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NATIONAL COLLEGE OF ART & DESIGN

FACULTY OF DESIGN

DEPARTMENT OF INDUSTRIAL DESIGN

THE THIRD STATEMENT ON THE QUAYS:

AN EXAMINATION OF THE SECOND PHASE OF THE CIVIC OFFICES,
WOOD QUAY BY SCOTT TALLON WALKER.

BY

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INTRODUCTION

The success of any building is how it relates to other buildings around it, how it preserves the fabric of the City and how it manages the new spaces created by its presence.

(Dr. Ronald Tallon, Plan, 1994)

This thesis examines the architectural design of the Scott Tallon Walker second phase of the civic offices. This is the most significant buildings to be built along the banks of the river Liffey for over 150 years, it forms an architectural dimension to the centre of Dublin City complementing both the Four Courts and the Custom House, making a strong statement as part of Dublin landscape. Its completion marks the conclusion to the redevelopment of this controversial site.



Fig.1 The Civic Offices viewed from in front of the Four Courts



The Thesis examines how Scott Tallon Walker won this controversial architectural project, the design of the building and how it relates to the Four Courts, the Custom House, SS Michael's church, Christchurch Cathedral and the existing first phase towers. Also the problems it solved and overcame. The interior architecture will also be examined and how it improves the quality of life for its staff and its visitors. Finally it will show how the building is environmental friendly and is an energy efficient building.

The first part of the thesis will examine the architectural history of the Civic Offices at Wood Quay under the original Sam Stephenson design, the circumstances under which it was built and illustrate some of the irresponsible actions taken by both the architect and the Dublin planning authorities. And how this resulted in an imbalance in the Quays architecture.

As the river Liffey flows through the centre of Dublin City it creates an urban space of subtle charm. Lining the quays of the Liffey is a variety of architectural expressions. A focal point, on the south bank is created by the gentle curve of the river. This focal point is Wood Quay.

Wood Quay is the most sensitive site in Dublin's history, as it was the city's Viking birthplace. And when Dublin Corporation decided to build their Civic Offices at Wood Quay, they would turn out to be the most controversial architectural projects in the country.

THE SOURCES

The primary sources for this thesis is the two phases of the Civic Offices themselves. The archives of the Scott Tallon Walker contained all the correspondence between the client, the contractors and suppliers, and the architects on the second phase building. As well as this, original drawing and sketches of the second phase and the Michael Scott entry for the original competition.

However the most important sources of information of the design of the second phase building of the Civic Offices are the interviews with Peter Dudley, who was one of the head Architects who worked on the project, and John O' Connor of Dublin Corporation, who is an architect with the corporation and was involved with the project.

For contemporary reports of both phases of the Civic Offices it was necessary to consult many newspaper articles. These articles are held in the National College of Art & Design archive Library and also the Dublin Institute of Technology, Bolton street Library. These newspaper articles bear testament to the ongoing struggle between the architect, client and the government to have the building completed.

All the major Irish daily newspapers printed articles on all aspects of both phases from the competitions to the official openings of the buildings. These included article such as Paul White's Sunday Business Post article "The Wood Quay that was" (2 January 1994), which deals with the archaeology of Wood Quay. Aileen O' Toole's Irish Times article "To the Brink of Bankruptcy" deals with the Sam Stephenson's view on his original design and the second phase issue.

Also there is Frank Mc Donald's Irish Times articles "No magic solutions for Wood Quay" which deals with the entry's for the phase two competition, and "feather in the corporation's cap" which deals with how the whole scheme has been improved and restores harmony to the quay's architecture.

The Internet proved to be a useful source of information on the architects who designed the civic offices; Sam Stephenson and Ronald Tallon. This information was available through the Architectural Association of Ireland website.

Pamphlets proved to be an important source of information. Ove Arup & partners Engineers pamphlet, Civic Offices at Wood Quay, Dublin, although more to do with structural engineering, proved useful information on many aspects of the second phase building. Ronald Tallon's pamphlet also called Civic Offices at Wood Quay, Dublin provided a good brief description of the building and its role and functions.

Other important published sources are the articles published in the various journals. These journals reveal the interest there was in the Civic Offices buildings in Ireland, but also outside Ireland. Tim Cooper's article "Green Efficiency" in Environment Management Ireland deals with the environmental issue of groundwater energy which was an important part of the Civic Offices green architectural design. Other articles like Colin Davis' "Town and Gown" in World Architecture, Martin Spring's "Taming the Beasts" in Building and Ronald Tallon's "Space Maker" in Plan gave good insight into the architectural design of the second phase building.

While the Civic Offices has largely been ignored in the literature on architecture and history of architecture, specific texts on Irish architecture history, theoretical

architectural concepts and the ergonomics of architectural design have been very useful.

Frank Mc Donald's book The destruction of Dublin and Graeve Jobst's book Temple Bar Lives gave a good background of the architectural history of this part of Dublin. David Chipperfield's Theoretical Practice and Diane Ghirado's Architecture after Modernism gave an insight on how to examine and view a building in its design.

Alan Blanc's Stairs, Steps & Ramps and James Holmes-Siedle's Barrier-Free design was a great source of information when examining how a building is designed in relation to its users. Dorothy Mac Kenzie's book Green design was an excellent source of the different aspects of 'Eco' architectural design.

Another useful source was an R.T.E. television documentary "To Bed with Palladio, waking with Luytens", which looked at Dublin's architectural planning and had a feature on Sam Stephenson's design for the Civic Offices.

CHAPTER 1: ARCHAEOLOGY, ORIGINS & PHASE ONE

Archaeology

The location of Wood Quay for the Civic Offices had apparent advantages. The site is centrally situated, very close to City hall. The site also has an impressive bearing onto the river Liffey. This site however is located at the heart of the Dublin City's historical past and therefore contained a unique record to the City's heritage.

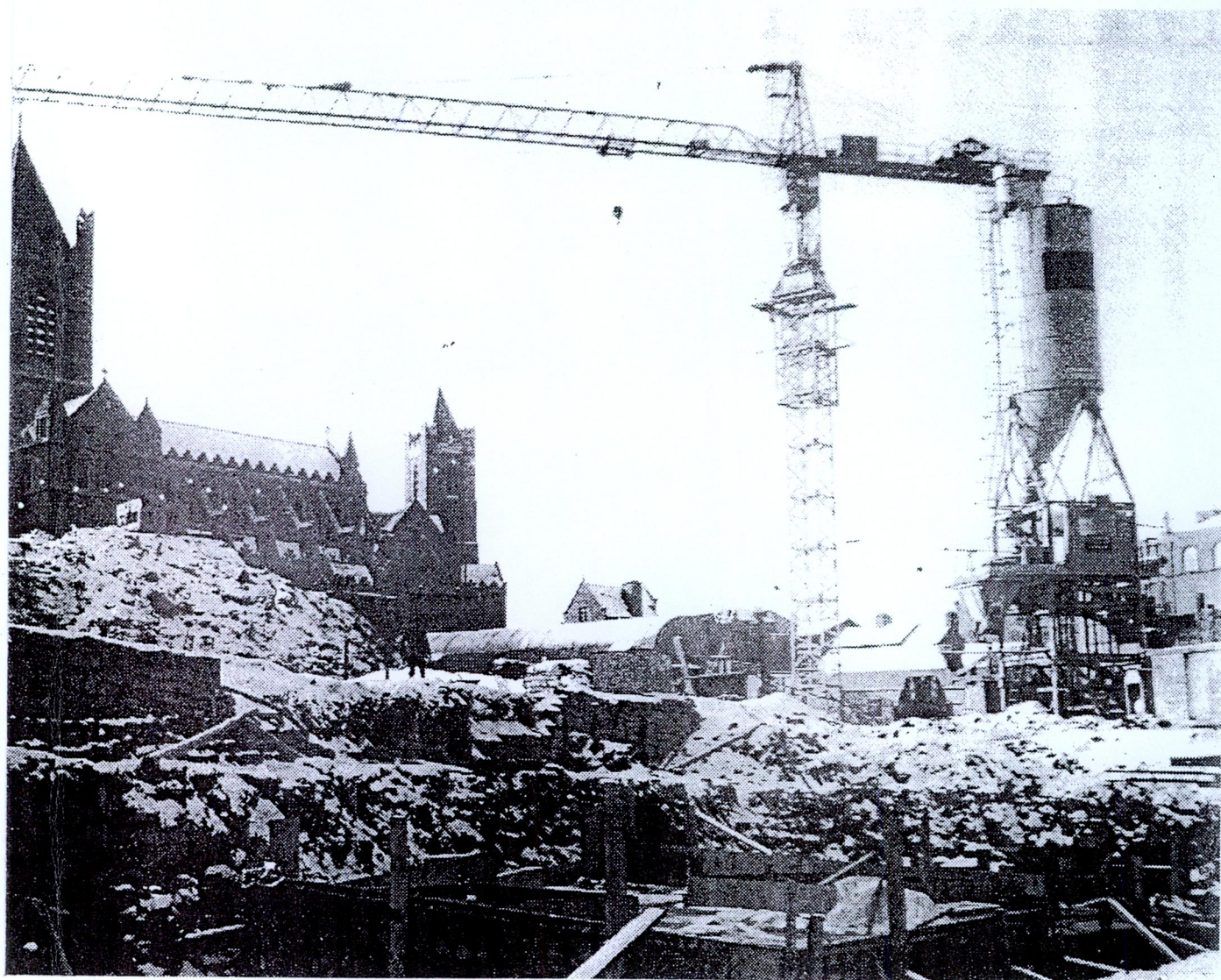


Fig. 2 Looking across the Fishamble Street/Wood Quay site in 1978

1973/74 Annual Report

The following table shows the results of the survey of the

employment of the staff of the Department of the Interior

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The Vikings are credited with developing the City of Dublin. But there are traces of prior settlements to the Vikings in the surrounding areas of the Wood Quay site. Baile Atha Cliath, the Ford of the Hurdles, was near to where O' Donovan Rossa Bridge now stands. With the Vikings influence, as shipping developed, walls were built to reduce the river Liffey's width, thus making the river deeper. The Wood Quay site contained a series of revetment walls, which used various different materials in their building. One of these walls was a tenth century Viking wall built to defend the City.

