

## Rares Marin

Architectural Technologist

#### Profile

I am a dedicated and detail-oriented
Architectural Technologist with over 9 years of
experience across residential, commercial, and
conservation projects in Ireland. I bring strong
technical knowledge and a passion for precision,
with a focus on digital innovation, sustainable
design, and the seamless integration of

traditional and modern construction methods. I have a particular interest in emerging technologies that enhance architectural quality and efficiency, especially within BIM

environments. I excel in Revit-based modelling,
Dynamo scripting, and the integration of point
cloud surveys into detailed design workflows—
including modelling traditional elements such as
cornices, architraves, and mouldings with
heritage sensitivity.

### Skills

- BIM & Digital Tools: Revit (advanced),
   Dynamo / Dynamo Player, Navisworks,
   AutoCAD, Autodesk Construction Cloud
- Visualisation & Graphics: Twinmotion, Photoshop, Illustrator
- Survey Integration: Point cloud modelling in Revit (e.g., heritage cornices, joinery, masonry)
- Technical Documentation: Planning, tender, and construction packages
- Coordination & Compliance: Clash detection, DAC/FAC certs, Universal Design, Irish Building Regulations
- Soft Skills: Team leadership, client liaison, multidisciplinary coordination
- Languages: English (fluent), Romanian (fluent)

#### Contact

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References on request.

## **Work Experience**

### Architectural Technologist @ AKM Design

August 2023 - June 2024

Delivered construction packages for large-scale housing and apartment schemes in partnership with Glenveagh Homes. Responsibilities included GA drawings, detailing, schedules, clash detection, and site coordination. I also developed tailored Revit workflows to improve drawing accuracy and streamline coordination with structural and M&E teams.

### Freelance Architectural Technologist

February 2022 - August 2023 | June 2024 - Present

Worked independently with private clients on residential projects including new builds, extensions, and refurbishments. Responsible for full project stages including design, tender documentation, and site coordination. Collaborated with practices such as Patrycja Rogala Architects and NBK Architects on both residential and commercial work. These collaborations included contributions to heritage-sensitive projects and the refurbishment of Protected Structures, allowing me to develop practical experience in conservation environments and traditional detailing.

### Architectural Technologist @ Scott Tallon Walker

December 2018 - February 2022

Contributed to the design and delivery of several large-scale healthcare and commercial projects from concept through construction. Produced detailed Revit models, planning documentation, tender and construction drawings, and participated in coordination with multidisciplinary teams. Played a key role in the office BIM committee, providing Revit support and training within the healthcare studio. Introduced Dynamo to streamline repetitive tasks and improve modelling efficiency, significantly reducing documentation time. Attended regular CPD training sessions covering sustainability, digital innovation, and heritage awareness.

### Architectural Technologist @ NBK Architects

September 2016 – December 2018

Worked on a wide range of commercial and residential developments, supporting planning, tender, and construction documentation. Regularly contributed to on-site resolution of technical issues, coordinated with consultants, and ensured compliance with building regulations and universal design standards. This period included experience on refurbishment projects involving historic buildings and Protected Structures, where I developed Revit-based detailing for traditional elements such as cornices, timber sash windows, and stone features.

### Selected Conservation Experience

- 26-27 South Mall, Cork Adaptive reuse of historic commercial property (NBK Architects)
- Ballast House, Dublin 2 Façade retention & integration into office/retail use (NBK Architects)
- 5 Mount Street Crescent, D2 Protected Georgian residence refurbishment (NBK Architects)
- Gate Lodge, Kilgobbin Castle Conservation detailing for traditional features (collab with Patrycja Rogala)

#### Education

### Architectural Technology @ South East Technological University

August 2012 - June 2016

BSc of Science in Architectural Technology. Accredited by The Chartered Institute of Architectural Technologists (CIAT) and The Royal Institute of the Architects of Ireland (RIAI).

### About Me

I enjoy problem-solving and exploring how architecture can positively shape user experience and the built environment. I am curious by nature, driven to understand how things work, and thrive in settings where technical creativity meets practical application. Dutside of work, I'm passionate about music (both performance and composition), philosophy, science, and sport.

#### ARCHITECTURAL PORTFOLIO CONTENT

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Ballast House......Page-19

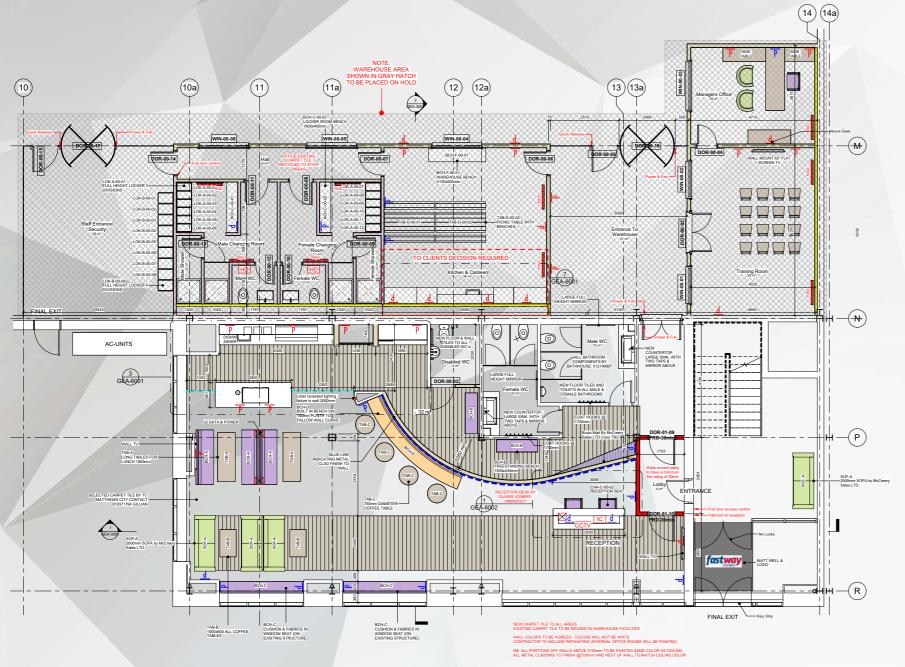
# Fastway Couriers Warehouse Offices

The Fastway offices are situated in Greenogue Business Park, Dublin, featuring a substantial warehouse, staff areas, and two floors of offices. The architectural designs implemented by our team cover a total area of 808m². NBK Architects were responsible for a comprehensive interior fit-out, which involved incorporating a new staff area and constructing a mezzanine floor to serve as a control center for an automated parcel sorting system.

