



City Quay

Environmental Impact Assessment Report (EIAR)

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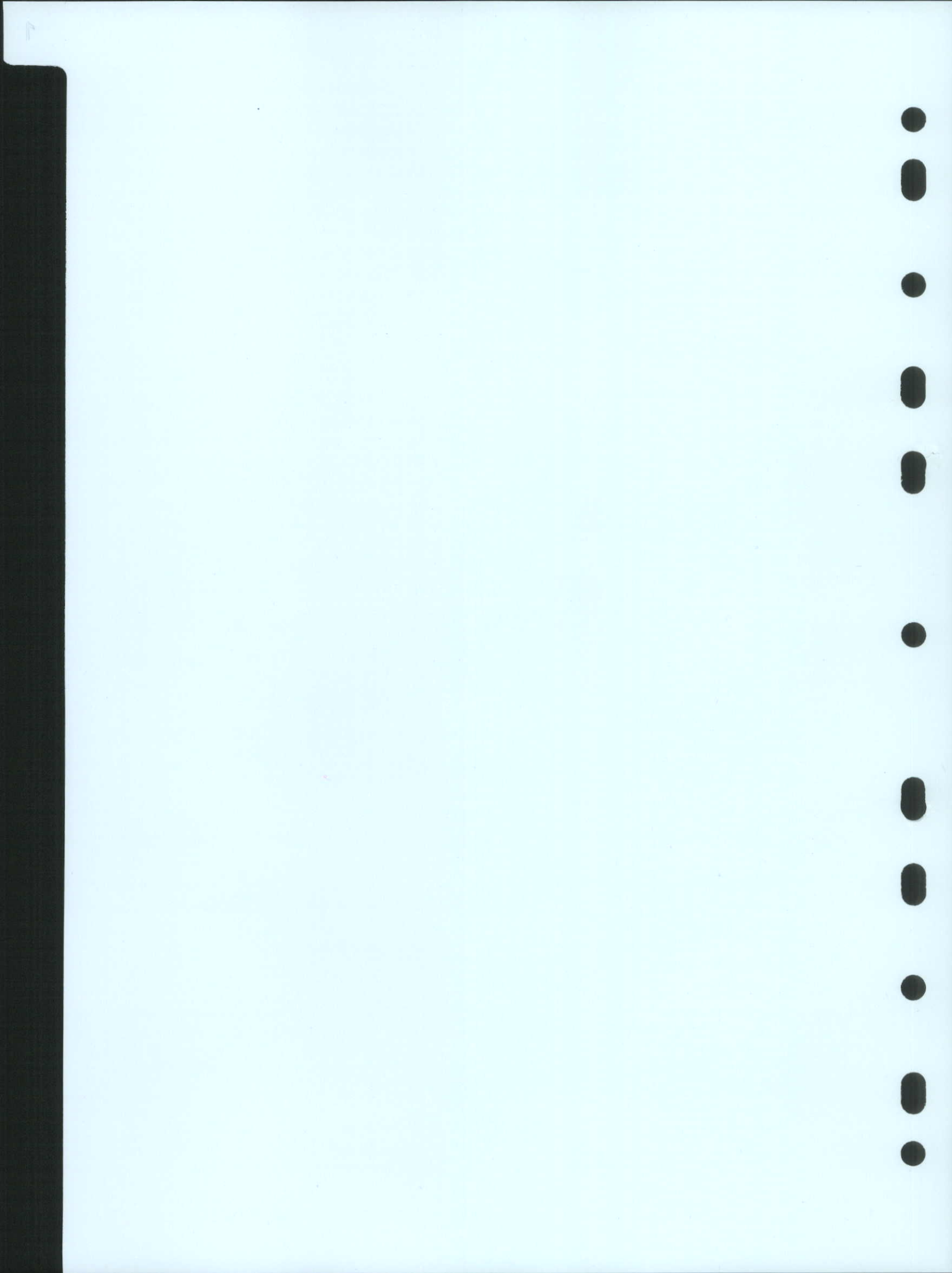
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CHAPTER 1

INTRODUCTION



1.0 INTRODUCTION

1.1 PROPOSED DEVELOPMENT

- 1.1 This Environmental Impact Assessment (EIA) Report has been prepared on behalf of Ventaway Ltd. (herein referred as 'the Applicant') to accompany a planning application to Dublin City Council (DCC) for the demolition of the existing disused former City Arts Centre Building and construction of a 24 storey mixed use building containing an arts centre, office and café accommodation, and exhibition performance space on a parcel of land which includes 1-4 City Quay, Dublin 2 D02KT32, 23-25 Moss Street, Dublin 2 D02 F854 and 5 City Quay, Dublin 2 D02PC03.
- 1.2 The location of the Proposed Development is shown in Figure 1.1. The lands primarily comprise the former City Arts Centre Building and associated hard standing bounded to the north by City Quay, to the west by Moss Street, and to the south by Gloucester Street South. The City Quay Covid testing centre and City Quay National school adjoin the eastern boundary of the subject lands.
- 1.3 The proposed development comprises:
- Demolition of the existing buildings and structures;
 - Construction of a building up to 24 storeys in height over a double basement including arts centre, offices, gym and ancillary uses;
 - The arts centre is contained at basement -1, ground and first floor level
 - The gym is proposed at ground level onto Moss Street;
 - The offices are proposed from ground to 23rd floor (24th storey) with terraces to all elevations;
 - The double basement provides for 11 car parking spaces and 424 bicycle spaces
 - The overall gross floor area of the development comprises 35,910 sq.m. including 1,404 sq.m. arts centre, 22,587 sq.m. offices and 244 sq.m. gym
 - All ancillary and associated works and development including plant, temporary construction works, public realm, landscaping, utilities connections and infrastructure.
- 1.4 This development will hereafter be referred to as the 'proposed development'. A full description of the development is provided in Chapter 2 (Description of the Proposed Development).



Figure 1.1 Location of the Proposed Development, with the site boundary indicated in red. (source google 2022)

- 1.5 The City Quay Arts site is one of the most significant brownfield sites in Dublin City centre and presents an exceptional opportunity to deliver a high density development in the city's central core. Located at the junction of City Quay and Moss Street the site extends to 0.22 hectares. The site is also bounded to the south by Gloucester Street South.
- 1.6 For many years the site has been vacant, with the abandoned City Arts Centre building, occupying the north-west corner of the site, now a derelict ruin. The only activity on the site since the mid 1990's has been its use for surface car parking. A small storage shed is located along the western perimeter of the yard.
- 1.7 The site is ideally placed to be part of an emerging cluster of buildings which will frame the backdrop and urban setting of the Customs House. The City Quay site can be developed as part of a balanced massing on the South Quays to include the recently approached scale of the Tara Steet Tower and College Square developments, which will reinforce the symmetrical setting of the Customs House on the North Quays.

1.2 CONTEXT

1.2.1 Legislative Requirements

- 1.8 The requirement for EIA for certain types and scales of development is set out in the EIA Directives (2011/92/EU and 2014/52/EU), European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (the bulk of

which came into operation in September 2018), the European Communities (Environmental Impact Assessment) Regulations 1989-2006, Planning and Development Act 2000 (as amended) and the Planning and Development Regulations 2001-2019. It should be noted that this EIA Report is prepared in accordance with the 2011 EIA Directive (2011/92/EU), as amended by the 2014 EIA Directive as transposed into Irish law by the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018.

- 1.9 The EIA Directives list those projects for which an EIA is mandatory (Annex I) and those projects for which an EIA may be required (Annex II). With regard to Annex II projects, Member States can choose to apply thresholds or use case by case examination or a combination of both to assess where EIA is required. In Ireland, a combination of both has been applied.
- 1.10 The project proposed is not listed under Annex I EIA Directives and it is below the relevant threshold as set out in the Planning and Development Regulations 2001-2018 for Annex II projects. The threshold for “Urban development which would involve an area greater than 2 hectares in the case of a business district” as set out in Part 2 of Schedule 5 (10(b)iv) of the Regulations was considered to be most relevant threshold in the context of the Proposed Development in the subject location. The Proposed Development does not exceed or come anywhere close to this threshold, however in light of proximity to the Customs House and the potential for visual impact the Applicant has decided to voluntarily prepare an EIA Report.
- 1.11 The main objective of an EIA, as set out in Article 3(1) of the 2014 EIA Directive, is to identify, describe and assess the direct and indirect significant impacts of a project on population and human health, biodiversity (with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC), land, soils, water, air & climate (including noise), material assets, cultural heritage and the landscape and the interaction between the aforementioned factors. The EIA Report reports on the findings of the EIA process to date and informs the Planning Authority, statutory consultees, other interested parties and the public in general about the likely effects of the project on the environment.

1.2.2 Format of the EIA Report

- 1.12 This EIA Report has been prepared in accordance with the requirements of EIA Directives (2011/92/EU and 2014/52/EU). It is prepared in the Grouped Format Structure following the guideline structure set down in the Environmental Protection Agency (EPA) “*Guidelines on the Information to be Contained in Environmental Impact Assessment Reports*” (2022).
- 1.13 The “*Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*” (August 2018) and the European Commission *Guidance on the preparation of the Environmental Impact Assessment Report* have also been considered in the preparation of the EIA report.
- 1.14 Using the Grouped Format Structure, the EIA Report examines each environmental aspect in a separate chapter. Each chapter generally covers the following:
- Receiving Environment;
 - Characteristics of the Proposed Development;
 - Potential Impacts of the Proposed Development;
 - Do-Nothing Scenario;
 - Remedial and Mitigation Measures;

- Predicted Impacts of the Development; and
- Cumulative Impacts.

- 1.15 A Non-Technical Summary of the findings of the EIA Report is provided as a separate document.
- 1.16 Mitigation measures applicable to each specialism are provided within the relevant chapters of this EIAR.
- 1.17 A description of projects that have been assessed cumulatively with the proposed development are provided in Section 2.8 of this EIA Report and in supporting planning documentation. Cumulative impacts for each environmental topic are assessed within the relevant specialist chapters of this EIA Report.
- 1.18 Interactions i.e. the interrelationship between each environmental aspect, are also assessed as they occur in each chapter. The final chapter of the EIA Report, Chapter 16 shows where interactions have been identified and how they have been addressed.

1.3 CONSULTATION

- 1.19 AWN, the applicant and the proposed development project team have liaised with the relevant departments of DCC in advance of lodgement of this application. Pre-application meetings were held with DCC on the 11th Oct 2021, 15th Nov 2021, 15th Dec 2021, 21st Jan 2022, 10th Feb 2022 and 2nd March 2022. Officials from DCC and members of the design and developer team attended. A number of specific issues, concerns and suggestions were raised during these meetings and further details regarding how they have been implemented into the design are provided in the Architectural Design Statement which is part of the Planning Application documents.
- 1.20 In addition, relevant specialists in the proposed development project team have liaised with statutory bodies (including the Water Services, Roads/Transportation, Environmental departments of DCC, Irish Water, Eirgrid, ESB) by correspondence and access to online databases during the course of the EIA Report preparation.
- 1.21 AWN and the other respective EIA contributors/authors have incorporated all relevant advice and comments received from consultees into the relevant chapters of this EIA Report.

1.4 CONTRIBUTORS TO THE EIA REPORT

- 1.22 The preparation and co-ordination of this EIA Report has been completed by AWN Consulting in conjunction with specialist subcontractors taking into account current knowledge and methods of assessment. Specialist inputs were provided by the following (Table 1.1):

Table 1.1 Roles and Responsibilities in the EIA Report

| Role | Responsibility |
|----------------------|------------------------------|
| Applicant | Ventaway Ltd. |
| Planning | John Spain and Associates |
| Architectural Design | Mahoney Architecture |
| Engineering Design | Bakkala Consulting Engineers |
| Civils Design | Byrne Looby |

| Mechanical and Electrical Design | | Penston MEP |
|----------------------------------|---|--------------------------------------|
| Environmental Impact Assessment | | AWN Consulting |
| Chapter No. | Chapter Title | Consultant |
| | Non-Technical Summary | AWN Consulting – Sarah Robertson |
| Chapter 1 | Introduction | AWN Consulting – Sarah Robertson |
| Chapter 2 | Description of the Proposed Development | AWN Consulting – Sarah Robertson |
| Chapter 3 | Planning and Development Context | AWN Consulting – Sarah Robertson |
| Chapter 4 | Alternatives | AWN Consulting – Sarah Robertson |
| Chapter 5 | Population and Human Health | AWN Consulting – Sarah Robertson |
| Chapter 6 | Biodiversity (including NIS) | Altamar – Bryan Deegan, Hugh Delaney |
| Chapter 7 | Land, Soils, Geology & Hydrogeology | AWN Consulting – Colm Driver |
| Chapter 8 | Hydrology | AWN Consulting – Colm Driver |
| Chapter 9 | Air Quality & Climate | AWN Consulting – Ciara Nolan |
| Chapter 10 | Noise & Vibration | AWN Consulting – Jennifer Harmon |
| Chapter 11 | Landscape and Visual Impact | Modelworks – Richard Butler |
| Chapter 12 | Archaeological, Architectural and Cultural Heritage | IAC – Faith Bailey & Rob Goodbody |
| Chapter 13 | Traffic and Transportation Assessment | Byrne Looby – Peter Monahan |
| Chapter 14 | Material Assets | AWN Consulting – Sarah Robertson |
| Chapter 15 | Waste Management | AWN Consulting – Niamh Kelly |
| Chapter 16 | Interactions | AWN Consulting – Sarah Robertson |

1.23 **Project Manager/EIA Co-ordinator/Selected Chapters, Sarah Robertson.** Sarah is a Senior Environmental Consultant in AWN Consulting with responsibility for IED licence applications, GMM and DAFM ABP certificates. She also provides EIAR management and specialist input to EIAR chapters. Sarah has over ten years experience working in the environmental field in impact assessment, EIAR management, environmental masterplans, urban planning, waste management, specialist ecological surveys, AA screening and Natura Impact Statements. Sarah holds a BA. Hons (mod Science), MSc. and a Diploma in Environmental Engineering, and has worked in Ireland, the UK, and the USA.

1.24 **Land, Soils, Geology, Hydrogeology & Hydrology, Colm Driver.** Colm Driver (BSc MSc MIT). Colm is an Environmental Consultant (Hydrogeologist) with AWN Consulting with over 5 years' experience in the field of environmental sciences including hydrogeology, soils, geology, geotechnical engineering, and impact assessment. His role at AWN includes responsibility for groundwater related projects including groundwater resource management and assessment, aquifer characterisation and source protection plans, contaminated land assessments, groundwater modelling, hydrogeology and geology in EIAR. His experience also includes the provision of hydrogeological conceptual site models (CSM) and ArcGIS

mapping. Colm is a member of the International Association of Hydrogeologists (Irish Group), Irish Brownfield Network and Institute of Geologists Ireland.

- 1.25 **Biodiversity/Appropriate Assessment, Bryan Deegan.** Bryan Deegan (MCIEEM) is the primary consultant. Bryan Deegan has 27 years' experience working in Irish terrestrial and aquatic environments, providing ecological consultancy. He has a Certificate in Science, Diploma in Applied Aquatic Science, BSc in Applied Marine Biology and a MSc in Environmental Science. Bryan has extensive aquatic and terrestrial fieldwork experience including flora and fauna (bird & mammal) surveys. Recent projects include carried out and managed by Bryan include the Lidl Regional Distribution Centre in Newbridge (and road proximate to the proposed development site), Primark warehouse Newbridge, airside works for daa at Dublin Airport, ecological elements for 5 marine fibre optic cables (within Irish waters and landfall) in addition to housing developments including SHD's.
- 1.26 **Biodiversity/Appropriate Assessment, Hugh Delaney.** Hugh Delaney is an ecologist (ornithologist primarily) having completed work on numerous sites with ecological consultancies over 10+ years. Hugh is local to the Dun Laoghaire-Rathdown area in Dublin and is especially familiar with the bird life and its ecology in the environs going back over 30 years.
- 1.27 **Air Quality & Climate, Ciara Nolan.** Ciara Nolan is an Environmental Consultant in the Air Quality section of AWN. She holds a BSc in Energy Systems Engineering from University College Dublin and has also completed an MSc in Applied Environmental Science at University College Dublin. She is an Associate Member of the Institute of Air Quality Management. She specialises in the fields of ambient air monitoring, indoor air monitoring and EIA.
- 1.28 **Noise & Vibration, Jennifer Harmon.** Jennifer Harmon is a Principal Acoustic Consultant in AWN Consulting. Jennifer holds a BSc in Environmental Science from University of Ulster and a Diploma in Acoustics and Noise Control from the Institute of Acoustics (IOA) and is a full member of the IOA. Jennifer has over 20 years' experience in environmental noise and vibration impact assessment for a wide range of project types across Ireland.
- 1.29 **Landscape and Visual, Richard Butler.** Richard Butler (B.L. Arch., MSc Spatial Planning, MILI MIPI) of Model Works Ltd. Richard has degrees in landscape architecture and planning and is a member of the Irish Landscape Institute and Irish Planning Institute. He has over 25 years' experience in development and environmental planning, specialising in Landscape/Townscape and Visual Impact Assessment (LVIA).
- 1.30 **Archaeology, Faith Bailey.** Faith Bailey is a Senior Archaeologist and Cultural Heritage Consultant with IAC Ltd. She holds an MA in Cultural Landscape Management (archaeology and built heritage) and a BA in single honours archaeology from the University of Wales, Lampeter. She is a licence eligible archaeologist and has over 13 years' experience working in commercial archaeology. Faith joined IAC in 2004 and in her capacity as Senior EIA Archaeologist, she has been responsible for the production and delivery of a large number of archaeological and built heritage desk top assessments, surveys, EIA, masterplans, LAP/SEA and management plans associated with all sectors of development in the Republic and Northern Ireland.
- 1.31 **Archaeology, Rob Goodbody.** Rob Goodbody BA (MOD), DIP ENV P, DIPABRC, MUBC, MA has a post-graduate diploma in Environmental Planning and a Masters in Urban Building Conservation from UCD. He has thirty years' experience as a

professional planner. In 1990 he took up a position with Dublin City Council, in which he worked on many aspects of planning including Environmental Impact Assessment on projects such as the North King Street road improvement and on area plans for areas such as Collins Barracks, Islandbridge Mills and Dublin's Quays and on the restructuring of Sheriff Street. For the past twenty-five years Rob has been researching the histories of buildings and towns. He has prepared detailed reports for clients throughout Ireland. Work has included built heritage inputs to EIAR for various infrastructural projects and development sites. His publications include six books and numerous articles and papers including the third Dublin volume of the Irish Historic Towns Atlas for the Royal Irish Academy. He teaches Georgian building construction on the post-graduate conservation course in TCD and for some years taught a module on the development of the Irish town at Masters level in NUI Maynooth. He is a founder member of the Industrial Heritage Association of Ireland.