Subsequent events prove that Wood quay is one of the most important urban archaeology sites in Europe, with an unique record of the life of Dublin at this time. That is why the Wood Quay site is the most sensitive area in the capital city and has caused so much controversy and public outcry, during the building of the Civic Offices.

Origins

Dublin Corporation's ambition since 1901 was to have central Civic Offices as its focal point for its operations. A site in Lord Edward Street was chosen for the first proposed site. This lies close to the Civic Offices eventual site of Wood Quay. In 1955, Jones and Kelly Architects after a sum of £60,000 had been allocated in 1951 drew up the first official plans.

This proposal was for a large granite façade building along the river frontage of the quay, blocking all views of Christchurch Cathedral. This project came against

strong objections and was eventually abandoned, even though the council did not own this site yet. These strong objections yielded that such a sensitive area, as the Wood Quay needed a major architectural competition for the best solution.

In the late 1960s, the City Council compulsory purchased a site expanding along north to south from Christchurch Cathedral to Wood Quay and east to west from Fishamble Street to Winetavern Street.

Dublin Corporation's main concern was how to finance the whole project. Architectural design was less of an issue and the Corporation did not state that the site had archaeological importance.

The design brief for this competition just required the provision of 300,000 square Feet of office space in "an efficient layout and a form reflecting the importance of the buildings in the life of the city". The corporation did note that they wanted to "open up the vista of Christchurch from the Quays" for this the brief said "the disposition and height of the buildings must take this into account" (Mc, Donald, 1985, p.191). The architectural design was to "have regard to " the existing buildings along the river frontage and "the effect on the skyline of the proposed buildings, particularly when viewed from the quays". The brief after this was mainly concentrated on "road improvements" (Mc Donald, 1985, p. 191).

The Corporation picked six entrants and put them on exhibition at City hall. Michael Scott and partners submitted the most daring design. It was a scaled-down version of the United Nations building in New York City. It had a twenty-two-storey skyscraper, with a two storey council chamber beside it. The design would have

covered the entire site. The design was placed second as it was thought it would be too domineering over Christchurch Cathedral and Dublin's skyline.

The competition was won by Stephenson Gibney Associates with their proposal of a plan of four office blocks, ranging in height from five to ten storeys showing glimpses of Christchurch Cathedral. Sam Stephenson was the head architect behind this design.

Sam Stephenson was Ireland's most controversial architect. He studied architecture at Dublin Institute of Technology, Bolton Street and in England, France and Switzerland. The Central Bank of Ireland building and the ESB headquarters building, in Fitzwilliam Square both completed in 1975 caused much controversy, but none more so than the Civic Offices at Wood Quay.

Planning permission was finally given on Christmas Eve of 1970. More than thirty individuals and organisations appealed this decision, but permission was granted in July 1972. Yet the National Monuments Advisory Council could record and recover matter of archaeological interest from the Wood Quay site.

In March 1973 it was decided that there was not any reason why building should not start straightaway. Though the National Museum, by May only five percent of the site had been investigated. The corporation issued an acquittal notice and the museum surprisingly did so.

For the following summer months the site was cleared by bulldozers, destroying many of the Viking remains. Eventually, Jimmy Tully, Minister for local government at the time, after numerous complaints stopped work on the site in November 1973,

for "consultation and further investigation" (Anonymous, 1973, 14 November).

After much argument, including a proposal to move the Civic Offices to a site on Waterford Street, it was unanimously voted to continue to be built at the Wood Quay site. This decision came about by mounting pressure from the corporation staff and that any further delays would cost money. On the 13 February 1974, it was decided that building would commence on the Fishamble Street (East) side of the site.

Sam Stephenson at this time had been involved in the Corporation's efforts to save the Wood Quay project. During this time he decided to upgrade the design for the whole scheme. The redesigning only made the project less sympathetic to the surroundings even though it never really was.

After this upgrade, Stephenson had to "sell" the whole design to the corporation again. Stephenson was successful, but because during the mid-seventies interest rates soared and the cost of building the project had risen. So it was decided to build the Project in two phases, the first phase costing 6.7 million. The contract was signed in late 1977 and was to be completed by 1980.

A few weeks' later people began to find out that it had been ordered to remove the medieval, historic remains. A group called "Friends of Medieval Dublin", which had been formed by many conservationists, which even included Sam Stephenson for a very short period, were extremely annoyed by this, especially a Rev. Professor F.X. Martin, who is Professor of Medieval History at University College Dublin.

Fr. Martin brought Dublin Corporation to the high court and in June 1978 succeeded in getting Wood Quay declared a national monument. Fr. Martin at this

stage had become a public figure and lead a mass movement of some 20,000 people through the streets of Dublin, protesting against the destruction of the Wood Quay site and the threat of losing their heritage.

In June of 1979, a small group of distinguished citizens inhabited the Wood Quay site. Ironically Michael Scott, the architect, whose firm would complete the Civic Offices later and who came second to Stephenson in the competition in 1968 was among this group.

They had a peaceful protest occupying the site for three weeks, but eventually the Corporation finally won. The Corporation continued with their site clearance and eventually construction of the building.

All the controversy gave Sam Stephenson quite a reputation. So much so, that Stephenson had to look for clients in the open market of the United Kingdom, as property developers in Ireland did not want any controversy and as little fuss as possible.

The corporation staff eventually moved into their new offices in 1986. The total cost of phase one was over twenty-one million pounds, ten times the estimated quote in 1967 when the project was put forward for the corporation's architectural competition.

*It is probably the most important thing I'll ever
build in my life and because they remain unfinished
are being judged in isolation from the original
concept.*

*(Sam Stephenson, To Bed with Palladio, Rising with
Lutyens, 1988, R.T.E.)*

1

The first part of the report deals with the general situation of the country and the progress of the work during the year. It is followed by a detailed account of the work done in each of the various departments, and a summary of the results achieved. The report concludes with a statement of the work planned for the next year.

The work of the year has been characterized by a steady and consistent progress in all the various departments. The results achieved have been of a high standard, and the work planned for the next year is of a similar nature.

The progress made during the year has been due to the efficient and energetic work of the various departments, and the co-operation and assistance of the various authorities and bodies concerned. It is hoped that the work planned for the next year will be of a similar nature, and that the results achieved will be of a similar standard.

Phase One

It is not the function of this thesis to dwell on the architectural design of phase one, but it has a strong influence on the approach to the second phase.

The greatest architectural opportunity in Dublin since Gandon took his design of the Custom house off the drawing board.

(Anonymous, 1973, p. 66-68)

This is what Sam Stephenson described the Civic Offices project as, after winning the international competition in 1968. The design for the entire project involved building four tower blocks of varying height, generally to the east of the site by Fishamble Street.

It had a public space on the West Side and gaps between the towers giving views of Christchurch Cathedral. The towers were to be joined by concourse areas and terraced parks. Sunlight was to flood into a central area, which was to be the main entrance. A background of the two lower towers was to bring the scale of the taller towers down to the Quays.

Stephenson decided to redesign the whole scheme during the various controversies, which delayed the building of the Civic Offices for many years (discussed earlier). This was to be a disastrous move.

Stephenson's original winning entry was far from perfect, yet its pre-cast elevations, flat roofs and projecting windows were more in tune with the surrounding area and Dublin's skyline than the supposed upgrade. The towers now became almost solid in appearance. They had chamfered roofs and most of all, aggressive looking

deep recessed “slit” windows. The architectural design of the project had completely changed in appearance since the 1968 original winning design.

Many did not like the severity of the design, what was thought to be a bunker like appearance. Some thought that the stark facades and heavy weight enhanced the delicacy of the stone work of Christchurch Cathedral.

The first phase was completed in 1986. Three or four floors of the towers should have been below ground level if the original scheme was completed. The towers are nine and seven storeys in height.

Both of the towers have a central core, which consists of lift shafts, stairwells and toilets. The office space surrounds the central cores. The towers do not convey the right democratic imagery that should be associated with local government. They appear cold and mysterious and convey a totalitarian image. The two towers have been associated with:

Huge filling cabinets, oversized nuclear shelters or even the concrete bunkers built by the Germans around the coast of continental Europe, during World war two.