As part of my role subcontracted by NBK Architects, I conducted a thorough site survey and developed detailed working drawings for both the client and contractors. The project entailed the design and specification of various joinery elements, including phone booths, one-on-one meeting pods, a fully equipped kitchen and canteen, custom benches and seats, as well as a reception desk. Additionally, the construction encompassed fire-rated walls, sound-treated meeting rooms, and a vertical rib partition to separate the office spaces.



### **BUILDING SECTION**

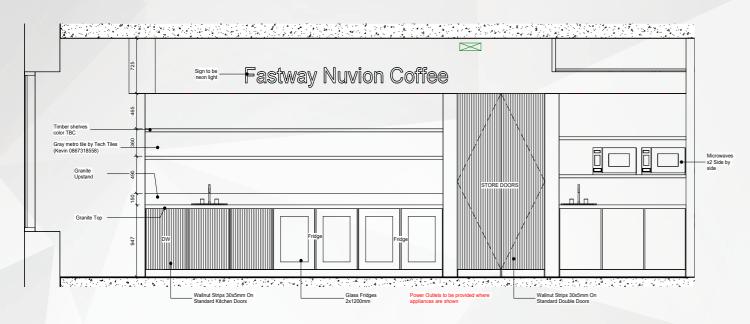


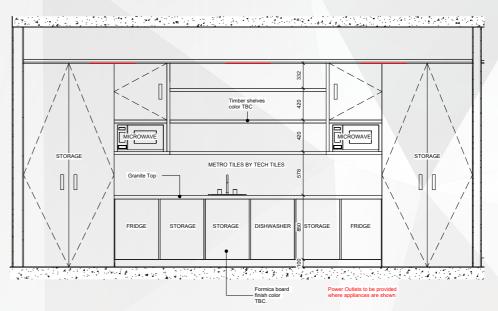
FIRST FLOOR CONCEPTUAL RENDER

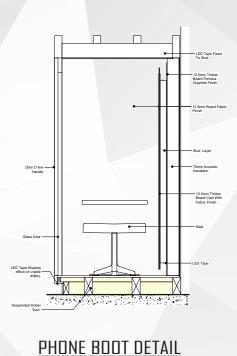


GROUND FLOOR CONCEPTUAL RENDER

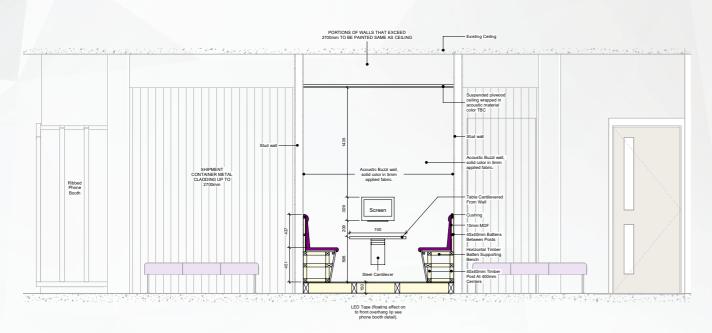
#### GROUND FLOOR PLAN



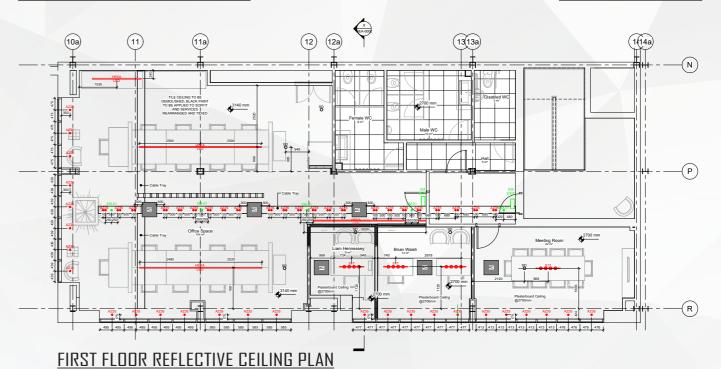




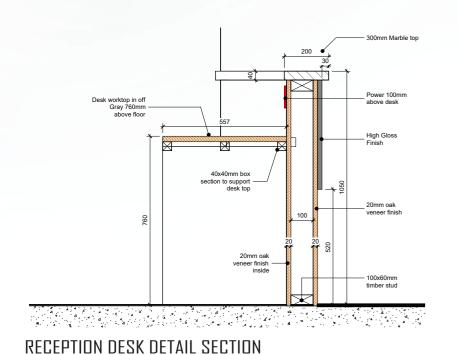
### KITCHEN ELEVATION

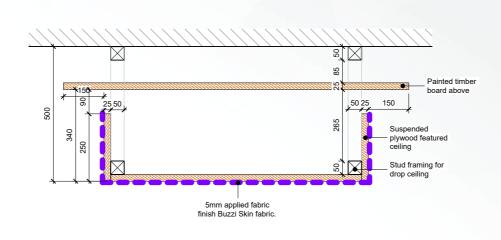


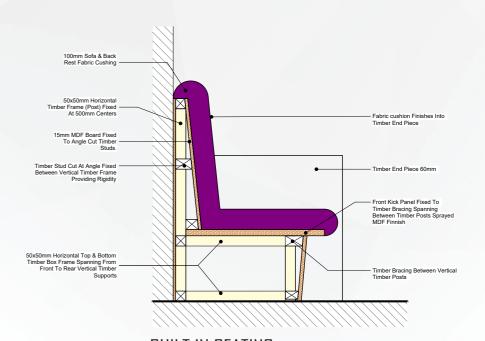
WAREHOUSE KITCHEN ELEVATION



### MEETING BOOTH DETAIL SECTION







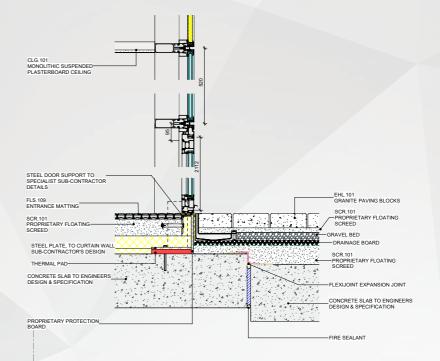
DROP CEILING DETAIL

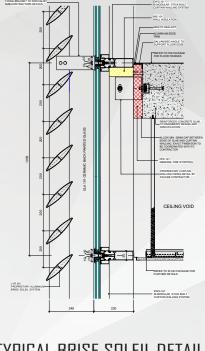
## Lisburn Primary and Community Care Centre