1.32 **Traffic & Transportation, Peter Monahan.** Peter Monahan is a Chartered Engineer and a Fellow of Engineers Ireland (FIEI). Peter graduated with an Honours Degree in Civil Engineering from University College Dublin, in 1993, with an MSc. Degree in Civil, Structural & Environmental Engineering from Trinity College Dublin, in 1994, and received a Certificate of Professional Competence in Road Safety Audits from University College Dublin in 2012. Mr. Monahan has in excess of twenty-five years' experience in the planning & design of road & transportation projects as well as significant experience in traffic & transports assessments and the independent evaluation of road projects from a road safety perspective (e.g. road safety audits, road safety inspections, collision monitoring audits). He has worked on projects in Ireland, the UK, Kuwait, Qatar, Abu Dhabi and the PRC. Mr. Monahan has been actively involved with the engineering professional body in Ireland, Engineers Ireland, for many years and has served as an officer on the Roads & Transportation Society committee and is a member of, and current PRO for, the Civil Division Committee within Engineers Ireland. He has also served as one of Engineers Ireland's representatives on the Urban Forum.

1.33 **Waste Management. Niamh Kelly.** Niamh Kelly is an Environmental Consultant within the waste management section of Awn Consulting. Niamh holds an MSc. in International Disaster Management and a B.A. in Earth Sciences. Niamh has prepared the Waste Management EIAR chapter, Operational Waste Management Plan and Resource and Waste Management Plan for various developments including residential and commercial.

1.5 DESCRIPTION OF EFFECTS

1.34 The quality, magnitude and duration of potential effects are defined in accordance with the criteria provided in the EPA EIA Report Guidelines 2022 as outlined in Table 1.2.

Table 1.2. Description of Effects as per EPA Guidelines (2022)

| Characteristic | Term | Description |
|--------------------|------------------|--|
| Quality of Effects | Positive | A change which improves the quality of the environment |
| | Neutral | No effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error. |
| | Negative/Adverse | A change which reduces the quality of the environment |

| | | |
|---|---------------------|---|
| Describing the Significance of Effects ¹ | Imperceptible | An effect capable of measurement but without significant consequences |
| | Not significant | An effect which causes noticeable changes in the character of the environment but without significant consequences |
| | Slight Effects | An effect which causes noticeable changes in the character of the environment without affecting its sensitivities |
| | Moderate Effects | An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends |
| | Significant Effects | An effect, which by its character, magnitude, duration or intensity alters a sensitive aspect of the environment |
| | Very Significant | An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment. |
| | Profound Effects | An effect which obliterates sensitive characteristics |
| Describing the Extent and Context of Effects | Extent | Describe the size of the area, the number of sites, and the proportion of a population affected by an effect. |
| | Context | Describe whether the extent, duration, or frequency will conform or contrast with established (baseline) conditions (is it the biggest, longest effect ever?) |
| Describing the Probability of Effects | Likely Effects | The effects that can reasonably be expected to occur because of the planned project if all mitigation measures are properly implemented. |
| | Unlikely Effects | The effects that can reasonably be expected not to occur because of the planned project if all mitigation measures are properly implemented. |
| Describing the Duration and Frequency of Effects | Momentary Effects | Effects lasting from seconds to minutes |
| | Brief Effects | Effects lasting less than a day |
| | Temporary Effects | Effects lasting less than a year |
| | Short-term Effects | Effects lasting one to seven years. |
| | Medium-term Effects | Effects lasting seven to fifteen years |
| | Long-term Effects | Effects lasting fifteen to sixty years |
| | Permanent Effects | Effects lasting over sixty years |

¹ For the purposes of facilitating the Competent Authority in conducting Environmental Impact Assessment as defined by Annex 1 of the EU Directive, the terms "imperceptible effects", "not significant effects", "slight effects", and "moderate effects" used within this report, while exhibiting varying degrees of impact, are all considered to be without significant consequence.

| | | |
|--------------------------------|--|--|
| | Reversible Effects | Effects that can be undone, for example through remediation or restoration |
| | Frequency of Effects | Describe how often the effect will occur. (once, rarely, occasionally, frequently, constantly – or hourly, daily, weekly, monthly, annually) |
| Describing the Type of Effects | Indirect Effects (a.k.a secondary or Off-site effects) | Effects on the environment, which are not a direct result of the project, often produced away from the project site or because of a complex pathway. |
| | Cumulative Effects | The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects. |
| | 'Do Nothing' Effects | The environment as it would be in the future should the subject project not be carried out |
| | 'Worst case' Effects | The effects arising from a project in the case where mitigation measures substantially fail |
| | Indeterminable Effects | When the full consequences of a change in the environment cannot be described |
| | Irreversible Effects | When the character, distinctiveness, diversity, or reproductive capacity of an environment is permanently lost |
| | Residual Effects | The degree of environmental change that will occur after the proposed mitigation measures have taken effect |
| | Synergistic Effects | Where the resultant effect is of greater significance than the sum of its constituents (e.g. combination of Sox and NOx to produce smog) |

1.6 ADDITIONAL ASSESSMENTS REQUIRED

1.35 This section addresses the additional approvals and assessments required under other EU Directives and legislation.

- **Appropriate Assessment** – an Appropriate Assessment Screening Report and a Natura Impact Statement has been completed for the proposed development, as required under the Habitats and Birds Directive (92/43/EEC and 79/409/EEC) and are included with the planning application; and
- **Flood Risk Assessment** - A Stage 3 Flood Risk Assessment has been undertaken for the site and is also included with the planning application.
- **Resource Waste Management Plan** – A RWMP has been prepared in line with 'A Waste Action Plan For a Circular Economy. Ireland's National Waste Policy. 2020-2025'. DECC, 2020, and 'Best Practice Guidelines for the Preparation of Resource and Waste Management Plans for Construction and Demolition Projects', EPA, 2021. The report is included as Appendix 15.1.

1.7 FORECASTING METHODS AND DIFFICULTIES IN COMPILING THE SPECIFIED INFORMATION

- 1.36 Forecasting methods and evidence used to identify and assess the significant effects on the environment for each environmental aspect are set out in each chapter.
- 1.37 There were no significant difficulties in compiling the specified information for this EIA Report. Any issues encountered during the assessment of individual factors are noted within the relevant chapters.
- 1.38 The Dublin City Council Development Plan (2016-2022) is currently being updated. The consultation period for the draft Dublin City Council Development Plan 2022-2028 has ended and the elected members are due to receive a report prepared by the Chief Executive regarding all submissions and observations received by the 29th September 2022. Having considered the proposed material alterations to the Draft Dublin City Council Development Plan and the Chief Executive's Report on submissions received, the Elected Members will make the Dublin City Development Plan 2022-2028 with or without amendment, at the end of October 2022.
- 1.39 Considering that this proposed development may still be in the planning process while the draft Dublin City Council Development Plan 2022-2028 is finalised and adopted, this planning application has also made reference to pertinent elements of the draft Dublin City Council Development Plan 2022-2028 alongside those aspects of the Dublin City Council Development Plan (2016-2022).
- 1.40 This consideration of the draft Dublin City Council Development Plan 2022-2028 throughout this EIAR is made in the full knowledge that the Elected Members may, as is their discretion, make alterations to the draft Dublin City Council Development Plan 2022-2028 and as such those elements of the draft Dublin City Council Development Plan 2022-2028 referred to in the planning application that remain unchanged shall serve the application for the proposed development throughout the planning process, and those that may be altered will need to be re-addressed by means of Further Information request.



CHAPTER 2

DESCRIPTION OF THE PROPOSED DEVELOPMENT



2.0 DESCRIPTION OF THE PROPOSED DEVELOPMENT

2.1 INTRODUCTION

- 2.1 As described in Chapter 1 the applicant is applying to Dublin City Council (DCC) for the demolition of the existing disused former City Arts Centre Building and construction of a 24 storey mixed use building containing an arts centre, office and café accommodation, and exhibition performance space on a parcel of land which includes 1-4 City Quay, Dublin 2 D02KT32, 23-25 Moss Street, Dublin 2 D02 F854 and 5 City Quay, Dublin 2 D02PC03.
- 2.2 This chapter presents the description of the project comprising information on the site, design, size and other relevant features of the project as set out in the EIA Directive (2011/92/EU) as amended by EIA Directive (2014/52/EU), as well as the relevant guidance documents *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports* (EPA, 2022) and *Draft Advice Notes for Preparing Environmental Impact Statements* (EPA, 2015).
- 2.3 This chapter summarises the proposed development (demolition, construction and operation). The EIAR should be read in conjunction with the entire planning package which includes complete elevations and floor plans, site and layout plans including utilities and building drawings, along with supporting engineering and planning reports.

2.2 DESCRIPTION OF THE EXISTING DEVELOPMENT SITE

- 2.4 The site of the proposed development extends to c. 0.22 hectares. It is a rectangular plot of land, situated on City Quay on the southern side of the banks of the River Liffey, with the western boundary defined by Moss Street and the southern boundary by Gloucester Street South. City Quay National School and a Covid testing centre are located along the eastern boundary. The Church of the Immaculate Heart of Mary and the associated presbytery are situated to the east of the City Quay National School and the Covid testing centre.
- 2.5 The subject lands are characterised as brownfield, 100% hard cover, developed lands. The north-western corner of the site contains the former City Arts building; an abandoned cluster of three storey, over basement derelict buildings which cover c. one-third of the subject lands. The remainder of the lands are hard paved and currently in use as surface car parking which is accessed via an entrance along the eastern perimeter from City Quay. A small single-storey shed is located within the southern yard along the western perimeter. There is an original Pooley Weighbridge located on the site which will be salvaged and incorporated into the public realm area of the proposed development. The perimeter of the site not delineated by the derelict buildings is lined with a wall formed from steel framework infilled with railway sleepers and corrugated sheeting.
- 2.6 The existing buildings on site are of no particular architectural importance or interest and are not included in the list of Protected Structure in the DCC Development Plan 2016 – 2022 (“DCC Plan”) and the draft DCC Development Plan 2022-2028 (“draft DCC Plan”).
- 2.7 In the wider environs the subject lands sit opposite the IFSC (International Financial Services Centre) and the Custom House Building situated on the northern quays of the

River Liffey. The Georges Quay office development lies to the west, and a recently constructed aparthotel to the south. The remainder of the surrounding area is characterised by hotel, office and retail developments along with high density and medium density residential.

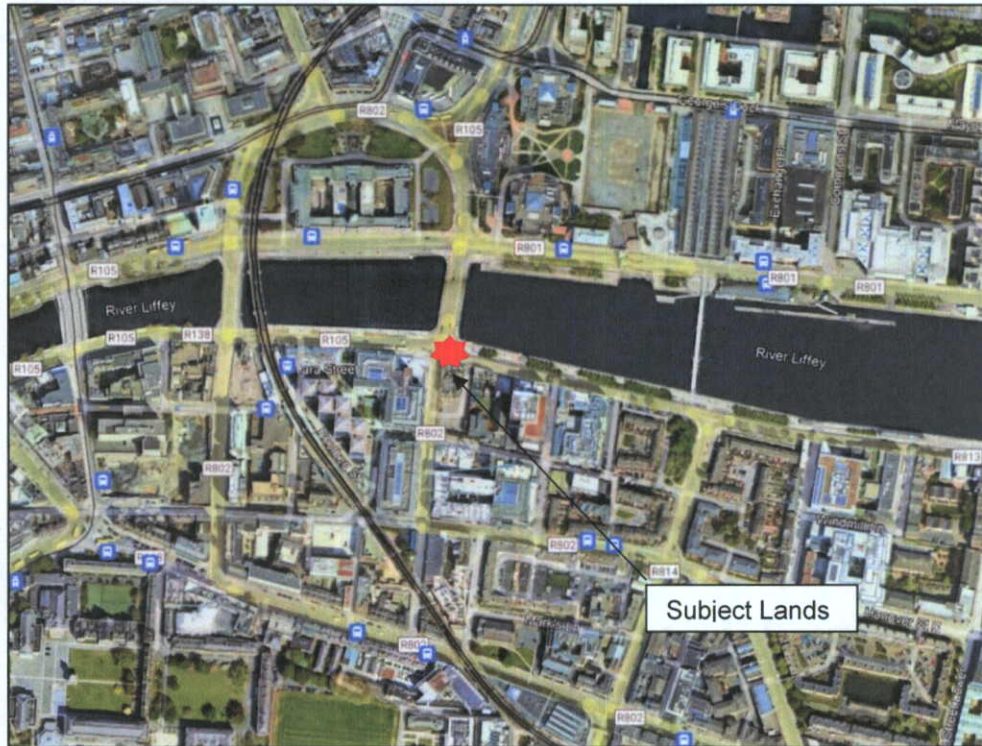


Figure 2.1 Location of Subject Lands (source Google earth)

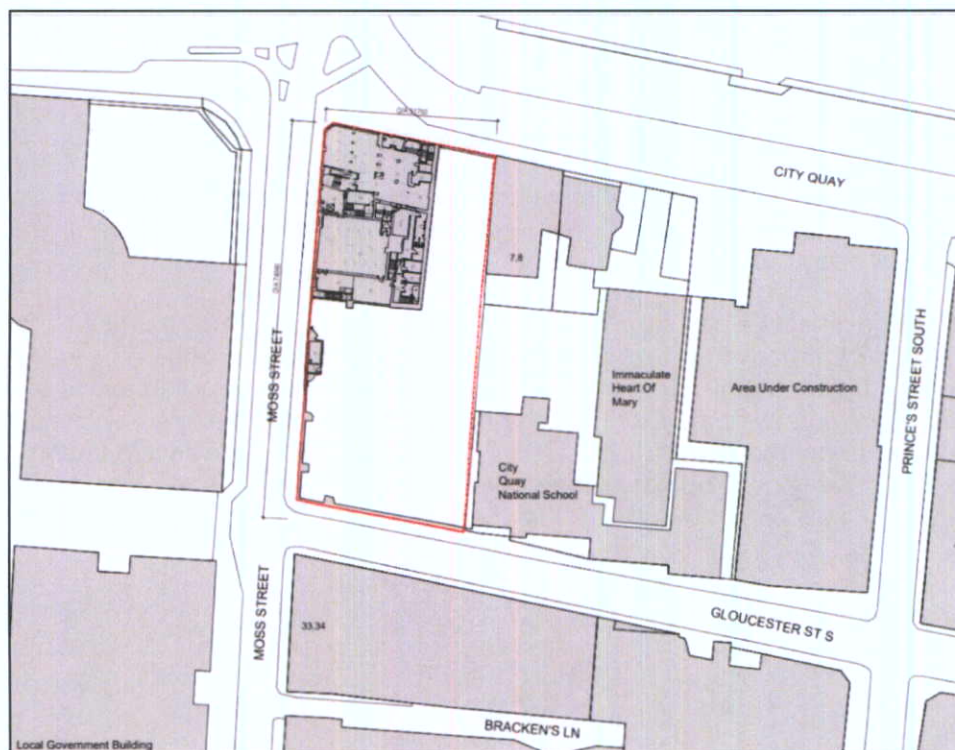


Figure 2.2 Existing Site Plan (Mahoney Architecture 2022)

2.3 THE NEED FOR THE PROPOSED PROJECT

- 2.8 The subject lands are located on the “arrival” side of the one of Dublin’s busiest river crossings via the Matt Talbot bridge where vehicular traffic from Gardiner Street and North Strand/Amiens Street converge to access the south side of Dublin city. Both the Matt Talbot bridge and the associated landing area on the southern side of the River Liffey lack the urban character warranted for such a significant gateway to Dublin leading to a disappointing spatial vacuum in the city’s built fabric.

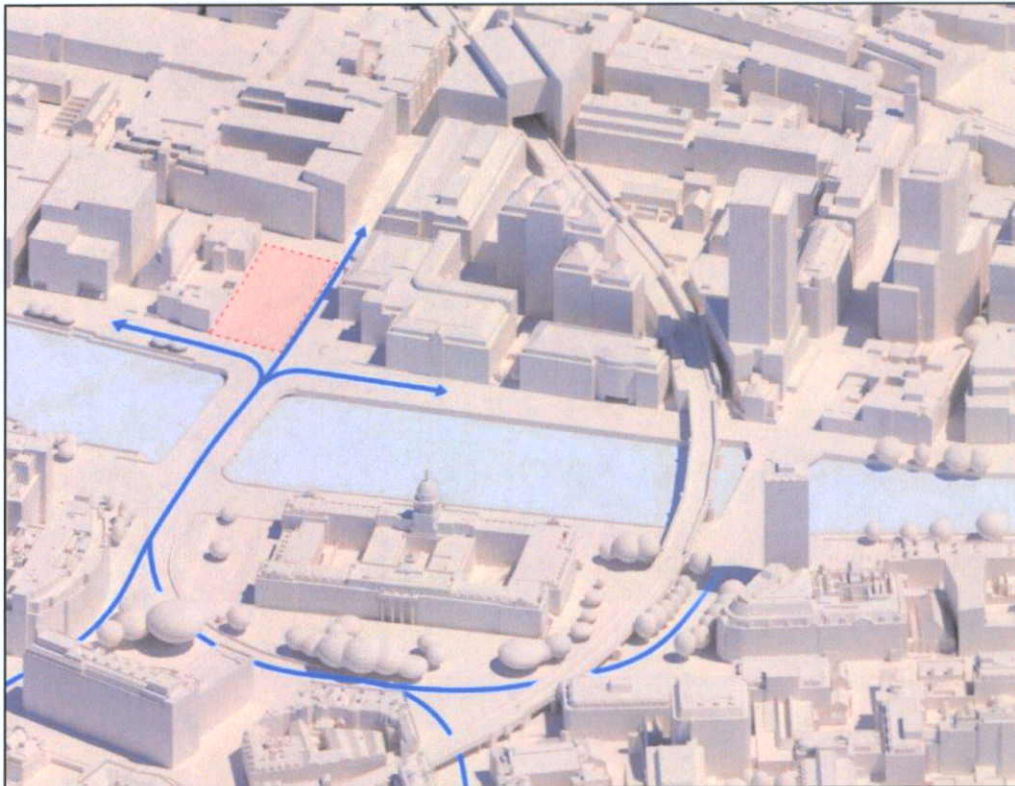


Figure 2.3 Primary Access Path to South Side of Dublin City (Mahoney Architecture 2022)

- 2.9 The proposed development offers a rare opportunity to deliver a building which will be appropriate to this significant portal and provide architectural balance to the greater southern quays along the River Liffey.
- 2.10 The subject lands are ideally placed to be part of an emerging cluster of buildings which will frame the backdrop and urban setting of the Customs House. The subject lands provide the opportunity fill in and balance the massing on the south quays of the River Liffey, bringing symmetry to the Customs House visual envelope with respect to the recently permitted Tara Street Tower and College Square developments and the George’s Quay development. The site is also aligned with the axis of Gardiner Street and to a lesser extent the axis of Kildare Street.