(Mc Donald, 1985, p.289)

Stephenson argued that it was not acceptable to judge the project on the basis of just the two completed blocks. The Corporation felt after phase one was completed that a new direction and ideas were needed to finish the Civic Offices, both in respect of the building style and the operation of the offices, into the new millennium. The Corporation had been subjected to much criticism for its handling of the first phase. It

eagerly wanted to prove it had a responsible attitude to both archaeology and architecture, and did not want to attract the controversy and criticism again.

CHAPTER 2: PHASE TWO COMPETITION & THE DESIGN TEAM

In 1992 Dublin Corporation finally decided to hold an architectural competition for the second phase of the Civic Offices.

It was not an open competition and architectural practices were selected to take part, by an interview panel dominated by Dublin Corporation officials, who seemed just as interested in each firm's ability to "deliver" the project on time and within the fourteen million pound budget, as their architectural design concepts.

Many feel the competition was rushed and as Frank Mc Donald of the Irish Times wrote:

There may not be much profit in crying over split milk, but what should have happened was a two-stage architectural competition in which all comers might have been asked to submit their ideas in the just a site plan and perspective and then the assessors could have picked six to do more detailed designs.

(Mc Donald, 1993, p.7)

This did not happen, simply because there was no time. One of the main reasons for this was the end-of-May (1993) deadline for urban renewal incentives. By September 1992 a short-list of eight architectural practices was drawn up. These practices were given one month to complete their proposals, which were then considered in detail by an international panel.

The brief they were given was so incredibly detailed; all practices had to show the locations of both male and female toilets on every floor. Also in the brief two

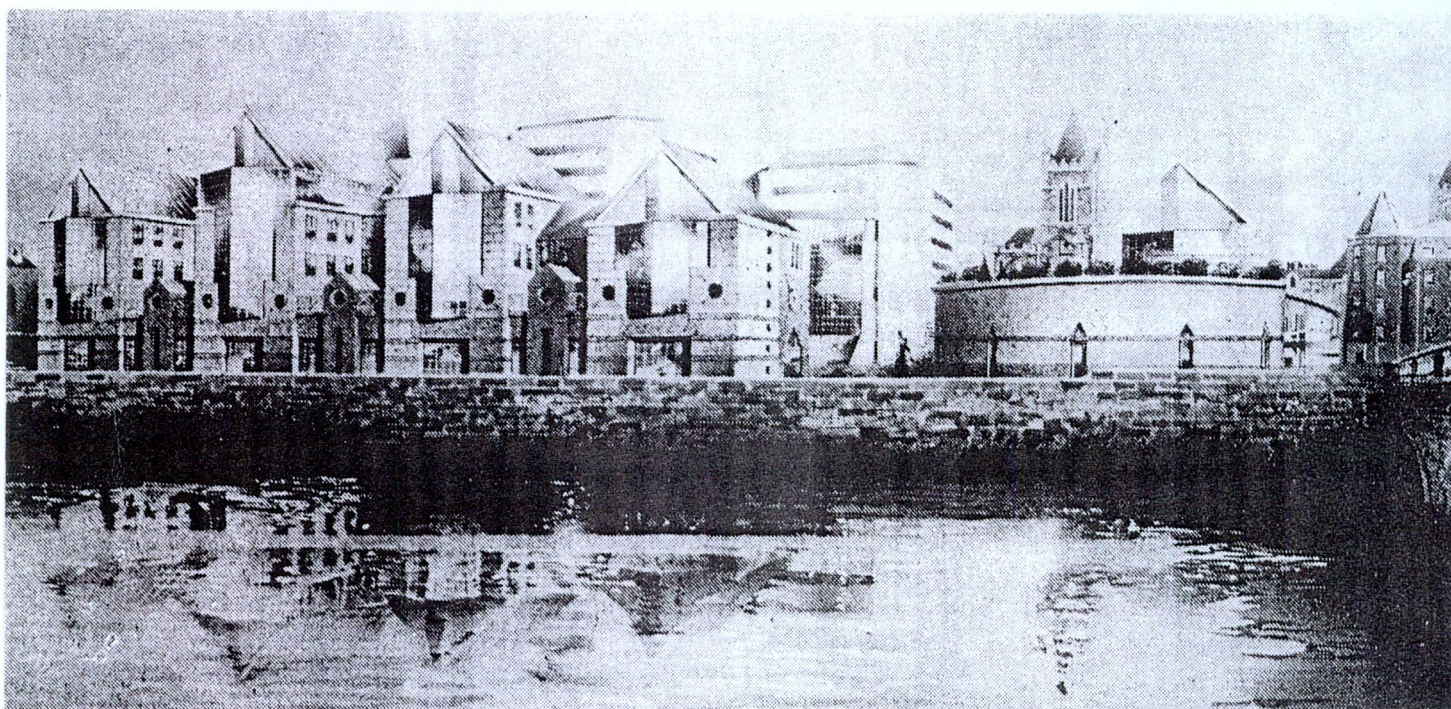
fundamental criteria were put forward in the brief. These were the

Contribution the new assembly made to the immediate urban context, to the city as a whole and the regeneration of the City Quays; and the degree to which the competitors created a logical assembly of buildings for the people who will work in the civic offices and the people who will use them

(Jim Dunne, 1992, p.34)

The Entries

A + D Wejcherts entry for the civic offices was described by Frank Mc Donald as “a post-modern, neo-gothic extravaganza”(Fig. 3). All of the offices would have been situated at the northeastern corner of the site, in front of the two existing towers, with a gothic-windowed drum at the junction of Wood quay and Winetraven Street.



(Fig. 3)

Many of the entries for the project exposed a view of the Cathedral, along its north

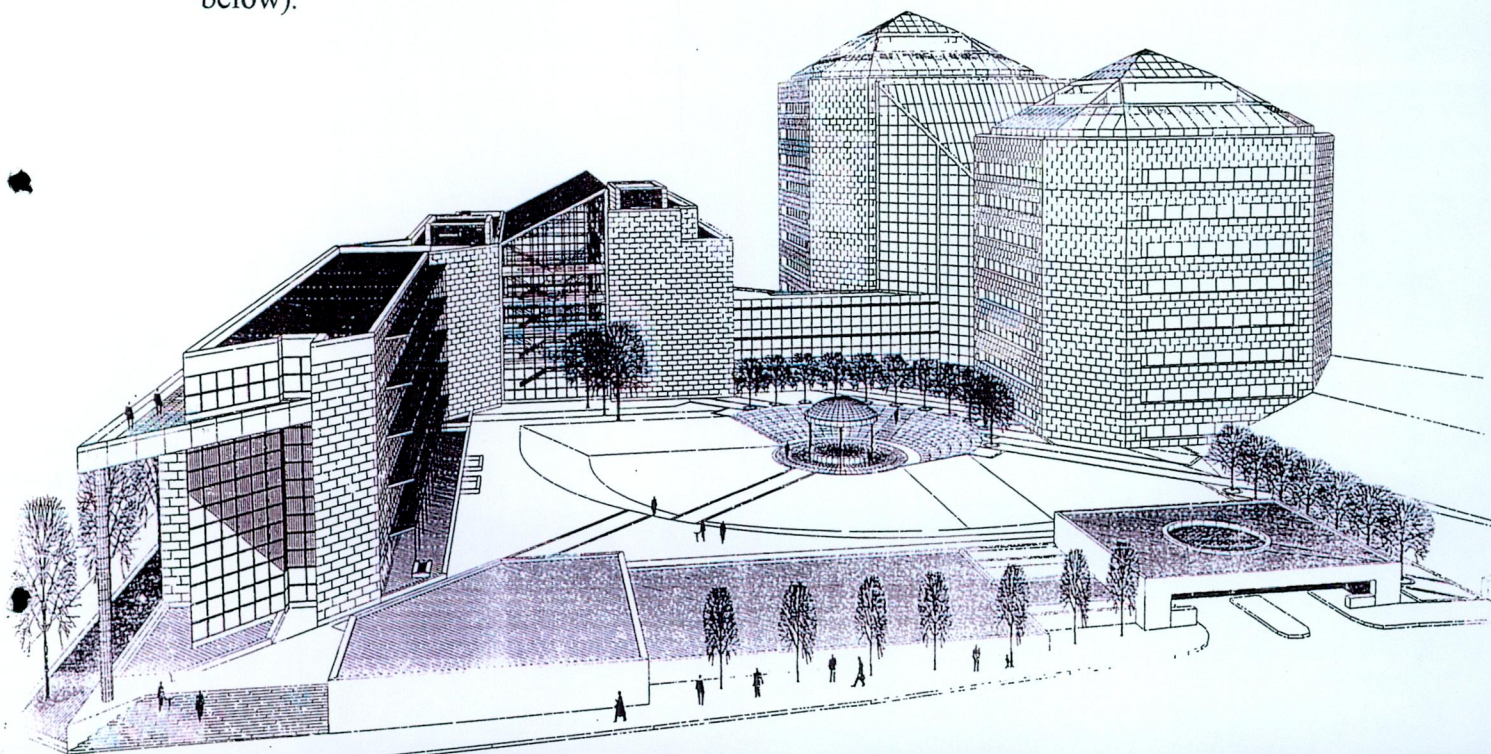
facing façade. This included the winning entry.

Two of the entered concepts by Arthur Gibney and partners, and Burke-Kennedy Doyle offer a different way to view the Cathedral, from the quays. This was along the axis of its north transept.