The Lisburn Primary and Community Care Centre is situated adjacent to the listed maternity building within the Lagan Valley Hospital complex. The design encompasses a four-story building and an adjoining car park on a sloping site. The building, spanning an area of 12,500m², caters to various healthcare services, including 6 GP practices, Diagnostic Imaging, Physiotherapy, Adult and Children's Mental Health Services, Pharmacy, Allied Health Services, and administration for outreach services.

I joined a team of 4 professionals and contributed to this project from the tender commencement phase until its completion. My involvement encompassed a broad range of responsibilities related to tender and construction packages. These included tasks such as developing set out and general arrangement plans, designing vertical circulation systems, creating roof plans, preparing ADB room datasheets, specifying curtain wall/windows and doors, designing rainwater drainage systems, overseeing atrium skylight installation, implementing effective wayfinding solutions, specifying floor and wall finishes, ensuring natural ventilation, designing RCPs (reflected ceiling plans), establishing fire rating requirements, coordinating dry risers, and much more. Additionally, I produced detailed construction drawings for almost all project packages.

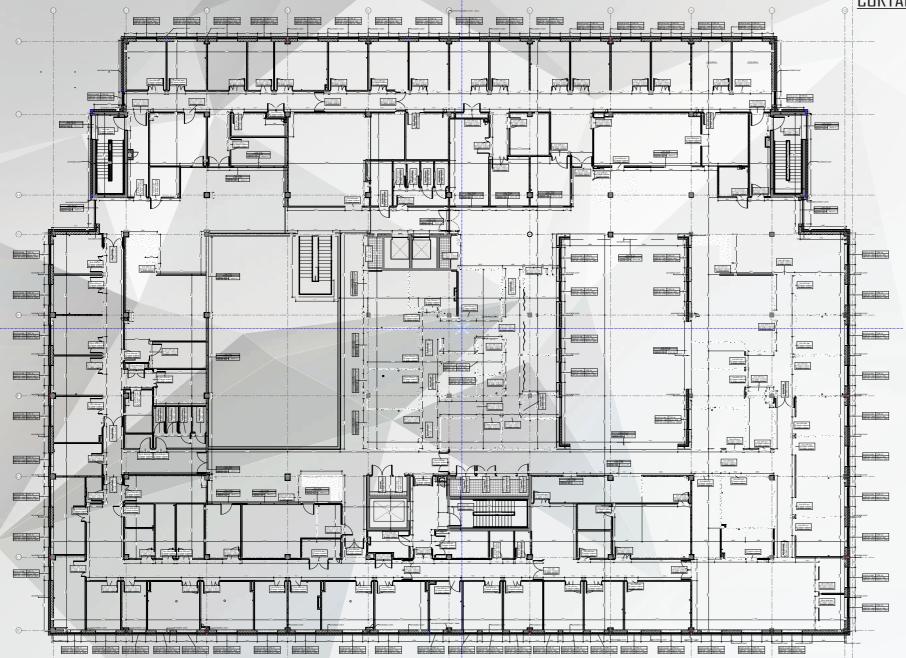
One of the project's complexities was meeting specific criteria for grants related to fuel conservation, efficiency, and sound dampening. Calculating natural ventilation posed a significant challenge, but I devised mathematical equations to create window families that accurately displayed geometric free area readings based on window sizes and types. Leveraging Dynamo, I linked windows hosted by rooms and exported a schedule to Excel, where information was sorted into a user-friendly and presentable format