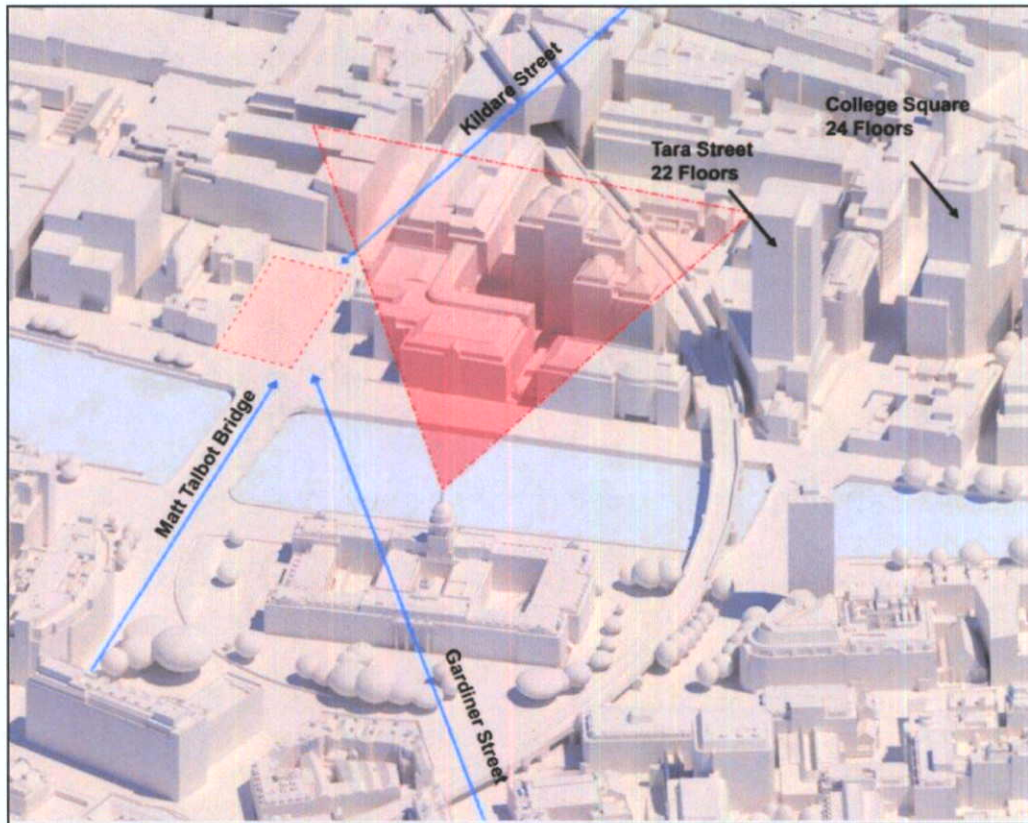


Figure 2.4 Backdrop and Urban setting of Custom House Building (Mahoney Architecture 2022)

2.11 These combined urban conditions reinforce the significance of the site and justify a design response which will deliver a building of considerable scale and character in a zone of Dublin City identified in the DCC plan as suitable for tall buildings.

The vast majority of the city area is identified as not being suitable for mid-rise or taller buildings.....However, taller buildings can also play an important visual role and can make a positive contribution to the skyline of a city. Dublin City Council recognises the merit of taller buildings, including landmark buildings, in a very limited number of locations at a scale appropriate for Dublin.....Of the 14 specific areas identified for midrise (up to 50m) and taller (above 50m) buildings:

- 10 are in the mid-rise category of which 4 are in areas already the subject of local area plans
- 4 are in taller category, and comprise the Docklands Cluster, Connolly, Heuston and George’s Quay (part of the Docklands is covered by the SDZ planning scheme).

2.12 The development of this site is a rare opportunity to deliver meaningful investment, vitality, identity and density in this important landmark city centre location, thus realising a significant quantum of employment and cultural assets; all within the most connected area of land in Ireland.

2.13 The proposed development is in accordance with National, regional and local planning and development policy, as detailed in the planners report which is submitted as part of this planning application and Chapter 4 (Planning & Development Context), with the

exception of the height of the building which is addressed in the Tall Building Statement prepared by Urban Design Strategies Inc. submitted under separate cover as part of the planning application.

2.14 In accordance with the Government's *National Planning Framework (2018 – 2040)*, the Eastern and Midland Regional Assembly's *Regional Spatial and Economic Strategy (2019 – 2031)* and DCC's Plan; the proposed development will deliver new high quality cultural arts space and a significant quantum of office space in a compact and sustainable manner, in an area well served by public transportation and proximate to other centres of employment and commerce.

2.15 For more information, refer to the planners report submitted as part of this planning application and Chapter 4 (Planning & Development Context).

2.4 CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

2.16 The proposed development consists of the demolition of the existing buildings on site and the construction of a new arts centre and office development with associated restaurant/café and gym. The proposed development consists of the following elements:

- Demolition of the existing buildings and structures;
- Construction of a building up to 24 storeys in height over a double basement including arts centre, offices, gym and ancillary uses;
- The arts centre is contained at basement -1, ground and first floor level
- The gym is proposed at ground level onto Moss Street;
- The offices are proposed from ground to 23rd floor (24th storey) with terraces to all elevations;
- The double basement provides for 11 car parking spaces and 424 bicycle spaces
- The overall gross floor area of the development comprises 35,910 sq.m. including 1,404 sq.m. arts centre, 22,587 sq.m. offices and 244 sq.m. gym
- All ancillary and associated works and development including plant, temporary construction works, public realm, landscaping, utilities connections and infrastructure.

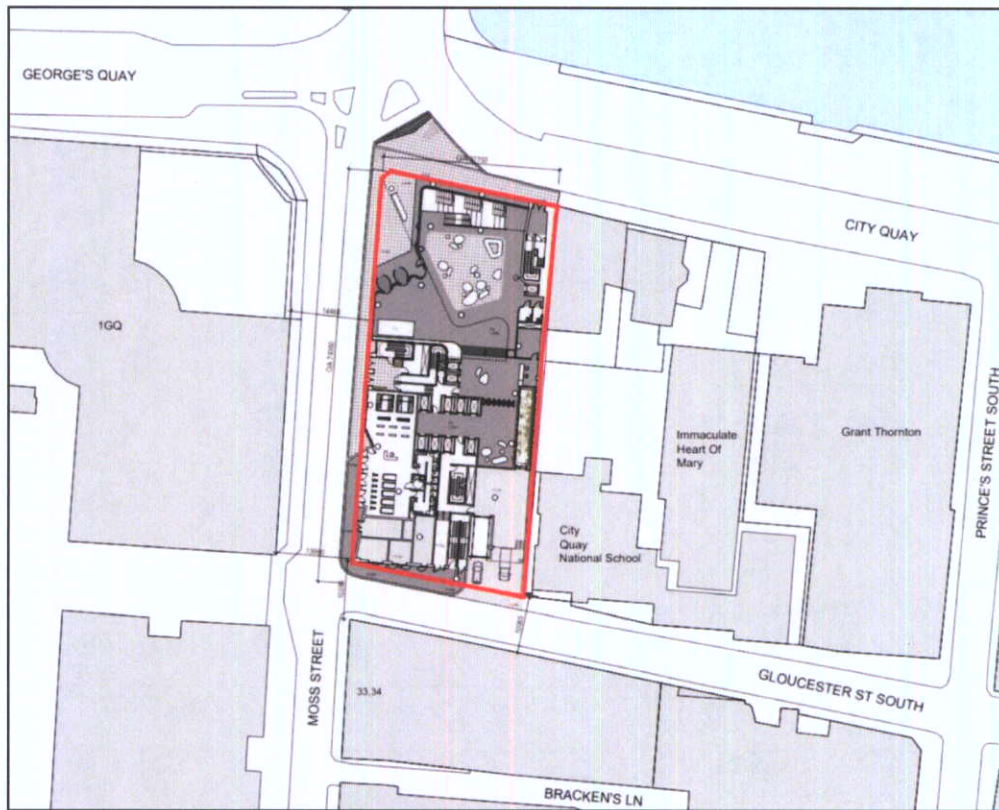


Figure 2.5 Proposed Site Layout (Mahoney Architecture 2022)

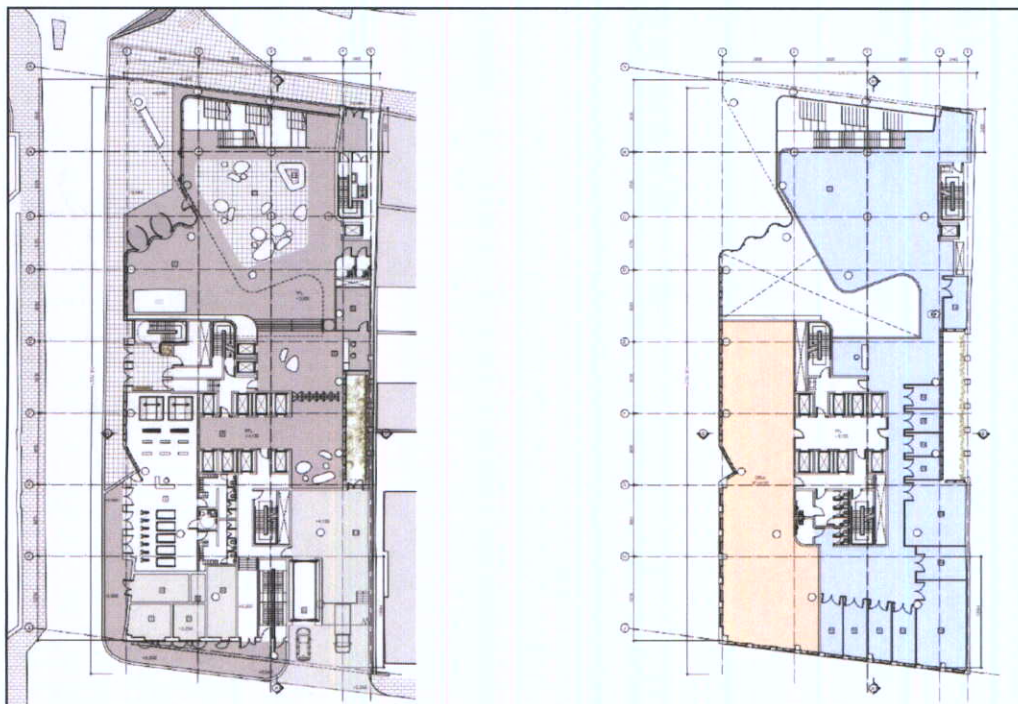


Figure 2.6 Ground Floor and First Floor Plan (Mahoney Architecture 2022)

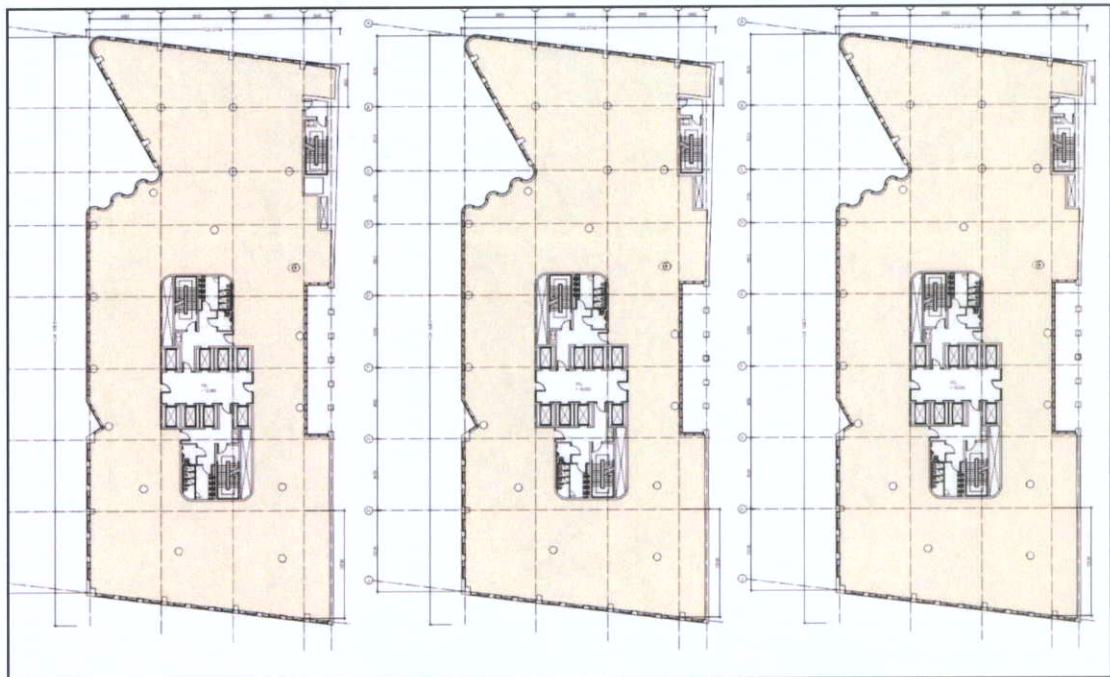


Figure 2.7 Proposed 2nd, 3rd and 4th Floor Levels (Mahoney Architecture 2022)

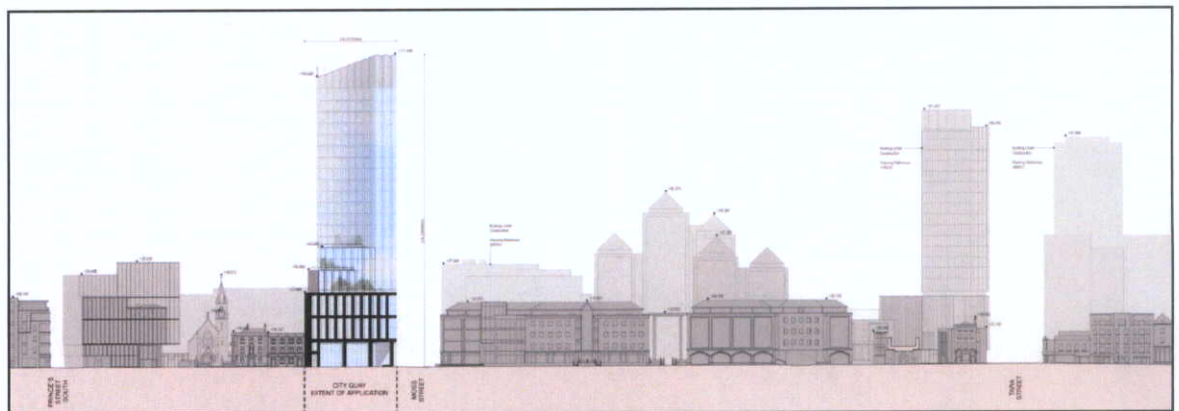


Figure 2.8 North Elevation (Mahoney Architecture 2022)

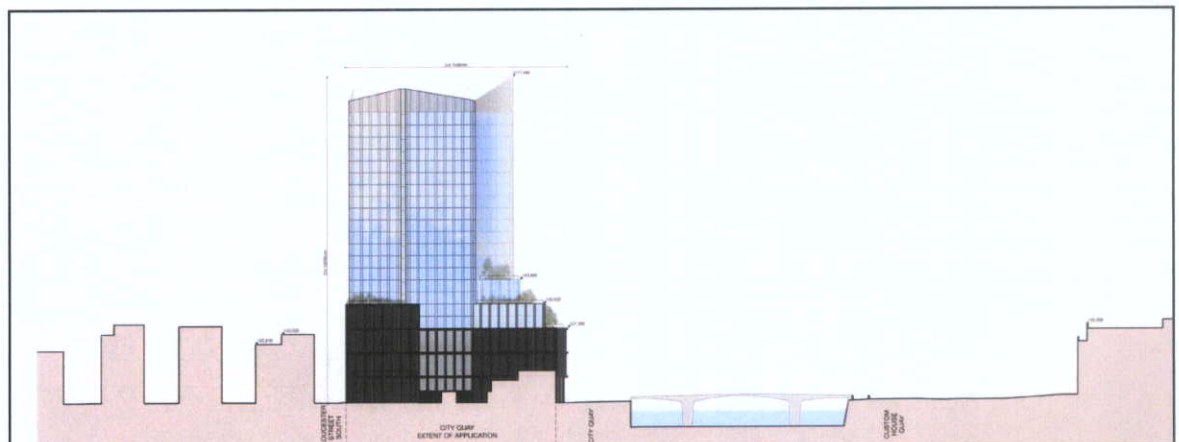


Figure 2.9 East Elevation (Mahoney Architecture 2022)

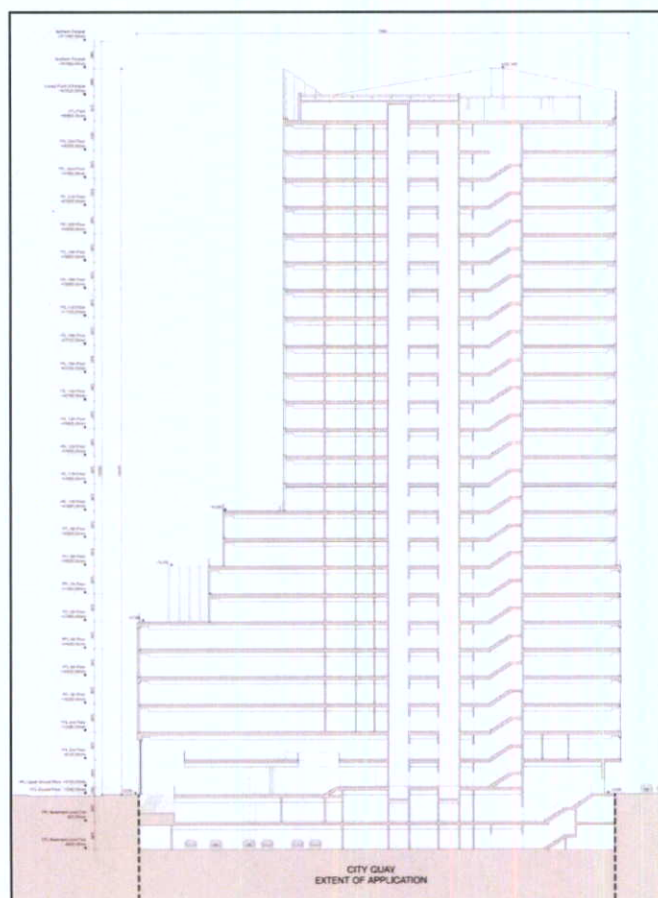


Figure 2.10 Cross Section of Proposed Development (3DDesign Bureau 2021)

2.4.1 Arts Centre

- 2.17 A new Arts Centre will re-establish the historic use of the site and will deliver a creative core at the entrance to the building, to be shared and experienced by all building users and members of the public. The Arts Centre will occupy three floors at the front of the building; basement, ground and first floor levels encompassing a total of 1,404m². A triple height volume on the City Quay façade links these three floors and will present a highly visible and welcoming frontage which will encourage the public to visit this important new cultural facility. The building's office users will pass through the Arts Centre enroute to the upper floors where they can pause to view exhibits or use the space for casual meeting and coffee breaks.
- 2.18 The basement floor level of the proposed building will form two primary functions; the most southern part of the building will be used for bicycle and scooter parking; the most northern end as an adaptable exhibition/performance/workshop space for the Arts Centre. The entire ground floor of the proposed development will provide for exhibition and public space, while the entire first floor of the proposed development will contain administration, workshops and studios.
- 2.19 The main entrance to the first floor, located in the north-east corner of the site off City Quay is set back from the site boundary to form a small plaza which opens into a light-filled double-height lobby. Externally a granite bench aligned with the undercroft of the second floor provides a waiting place close to the entrance. There will be a large door on the City Quay frontage that can be opened onto the plaza to allow for occasional

entrances for large events and also to allow for large scale art works to be moved in and out.