Murray O' Laoire and joint entrant's deBlacam and Meagher/Robinson Keefe and Devane created amphitheatres as their focal point, even at the risk of reducing the amount of functional office space.

Gilroy Mc Mahon went for a "people-friendly" solution, which was thought by the assessors to be "not immediately identifiable as a civic building". Kennedy Fitzgerald did not bother in their concept to reduce the view of the two existing towers, as their river façade was only three storeys high.

On the 10 December 1992, Dublin Corporation unveiled Scott Tallon Walker as the winning design for this competition. This design attempted to main the fabric of the quays while retaining a vista of Christchurch Cathedral. Its integration with the existing towers also made this concept such a viable and worthy winner (Fig 4, below).



This Scott Tallon Walker design fulfilled all of its criteria and the assessors said:

There is a clear break between the new buildings and old along the line of the city wall and, effectively, a pedestrian continuation of Essex street west. This break serves a number of different purposes but, most importantly, is a new public route from Temple bar along the line of the city wall leading through the site, through a public open space before Christchurch and out on to Winetraven street.
(Spring, 1995, p.28)

Not everyone, at this time felt this way and were quite wary in accepting this design, due to sensitivity of the Wood quay site. The city council at one stage even were reconsidering the original Sam Stephenson design, who was not allowed to compete in the phase two competition. But eventually the Scott Tallon Walker was seen to be definitely the most suitable. The senior corporation architect David O' Connor thought, "it will make a fine public building".

Scott Tallon Walker was instructed to prepare working details for the site starting 7 April 1993 with Completion by July 1994.

The Design Team

Scott Tallon Walker is Ireland's most internationally renowned architectural practice. Michael Scott, who is considered the most important architect of the twentieth Century in Ireland, set up his own practice in 1938: Michael Scott Architect. In 1958 the firm was renamed Michael Scott and Associates, bringing on board Ronald Tallon and Robin Walker as partners. Either Tallon or Walker spearheaded each

major project. The practice, eventually was renamed Scott Tallon Walker. Ronald Tallon was the head architect behind the second phase of the civic offices at Wood Quay.

Ronald Tallon

After graduating from University College Dublin in 1950, Tallon worked in the office of Public Works. In 1956 he joined Michael Scott's office. He became a full partner in 1958. He is currently Chairman since the retirement of Scott in 1975. He received an honorary Doctorate of Laws by the National University of Ireland for his contribution to architecture in 1990.

CHAPTER 3: SITE INVESTIGATION, BRIEF & PLAN

General

Throughout the competition, the briefing, the design and the construction of the Civic Offices the client played an active role as part of the project. David O' Connor of Dublin Corporation, in his role as Nominated Officer, made sure all communications between the different groups involved were kept open. Many complicated decisions on the functional requirements and changes in the brief development, had to be made at client level while still allowing the consultative process to take place. The line of communication and tight control proved to be invaluable and extremely effective.

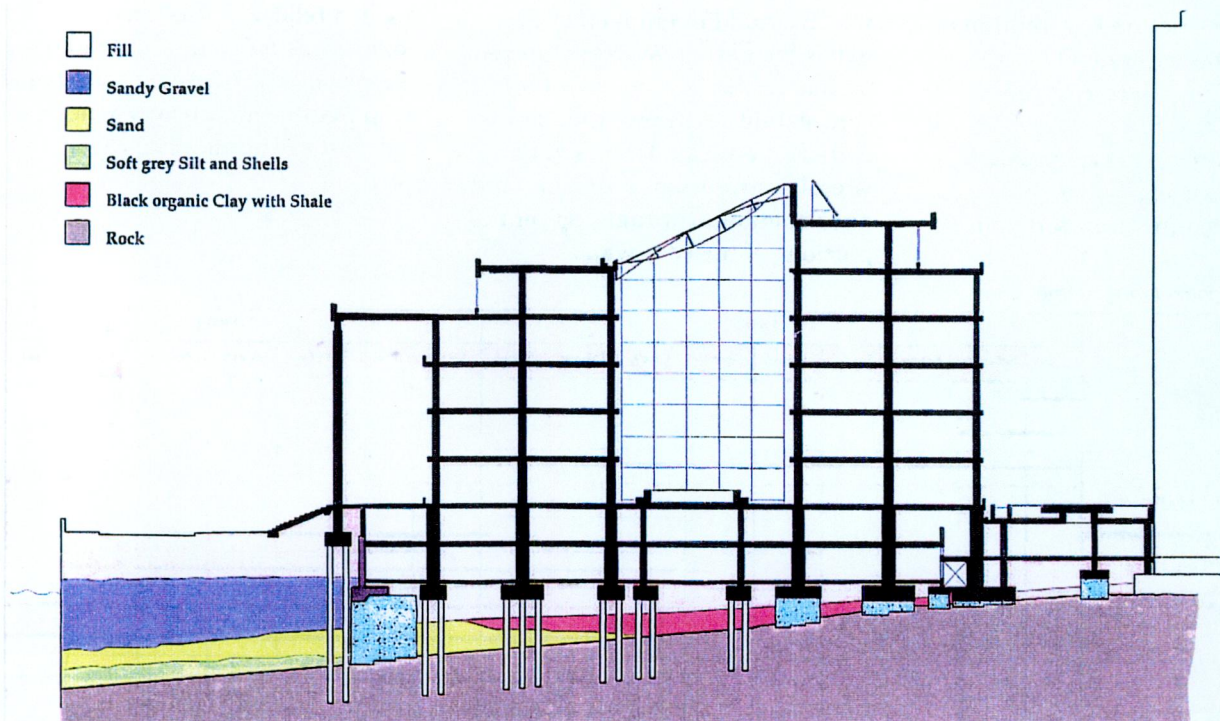
The design period was shortened by the absence of the usual requirement to go through the planning or fire certificate process. The building, although, was designed to comply with the building regulations and there was tight scrutiny by the City's Fire Officer.

The Corporation decided at an early stage, to take out Decennial Insurance cover, giving full protection for the building structure for ten years. The design was examined in general terms and aspects where they're maybe doubts. This was checked by an independent Consultant (British firm, Scott Wilson Kirkpatrick) and was a useful exercise for an extra design check..

Site Investigation

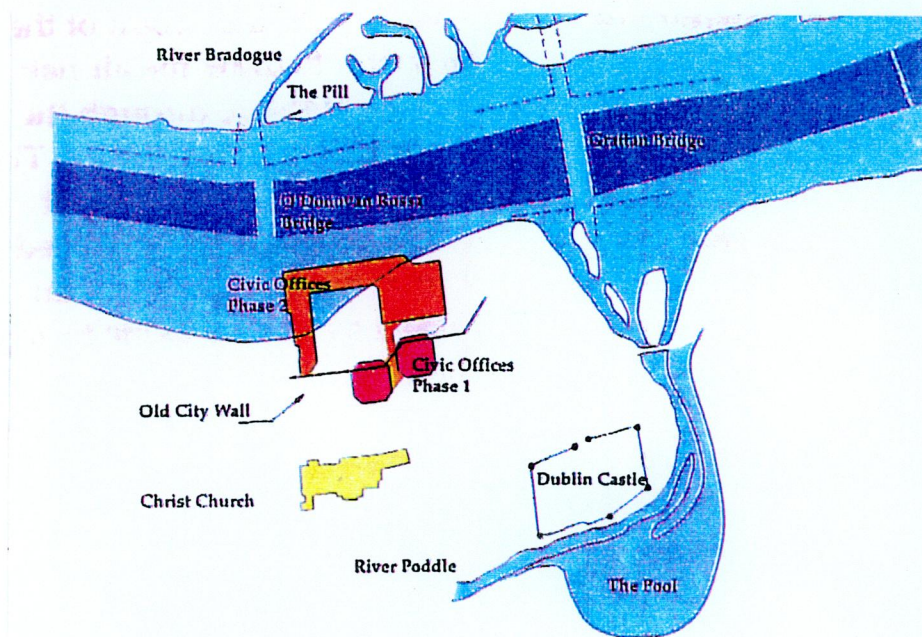
Most of the site investigation was already undertaken from the phase one

development, but further investigation was needed to verify these results. It was revealed from these further investigations that there are fills, river silts and gravel's overlying fractured calp limestone rock. (Fig. 5).



(Fig. 5)

The rock levels, which were the controlling parameter for foundation design, sloped steeply from the existing basement level to five metres deeper at the riverside of the site. In the gravel formations underneath the site, there was groundwater found (Fig 6). This was to be a significant factor when considering the energy requirements of the building.



(Fig. 6)

Brief

The design brief was extremely detailed, but had three principal elements. The first of these is the functional requirements of the corporation in respect of parking and most of all, office space.