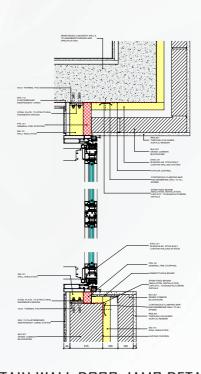


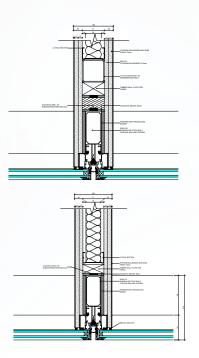
#### CURTAIN WALL THRESHOLD DETAIL

TYPICAL BRISE SOLEIL DETAIL

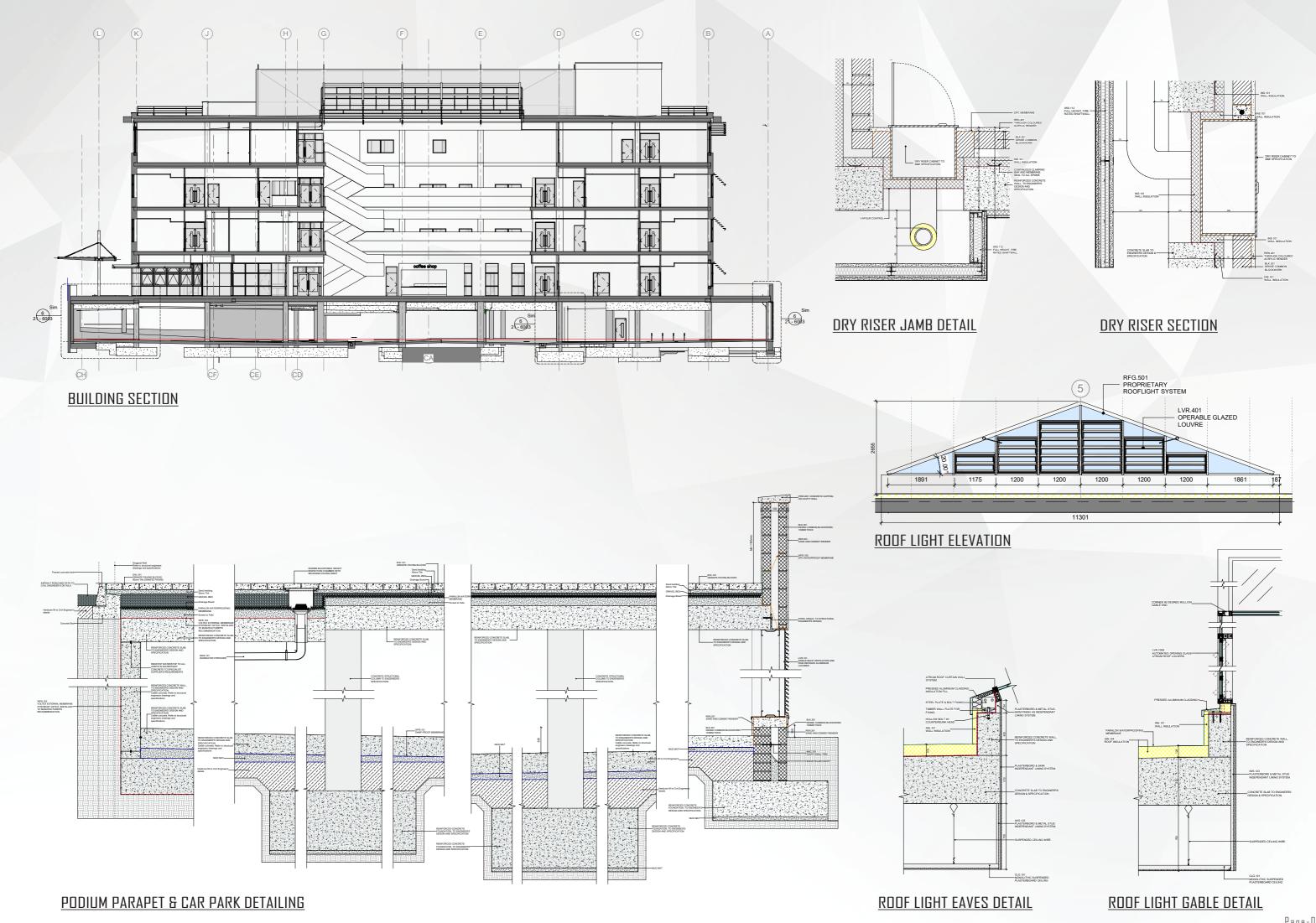








PARTITION & MULLION INTERSECTION

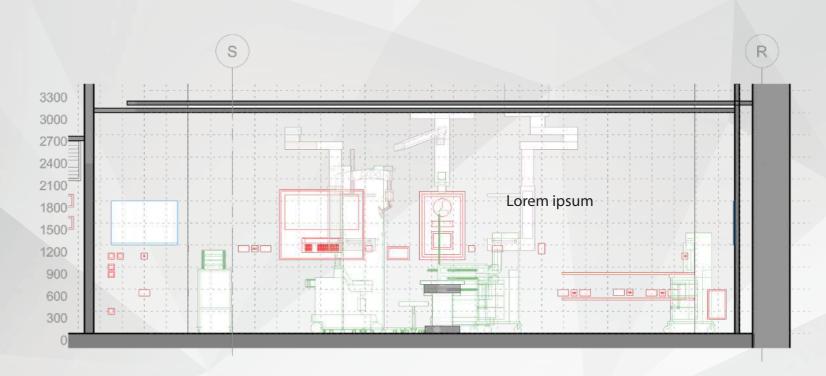


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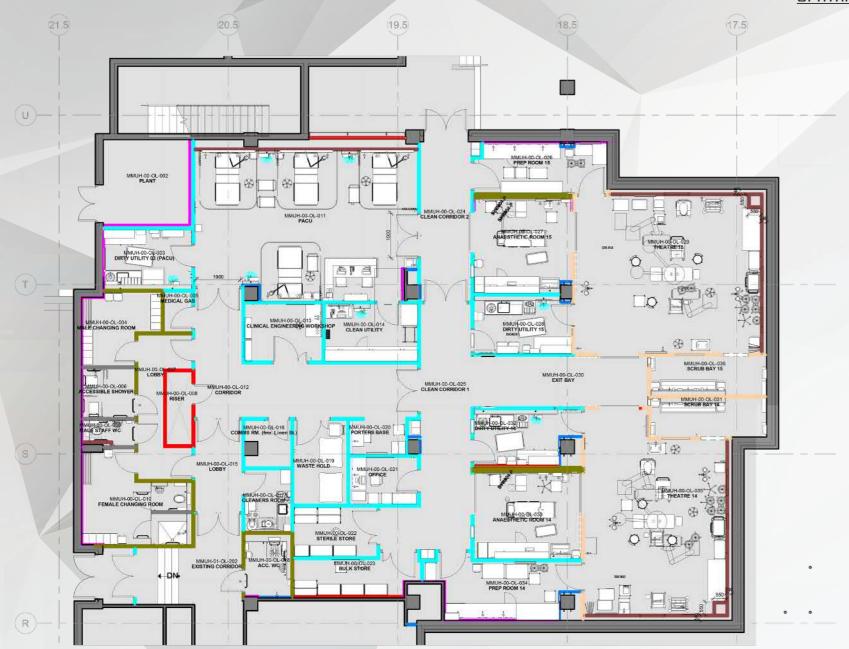
## **Ophthalmic Theatres Matter Hospital**

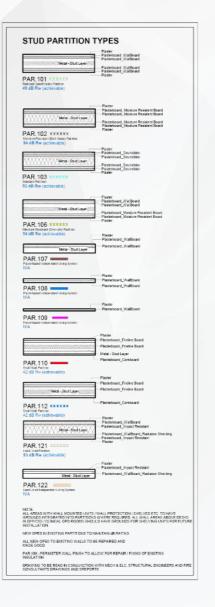
STW provided comprehensive design, tender, and construction services for the new state-of-the-art Ophthalmic Operating Theatre Suite at Mater Misericordiae University Hospital in Dublin. Spanning 800m², the suite comprises two fully equipped operating theatres and associated ancillary spaces such as anaesthetic, scrub, clean and dirty utilities and a post-acute care unit (PACU). The strategic location for the new theatres was determined as the site of the previous dilapidated operating theatres, offering views of a courtyard and establishing a connection to the existing ophthalmic department.