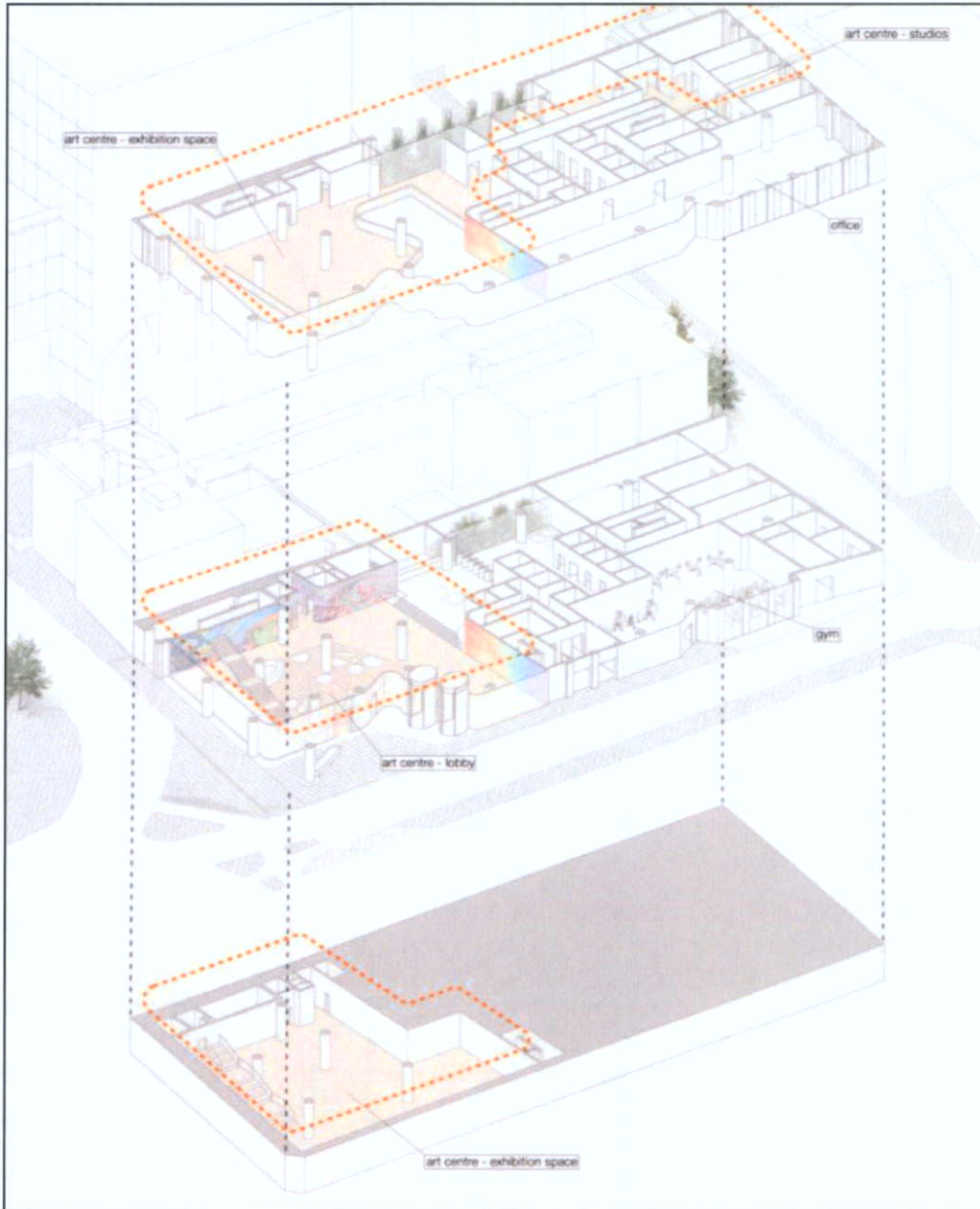


Figure 2.11 Internal layout of Proposed Arts Centre (Mahoney Architecture 2022)

2.20 Internal to the main lobby on the first floor a large video wall is positioned in front of the main entrance. The wall will display video artworks and will be highly visible from the outside. The salvaged Pooley Weighbridge will be set into the floor directly in front of the video wall and will have the capacity to interact with the video wall. The concrete wall located to the west of the entrance will be a curated graffiti wall which will continue to change over time. The area to the east of the entrance will provide a multi-use space for workshops, exhibitions and performances along with a café.

2.4.2 Office Accommodation

- 2.21 The office accommodation begins at the first floor level and extends to the top floor of the building providing a total of 22,587 m² net office floor space.
- 2.22 The main lift core containing 8 lift shafts is centred in the building. Office users approach the lift core from the shared lobby, up a series of steps (or platform lift) past the roof-lit main office reception desk. The number of lifts reduces as they ascend the building, with six shafts from the 10th to the 17th level and just four lift shafts serving the upper floors. Two of the lift shafts throughout the levels serve as fire-fighting lifts with dual access to the main lift lobby and the fire-fighting core.
- 2.23 The central core also accommodates the toilets and service risers leaving an open floor plate with 360 degree panoramic views of the city. The floor plate depth and ceiling height ensures high levels of daylight penetrate through to the full extent of the office accommodation.

2.4.3 Gym

- 2.24 A gym/spa facility exclusive for use by the office users and Art Centre staff is located on the upper basement floor level (-1 level), situated in the centre of the floor between the Art Centre and the changing rooms area.

2.4.4 Sustainable Parking Provisions

- 2.25 Sustainable parking will be provided over the two lower basement levels in the proposed development.
- 2.26 The lower basement level (-2 level) will provide for 11 car parking spaces (all of which will have EV charging points and two of which are disabled accessible parking spaces) and 20 motorcycle parking spaces. This lower basement level will also contain plant rooms, sprinkler pumps, flood defence barriers, water tanks and a waste storage area. Motorised vehicles can access this lower basement level from Gloucester Street south via a car lift.
- 2.27 The upper basement level (-1 level) provides for extensive cyclist facilities on the southern end. A total of 424 no. bike spaces will be provided along with a cycle repair dock. Cyclists will have access to a total of 20 no. showers including 4 no. disabled accessible showers, 4 no. toilets and 430 no. lockers. Cyclists can access the basement from Gloucester Street South via a designated double-width stair with wheel tracks on each side, or via the car lift.

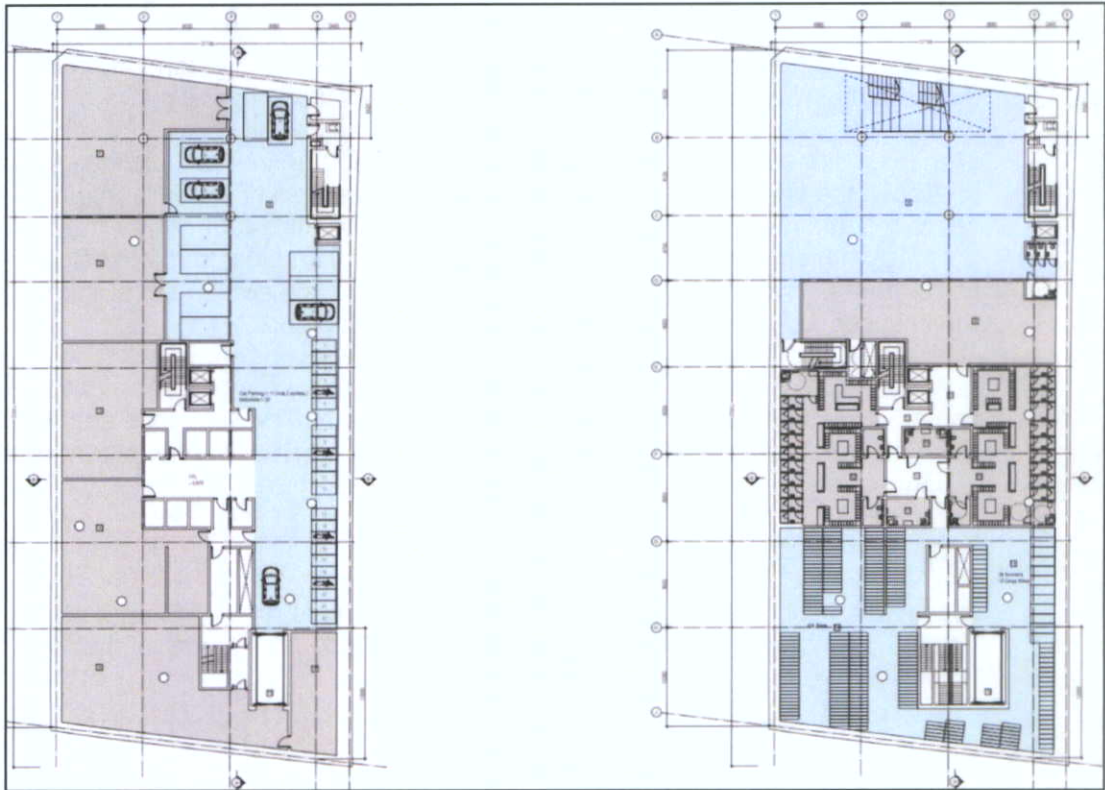


Figure 2.12 Proposed Lower and Upper Basement Levels (Mahoney Architecture 2022)

2.4.5 Access

- 2.28 The building will be serviced from Gloucester Street South where access is provided to a loading bay which is linked directly to the office reception area and lift core.
- 2.29 A car lift is located next to the loading bay and serves the two basement levels for both cars, motorbikes, cyclists and the waste storage area.
- 2.30 A double-width stairs with wheel tracks provides access for cyclist to the basement.

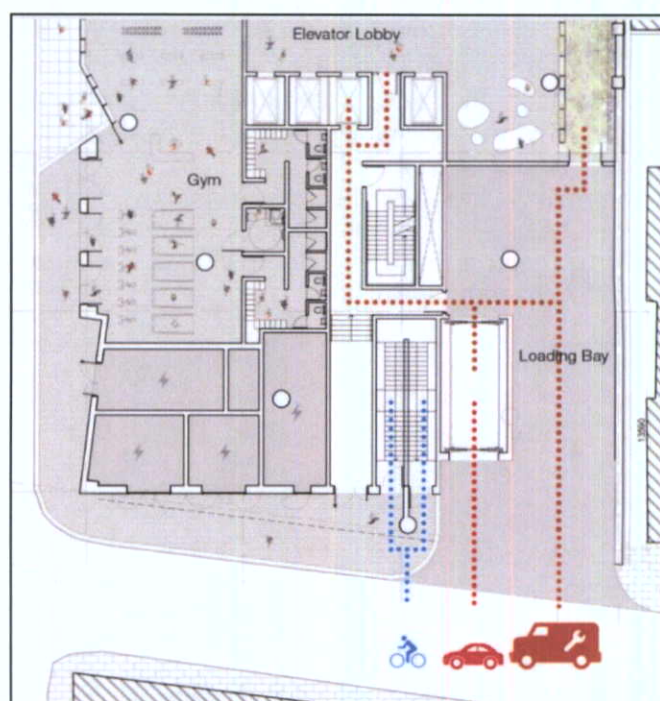


Figure 2.13 Access Provisions to the Proposed Development (Mahoney Architecture 2022)

2.31 The subject lands are well served by public transport with George's Dock Luas Stop, on the Luas Red Line, approximately 500m northeast from the proposed development and the Trinity Luas Stop, on the Luas Green Line, approximately 500m southwest from the proposed development. Pearse Street railway station is located approximately 400m southeast from the development offering access to the DART and National rail network. Many bus stops are also located close to the proposed development on Moss Street and Townsend Street, which are served by multiple bus routes. Pedestrian access to the bus stops is well served by footways on both sides of Moss Street, and Townsend Street, and pedestrian crossings across City Quay, Moss Street and Gloucester Street South.

2.32 The proposed development is located in one of the most connected areas of Ireland in terms of public transport options and bicycle infrastructure provisions.

2.4.6 Heating/Cooling and Ventilation

2.33 Heating will be provided by a combination of utilising the Dublin District Heating scheme and ground sourced heat pump technology.

2.34 Multipurpose Unit Compressors will be located at roof level to serve the groundwater heat pumps and also the building's ventilation and cooling system. Fresh air will be provided by mechanical ventilation heat recovery (MHVR) units that are to be located in the ceiling voids at each level.

2.35 Hot water will be generated for both space heating and domestic hot water uses from the on-site heat exchanger attached to the existing Dublin District Heating network.

2.36 A demand control ventilation system which will consist of sensors, controller and ventilation fans will continuously measure and monitor the indoor air quality and increase or decrease the ventilation rate accordingly.

2.4.7 Waste Storage

- 2.37 The waste storage area is located at the lower basement level (level -2) along the south-western corner of the property. Prior to collection by a licensed waste contractor the bins/bales of segregated waste/recyclables will be conveyed by the waste contractor or facilities management via the car lift to a designated waste staging area at ground level. From ground level the bins will be collected/emptied on Gloucester Street South. Further information is provided in the Operational Waste Management Plan (OWMP) submitted as part of this planning application.

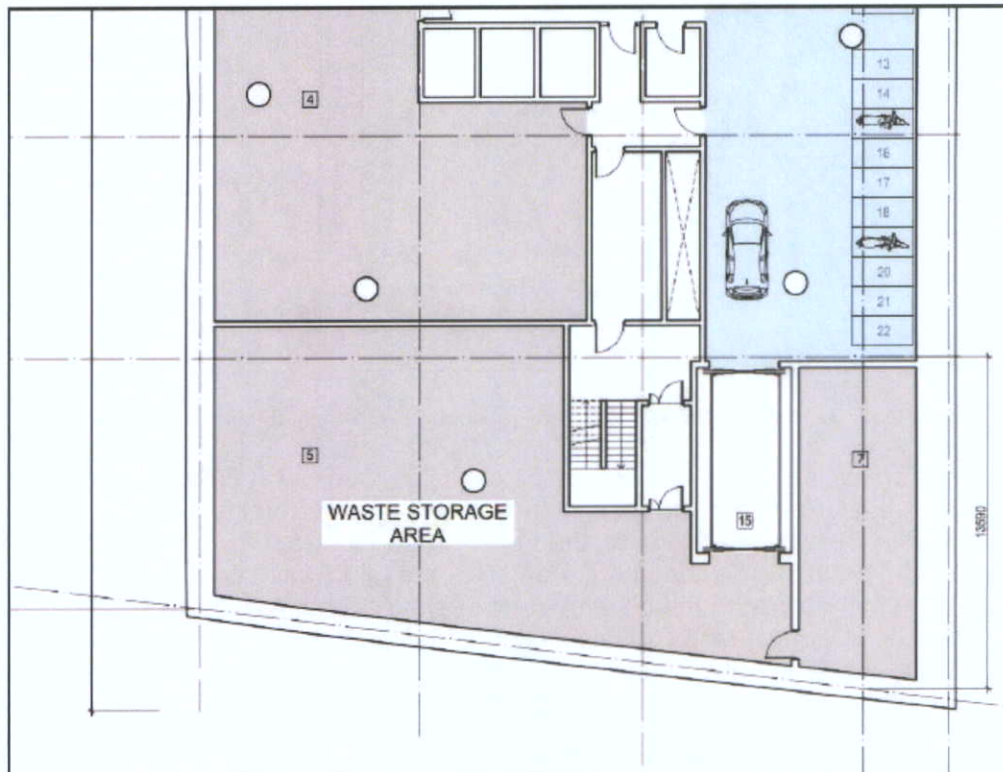


Figure 2.14 Location of Waste Storage Area (Mahoney Architecture 2022)

2.4.8 External Site Lighting

- 2.38 Each light fitting will be controlled via an individual Photoelectric Control Unit (OECU). All lamps selected will be dimmable and will be controlled via an astronomical clock which is built into the circuit board of the luminaire.

2.4.9 Landscaping Design Rational

- 2.39 During construction, there will be a change to the landscape and there will be negative visual effects for residents and visitors to the areas adjacent to the site associated with construction activity. Landscape works are proposed to reduce and offset any effects generated due to the proposed development at ground level. The planting of a green wall (refer to Section 3.1.3) between the subject lands and City Quay National School and the Immaculate heart of St. Mary Church, along with the landscaped terraced staggered at the base of the proposed building will enhance the overall appearance of the new development. Further details are provided in the planning drawings and the Landscape Design Report prepared by Thirtythreetrees and submitted as part of this planning application.

2.5 DESCRIPTION OF DEMOLITION AND CONSTRUCTION

- 2.40 The initial phase of the proposed development will comprise the demolition and removal of the buildings in the north-west corner, the shed along the western perimeter, all hard surfaces and underground infrastructure, and the removal, storage and re-use of the Pooley Weighbridge. The buildings are constructed mainly from blockwork and bricks, timber framing and a mixture of slate and flat concrete/asphalt roofing. The shed is constructed mainly from blockwork and roofing sheets. A full archaeological assessment of the buildings on site has been prepared by Irish Archaeology Consultancy (IAC) (Archaeological Assessment of City Quay Project).