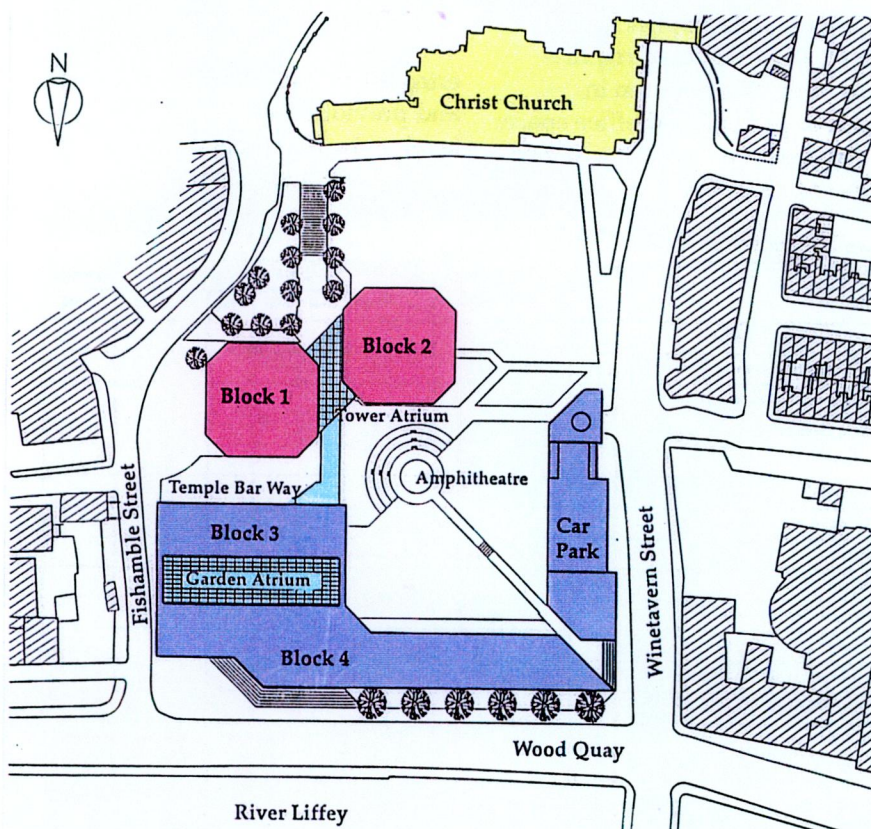
The corporation's functional requirement was for 12,500 metres squared of office space. They also wanted public areas for receptions and general use. A car park, with enough space for 330 automobiles with access to and from Winetavern street. Also, a direct linkage between the existing buildings to enable easy movement between all sections of Dublin corporation.

The second principal element was the construction timetable to meet tax incentive deadlines. These government incentives permitted tax relief, providing that buildings were started and completed before certain dates. For the Civic Offices, the foundations had to be complete by 31 May 1993 and the whole building by 31 July 1994.

The third principal element was the influence of Archaeology on the site development. The building site was generally confined to areas that had already been examined, since the site was such a sensitive subject. A large public open space was to be part of the design. Work in areas that had not been disturbed, previously, would be kept under close analysis.

Plan

The Scott Tallon Walker building's second phase site is U-shaped (Fig. 7), even though it does not all visible to the eye. It covers an area used for car parking and previously excavated area to the level of the basement of the existing towers. Access to this level was via a ramp at Winetavern Street.



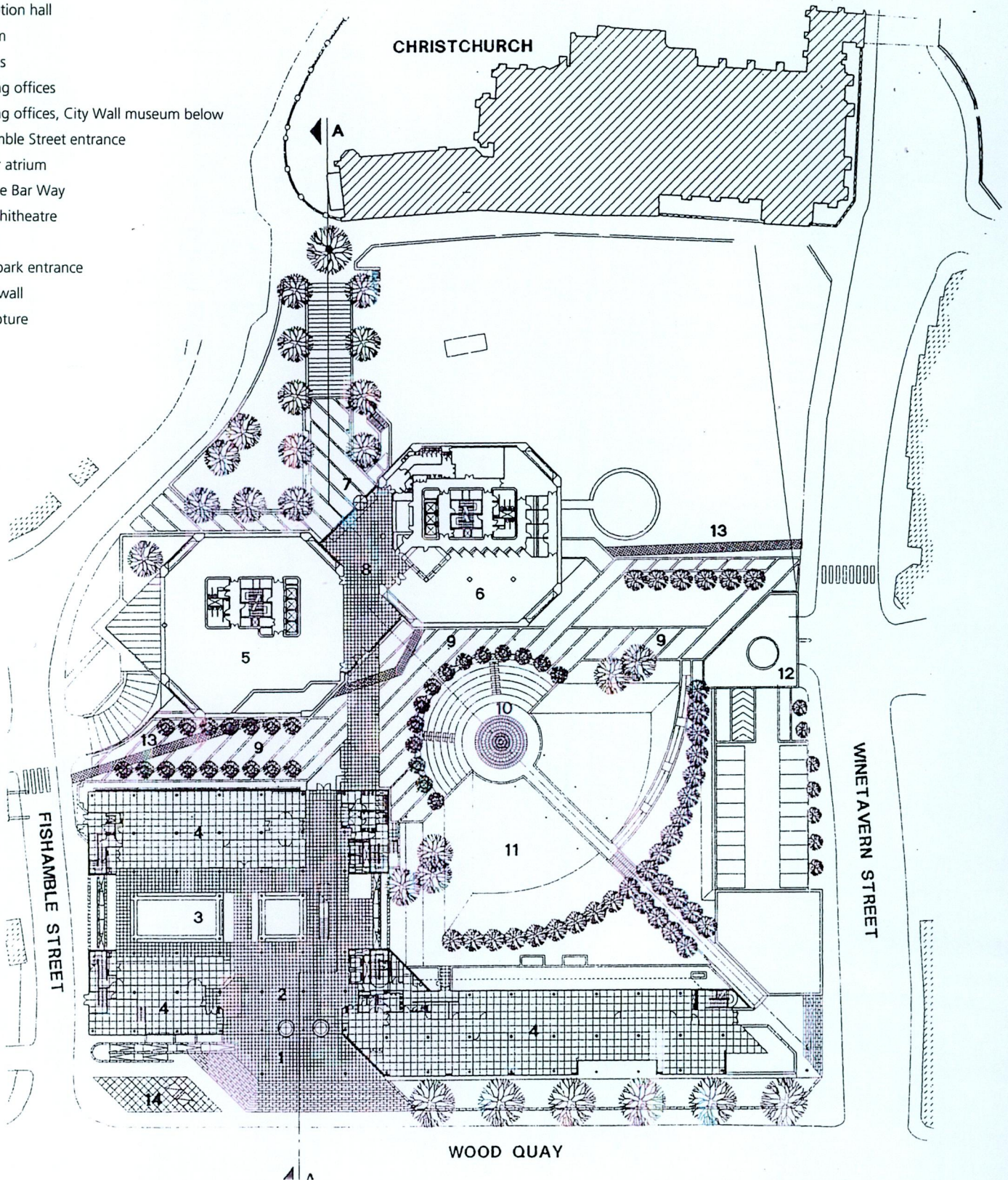
(Fig. 7)

Scott Tallon Walker's winning design proposed two levels of car parking covering the entire site with two office blocks, running parallel to the river, which was to be built over the parking level. The two new offices blocks were five storeys in height along the river frontage and six storeys for the one further behind. The front block runs the length of the Quay wall and moves north in plan beside the quay entrance to break up the mass of the façade. The other block is at temple bar Way runs between Fishamble Street and the central park of the complex.

The space between the blocks has been linked and enclosed by a five to seven storey glazed atrium with bridges linking them at all levels. This is the focal point of the Scott Tallon Walker building and contains mature tropical trees. A full height tower atrium links the existing towers and takes the harsh environment between suffered them. It also gives a less monstrous feeling to the "bunkers".

Key

- 1 Front entrance
- 2 Reception hall
- 3 Atrium
- 4 Offices
- 5 Existing offices
- 6 Existing offices, City Wall museum below
- 7 Fishamble Street entrance
- 8 Tower atrium
- 9 Temple Bar Way
- 10 Amphitheatre
- 11 Park
- 12 Car park entrance
- 13 City wall
- 14 Sculpture



(Fig. 8) Plan Layout

CHAPTER 4: EXTERNAL FACADES

Among the most important urban design problems successfully resolved by the project are the correct relationship of the new buildings to Christ Church Cathedral and the City Quays, their architectural and functional integration with the pre-existing towers, the position of the site, the termination of the Temple Bar area and connections made to the surrounding City.

(Tallon, Plan, 1994)

The design solution for the Civic Offices at Wood Quay is a compromise, but that is not to denigrate it. It is a compromise of very high standards. It manages to fulfil every requirement of its brief, site and urban context with real architectural integrity and quality.

Despite sharing so many features with Sam Stephenson's phase 1 "bunkers", the new building has a completely different form and character. This character is one of "imagination, humanity, subtlety and meticulous technical detailing" (Spring, Building, 1995).

It has been transformed and grown from a once inharmonious building into one that keeps the continuity of the architecture of the Quays while still allowing views of Christchurch Cathedral. It is now turned from a gash in the heart of the capital landscape to a place of civic pride.

We wanted to create a major civic building that would make a single strong architectural statement on the riverfront. James Gandon managed this with his CustomHouse and Four Quays. So, we thought: 'Why not let the new civic offices form a third major statement on the riverfront?'

(Tallon, Plan, 1994)

The first duty the building renders to the capital is to restore the continuity of the river Liffey's urban space with a five storey block, spreading along the whole of the quay frontage and concealing the "bunkers" from view. It is fundamentally an office block, but it used by the people of Dublin and therefore also has a public dimension.

The building is granite clad in respect James Gandon's masterpiece buildings, the Custom House and the Four Quays. Also by the form of the quay side frontages that these buildings possess by their horizontal proportions and use of granite and Portland stone.