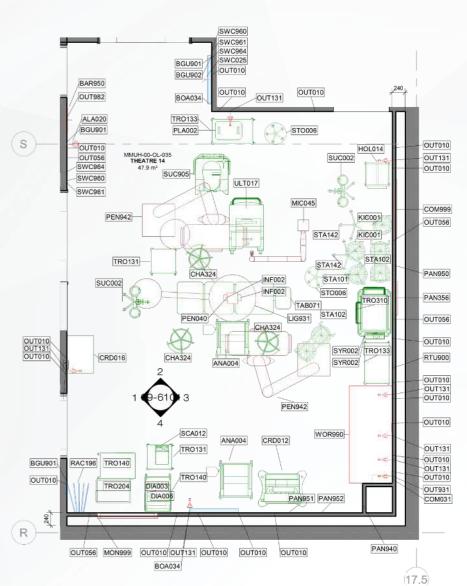
During this project, I worked closely with a two-person team from start to finish, contributing to various aspects of tender and construction documentation. These included developing general arrangement plans, reflective ceiling plans, ADB room layouts, door/window and curtain wall packages, creating families and architectural elements in the model, producing construction details, fire and acoustic rating drawings, and much more. One notable challenge was designing the plant room situated above the ophthalmic theatres. Ensuring fire protection for existing windows above the plant room required the construction of shaft walls to provide 60-minute fire protection from both directions, satisfying the fire officer's requirements.



#### OPHTHALMIC THEATRES ADB ELEVATION

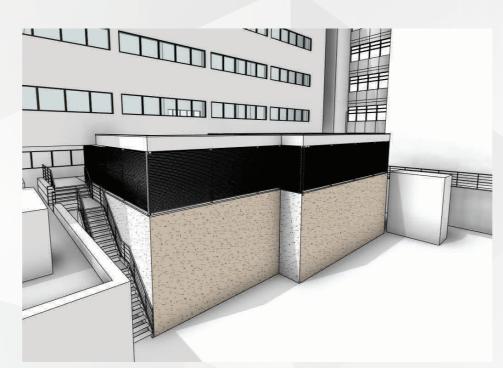








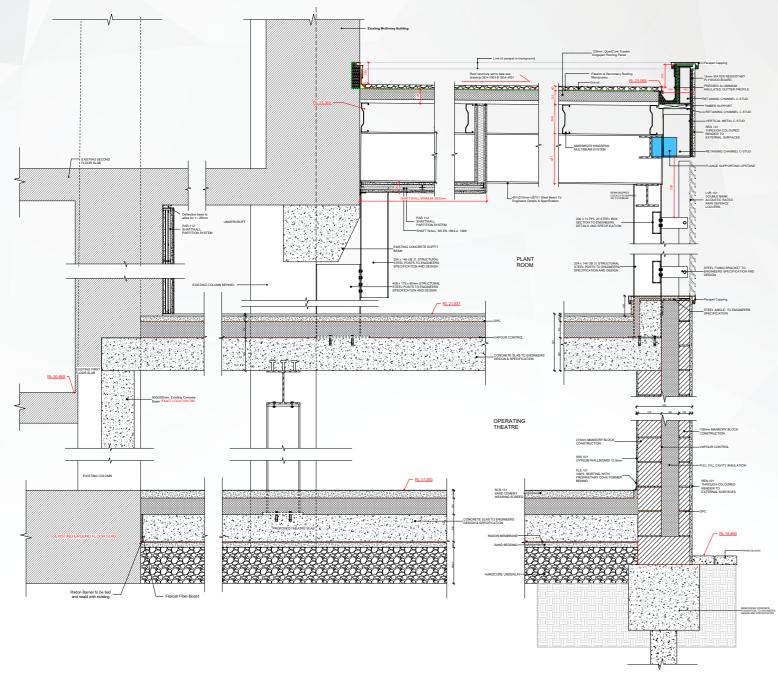
OPHTHALMIC THEATRE PHOTOGRAPH AT COMPLETION

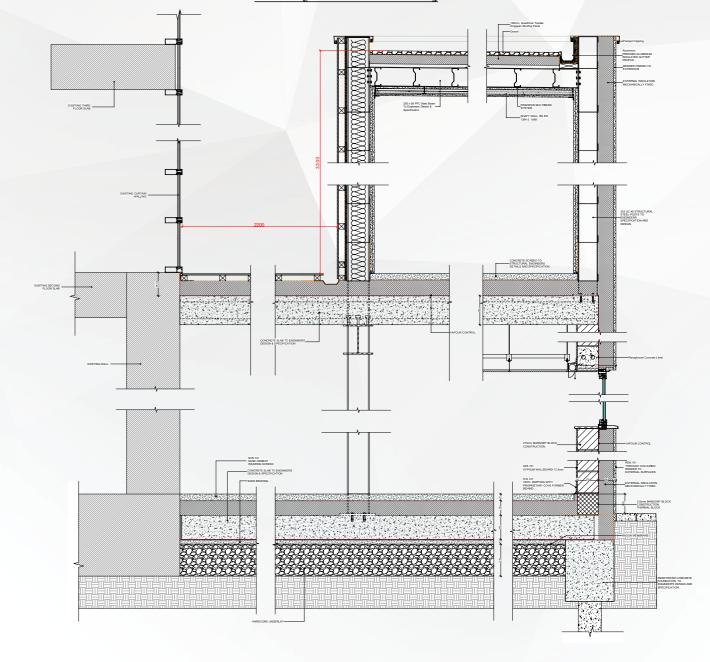


OPHTHALMIC THEATRE FINAL DESIGN PERSPECTIVE VIEW



OPHTHALMIC THEATRES (TOP LEFT OF IMAGE) OBSERVATION WORD [MIDDLE OF IMAGE]

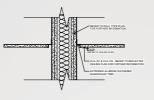




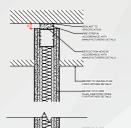
# Sligo North West Hospice

Sligo North West Hospice: The North West Hospice inpatient unit, located on the grounds of Sligo University Hospital, underwent an expansion to increase its capacity from 8 to 12 single rooms dedicated to end-of-life care. The enhanced facility not only accommodates the inpatient unit but also includes space for the Community Palliative Care Team, outpatient and consultation facilities, administration and management offices, and meeting rooms for HSE, community, and volunteer activities supporting specialized palliative care services.