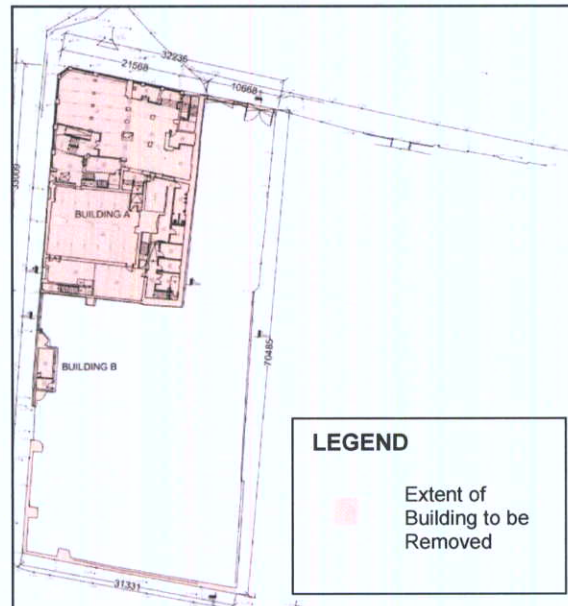


Figure 2.15 Buildings to be Demolished (Mahoney Architecture 2022)

- 2.41 Once the subject lands are cleared of all existing structures the construction phase will proceed, commencing with underground structures (excavation and installation of basement, water, sewerage infrastructure etc.) followed by above ground works (building, power and telecoms infrastructure, surface water drainage, site profiling, landscape etc.)
- 2.42 An outline Construction Management Plan (CMP) has been prepared by Byrne Looby and is accompanied with this application. This outline CMP explains the construction techniques and methodologies which will be implemented during construction of the proposed development.
- 2.43 Byrne Looby have also prepared an outline Resource and Waste Management Plan (RWMP) that is included with the application documentation. The plan has been prepared in line with 'Best Practice Guidelines for the Preparation of Resource and Waste Management Plans for Construction & Demolition Projects', published by the EPA in 2021. The plan includes a provision for the management of all construction and demolition waste arising on site, and shall make provision for the recovery or disposal of this waste to authorized facilities by authorised collectors. The primary objective of this outline plan is to achieve more sustainable waste management practices through increased recycling, use of source separation and use of industry code to regulate collection and treatment of waste.

2.5.1 Site Preparation Works and Establishment of Construction Services

- 2.44 Preparation of the site for demolition and the construction phase will require the establishment of the entranceway and internal haul roads for vehicles, surveying and setting out, setting up of the construction site with fencing, and establishing site compound(s). These will initially be located at the south-east corner of the subject lands and will later be relocated within the subject lands as the proposed development progresses.
- 2.45 The site compound(s) will provide office, portable sanitary facilities, equipment storage etc. for contractors for the duration of the works. The construction compound(s) will be fenced off for health and safety reasons so that access is restricted to authorised personnel only. All areas under demolition and construction will be fenced for security and safety purposes and temporary lighting supplied, as necessary.

2.5.2 Demolition/Construction Site Utilities and Infrastructure

Potable Water During Demolition/Construction

- 2.46 Water will be required for welfare facilities, dust suppression and general construction activities. It is anticipated that due to the short duration of works and low water requirements that water supply will be provided initially by tanker to the site, progressing to water from the mains once a working connection is established.

Foul Water During Demolition/Construction

- 2.47 Welfare facilities will be provided for the contractors via portable sanitary facilities within the construction compound site during the demolition and construction works. It is anticipated that initially, foul waste will be collected by tanker and disposed to a licensed facility by a licensed waste sewage contractor, and that in time temporary connections to the proposed constructed services will be established to provide service subject to relevant applications and approvals.

Stormwater During Demolition/Construction

- 2.48 Based on preliminary surveys all surface water currently drains unrestricted from the subject lands to the combined foul and surface sewers on City quay, Moss Street and Gloucester Street South. This public sewerage ultimately discharges to the Irish Sea via Ringsend Wastewater Treatment Plant (WWTP).
- 2.49 For the initial phases of demolition any surface waters arising on site will drain via the existing surface water drainage network until such time as demolition works progress to below ground in which case the existing connection to the public sewerage will be removed.
- 2.50 Until such time as the new proposed surface water drainage system is installed minor accumulation of surface water will infiltrate to ground within the site. During construction however larger volumes of surface water run-off into excavations/earthworks cannot be prevented entirely and are largely a function of prevailing weather conditions. Any standing surface waters will be treated using a silt-buster or similar to remove suspended solids prior to being piped to foul sewer.
- 2.51 As construction progresses surface water run-off from the proposed development will be collected in a new surface water drainage network which will connect to the existing combined sewers on Moss Street and Gloucester Street South via a class 1 bypass

interceptor and an attenuation tank (c. 112m³) fitted with a hydrobrake valve to ensure a maximum discharge rate of 2l/s. These combined sewers discharge to Dublin Bay via Ringsend WWTP.

2.5.2.2 Electricity During Demolition/Construction

2.52 During demolition and construction, contractors will require power for onsite accommodation, and construction equipment/plant. A construction compound and temporary power supply will be established in consultation with the utility supplier. The power requirements for the construction phase will be relatively minor.

2.5.2.3 Telecommunications During Demolition/Construction

2.53 Telecommunications required during the construction phase will be provided via a mobile connection.

2.5.3 Site Roads, Site Access and Car Parking

2.54 All plant, machinery and equipment will be stored on site within the works area or within the temporary construction compound which will be defined during detailed design/tendering of the project. Site access will be via Gloucester Street South.

2.55 Traffic management and road signage will be in accordance with the *Department of Transport: Traffic Signs Manual - Chapter 8: Temporary Traffic Measures and Signs for Road Works* and in agreement with DCC. As part of the construction methodologies, a Construction Traffic Management Plan will be developed by the construction contractor prior to commencement of development. Junction capacity and potential traffic safety impacts are considered in Chapter 13 (Traffic and Transportation).

2.56 There will be no car-parking available on site. The site is well served by public transport including Dublin Bus and Irish Rail. The Contractor will organise off-site parking and shared car arrangements if required.

2.5.4 Construction Duration

2.57 The overall start-to-finish duration is estimated to be 33-36 months with development aspects overlapping.

2.58 Each of the specialist EIAR chapters have, as appropriate, included an assessment of the potential impact of construction works on their individual environmental aspect and set out the relevant mitigation measures relating to those aspects.

2.5.5 Construction Staffing and Working Hours

2.59 Standard working hours for construction will be 7.00am to 7.00pm Monday to Friday and 7.00am to 14.00pm on Saturday (if required), with no works on Sundays or Bank Holidays except in exceptional circumstances or in the event of an emergency. All site personnel will be required to wear project notification labelling on high visibility vests and head protection so that they can be easily identified by all workers on-site.

2.60 It is estimated that during peak construction periods there will be up to 300 staff and contractors on site per day. Site staff will include; management, engineers,

construction crews, supervisors, environment health and safety personal, and maintenance contractors.

2.5.6 Landscaping/Reinstatement

- 2.61 Excavated material will be temporarily stored within appropriate areas within the site prior to re-use in the site(where applicable).
- 2.62 There is no vegetation of note that can be saved and/or reused within the completed landscape design.

2.5.7 Construction Materials

- 2.63 The key civil engineering works will involve the excavation of soil material. There will be a requirement for deliveries of imported engineering fill, and other construction materials. Other construction activities will include site storage of cement and concrete materials, fuels for construction vehicles.
- 2.64 Construction materials will be brought to the subject site by road. Construction materials will be transported in clean vehicles. Lorries/trucks will be properly enclosed or covered during transportation of friable construction materials and spoil to prevent the escape material along the public roadway.
- 2.65 Where possible it is proposed to source general construction materials from the local area to minimise transportation distances. Aggregate materials such as sands and gravels will be stored in clearly marked receptacles within a secure compound area to prevent contamination. Liquid materials will be stored within temporary bunded areas, doubled skinned tanks or bunded containers (all bunds will conform to standard bunding specifications - BS8007-1987) to prevent spillage.
- 2.66 Due to the restricted nature of available space within the subject lands a “Just in Time” approach will be required for the delivery of particular building materials & equipment.

2.5.8 Excavation and Spoil Deposition

- 2.67 All excavated material will be temporarily stored adjacent to the trench prior to re-use in the trench reinstatement (where applicable). Stockpiles will be restricted to less than 2m in height. Surplus material will be disposed of to a suitably licensed facility.
- 2.68 Excavated material will be temporarily stockpiled onsite for re-use during reinstatement. Stockpiles will be restricted to less than 2m in height and will be subject to approval by the Site Manager. Excavated material shall be employed to backfill where appropriate and any surplus material will be transported off site and disposed of at a fully authorised soil recovery site.

2.5.9 Waste Management During Construction

- 2.69 The demolition waste will be segregated at source where practical and transferred off site for reuse, recycling and recovery, with landfill disposal only to be used where there are no available reuse, recycling or recovery options.
- 2.70 It is expected that volumes of wastes generated (other than excavated material and building materials from the demolition) from the construction activities will be negligible and will generally comprise waste generated from construction workers. These wastes

would generally be organic/food waste, dry mixed recyclables (waste paper, newspaper, plastic bottles, packaging, aluminium cans, tins and Tetra Pak cartons), mixed non-recyclables and potentially sewage sludge from temporary welfare facilities provided at the site compound during the construction phase. Waste printer/toner cartridges, waste electrical and electronic equipment (WEEE) and waste batteries may also be generated infrequently from site offices.

- 2.71 It should be noted that until final materials and detailed construction methodologies have been confirmed it is difficult to predict with a high level of accuracy the construction waste that will be generated from the construction of the proposed development as the exact materials and quantities may be subject to some degree of change and variation during the detailed design and construction process.
- 2.72 A Resource and Waste Management Plan has been prepared by Byrne Looby (Appendix 15.1) to ensure that the management of construction and demolition waste at the site is undertaken in accordance with the current legal and industry standards while maximising prevention, reuse, recycling and recovery of waste with diversion from landfill, wherever possible.

2.5.10 Potential Impacts During Demolition and Construction and Mitigation Measures

- 2.73 There are potential short-term nuisances such as dust, noise, as well as the potential for pollution of surface water associated with demolition, excavations and construction. In advance of work starting on site, the works contractor will prepare a detailed Construction and Environmental Management Plan (CEMP). The CEMP will set out the overarching vision of how the construction of the proposed development will be managed in a safe and organised manner by the Contractor.
- 2.74 The CEMP minimisation measures to ensure that pollution and nuisances arising from demolition, site clearance and construction activities is prevented where possible and managed in accordance with best practice, mitigation measures proposed in this EIAR, and any subsequent planning conditions relevant to the proposed development.
- 2.75 This CEMP will be maintained by the contractors during the demolition and construction phases and covers all potentially polluting activities and includes an emergency response procedure. All personnel working on the site will be trained in the implementation of the procedures.
- 2.76 Prior to commencement of construction works the contractor will draw up detailed Method Statements which will be informed by environmental protection measures included within this EIAR, the planning permission, and relevant guidance documents and best practice measures. This method statement will be adhered to by the contractors and will be overseen by the Project Manager or Environmental Manager where relevant.
- 2.77 The primary impacts from construction which require mitigation are:
- Management of run-off water in terms of silt;
 - Effects on the road network (due to construction workers and other staff attending site during preparation, construction and commissioning phases; and,
 - Impacts on human beings in terms of nuisances relating to the air quality of the environs due to dust and other particulate matter generated from excavation works and impacts on the noise environment due to plant and equipment involved in construction.

- 2.78 Mitigation measures to address potential environmental impacts are presented in each individual EIAR chapter.

Noise, Vibration and Dust Nuisance Prevention

- 2.79 With regard to construction activities, reference will be made to BS 5228 (i.e. BS 5228-1:2009+A1:2014 and BS 5228-2:2009+A1:2014) for noise and vibration control on construction and open sites, which offers detailed guidance on the control of noise and vibration from demolition and construction activities.
- 2.80 The potential for dust to be emitted depends on the type of construction activity being carried out in conjunction with environmental factors including levels of rainfall, wind speeds and wind direction. The potential for impact from dust depends on the distance to potentially sensitive locations and whether the wind can carry the dust to these locations. The majority of dust produced will be deposited close to the generated source.
- 2.81 Dust nuisance control measures are discussed in further detail in Chapter 9 Air Quality and Climate, and noise control measures in Chapter 10 Noise and Vibration.

2.6 OPERATION OF THE PROJECT

2.6.1 Site Utilities and Infrastructure (Resource Consumption)

Potable Water During the Operational Phase

- 2.82 The proposed water supply network will be designed and installed to the requirements and specifications set out in the Irish Water Code of Practice for Water Infrastructure. Measures are proposed to minimise water use during the operational phase, including low consumption sanitary fittings, leak detection systems and rainwater.
- 2.83 A pre-connection application has been submitted and a Confirmation of Feasibility letter has been received from Irish Water stating that the proposed connection can be facilitated at this time. The connection is feasible without infrastructure up-grade by Irish Water.
- 2.84 The water demand for the proposed development will be reduced via the use of rainwater harvesting. Collected rainwater from the various green terraced areas will be distributed to a grey water utilisation system to serve the toilet cisterns and also the building irrigation system. This will be coupled with low water use sanitary ware fittings.

Foul Water During the Operational Phase

- 2.85 All foul effluent generated at the proposed development site during the operational phase shall be collected in a new foul drainage network for the proposed development designed in accordance with Irish Water Code of Practice for Wastewater Infrastructure.
- 2.86 A pre-connection application has been submitted and a Confirmation of Feasibility letter has been received from Irish Water stating that the proposed connection can be facilitated at this time. The connection is feasible subject to infrastructure up-grade by Irish Water which is scheduled to be completed in 2026. Further reference is made to foul water drainage in Chapter 8 (Hydrology).

Stormwater During the Operational Phase

- 2.87 Sustainable drainage systems (SuDS) measures will be incorporated into the stormwater drainage network to improve the quality of stormwater leaving the site. SuDS are drainage systems that are environmentally beneficial, causing minimal or no long-term detrimental damage.
- 2.88 These measures will include green roofs, attenuation and hydrobrake. A class 1 interceptor will also be provided.
- 2.89 The stormwater drainage network has been designed and modelled for the 100-year storm event. Further information in relation to surface water drainage and flood risk is provided in Chapter 8 (Hydrology), and in the Engineering Assessment Report and Flood Risk Assessment Report prepared by Byrne Looby and submitted under separate covers as part of this planning application.

Energy During the Operational Phase

- 2.90 Once in operation, electricity will be provided to the site via the national grid tying in with existing infrastructure in neighbouring areas.
- 2.91 The building will be served by two electricity sub-stations accessed from Gloucester Street South. This will be carried out in accordance with the requirements of the various service providers.
- 2.92 There is no gas supply connection required for the proposed development due to the use of renewable technologies as the primary energy source.
- 2.93 Multiple arrays of photovoltaic (PV) panels will be provided as part of the renewable energy strategy for the building. All PV panels are integrated into the building façade on the south, south west and south east orientations

Telecommunications During the Operational Phase

- 2.94 There are telecommunication lines in existence for telephone and broadband services in the area. A fibre optic cable distribution network will be installed with a separate incoming fibre infrastructure and provided to the proposed building via underground fibre ducts. There are existing underground carrier ducts adjacent to the site that will be utilised for the development.

2.6.2 Sustainability Energy Efficiency And Resource Use

- 2.95 A “Climate Action and Energy Report” and a preliminary “Part L Compliance and Building Energy Rating Report” have been prepared by Penston MEP Consulting, and are submitted as part of this application. The later report demonstrates that NZEB (Nearly Zero Energy Building standard) compliance and A1 building energy rating can be achieved for the proposed development.

2.6.3 Waste Management

- 2.96 An Operational Waste Management Plan (OWMP) has been prepared by Awn consulting and is submitted as part of this planning application. The OWMP outlines the principles and measures by which the waste generated during the operational phase of the proposed development will be managed and disposed of in compliance with the provisions of the Waste Management Acts 1996 to 2013 and the Eastern

Midlands Region (EMR) Waste Management Plan 2015-2021. It describes the measures by which optimum levels of waste reduction, re-use and recycling shall be achieved.

2.6.4 Microclimate/Wind Assessment

2.97 A Wind Microclimate assessment report has been prepared to accompany this planning application. This report demonstrates that with the exception of some pedestrian locations in winter, the wind conditions surrounding the proposed development will be suitable for pedestrians. For the few identified test locations where it may not be suitable, the wind conditions in winter mean that at a few test locations have occasional lower wind distress (“discomfort”) conditions, and depending upon their intended pedestrian usage, some locations might have unsuitable wind comfort conditions. These locations are highlighted in the report, and where appropriate attention is directed to commonly used wind mitigation measures that are described in this report

2.6.5 Daylight / Sunlight Access

2.98 A daylight/ sunlight assessment was prepared by Digital Dimensions to accompany this application which concluded that there will be a moderate reduction to the daylight availability to the directly adjacent buildings however this is broadly in line with the possible reduction of a building similar in massing to the surrounding buildings and as set out in the local area plan.

2.99 For nearby residential buildings there will be a moderate reduction in the available daylight levels for social housing apartments on Gloucester Street south, but negligible impact on Peterson’s Court.

2.100 There would be a reduction to the available daylight of the windows on the classrooms at the City Quay National School to the courtyard side of the school. The playground/outdoor amenity for the school will have minimal reduction to the available sunlight, and this reduction would only occur outside of school hours.

2.101 There will be a reduction in available sunlight to the bedroom windows of the Aparthotel on the corner of Moss Steet and Gloucester Street South which face the proposed development. The usage of the rooms are short stay accommodation and the residents would not perceive any reduction. Currently the hotel rooms face a vacant site with unobstructed access to the sky. The reduction in daylight levels from the current proposed development is no greater than that of a building of similar scale to the hotel.

2.102 With respect to the office buildings 1GQ, City Quay and Grant Thornton. There would be a reduction in the daylight levels to some of the windows in the surrounding offices. The floor plates to these buildings are deep and beyond lighting naturally for the depth of the floor. Offices require consistent light levels and generally use supplementary automatic lighting to achieve this. They have a lesser requirement for natural daylight levels than dwellings.

2.6.6 Aviation Considerations

2.103 An Aeronautical Assessment Report has been prepared by O’Dwyer & Jones Design Partnerships and is submitted as part of this planning application. The report considers that the proposed development complies fully with all aviation and aeronautical considerations and requirements affecting the site.