It is this conscious of the Civic Offices status as one of the most significant buildings to be built in the heart of the City for more than two centuries and still the building in composition has a dimension that is relaxed and symmetrical.

If the building is viewed from O' Connell Bridge, the area of low, horizontal forms and the 'gleaming white' colour of the civic offices are completely appropriate. The scale of the building with its surroundings feels proportionally right.

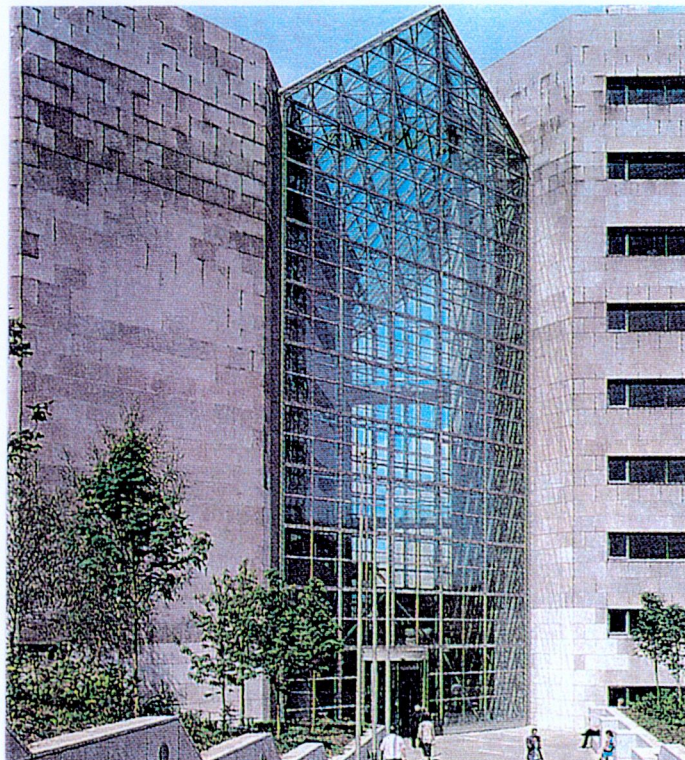
Then, when the building is viewed from the north quays, west of the Four Courts, it confirms this impression (Fig. 9), where the glazed atrium between the two existing



(Fig. 9)

towers is seen vividly. At the Four courts, the scale of the main four-storey block stretching along the river is a perfect continuation of the buildings on Merchant's Quay.

The most unexpected and pleasing urban-scale surprise is the view of the complex from College Green. The reason for this maybe that the two "bunkers" where previously unfinished but the new, nine-storey, glazed tower atrium (Fig. 10) vividly complements the asymmetrical composition of the two towers of different heights. It shows subtly the bend, not noticeable from College Green of Lord Edward Street leading into Christchurch place.



(Fig. 10)

This incidental urban scaling is not successful when coming close to the south entrance of the original towers. This is because of the poor condition of the original stonework and the aggressive black glass. The granite cladding on the original towers

has a mottled look due to its weathering. This gives a patchy effect to the building giving it an overall soiled unpleasant appearance (Fig 11).



(Fig. 11)

The “bunkers” composition and atrium can be really appreciated from Cook Street. If viewed from St. Audeon’s the link bridge between the original towers and the new blocks is not expressive at all, though quite solid in appearance due to the granite cladding, it seems to have been an overlooked element of the project. But once on Winetavern Street the unity of the whole complex is apparent.

Contrasting with the vertical atrium between the two original towers is a 'lean-to' atrium. This is the focal point of the new development (Fig. 12). The forty-five degree granite chamfers of the original towers are not though the granite gables of the new



(Fig. 12)

blocks. Strong visual links are created between old and new, even though the new strip windows are flush to the face of the walls and the original windows are recessed, the overhanging sun shades and visible soffits of the upper-level ceiling of the new blocks form this link. Yet there is still differences between the old and the new, as the black glazing on the original is aggressive and the new glazing is fresh and open in its dimensions and achieves a sense of transparency not seen in Dublin City buildings.

On the north side of the river Liffey, from within the City blocks, the Scott Tallon Walker building gives an impression of an 'abstract white datum' against the two original towers and Christchurch Cathedral tower when viewed. Charles Street West is directly in line with the tower of Christchurch, facing southwards across the Liffey.

The architectural design of this building allows a framed view of Christchurch Cathedral from the river Liffey, while still continuing the architecture of the quays.

The façade of the building has a breakage to align with the buildings to the east (SS Michael and John's church) which are set slightly back from the Liffey. The break is indicative of the geometric chamfers of the original towers, which take up the lines of the buildings to the West (Fig. 13). At the break of the façade, the roof over sails at the third floor level and is supported by a pair of columns. This forms the main entrance portico to the Civic Offices.



(Fig. 13)

To the left of the main entrance stands a ten-metre high cedar wood sculpture by Michael Warren. This is a fine expressive public sculpture, as it may be perceived as a link between Dublin's historical past and the contemporary architectural design of the Civic Offices (Fig. 14).



(Fig. 14)

The West of the building's river façade is sliced off at forty-five degrees short of the site boundary. The root canopy is over-sailing to form a second portico, which is supported by a single column on the corner. This is an exercise in architectural compromise. As before phase 2 was built, views of the Cathedral were seen vividly along the quays. The western portico is a device, which frames the view of Christchurch, so the view is not lost completely while still having continuity of the river frontage (Fig. 15).



(Fig. 15)

Originally, the cathedral was tightly hemmed in by buildings and enjoyed no long vistas. We have opened up a view of the cathedral at the upstream corner of the building, though without leaving a gap in the continuous riverfront façade.

(Dudley, 1998, 12 May)

Behind the West Side of the riverfront block, the site has been left open, so as not to disturb the buried Viking remains. A new public garden area has been created. This public open space also holds an amphitheatre (Fig. 16). From this area the Four courts dome on the other side of the quay has a beautifully framed view through the western portico (Fig. 17). This public space also provides a pleasant foreground for viewing of Christchurch cathedral.



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(Fig. 16)



(Fig. 17)

The riverfront façade has had a few revisions since winning the competition. The double height entrance hall is now fully expressed. The Winetavern Street glazed corner has been enlarged and finally the penthouse has been revised.

*The riverfront façade is best at its extremities,
especially overlooking Temple bar, where the
interplay of solid wall, transparency and terrace
void is exhilarating*

(O' Toole, 1994, p.22)

Though the Civic Offices is necessarily a rather complicated building in plan, it has been very well executed in the simple, economical fundamental modern style, that Scott Tallon Walker have developed over the last ten years.

CHAPTER 5: INTERIOR ARCHITECTURAL DESIGN

This is an open building, with public facilities arranged over several floors. The two new atria, particularly the garden atrium, are valuable additions to the range of public rooms in the city.

(O' Toole, 1994, p.26)

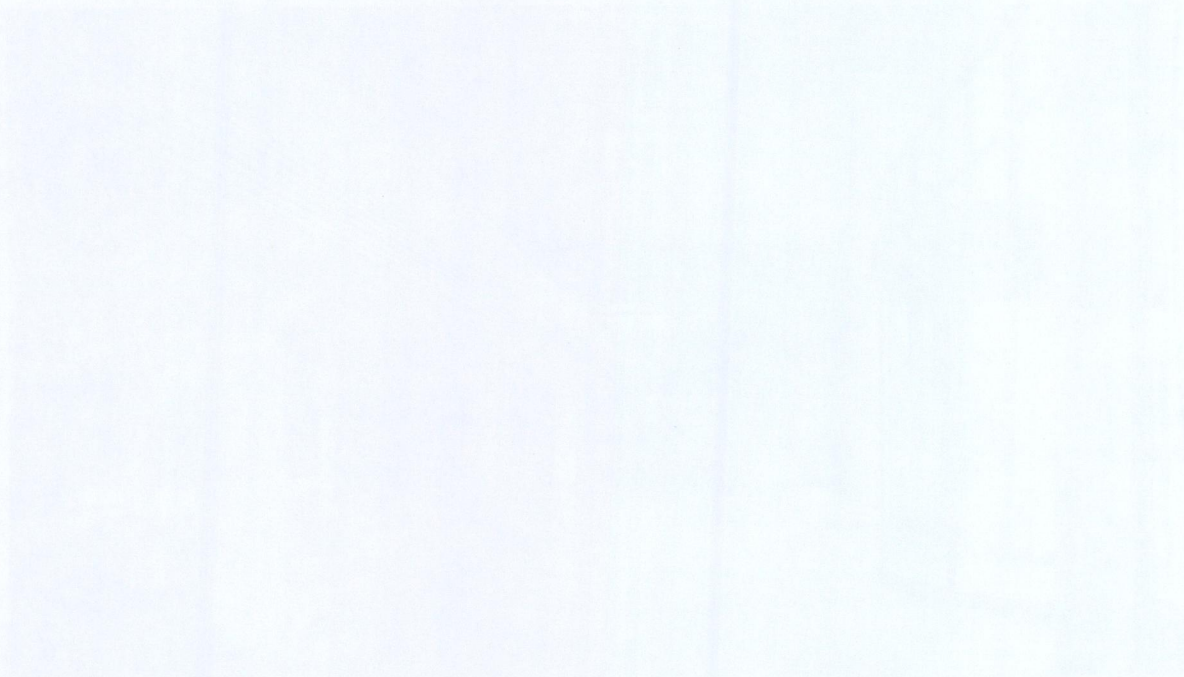
General

The environment created for the users inside the new Civic Offices is one of space and light. Once entered, from the exterior it is like a different world inside. The interiors of the new buildings are welcoming, relaxed, full of natural light, and rich in natural materials and vibrant tropical plant life.