My involvement in this project began during the early design stages, where I translated initial conceptual sketches into a new BIM model. This involved incorporating land survey drawings, generating a topography, and accurately representing the conceptual design. I further developed the drawings for feasibility studies and pre-planning applications. Additionally, I produced drawings and information for various architectural packages related to the project. Overcoming the challenge of dealing with changes in levels and ensuring accessibility without overpowering the original design with stairs and ramps required careful design considerations. The solution involved separate main stairways from ramps, creating an immersive ramped walkway surrounded by vegetation.



6 Internal Screen Detail - T02

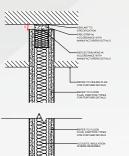




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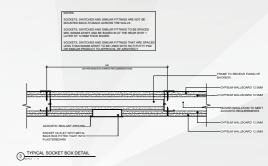
WALL PROTECTION TYPICAL DETAIL



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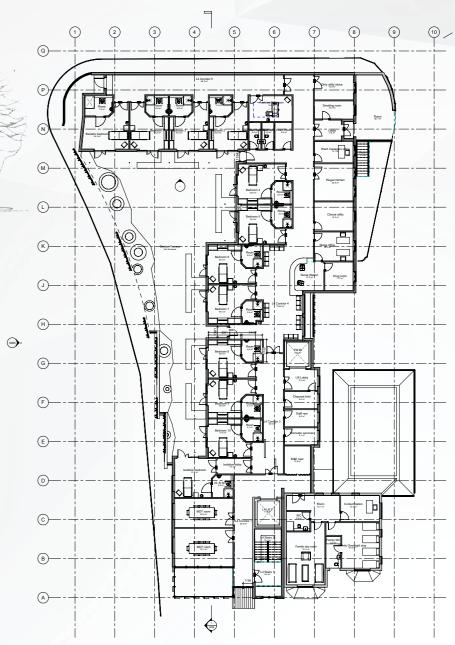


EXTERNAL RENDER CREATED IN TWINMOTION

## INITIAL CONCEPTUAL SKETCH



WEST ELEVATION (PRE PLANNING CONSULTATION)



<u>gea - first floor plan</u>

# St Vincent's Community Nursing Unit Mountmellick

The St. Vincent's Community Nursing Unit in Mountmellick, County Laois underwent a construction project to add a 50-bed unit to the existing facility. The scope of the project included underground services diversions, demolitions of on-site buildings, tying into the existing structure, and both temporary and permanent relocation of existing campus facilities such as the central plant, laundry, and ESB substation.

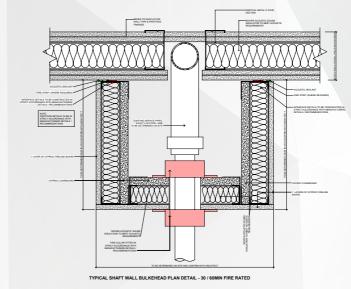
My involvement in this project began after the tender phase and before the start of construction. My primary responsibility was to address and resolve issues within the model. This involved tasks such as remodeling architectural elements, assigning worksets to correct elements, and rectifying topography-related issues. Additionally, I completed various tender and construction drawing packages, including ADB datasheets, RCP (reflected ceiling plans), window and curtain walling details, door specifications, and realistic renderings using Twinmotion.

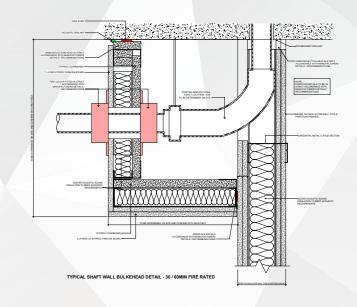
The most significant challenge during this project was the cleaning and purging process of the model. The presence of numerous irrelevant CAD links and imported elements significantly inflated the model size. Moreover, some of these elements could not be removed using Revit alone. To tackle this challenge, I leveraged Dynamo, a scripting tool, to develop an automated script capable of performing multiple tasks. This script eliminated the need for tedious manual work, reducing the risk of human error and enhancing efficiency.





EXTERNAL RENDERS CREATED IN TWINMOTION





TYPICAL SHAFT WALL DETAILS



## Matter Hospital Rock Wing

In 2020, Scott Tallon Walker Architects was entrusted with the design of the new Rock Wing and appointed as the design lead for the comprehensive multidisciplinary team. The project was initiated in response to the emergency legislation enacted by the Irish government, which aimed to address the urgent need for additional healthcare facilities under the Health Service Executive.

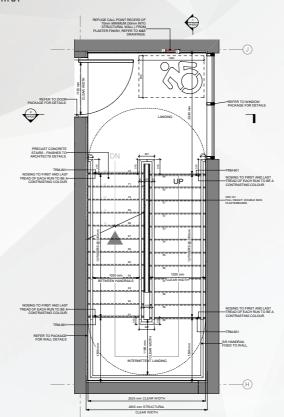
The design of the new building exemplifies an unwavering commitment to creating a sustainable and high-quality healthcare environment. By providing the hospital with significant additional capacity, the Rock Wing effectively addresses the growing demands of patients while working towards reducing waiting times. Moreover, this new wing offers an enhanced physical environment that aims to optimize the experience for all individuals involved.

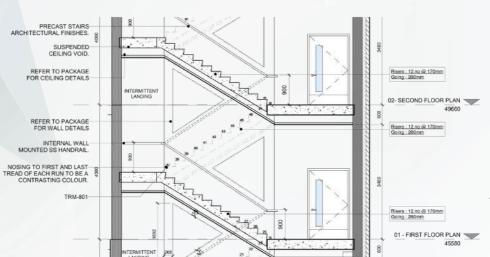
From the inception of the project, I was actively engaged in its development. My initial task involved conceptual modeling to facilitate a rapid feasibility study. This entailed creating fundamental plans, elevations, sections, and renderings to visualize the building's placement within the site and its surrounding context. Additionally, I contributed to a diverse range of drawing packages encompassing elements such as reflected ceiling plans (RCP), ADB room datasheets, vertical circulation layouts, roof configurations, windows, curtain walls, doors, setting out details, rainwater drainage systems, and more.

