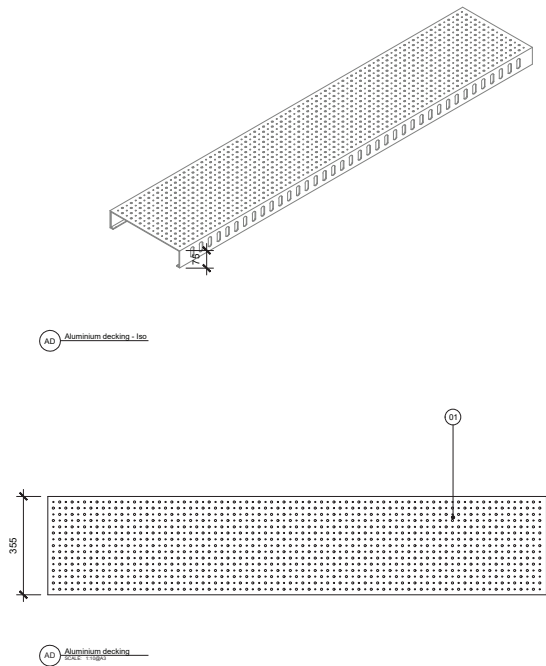


Figure 39 - Lightweight aluminium decking

APPENDIX A - METHOD STATEMENT

Method Statement for works to the historic quay wall.

A full photographic survey of the wall will be carried out prior to the commencement of any works. All capping stones will be carefully numbered and referenced on a matching drawing to document locations.

Scope of works to the granite capping stones:

- Light steam clean to existing granite, in order to remove algae carbon staining. There will be no aggregate based cleaning of the stone.
- Where required several cap stones will be temporarily lifted out to facilitate the works and will be reinstated upon completion of the works.
- All works will be carried out by an experienced mason, with the conservation architect on site to review the lifting out method for the first stone.
- The mortar joints around the stone will be raked out by hand.
- The first granite stone to be removed will be carefully levered up using a suitable wedge tool, to ensure that it lifts up on tact.
- Each stone is to be marked on the back with a number to correspond with the drawn survey. It is advisable to number the stone in more than one location and with a masonry paint, to the underside of the stone.

- Each stone will be carefully wrapped and stored on site until reinstated.
- Bedding mortar for reinstated stones to be NHL 5 mix to ensure that the mortar will withstand the rising tides. A prompt mix may also be considered.
- The repointing mortar will be an NHL 3.5 mix. Samples to be provided on site to determine a suitable match to the surrounding historic mortar.
- Repair of any cracked stones with a prompt mix if the stone is below the capping level. Samples to be provided on site for review by the conservation architect.
- Should any repointing or repair works be required to the face of the wall, the lime mortar mix will be an NHL 3.5 or may be a prompt mix if the repointing is required in close proximity to water and / or areas of walls subject to rising water.

Protection of the existing historic fabric will be required throughout the works and particularly during the installation of the spreader beams and concrete wall. Non historic paving will be lifted out to facilitate the installation of the concrete and the retained granite capping should be carefully protected with ply coverings during this work.

Howley Hayes Cooney Architecture are recognised for their work in both contemporary design and for the sensitive conservation of historic buildings, structures and places. Over a thirty year period, the practice has been responsible for the conservation and reuse of numerous buildings of national and international cultural significance, many of which have received RIAI, RIBA, Irish Georgian Society, Opus or Europa Nostra Awards. Under the Conservation Accreditation System, implemented by the Royal Institute of Architects of Ireland, the practice has three RIAI Grade 1 accredited directors, James Howley, Fionnuala Hayes and Lucy O'Connor. Howley Hayes Architects have, to date, been responsible for approximately three hundred conservation plans, reports and feasibility studies for clients such as the Heritage Council, the World Monument Fund, the Office of Public Works, the Department of Housing, Local Government and Heritage, the Law Society of Ireland, the Alfred Beit Foundation, Red Carnation Hotels, Killarney Hotels, Liebherr International and Diageo PLC, together with numerous local authorities and private clients.