2.7 POTENTIAL IMPACTS DURING OPERATION AND MITIGATION MEASURES

- 2.104 The most significant environmental effects are expected to arise during the construction phase. The operational phase of the proposed development, which will entail aspects associated with the standard operation of a large-scale office and cultural arts facility, is therefore relatively benign. Relevant aspects of the operational phase are discussed in the respective specialist chapters, as appropriate.
- 2.105 The proposed development, when operational, will generate negligible additional traffic, air, and water emissions, wastes generation from activities etc. Each chapter of this EIAR assesses the potential impact of the operation of the proposed development on the receiving environment. Please refer to each specialist chapter respectively.

2.8 DESCRIPTION OF OTHER RELATED/CUMULATIVE PROJECTS

2.8.1 Related Development

- 2.106 It is stated in the Guidelines on the information to be contained in Environmental Impact Assessment Reports, EPA May 2022 that related development includes *“other projects (sometimes by other developers and sometimes off site) or individual project components which occur as a direct result of the main project, such as a power line, a substation or a road junction upgrade which may result in significant effects.”* (section 3.5.7, page 40)
- 2.107 There are no proposed related developments (either offsite or secondary¹) associated with the proposed development. Any future application on these development lands will be subject to planning approval and environmental assessment as required. Any new development proposed on the lands after the submission of the proposed development would be accompanied by an EIA, or EIA Screening as required and take into consideration the development of this site.

2.8.2 Cumulative Development

- 2.108 The Guidelines on the information to be contained in Environmental Impact Assessment Reports, EPA May 2022 states that cumulative effects are *“t(T)he addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects.”*

While a single activity may itself result in a minor impact, it may, when combined with other impacts (minor or insignificant), result in a cumulative impact that is collectively significant. For example, effects on traffic due to an individual industrial project may be acceptable; however, it may be necessary to assess the cumulative effects taking account of traffic generated by other permitted or planned projects. It can also be prudent to have regard to the likely future environmental loadings arising from the development of zoned lands in the immediate environs of the proposed project.” (section 3.7.3 page 57)

- 2.109 The impact of all *existing* developments within the zone of influence of the proposed development, including the activities currently permitted within the lands of the

¹ Section 3.5.7 of The Guidelines on the information to be contained in Environmental Impact Assessment Reports, EPA May 2022 states that the description of other related projects can loosely be grouped under two headings: Off-site and Secondary Projects.

proposed development are already present within the environment and are described by the *existing* environmental baseline conditions. The current baseline conditions are established primarily through a review of current desktop sources, augmented where necessary via independent surveys. Any statements contained within this report as to the likely impact of the proposed development upon the environment are by default also a statement as to the likely accumulation of impacts arising from the proposed development with those impacts already in *existence*.

2.110 As part of the assessment of the impact of the proposed development, account has also been taken of cumulative projects in this EIAR, i.e. developments that are currently permitted or under construction within the surrounding area, but whose environmental impact are not yet fully realised within the existing environmental baseline. The potential for cumulative impacts arising from these other cumulative projects has been addressed within each specialist chapter of this EIA Report.

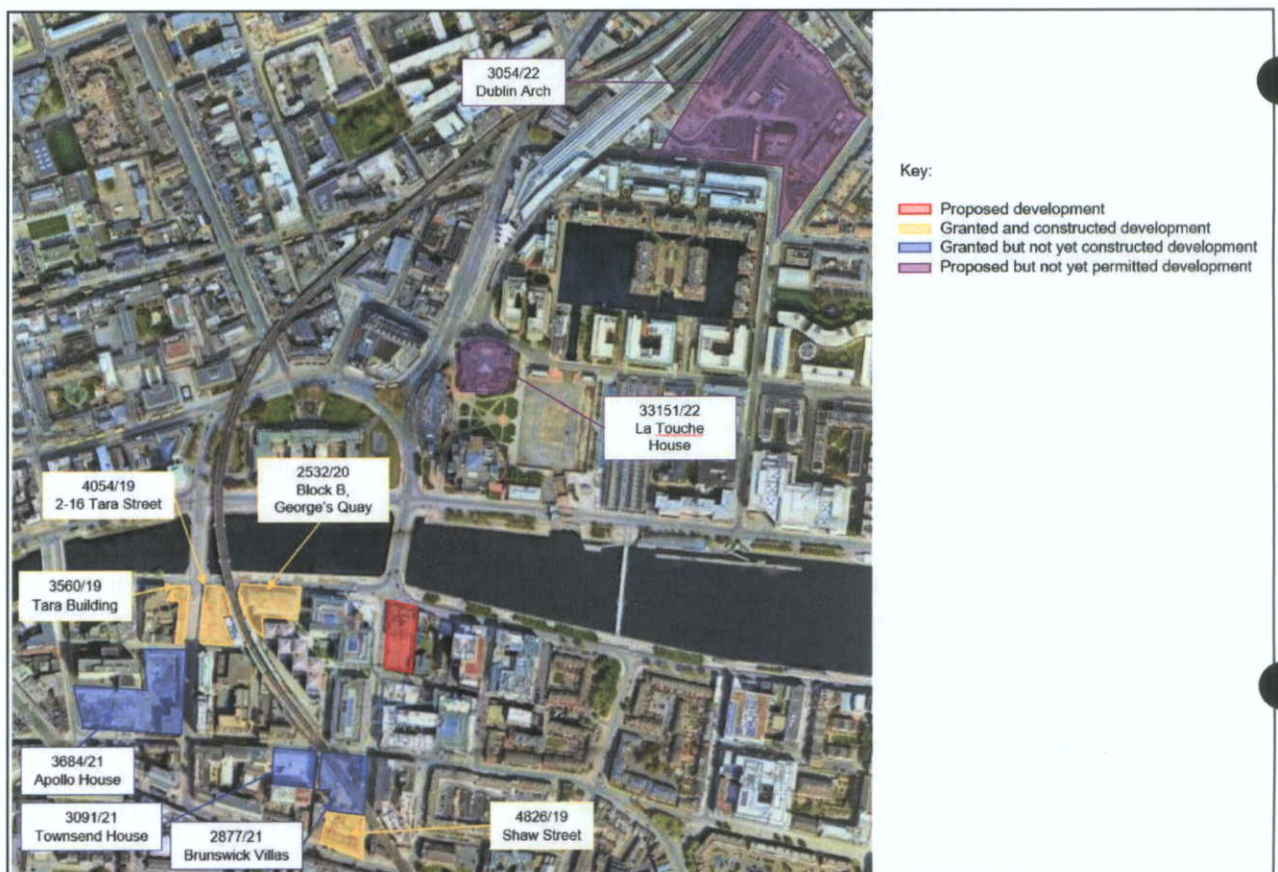


Figure 2.16 Cumulative Developments Relevant to the Proposed Development

2.111 The subject lands and surrounding lands provide good potential for delivering high density office and residential uses. The proposed development represents one of many opportunities that have been and are being constructed to realise this potential. Figure 2.16 above depicts these cumulative developments.

2.8.1 Developed Cumulative Developments

2-16 Tara Street (Planning Ref. 4054/19)

2.112 In January 2020 planning permission was granted for amendments to previously permitted development, Reg. Ref. 3794/18 / ABP Ref.302980-18 at site of 0.2 ha bound by Georges Quay to the north, Tara Street to the west, Poolbeg Street to the south and Tara Street Station to the east. The site includes lands of the former Tara House, 2-16 Tara Street, Dublin 2, D02 W597 and existing Tara Street Station concourse accessed from Georges Quay. Kennedy's Public House (The Workshop) at no. 10 Georges Quay is contiguous but does not form part of the site or the application. No. 10 George's Quay (Licensed Premises) is a Protected Structure RPS 3175.

2.113 The amendments comprise of the following:

- Internal reconfiguration of the permitted hotel development within the podium element to provide for 1 no. additional hotel floor and a mezzanine level between ground and first floor within the permitted building envelope increasing the number of hotel bedrooms from 107 no. to 157 no.
- The revised hotel layout will increase the overall floor area from 16,557 sq.m to 17,992 sq.m comprising of c. 5,784 sq.m of hotel accommodation, c. 9,670 sq.m. gross floor area of office accommodation and c. 361 sq. metres gross floor area of restaurant accommodation.
- The additional floor will increase the permitted podium element from 4 no. floor levels to 5 no. floor levels plus mezzanine level within the permitted building envelope increasing the number of floors from 22 no. to 23 no. plus mezzanine level. There will be no change to the overall permitted height of the building at 88m or the permitted height of the podium at 22.7m.
- Minor modifications to the façade detail as a result of the additional floor level.
- Minor modifications to the permitted colonnade along Tara Street.
- Minor modifications to basement level B2 to reduce the number of car parking spaces from 16 no. to 15 no.

Tara Building (Planning ref. 3560/19)

2.114 Granted in October 2019, The Tara Building mixed use proposed development consists of the demolition of existing structures at the following addresses: Nos. 5, 6 & 7 George's Quay, Nos. 1A, 1, 3, 5, 7, 9, 11, 13 and 15 Tara Street and No. 11 Poolbeg Street and the construction of a mixed-use development ranging in height from three to eight storeys, including rooftop plant. The total gross floor area above ground on this building will be circa 4740 square metres and the gross floor area including basement is 5284 square metres. The site area is 0.799 Ha. The ground floor includes a hotel reception/bar/restaurant totalling 150 square metres, a co-working reception and cafe totalling 163 square metres and a cafe/restaurant/retail unit totalling 74 square metres. The first floor comprises a co-working office space with circa 490 square metres of nett office space. The second to seventh floor levels inclusive comprise of hotel use with a total of 116 hotel bedrooms. A breakfast room/bar associated with the hotel is located on the sixth floor opening onto a roof terrace. Three private roof terraces will be provided to hotel bedrooms: one located at fourth floor to the North elevation and two to the South elevation located at third and sixth floors. One basement level, floor area 540 square metres provides ancillary uses to the hotel and retail uses of the building, including plant, bicycle storage, staff amenities and a commercial kitchen. The gross floor area including basement is 5,284 square metres. The proposed development also includes for provision of

hotel/retail/cafe/restaurant signage, associated site servicing (foul and surface water drainage, water supply and electricity supply), and all other associated site excavation and site development works above and below ground. The site is bounded by George's Quay to the North, Poolbeg Street to the South and Tara Street to the East. All located at the following addresses: Nos. 5, 6 & 7 George's Quay, Nos. 1A, 1, 3, 5, 7, 9, 11 and 13 and 15 Tara Street and No. 11 Poolbeg Street, Dublin 2.

Block B, Georges Quay (Planning reference: 2532/20)

2.115 Granted final permission Dec 2020, planning permission for development on a site of 0.14ha at Block B, Georges Quay, Dublin 2, D02 VR98. The site is bound by Georges Quay to the north, Georges Quay Plaza to the south, 1GQ to the east and Tara Street Station/Railway bridge to the west. Luke Street runs through the site in a north/south direction with the existing building bridging across Luke Street from 1st floor level. The proposed development comprises of the following:

- Refurbishment of the existing 5 no. storey building to provide for a new façade treatment to all elevations.
- Extension of existing 5th storey set back level in line with the main façade along the northern elevation.
- Provision of 2 no. additional floors (2,627 sq.m), set back from the north, east and west elevations.
- Provision of a café unit (302 sq.m.) to the west side of the building fronting Georges Quay and Luke Street to the east at ground at mezzanine level
- Amendments to the ground floor layout to provide for a new entrance lobby to the office to the east of the building.
- Amendments to basement level to provide for a reconfiguration of the car parking spaces, 80 no. cycle parking spaces, 3 no. motorbike spaces, new shower and locker rooms, staff amenities, bin store, managers office and plant room. Access to basement will remain unchanged.
- Alterations to the hard and soft landscaping, SUDs drainage provision of plant at basement and roof level, 2 no. accessible terraces at 5th and 6th floor to the north, east and west, green roofs and all other associated site development works necessary to facilitate the development works necessary to facilitate the development.

2.116 The proposed development will result in an increase in gross floor area from 5,220 sq.m. to 7,847 sq.m.

Shaw Street (Planning Ref. 4826/19)

2.117 Granted Dec 2020 for the demolition of existing property known as No. 2 Brunswick Villas, including existing boundary walls and gateway entrance to Shaw Street and the construction of a new 12 No. apartment development comprising of; 11 No. 1 bedroom units and 1 No. 2 bedroom unit in a mixture of three and six storey buildings. The development will include internal courtyard to rear, new gateway to the existing Brunswick Villas laneway and entrance lobby, plant rooms and bicycle storage areas at ground floor level. All apartments will include balconies to street elevations from first to fifth floors, with setback balconies and balustrades included to fifth floor apartment area. The proposed works are to include all associated site works, ancillary accommodation and drainage at the site.

2.118 The demolition/construction phase of these four cumulative developments are captured within the current existing environmental baseline for the area surrounding the subject lands. As they are already constructed, or their construction will be

complete prior to the construction phase for the proposed development they will not contribute any potential increase in cumulative impacts associated with the proposed development demolition and construction phase. As such the assessment within this EIAR does not consider the likelihood of environmental impacts associated with the cumulative demolition and construction phases of the proposed development and these four already constructed developments.

2.119 This EIAR however does consider the likelihood for cumulative impacts associated with the operational phase of the proposed development and these four already/nearly constructed developments within each specialist chapter of this EIA Report. The likely operational impacts to the environment arising from these four constructed/nearly constructed developments have been identified by a review of the planning documents associated with each of these four cumulative developments.

2.8.2 Cumulative Developments Permitted but not yet Constructed

Apollo House (Planning Ref. 3684/21)

2.120 Granted permission in April 2022, the development consists of amendments and additions to the previously permitted redevelopment of the former College House and the former Screen Cinema (DCC Reg. Ref: 3637/17, ABP Ref: PL29S.300709) and the former Apollo House (DCC Reg. Ref.: 3036/16, ABP Ref: PL29S.247907) and as amended by DCC Reg. Ref.: 2415/19, DCC Reg. Ref.: 4170/19, ABP Ref: PL29S.306335 and DCC Reg. Ref.: 2583/20 as follows:

- The proposed development consists of amendments to the permitted basement -2 layout including the increase in car parking from 39 spaces to 55 spaces (allowing for 5. No car sharing spaces, 5 No. car spaces for shared commercial and residential use and 6 No. car spaces for the commercial offices) and designation of areas within the basement for cargo bikes, e-bikes/e-scooter parking and charging facilities.
- The proposed development also includes for an additional floor of development in the permitted build-to-rent residential accommodation building increasing permitted overall scheme height from 21 storeys (78.95 m above street level) to 22 storeys (82.1 m above street level) and increasing the no. of residential units from 54 no. build-to-rent units (45 no. 1 bedroom and 9 no. 2 bedroom) to 58 build-to-rent no. units (48 no. 1 bedroom and 10 no. 2 bedroom). The proposed development also includes for a relocation of the permitted communal internal residential amenity space from the proposed 21st floor (previously permitted 20th floor) to the 11th floor including conversion of roof area at 11th floor, on the southern elevation of the residential building, into external landscaped residential amenity space. The proposed amendments results in a total of 4 additional residential units.

Brunswick Villas (Planning Re. 2877/21)

2.121 Granted in November 2021 planning permission for amendments to a permitted development under Reg. Ref.: 4778/19 at a site (0.2695 ha). The permitted development includes construction over the rail line which traverses the site and also within the vaulted foundations supporting the rail line. The proposed development consists of the following:

- Amendments to the footprint of the basement and layout of the ground floor level. There is also a slight reduction in the floor area from 1st – 8th floor due to the proposed amendments.

- The basement level in Plot A will increase by 235.3 sqm to provide a total overall basement gross floor area of 1,340 sqm providing retail and office uses.
- The basement floor level in Plot B will be lowered from -4.2 to -5.25m.
- The amendments at ground floor level include general layout changes, new revolving door and glazed screen to office reception on Townsend Street; change of use of permitted office unit (355 sqm) at ground floor level fronting Brunswick Villas retail/café/restaurant use; the provision of a new entrance lobby to access basement level and associated elevational changes; revisions to bicycle parking and refuse area to provide additional retail floor space and; minor elevational changes to ESB substation fronting Garden Lane.
- Proposed revisions to Shaw Street elevation at 6th floor and the provision of an additional terrace access door.
- Additional plant at roof level over 8th floor providing for a slight increase of 1.75m to the overall building height.
- The proposed amendments result in an additional 969.6 sqm of retail/café/restaurant space and a minor increase in overall development GFA by 285.3 sqm to a total 15,400 sqm.
- And all ancillary and associated works, including elevational works.

Townsend House (Planning Ref. 3091/21)

- 2.122 Granted in December 2021 planning permission for amendments to the previously permitted development, Reg. Ref.: 4485/17, on a site of c.0.1419ha. at 157-164 Townsend Street at the junction with Spring Garden Lane, Dublin 2, D02 V186. The proposed development provides for: - Reconfiguration of the lower basement; - Reconfiguration of upper basement to provide for additional showers, an additional 24 no. cycle spaces (increasing from 94 no. spaces to 118 no.) and enlargement of stairwell (the enlargement continues up through the building); - Realignment of western boundary gable wall and associated stairwell; - Revision to the site boundary on the western side of the site; - At ground floor level, the addition of two new fire escape doors to Spring Garden Lane, repositioning of substation and switch room, relocation of vents, omission of door and omission of secondary door to main entrance on Townsend Street; - At sixth floor level, balconies are provided at northern and southern corners of western gable; - New additional eighth storey; - New additional set back ninth storey with terraces on northern and southern elevation providing 174sqm of external space; - Plant enclosed by plant screen at roof level, which is a green roof. The maximum height of the proposed development is increased to 38.095m (including roof-level plant) from 27.990m. The gross floor area increases from 8813sq.m. (excluding basement) to 13070sq.m. (including basement). The site is currently under construction.
- 2.123 Due to the fact that these three permitted but not yet constructed developments have not been constructed their potential impacts are not captured within the current environmental baseline for either their demolition/construction phase or their operational phase.
- 2.124 The precise timeline for the construction of these three permitted but not yet constructed developments is not known and as such, for the purposes of this EIAR the precautionary principle has been applied by assessing within each specialist chapter of this EIAR the potential for cumulative construction impacts occurring in tandem with the proposed development. The likely demolition/construction impacts to the environment arising from these three permitted but not yet constructed developments have been identified by a review of the planning documents associated with each of the permitted but not yet constructed development applications.