One of the most significant challenges I encountered during the project involved coordinating the routing of rainwater pipes across eleven storeys, amidst a complex network of mechanical and electrical (M&E) services. Overcoming this challenge required a combination of patience, focused effort, clear communication, iterative problem-solving, and the utilization of clash detection tools from both Revit and Navisworks to ensure seamless integration with existing systems.

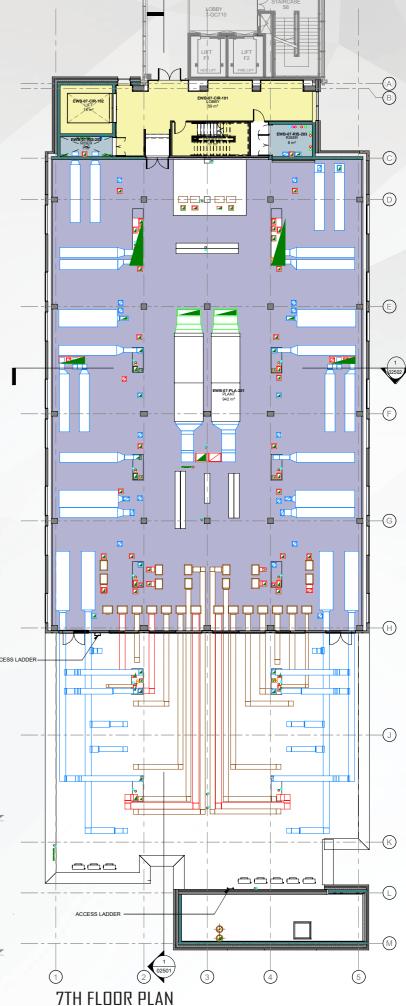












# Matter Hospital Feasibility Study

The Mater Misericordiae University Hospital, situated in Dublin's north inner city, serves as the prominent acute teaching hospital for a local population catchment of 185,000. With a capacity of 600 beds, it holds national recognition as a referral center for various specialized fields, including cardiac surgery, heart-lung transplant, spinal injuries, and is one of eight designated national cancer care centers in Ireland.

During my tenure at STW Architects, my proficiency in Revit was swiftly acknowledged, leading to numerous opportunities to undertake the modeling of diverse projects for conceptual purposes, such as feasibility studies and pre-planning consultations and applications.

Among the projects I undertook, the Mater Hospital feasibility study stands out as a significant undertaking. Throughout my time at STW, it was the first and most extensive feasibility study I participated in. In less than four days, I successfully modeled the entire existing building and incorporated four proposed buildings, which were planned for construction in sequential phases.



CONCEPTUAL RENDER OF NEW ENTRANCE FROM ECLES ST



ROOFTOP CONCEPTUAL RENDER





CONCEPTUAL RENDER OF PHASE TWO TAKEN FROM NORTH CIRCULAR RD

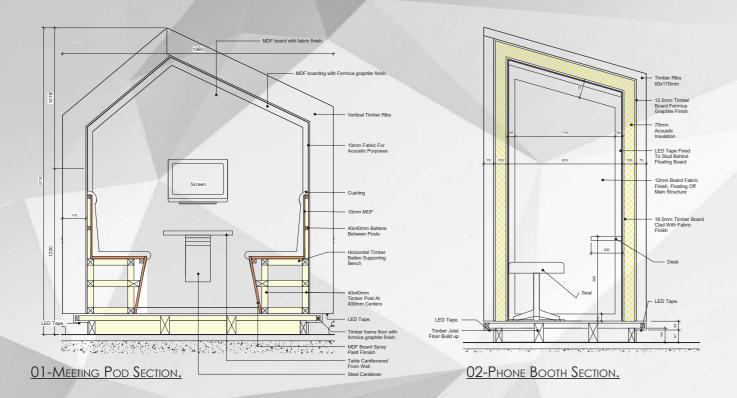


CONCEPTUAL RIRDS FYF VIFW SHOWING ALL PHASES AND SURROUNDING CONTEXT

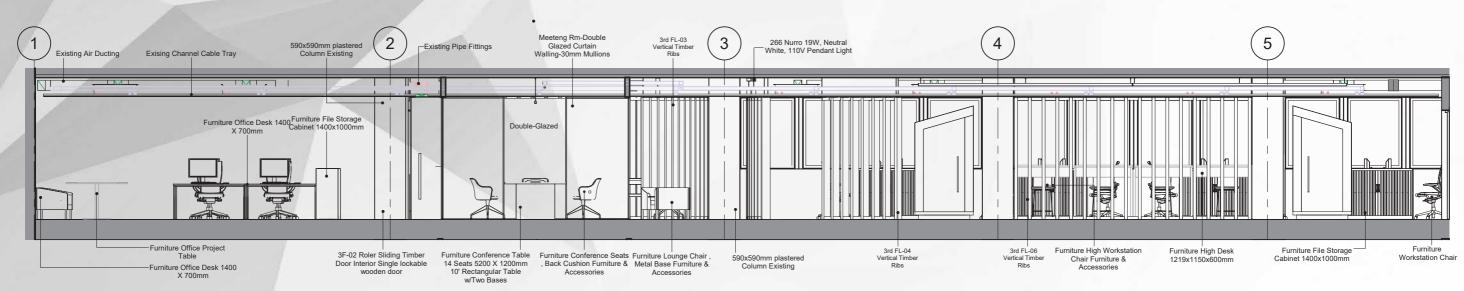
# Haddington Court - Dentsu Aegis Network

Haddington Court, situated on Haddington Road and currently occupied by Dentsu Aegis, is a six-storey building with a medium size of approximately 47D square meters per floor. The building has undergone a comprehensive refurbishment to transform it into a modern office space. BKD Architects handled the refurbishment of the building's external and internal shell, while NBK Architects took charge of the full internal design for four storeys and provided concept designs for the remaining floors, which are sublet by Dentsu Aegis.

Throughout the project, there was a focus on designing and detailing various joinery items, including phone booths, one-on-one meeting pods, tea stations, up to 4-meter-long sliding timber doors for meeting rooms, a fully functional kitchen and canteen, custom benches/seats, a reception desk, timber panelling, and hidden doors. In addition, the construction involved the implementation of fire-resisting walls, sound-treated meeting rooms, and vertical rib partitions to divide the office space effectively.