The main riverfront portico at the break in the building leads into a wide entrance hall that is filled with daylight from the front and the rear. The entrance hall (Fig. 18) sweeps vibrantly into the main internal focal point. This is a large spectacular garden atrium that extends the full height and length of the new block behind.



(Fig. 18)

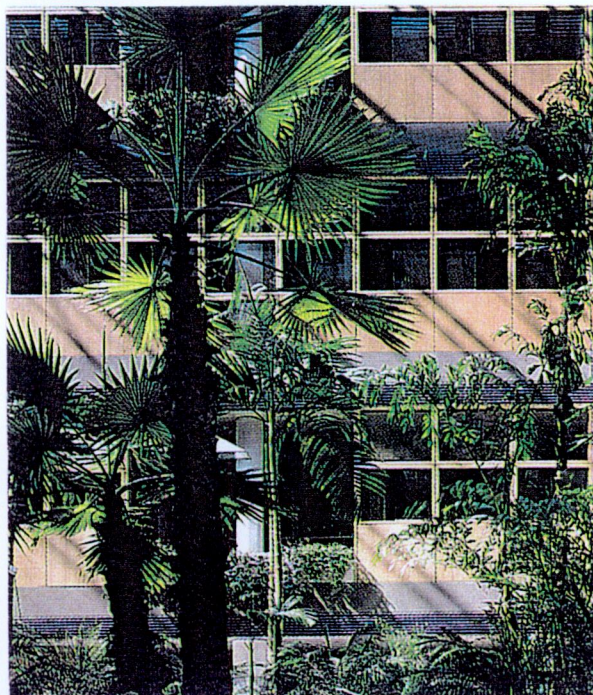


Garden Atrium

The purpose of the garden atrium (Fig. 19, next page) is not only to link the area between the two blocks but also to create “the equivalent of external space within internal space” for a civic space (Davis, 1995, p.114).

To create this, the maximum transparency and minimum structure was needed. The structure of the atrium must also have some visual interest in its design. Conventional trusses or beams looked awkward. Space frame structure looked too cluttered. The solution to the problem was to increase the number of tension elements and reduce the compression elements to those areas already sized to take glazed bars.

The garden atrium is nearly filled with a multitude of different tropical trees and bushes (Fig. 20). Natural daylight beams in through the clear glazed roof and the clear glazing at both gable ends of the atrium. The walls of the overlooking offices onto the atrium are lined with oak-veneered panels and clear-glass sliding windows with bushes dotted around at different levels. The sound of rippling water makes a soothing, calming effect within the atrium, quenching the hollow echo usually associated with internal structures of this size.



(Fig. 20)



The ambience in the garden atrium is more associated with that of an exotic plant house in a botanic garden than a conventional atrium. This is a fantastic amenity for the workers within the building but also serves as an inspirational venue and backdrop for civic functions or receptions. It is also used for exhibitions, which was seen when the NCAD 250 / Smurfit Industrial Design Exhibition took place there (NCAD, 1996).

The two blocks are not only connected by the garden atrium, but are interconnected at each level with this space. The stairs and bridges have maintained the lightweight open feeling in the public by some delicate treatment using its materials (Fig. 21). The solution involves using steelwork beams with thin concrete in fill on the permanent metal deck.



(Fig. 21)

Office Space

The two new areas, on both sides of the atrium of the open plan offices are built to a width of almost fifteen metres. This gives the staff of the Civic Offices the ability to benefit from ample natural ventilation and abundant amounts of daylight with breathtaking views. The exterior façade offices of each block of the building profit from the views of the river Liffey or Christchurch Cathedral, while the interior façade offices have views of the richly planted atrium.

Five corporation departments, including town planning and community services, are laid out so they are accessible to the public. Yet within the internal space there are not any noticeable barriers or screens. Space and daylight flow unimpeded through the whole of phase 2.

Each department has its own reception area with comfortable waiting space on different levels. Twenty-two meeting rooms of various sizes, spread throughout the building complement these departments. These meeting rooms are where staff can bring members of the public to discuss business. Areas where the staff works are not permitted to the public and are concealed by swipe-card-operated doors.

The Sheelin office group based in Drogheda supplied open plan system furniture, seating and storage to the civic offices, with the value of the contract totalling one million pounds.

The open plan system furniture, Workspace 2000, is a screen based modular screen system. It is manufactured to meet client requirements. The one million pound contract also included, research in ergonomic usage of corporation staff before the new furnishing were made and installed.

Works of art are incorporated into the building's fabric. Two tapestries by Patrick Scott, one depicting the municipal coat of arms and one based on organic forms in nature are two of the most noticeable pieces (Fig. 22).



(Fig. 22)

Existing buildings

The new atrium, created between the two Sam Stephenson bunkers is surprisingly effective. The external views from the front and the rear are quite spectacular. Daylight is bounced wonderfully between the two previously overpowering bunkers. The use of the oak-veneered reception desks gives a harmonious feeling between the two atriums. It is very difficult now to imagine how the existing buildings where before the atrium was built and how the atrium was created out of such limited buildings to become its focal point.

CHAPTER 6: 'ECO' ARCHITECTURAL DESIGN

General

'Eco' or green architecture aims to design buildings that accomplish essential living functions for people and tries to protect the environment.

Buildings are the reason for more external pollution than any other product. According to Professor John Page of the University of Sheffield "Energy used in buildings accounts for 2/3 of the global warming risks"(Tim Cooper, 1993, July). So for this reason the way a building is designed and built is extremely important.

Architecture has the ability to influence the environmental impact, depending on how early they are directly related in the planning of the building. The earlier, the environment issues are considered the better.

Ways of reducing the harmful effects of a building may go in two different, contradictory directions. One is highly sophisticated technology to control the functions within the building. The other is the use of natural, simple features to ensure that the building takes full advantage of its site, and it is comfortable to live and work in. Both of these contradictory directions can be used in harmony together and compliment each other.

The architect will determine how well the building performs in terms of energy usage, human health and safety. The also influence the use of materials so they are produced in an environmentally sensitive way.

The Civic Offices at Wood Quay are a harmonious building, which is environmentally sensitive on many different levels.

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The civic offices seems to have broader environment considerations too, in terms of energy-control and sun screening.

(RIAI Awards, Cahill, 1995, p.27)

Energy Efficiency

Increasing energy efficiency of a building is an area of major opportunity for energy conservation. Clean renewable energy, like the substitution of passive solar heating for the dirty combustion of fossil fuels for heating.

Simultaneously provided effective ventilation to keep the environment biologically clean can make important contributions to the health of the individual and of global ecosystems as well as contributing to the energy economy.

(Crowther, 1992, p.102)

In the Civic Offices, rather than conventional air conditioning, an energy-saving ventilation system was devised with the help of Dr. Tim Cooper of Trinity College Dublin. Energy costs dictate that in so far as possible natural ventilation of office spaces is preferred.

The atrium of phase 2 (Fig. 23), which is not external space, can be used to give the equivalent of external conditions, but still has the benefits of being covered and sheltered.

The way this is achieved is by using the heat build up in the atrium and offices by judicious use of solar gain and internal heat loads and with the height of the atrium space the air is drawn up naturally by stack pressure through the offices and the atrium.

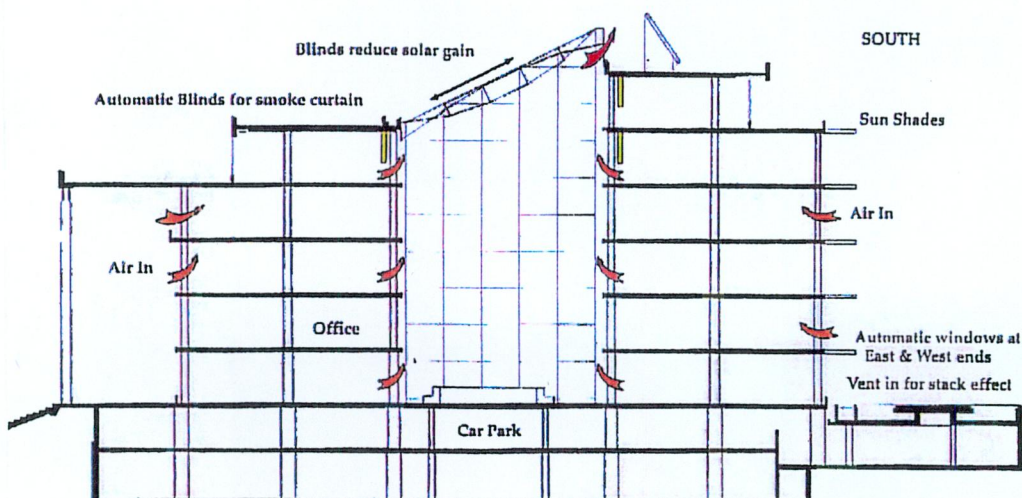


(Fig. 23)

The air flow is drawn in through vents at ground level and is released through clerestory louvres at the top of the atrium. This is assisted by a wind baffle to accelerate draught.