2.125 This EIAR also considers the likelihood for cumulative impacts associated with the operational phase of the proposed development and the operational phase of these three permitted but not yet constructed developments within each specialist chapter. The likely operational impacts to the environment arising from these three permitted but not yet constructed developments have been identified by a review of the planning documents associated with each of the permitted but not yet constructed development applications.

2.8.3 Cumulative Developments in Planning but not yet Permitted

La Touche House (Planning Ref. 3315/22)

2.126 An application for planning permission for development at this c. 0.4417 ha site at La Touche House, Custom House Dock, International Financial Services Centre, Dublin 1. The proposed development will consist of; the refurbishment/reconfiguration, partial demolition, recladding and vertical extension of an existing (c. 13,275.9 sq.m GFA) 7-storey building to a 10-storey (c. 23,314.3 sq.m GFA) office building with an additional c. 8,068.4 sq.m commercial floorspace provided and a total height of c. 45.84 m from ground (50.85m ODM), including the following:

- Partial demolition of the existing fifth floor and the existing sixth floor plant rooms and external plant areas to fifth floor slab level, comprising a combined area of c. 1528.5sq.m removed, the removal of an existing bridge link across the atrium, and maintaining the existing c. 565.1 sq.m of office space and the existing core areas to the east, west and south;
- Refurbishment and reconfiguration of the existing office building as follows:-
- Basement level: Reduction in car parking provision from 143 no. to 99 no. retained spaces, reconfiguration of existing plant areas, increased bicycle parking to 184 no. spaces, provision of bicycle storage areas, locker room, changing rooms, staff toilets and drying room, bin storage area, new staircase link, bicycle lift and service lift from podium (ground floor level) covering an additional area of c.913.2 sq.m within the existing basement;
- Ground Floor: Reconfiguration of the existing ground floor to include a new glazed screen enclosure to the existing atrium and introduce a new building entrance to the south elevation accessed from IFSC Plaza and close the existing entrance. Change of use of 103 sq.m of part of an existing retail bank area to office use. Change of use of c. 134.9 sq.m existing office space to a c. 152.1 sq.m food & beverage unit including an extended area of c. 17.2 sq.m to the east and access to an external terrace to the east. Change of use of c. 128.2 sq.m existing office space to a c. 164 sq.m bicycle café including an extended area of c. 35.8 sq.m to the south and east. Reconfiguration of the existing ground floor to the south/south- west to include a change of use from existing office area to create 2 no. food & beverage/retail units of c. 94.1 sq.m and c. 44 sq.m respectively;
- First Floor, Second Floor and Third Floor: Reconfiguration of the existing office floors to include refurbished and extended toilet accommodation; extension of the office accommodation to the edge of a new glazed screen enclosure to the existing atrium;
- Fourth Floor: Reconfiguration of the existing office floors to include refurbished and extended toilet accommodation; extension of the office accommodation to the edge of a new glazed screen enclosure to the existing atrium and enclosure of 2 no. external balcony areas to provide an additional c. 86.6 sq.m office space;

- Fifth Floor: New office floor accommodation to replace the existing plant areas and the enclosure of the existing external terrace to the north of the office floor (c. 1,226 sq.m) and to include the existing c. 565.1 sq.m of office accommodation to the north of the new extended floorplate, reconfiguration of existing plant areas to unisex toilets, lift lobby and circulation space within core area to the south;
- Addition of new floors: Addition of 4 no. office floors with the existing stair cores extended upwards and toilet accommodation replicated as the supplemented existing provision on the lower floors and the existing atrium extended through to roof level; the proposed sixth, seventh and eighth floor levels will consist of c. 1,791.1 sq.m office space each; the proposed ninth floor level will consist of c. 1,329.5 sq.m office space; setback of the external envelope and creation of a terrace area accessible for maintenance only at ninth floor level; new Part M compliant accommodation stairs within the atrium from ground floor to ninth floor;
- External works to include; A complete recladding with replacement curtain walling and an over-wrapping by a translucent perforated metal veil to the vertical external envelope of the existing building from ground floor level to fifth floor level and the extension and continuation of a new curtain wall and external perforated veil above to include the newly reconstructed fifth floor, and the new sixth, seventh, eighth and ninth floors; new plant and plant enclosure screen at roof level; additional plant on perforated metal platforms adjacent to the 3 no. existing cores from first to ninth floor; the provision of photovoltaic panels at roof level; new glazed atrium roof; provision of 4 no standard bicycle spaces and 9 no. cargo bicycle spaces at ground level; provision of a platform lift on the north-east corner of the site; new hard and soft landscaping adjacent to the building only; new lighting; and all associated site development works.

2.127 A recent decision was taken April 2022 by DCC to seek additional information.

Dublin Arch (Planning Ref. 3054/22)

2.128 An application for permission for a proposed mixed-use development, 'Dublin Arch', on a site (2.86 ha) adjacent to Connolly Station, Sheriff Street Lower, Dublin 1, D01 V6V6. The proposed development relates to work to a Protected Structure (RPS Ref. No. 130). The development will consist of:

- (The construction of 4 no. office blocks (B1, B2, B3 and B4) 12 to 16 storeys in height including landscaped areas in the form of gardens at podium level and landscaped terraces at upper levels (combined 3,365 sq.m) with a cumulative gross floor area of 52,509 sq.m comprising of:
 - a) Block B1 (max. building height 58.725 m, total gross internal floor area 11,860 sq.m of office);
 - b) Block B2 (max. building height 58.725 m, total gross internal floor area 11,902 sq.m of office);
 - c) Block B3 (max. building height 54.725 m, total gross internal floor area 10,147 sq.m of office);
 - d) Block B4 (max. building height 69.925 m, total gross internal floor area 18,600 sq.m)
- The construction of 187 no. Built-to-Rent (BTR) apartments and associated supporting tenant support facilities, services and amenities in 2 no. blocks (C and D1/D2) with a cumulative gross floor area of 19,836 sq.m;
 - a) Block C (6,522 sq.m) comprising 62 apartments (10 no. studio; 14 no. 1-bed; 35 no. 2-bed and 3 no. 3-bed units) in a block 5 to 11 storeys

- in height (max. building height 39.5 m) and supporting tenant facilities and amenities (combined 68 sq.m);
 - b) Block D1/D2 (13,314 sq.m) comprising 125 apartments (40 no. studio; 30 no. 1-bed; and 55 no. 2-bed) in a block 5 to 15 storeys in height (max. building height 53.392 m) and supporting tenant facilities and amenities (combined 420 sq.m);
- Residential communal amenity open space across Block C and D1/D2 in the form of courtyards and landscaped terraces at upper floor levels (combined 2,695 sq.m) and other private open spaces;
- 7,380 sq.m of public open space (5,930 sq.m at street level, and 1,450 sq.m at upper level) including a central public plaza and other open spaces located throughout the development;
- two-storey covered car parking at ground level (the lowest level is +0.0 AOD) under blocks B2, B3, B4 and C of 7,027 sq.m with 206 no. car parking spaces;
- a total of 1,047 bicycle parking spaces distributed as follows:
 - a) 283 no. secure long-term bicycle parking spaces for residents and 96 no. secure short-term bicycle parking spaces for apartment visitors distributed across 2 no. bike storage rooms at street level in Block C and Block D1/D2;
 - b) 554 no. secure bicycle parking spaces to serve the office element of the development in 1 no. bike storage room at street level in Block B1; and
 - c) 114 no. bicycle parking spaces for public use at street level distributed across the development, including spaces within a covered bike hub;
- 4 no. retail units at street level (combined 468 sq.m) distributed in Block B4 (1 no. retail unit) Block C (1 no. retail unit) and Block D1/D2 (2 no. retail units), and 2 no. community units (combined 640 sq.m) at street level in Block D1/D2;
- modifications to a portion of a Protected Structure (RPS No. 130), specifically the wall fronting Oriel Street Upper to facilitate:
 - a) the development of a new pedestrian entrance to the site;
 - b) the development of a vehicular entrance to the proposed car parking area; and
 - c) the development of a service/ emergency vehicular access only ramp to serve CIE's transport needs at Connolly Station;
- decommissioning and removal of existing telecommunication masts and removal of all existing structures on site including portacabins and ancillary storage containers;
- the construction of 7 no. electricity substations, plant rooms, 4 no. waste storage area within the proposed blocks and car parking, and solar panels located on the roofs of proposed office blocks; and
- all ancillary site development works, including drainage, landscaping and lighting.

2.129 A recent decision was taken March 2022 by DCC to seek additional information.

2.130 For the purposes of this EIAR the precautionary principle has been applied by assessing in this EIAR the potential for cumulative construction impacts of the above two planned but not yet permitted developments. The likely demolition/construction impacts to the environment arising from these two planned but not yet permitted developments has been obtained through a review of the planning application documents.

2.131 This EIAR also considers the likelihood for cumulative impacts associated with the operational phase of the proposed development and the operational phase of these two planned but not yet permitted developments within each specialist chapter. The likely operational impacts to the environment arising from these two planned but not yet permitted developments has been identified by a review of the associated planning documents.



CHAPTER 3
ALTERNATIVES



3.0 ALTERNATIVES

3.1 INTRODUCTION

- 3.1 The requirement to consider alternatives within an EIAR is set out in Annex IV (2) of the EIA Directive (2014/52/EU) and in Schedule 6 of the Planning and Development Regulations, 2001, as amended (“the Regulation”), which state:

*“A description of the **reasonable alternatives** studied by the person or persons who prepared the EIAR, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the proposed development on the environment.”*

- 3.2 Schedule 6(2)(b) of the Regulations implement this requirement by requiring the following information:

(b) “a description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the person or persons who prepared the EIAR, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects;”

- 3.3 Reasonable alternatives may include project design proposals, location, size and scale, which are relevant to the proposed development and its specific characteristics. The regulations require that an indication of the main reasons for selecting the preferred option, including a comparison of the environmental effects to be presented in the EIAR.

- 3.4 The Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (2018) – states:

“The Directive requires that information provided by the developer in an EIAR shall include a description of the reasonable alternatives studied by the developer. These are reasonable alternatives which are relevant to the project and its specific characteristics. The developer must also indicate the main reasons for the option chosen taking into account the effects of the project on the environment.”

“Reasonable alternatives may relate to matters such as project design, technology, location, size and scale. The type of alternatives will depend on the nature of the project proposed and the characteristics of the receiving environment. For example, some projects may be site specific so the consideration of alternative sites may not be relevant. It is generally sufficient for the developer to provide a broad description of each main alternative studied and the key environmental issues associated with each. A ‘mini- EIA’ is not required for each alternative studied.”

- 3.5 As such, the consideration and presentation of the reasonable alternatives studied by the project design team is an important requirement of the EIA process.

- 3.6 This section provides an outline of the main alternatives examined during the design phase. It sets out the main reasons for choosing the development as proposed, taking into account and providing a comparison on the environmental effects.
- 3.7 This section assesses the evolution of the proposed development and the alternatives examined by the Applicant relating to the location, size and scale and project design and technology of the proposed development. This section provides a full justification for the proposed development and provides a comparison of the environmental effects of each alternative option.
- 3.8 The main alternatives examined throughout the design process are set out as follows:
- Do Nothing Alternative;
 - Alternative project locations;
 - Alternative designs/layouts;
 - Alternative processes; and
 - Alternative mitigation measures.
- 3.9 This chapter describes the alternatives that were considered for the proposed development, where applicable, under each of these headings and the reasons for the selection of the chosen options, including a comparison of environmental effects.

3.1.1 Do Nothing Alternative

- 3.10 In the event that the Proposed Development does not proceed, the specific need for this commercial and cultural amenity development would still exist for the site, and as such a similar development to that which is proposed would need to be built within the subject lands.
- 3.11 The site is located within land zoned Z5 (City Centre) in both the Dublin City Council Development Plan 2016-2022 and the Draft Plan 2022-2028 *“t(T)o consolidate and facilitate the development of the central area, and to identify, reinforce, strengthen and protect its civic design character and dignity”*. The areas surrounding the subject lands are considered a mix of established residential, hotel and office developments complementary to the proposed development. A conservation area is located to the north of the site. The primary goal of this zoning is *“to sustain life within the centre of the city through intensive mixed-use development”*.
- 3.12 The subject lands are also located within the ‘docklands mixed-use’ area of the Georges Quay Local Area Plan (LAP). With respect to the subject lands the LAP specifically states it is an objective *“t(T)o require the provision within the western site of a new arts and/or community resource space within the building. This space (approximately 250-300 sq. m.) to be designed in consultation with Dublin City Council Arts Office, will become part of the resources owned by Dublin City Council to support community and arts activity in this area of the City”*.
- 3.13 As such to “do-nothing” at the subject lands would not observe the requirements of the Dublin City Development Plans (2016-2022 and draft 2022-2028), and the Georges Quay LAP. It is considered that this development will support a diverse range of uses and ensure vitality throughout the day and night in the local area.

3.1.2 Alternative Project Locations

- 3.14 As noted in Section 4.13 of the 2018 Guidelines *“some projects may be site specific so the consideration of alternative sites may not be relevant.”*

- 3.15 We also refer to the Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA 2022), which states that in some instances alternative locations may not be applicable or available for a specific project which is identified for a specific location.
- 3.16 In the first instance, the proposed development is in accordance with the zoning and other relevant policies and objectives of the DCC Development Plan 2016 – 2022 (and draft DCC Development Plan 2022-2028). The site is zoned as ‘Zone Z5 – *“t(T)o consolidate and facilitate the development of the central area, and to identify, reinforce, strengthen and protect its civic design character and dignity”*. The most recent use of the subject lands for car parking is included as a permissible use for Z5 however the proposed development provides a more diverse mix of uses including office, cultural arts, fitness, and café/restaurant uses. Therefore, the proposed development represents a significant improvement in the alignment with the zoning goals of Z5 - City Centre.
- 3.17 The location of the proposed development was also chosen to complement the associated proximal developments as mentioned in Section 2.8 and other existing residential, commercial and amenity developments within the City Centre, the remainder of the Georges Quay area and the Dublin Docklands.
- 3.18 Furthermore, as identified in Chapter 13 of this EIAR the current location for the proposed development is one of the most connected sites in Ireland in terms of provision of public transportation. It is an ideal location for the consolidation of such a significant number of employment opportunities for those residing within Dublin City centre and those living further afield enabling a significant switch to car-less sustainable commutes.
- 3.19 Given the current zoning of the site, the surrounding land uses, the proximity to similar associated developments, the public transport connections, and the availability of necessary services and infrastructure, the current location of the proposed development is determined to be the most appropriate.

3.1.3 Alternative Design/Layouts

- 3.20 It must be noted that the subject lands are located in an urban/city centre context on 0.22 hectares which poses tight limitations on layout options in comparison to a potential suburban or rural context on a significantly larger parcel of land. Within these subject lands there is only one layout option which is for a building whose footprint utilises the full extent (and hence shape) of this rectangular 0.22 hectare plot of land.
- 3.21 Beyond the physical constraints of the land a great deal of time has been spent on optimising of the resultant design of the proposed development, as shall be detailed in the remainder of this section.
- 3.22 The subject lands form a key corner of the South Quays within the Custom House Setting. In light of existing, current and recently permitted development in the area the subject lands provide an opportunity to create a formal composition in response to the Custom House Setting.
- 3.23 As can be seen in Figure 3.1 below there is an opportunity to complete the Custom House Setting and to mark the landing point to the City Centre with a complimentary landscape architectural statement.

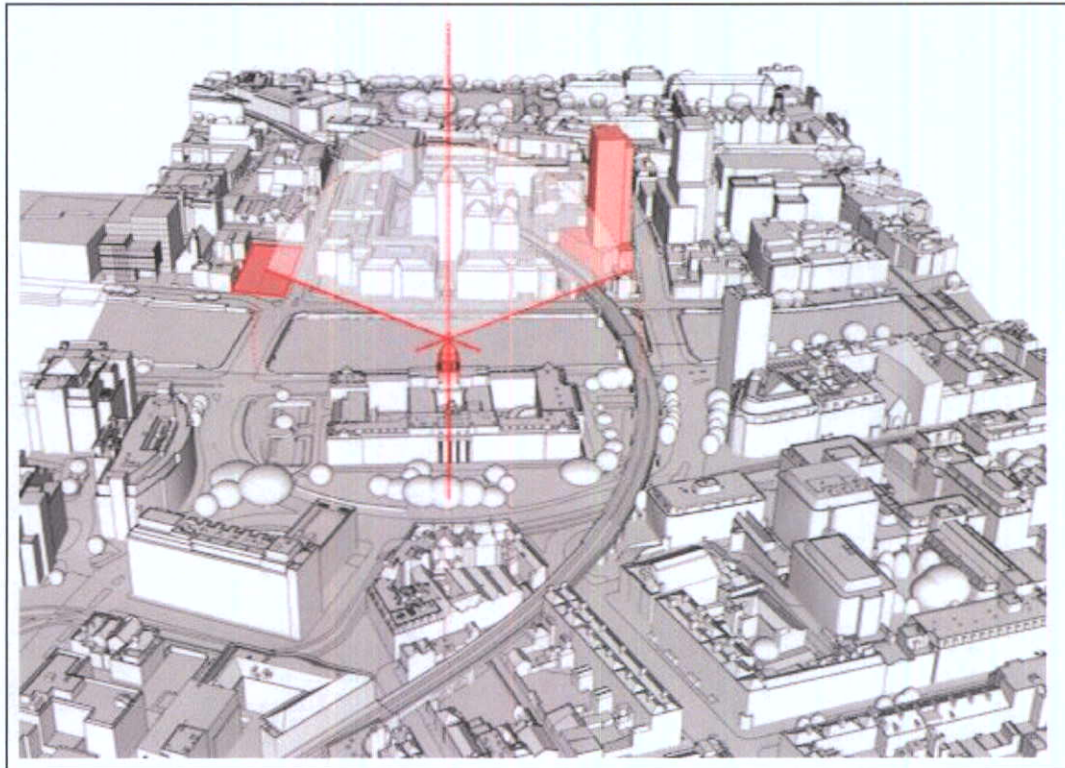


Figure 3.1 Custom House Setting

- 3.24 Figures 30 and 31 of the Georges Quay Local Area Plan (GQLAP) set out, what was in 2012 a desired plan for the subject lands to comprise active street frontage, a commercial or residential use and a maximum of 6 storeys (with provision for one setback storey) north of a line delineated by the Immaculate Heart of Mary Church, and a maximum of 9/10 storeys south of that line. There has been a significant change in National guidance on city planning policy since 2012 when the GQLAP was published, where a policy for greater height and density is now required for highly serviced urban locations. This policy has been accepted by Dublin City Council, as sites such as Tara Street and those developments contained within the Hawkins St./Tara St./Townsend St./Poolbeg St. block which have been granted permission for height and density greatly in excess of the LAP guidance. The Tall Building Statement: City Quay Dublin by Urban strategies Inc. which is submitted as part of the planning application provides further detail in this regard.