(Dudley, 1998, 12 May)

Solar gain is used in winter to reduce heating costs and gives the offices protection from the cold winter winds. In the summer time (Fig. 24), it takes the heat gain from the offices and extracts it at a high level. The planting in the atrium provides oxygen to the heart of the building, reducing CO₂ emissions and improving the health and comfort conditions for the workers and for visitors.



(Fig. 24)



1. The first part of the report is a general introduction to the subject of the study. It discusses the importance of the research and the objectives of the study. It also provides a brief overview of the methodology used in the study.

2. The second part of the report is a detailed description of the methodology used in the study. It discusses the data collection methods, the sample size, and the statistical analysis techniques used.

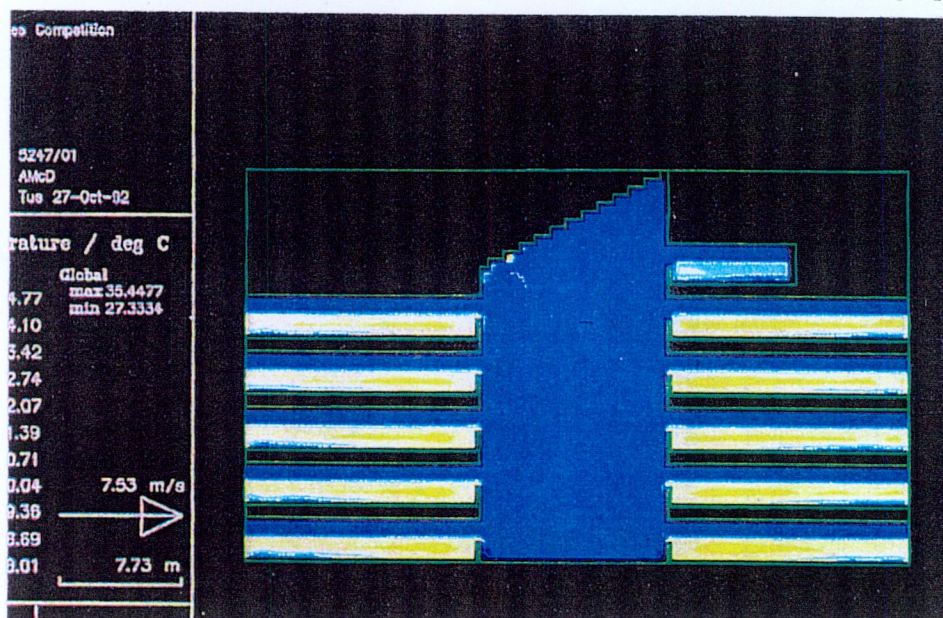
3. The third part of the report is a discussion of the results of the study. It presents the findings of the study and discusses their implications. It also compares the results of the study with previous research in the field.

4. The fourth part of the report is a conclusion and a list of references. The conclusion summarizes the main findings of the study and provides recommendations for future research. The references list the sources of information used in the study.

Table 1: Summary of Results	
Variable	Value
Mean	1.2
Standard Deviation	0.5
Minimum	0.5
Maximum	2.0

Table 2: Comparison of Results	
Variable	Value
Mean	1.2
Standard Deviation	0.5
Minimum	0.5
Maximum	2.0

The vents, along with binds stretching across the clear glazed atrium roof are computer controlled. The ventilation rates are controlled by an automatic system, which is sensitive to heat. This has an override facility for fires conditions and smoke evacuation. The basis of the control operations is Computational Fluid Dynamic analysis of the heat build up, together with interactive computer graphics (Fig. 25).



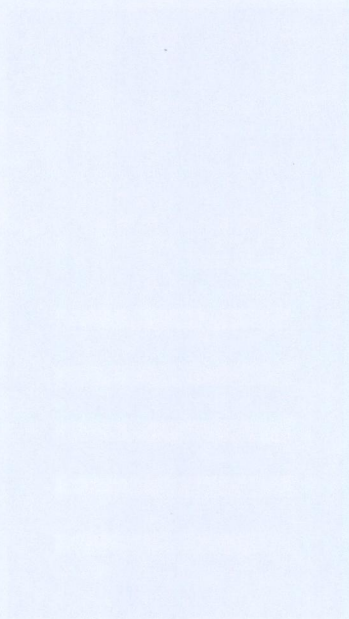
(Fig. 25)

Groundwater Energy

The work of Dr. Tim Cooper of Trinity College Dublin was taken into account again (Cooper, 1993, July). The heat contained in groundwater could be used with advanced heat pump technology to achieve cost effective energy savings.

An artificial aquifer was formed under the building, which allows groundwater to be extracted for use in the heat pumps that provides heating in the winter months and extracts heat in the summer.

The first of these is the fact that the
government has been unable to
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THE END

A heat pump system meant that low temperature water could be used. Such water was known to be available in gravel formations under all of Dublin City, especially the Quays. The only query was the volume of the water and the effect of the river Liffey.

Part of the development of Sam Stephenson's "bunkers" (phase 1) had been a retaining wall along Wood Quay, Fishamble Street and Winetavern Street. This wall was extremely difficult to construct, due to the groundwater being present and the depth of rock.

The solution was a five metre wide mass concrete base down to rock level which had the very convenient effect of acting as a cut off wall between the site and the river Liffey, regime outside it.

Tests proved the water in the site was independent to the river water. It did not have the same origin and its temperature and composition were also different. The pure water in the site remained at a constant eleven degrees Celsius temperature and was therefore the required temperature for the system. The pump system broke even financially and is now producing savings.

The waste heat extracted from this system in the summer is used to provide hot water for the residents in the adjoining housing and apartment schemes at the West End of Temple Bar. A combined heat and power system is used to generate electricity for the Civic Offices and to give heat energy for both the civic offices and residential buildings.

Materials

Architects have a great opportunity to influence environmental impact through the use of materials. Understanding the environment issues of materials helps minimise the environmental problems of a building.

The Civic Offices at Wood Quay used two main materials in its construction. These are reinforced glass and granite cladding. Glass, as is widely known is a recyclable product and is made of non-toxic materials.

The forty millimetre thick cladding panels of sand-blasted Wicklow granite is not only a energy efficient material, but is energy efficient due to the amount of energy to transport which was minimal, due to the short journey from Wicklow. This is always a major consideration, especially with such a heavy material, as it may be energy and cost inefficient if has to be brought long distances from their source to the site.

The combination of these environmental functions; solar gain, energy saving heating and ventilation systems, groundwater energy and materials achieve exceptionally high levels of efficiency and large reductions in CO2 emissions and greenhouse gases, making the civic offices at Wood quay an environmentally harmonious building.

CHAPTER 7: COMPLETION AND HANDOVER

Completion

Completion of the Civic Offices project included extensive internal and external landscaping. The provisions of the amphitheatre in the central park area a focal point, within the external space of the complex, for pedestrian routes linking Temple Bar and the Quays.

Handover

Handover of the project took place on the 29 July 1994 in accordance with the competition requirements, sixteen months after starting on the site and twenty-one months from the start of the competition. A very short time space for a project of this scale. This was only achieved because of the fantastic work by the client, design team and contractors, which resulted in a very high standard of architectural design and detailing.

CONCLUSION

As the dust gradually settles and our eyes grow accustomed to this new civic building, it is to be hoped that its generosity of spirit may also shape and users, so that it may mark a new beginning in relationships and contribute to helping a long hurt endured by the City and its resigned citizens.

(O' Toole, 1995, p.27)

In reality the design of the second phase of the Civic Offices is a compromise due to the location and history of the site and the existing towers, but it is a compromise of the highest standards.

The first phase of the Civic Offices should never have been built on a site of such archaeological importance. Sam Stephenson's design solution did not have any regard for its surrounding environment with its styling and monstrous heavy forms.

The Scott Tallon Walker second phase marks a jubilant ending to the architectural design and cityscape of Dublin's most controversial architectural project. This design solves a number of urban design problems very successfully, including

the correct relationship of the new building to Christ Church Cathedral and the City Quays, their architectural and practical integration with the existing towers, the position of the site at the end of the Temple Bar area and the connections the surrounding city.

(Tallon, Plan, 1994)

The building is a supreme damage limitation design exercise, considering the pervious history of the site. The new Civic Offices give balance and continuity along the Quays, providing an architectural expression on prominent splendour. The monumental statements of James Gandon's Eighteenth Century masterpieces, the

Four Courts and the Custom House, may have a great significance on Dublin's Quays but the new Civic Offices at Wood Quay create a triumphant statement along the river Liffey marking its place as a building of great significance and a impressive design solution to such as sensitive site.

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PRIMARY SOURCES

A ARCHIVES

IRISH ARCHITECTURAL ARCHIVE

The Michael Scott Personal Miscellania file.

This contains various drawings and photographs of drawings of projects like the design for the civic offices original concept.

The Scott Tallon Walker Collection.

This contains various drawings and illustrations of projects undertaken by the practice including the second phase of the civic offices at Wood Quay.

SCOTT TALLON WALKER ARCHIVES

The STW Archives were carefully catalogued by the former archivist and architect Patrick Hamilton, who divided them into box files. Each box file can contain a number of packets of individual papers. For details of the civic offices, the important files are:

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