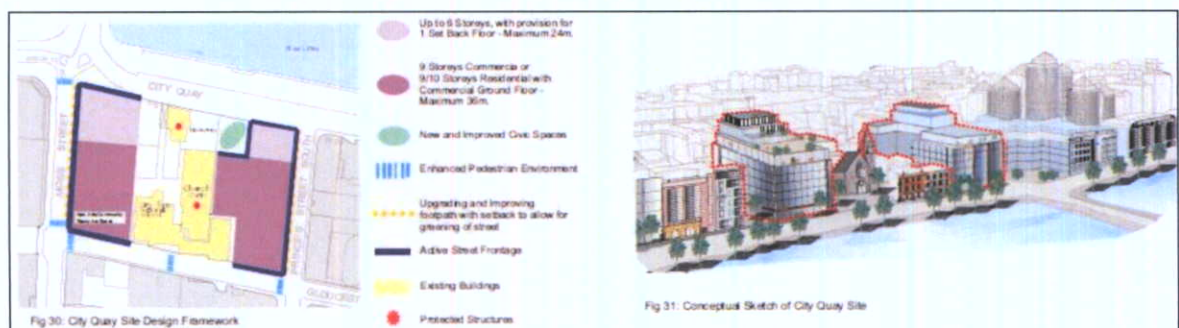


Figure 3.2 Figures 30 and 31 from George's Quay Local Area Plan

- 3.25 A total of 6 pre-application meetings have been held with DCC (11th Oct 2021, 15th Nov 2021, 15th Dec 2021, 21st Jan 2022, 10th Feb 2022 and 2nd March 2022) to analyse and review the most sustainable option for the development of the subject lands. Please

see Figure 3.3 (larger scale copy is located within the Architect's Design Statement submitted as part of this planning application) which shows the evolution of the design of the development of the subject lands from initial design to the current proposed development.

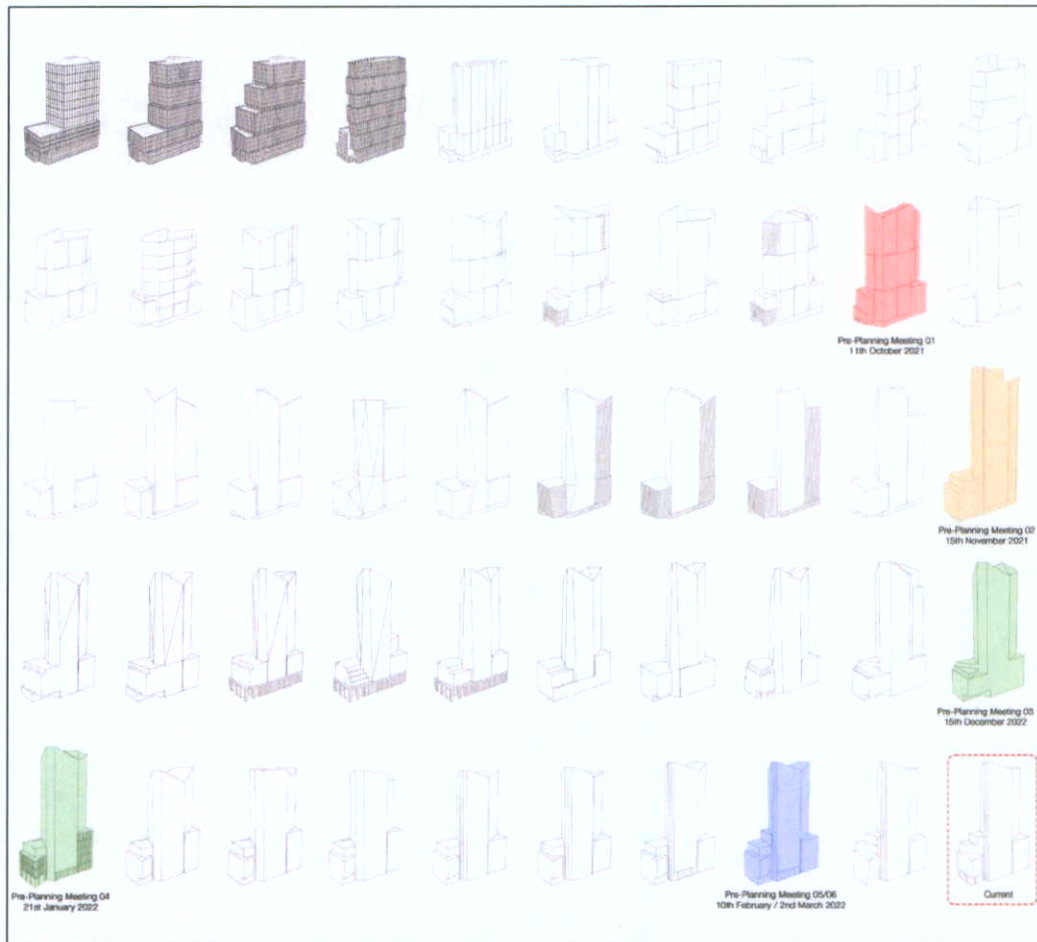


Figure 3.3 Evolution of Building Design (Mahoney Architecture)

- 3.26 While there are many facets of the surrounding environment that need to be accounted for in selecting the most sustainable design option, the interaction of the proposed development between City Quay National School, the visual envelope along the Gardiner Street Axis and Custom House, were highlighted as being of higher sensitivity. Figure 3.4 provides another visual aid of the various design iterations within the context of the surrounding area and Custom House in particular that have been assessed as the proposed development evolved. An example of some of these changes to the design are detailed below.

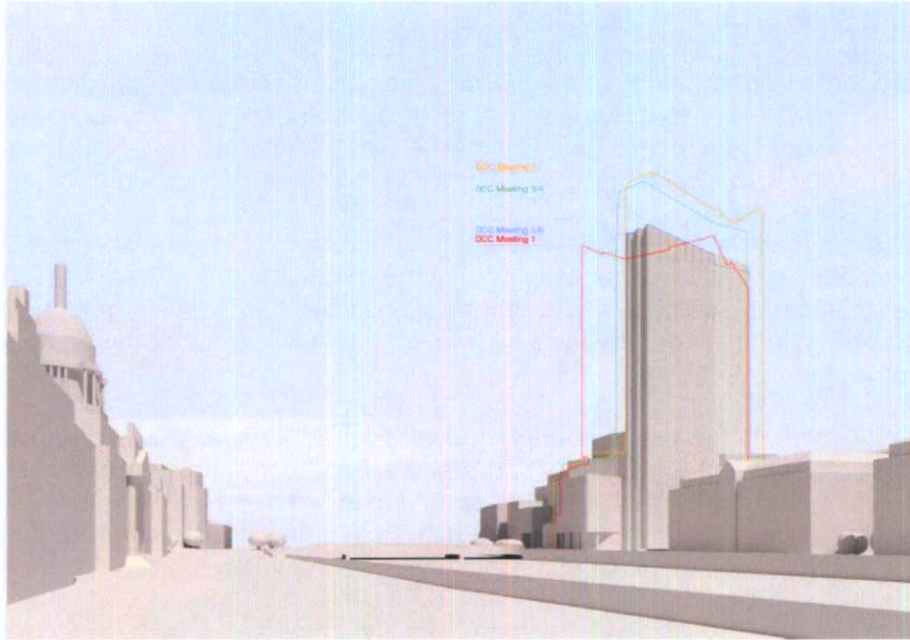


Figure 3.4 Evolution of Building Design in Response to Immediate Surroundings

City Quay National School/Immaculate Heart of the Mary Church

- 3.27 In order to ensure that there is minimal disruption to daylight in the school the south-eastern and eastern portion of the proposed building has been trimmed back (Figure 3.8).
- 3.28 In addition to this the trimmed eastern façade bordering the Immaculate Heart of Mary Church and City Quay National School features a trellis of climbing plants set between the brick frame and horizontal louvres on the set-back, and glazing to ensure the visual privacy for these properties. The selected planting is trained vertically by tensioned cables. A translucent interlayer contained within the glazing extends from floor level to a height of 1.8m on each floor to fully prevent any overlooking of the school property below. This glazing is set-back 3.3m from the eastern boundary and is further screened from the adjacent properties by the open brick clad frame and the trellis planting.

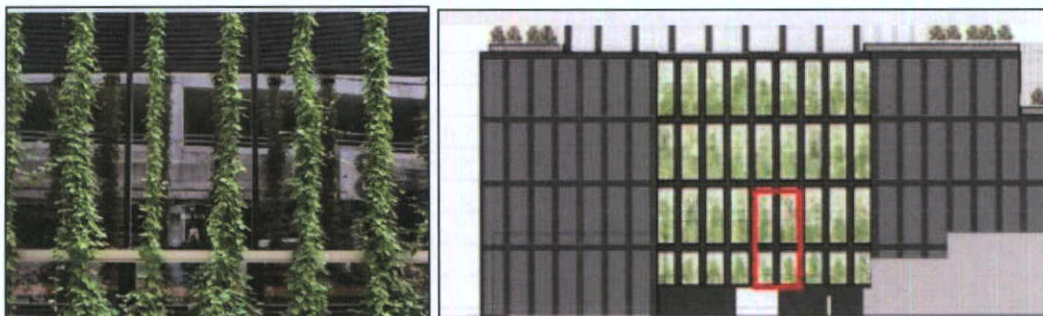


Figure 3.5 Treatment of Eastern Façade in Response to City Quay National School

- 3.29 Finally the bulk of the building has also been moved back behind the front building line established by the Immaculate Heart of Mary Church.

Gardiner St. Axis

- 3.30 The proportions and height of the building has been reviewed from many vantage points across the city to determine the most advantageous and balanced height to deliver an elegant and recognisable form which will become a building of character and interest in the City's skyline (refer to Chapter 11 for further information).
- 3.31 With respect to viewpoints further away from the subject lands, the shape and form of the tower has evolved in response to its alignment with the axis of Gardiner Street. The slender diamond plan shape ensures that the building form is elegant and slim when viewed from Gardiner Street where its form is further accentuated by the flute profile of its prow.
- 3.32 The roof profile of the tower is angled towards the Gardiner Street axis creating a distinctive and unique form on the City's skyline and contributing to the character of the grouping of nearby buildings including Liberty Hall, Busaras and the Custom House. The massing of the building has been trimmed on the east and west sides to sit clear of the Customs House dome when viewed from Gardiner Street.
- 3.33 The form of the proposed tower is shifted slightly forward and rotated precisely to the alignment of the Gardiner Street Axis. This will create a strong symmetrical massing when viewed from Gardiner Street, thus reinforcing the axis and introducing a new focal point in the cityscape. This is a common urban design response, in both historic set pieces and contemporary interventions.
- 3.34 Slenderness is achieved through the break-down of the tower form into a series of folding planes resulting from the plan shape. The alignment of the plan to the Gardiner Street vista trims the perimeter of the tower plan and breaks down the massing of the building into a dynamic series of slender planes.

Scale and Proportion

- 3.35 The massing of the building is broken down by the articulation of the façades into a series of well-proportioned volumes defined by the podium and tower. The 6-storey podium on City Quay relates to the established shoulder height of recent developments along City Quay. The 8-storey podium to the south of the building relates to the scale of the new developments on Moss Street and Gloucester Street South. The oblong footprint of the tower forms a series of folding planes which ensure an appropriate slenderness ratio when viewed from each side. The carefully considered balancing of the podium and tower volumes informs the height of the various elements and the overall massing of the building. This has been considered from each of the primary vistas. The contrasting surface material treatment of the two elements further articulates the compositions. The brick surface of the podium responds to the local scale of the streetscape and the glazed surface of the tower responds to the broader city scale and the emerging cluster of tall buildings.

Response to Surrounding Architecture

- 3.36 The prow of the triangular form is terminated by the scalloped profile of the fluted façade facing onto Customs House Quay. This will create a unique form on the City's skyline and will contribute to the character of the grouping of distinctive neighbouring buildings including Liberty Hall, Busaras and The Customs House. The fluted prow extends to the ground level where the oval entrance lobbies sit into the concave recesses of the fluting. This distinctive form has echoes of its neighbour's motifs including the concrete canopy of Busaras, the triple swags of the Customs House and the zig-zag profile of Liberty Hall. Carefully placed lighting will accentuate the roof profile in the night sky and add to the character of the City's roofscapes.

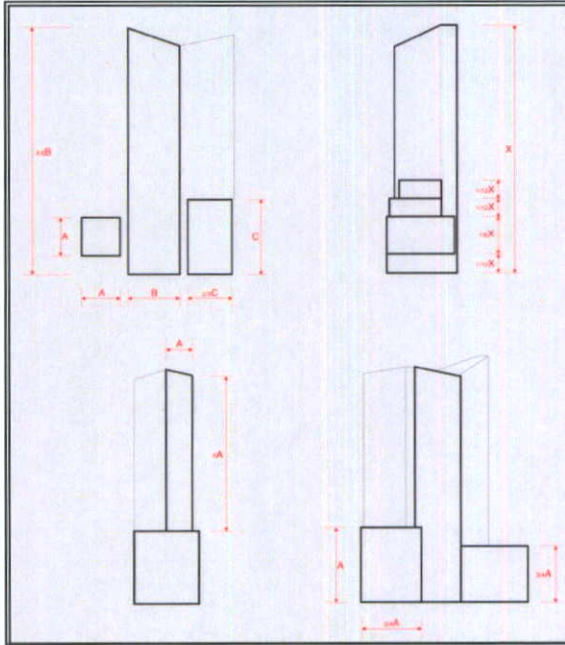


Figure 3.6 Concept Drawing of Bulk and Massing Response to Neighbouring Architecture.

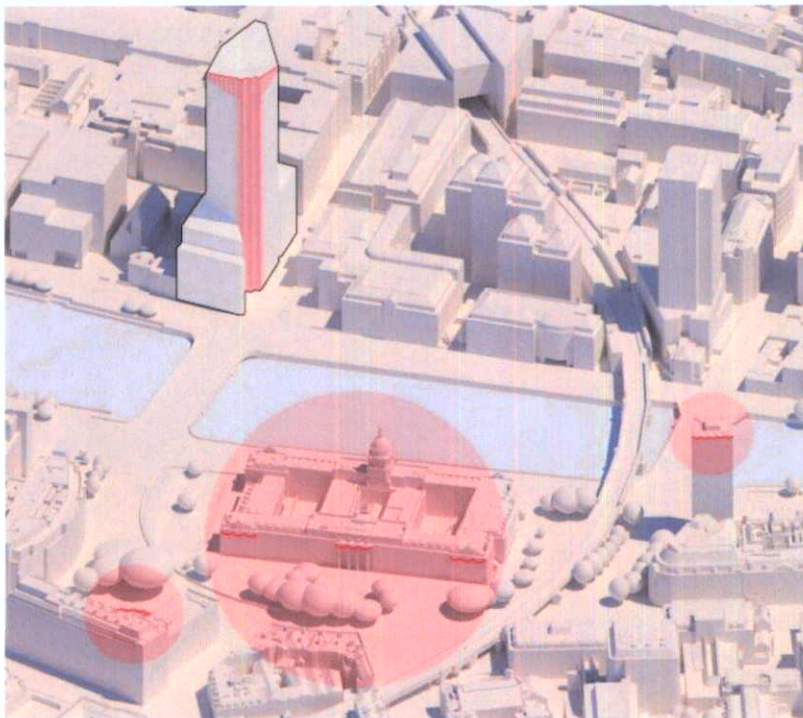


Figure 3.7 Concept Drawing of Architectural Response to Neighbouring Architecture.

- 3 37 The roof profile is pitched with the high points on the north and south ends creating a v-shaped roofline from the River Liffey corridor views and accentuating the verticality of the building form when viewed from Gardiner Street and the south of the city. The massing is further reduced on the east side to reduce the massing when viewed from the east. This also creates a set back from the adjacent school and church buildings. The western face of the podium volume is eroded to allow the form of the tower extend fully to the ground level and creates recesses for the main entrances to the building off Moss Street.

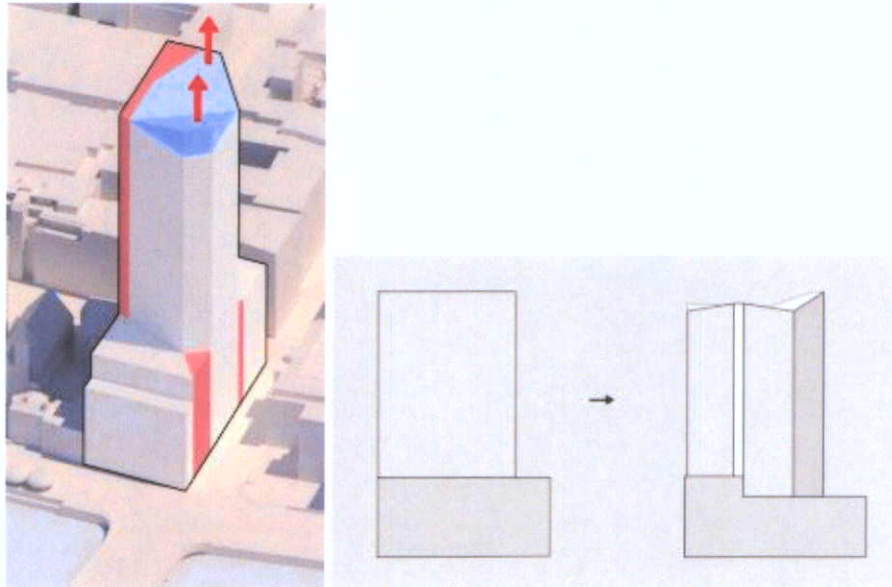


Figure 3.8 *Concept Drawing of Bulk and Massing Response to Neighbouring Architecture.*

Responding to Public Streetscape

- 3.38 The podium (the ground to tenth floors) is stepped to rise from the six-storey scale on the riverside to the ten-storey height at the rear. These steps are also angled to respond to the form of the tower, allowing the prow of the tower to extend and touch the ground. The steps are extensively landscaped to provide outdoor amenity space, and to tie the main portion of the building to the ground level increasing the perception of green open spaces.



Figure 3.9 *Concept Drawing of Response to Public Streetscape*

- 3.39 The ground and first floors at the front of the building are set back to broaden the public realm at the entrance and activate the street frontage. The double-storey scale at ground level highlights the new City Arts Centre which occupies the main public frontage of the building.