04-BUILDING SECTION.



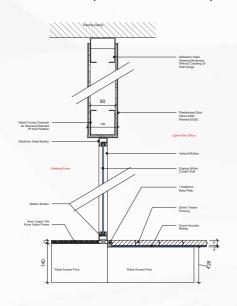
EXTERNAL RENDER. (REVIT & PHOTOSHOP)

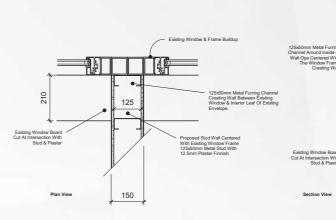


INTERNAL RENDER. (REVIT & PHOTOSHOP)



Internal Render. (Revit & Photoshop)

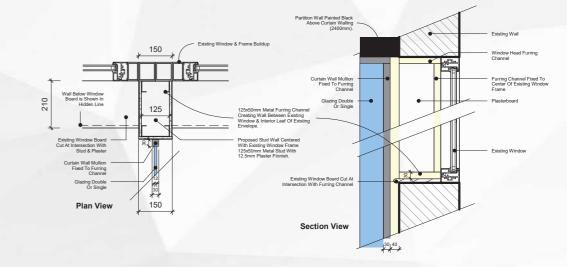




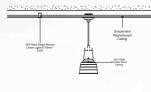
125sG0mm Metal Furring
Channel Around Inside of
Wall Ope Certerate With
The Vicasting Window Board
Cut At Intersection With
Stud & Pleaster

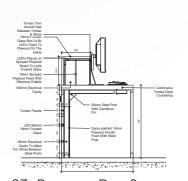
Section View

05-CURTAIN WALL /WALL PARTITION AND WINDOW DETAIL.

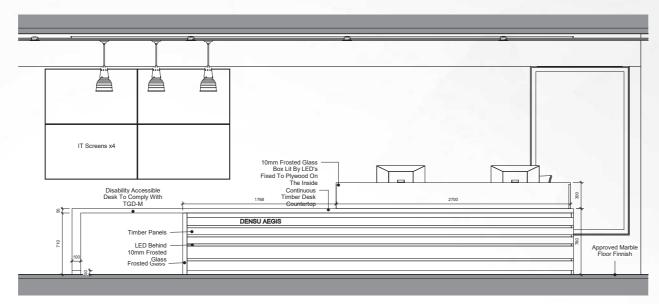


06-CURTAIN WALL /WALL PARTITION AND WINDOW DETAIL.





07- RECEPTION DESK SECTION.



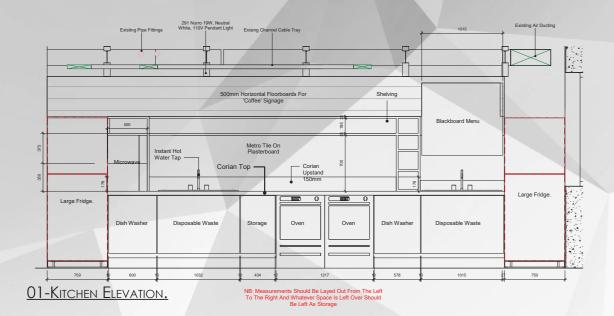
08-RECEPTION DESK ELEVATION.

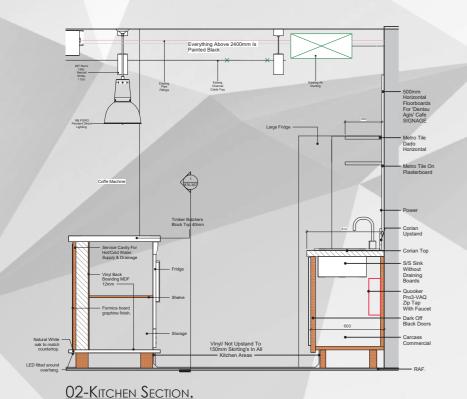


RECEPTION DESK RENDER. (REVIT & PHOTOSHOP)

# Haddington Court - Dentsu Aegis Network

During the refurbishment process, we encountered certain challenges, one of which was the presence of existing electrical, mechanical, and plumbing conduits on the ceiling. These conduits were left exposed due to the limited head height within the building. To address this, we maintained a consistent height for all joinery and glazing items, ensuring that there were no clashes with the conduits. This approach enabled us to construct partition walls above the conduits, and we took necessary measures to paint, seal, and provide satisfactory levels of fire resistance and soundproofing for all conduit penetrations.

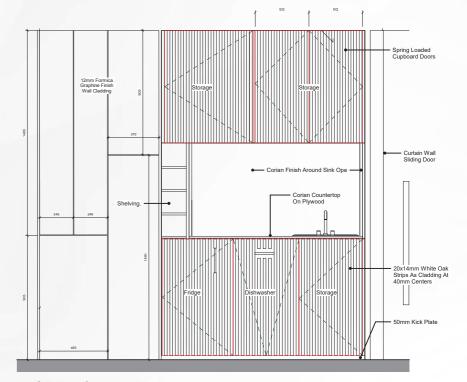




04-Tea Station Section.

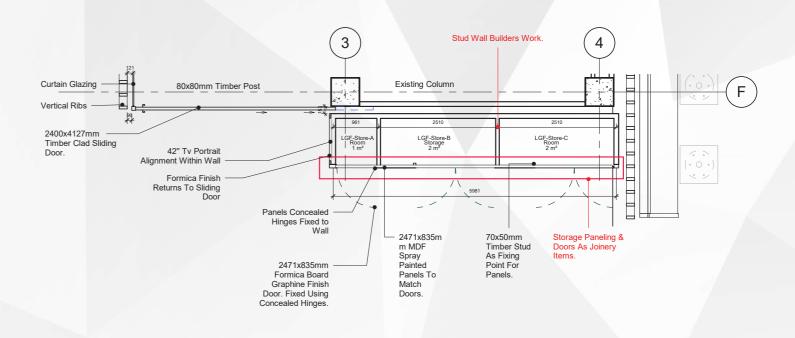


03-CEILING PLAN.



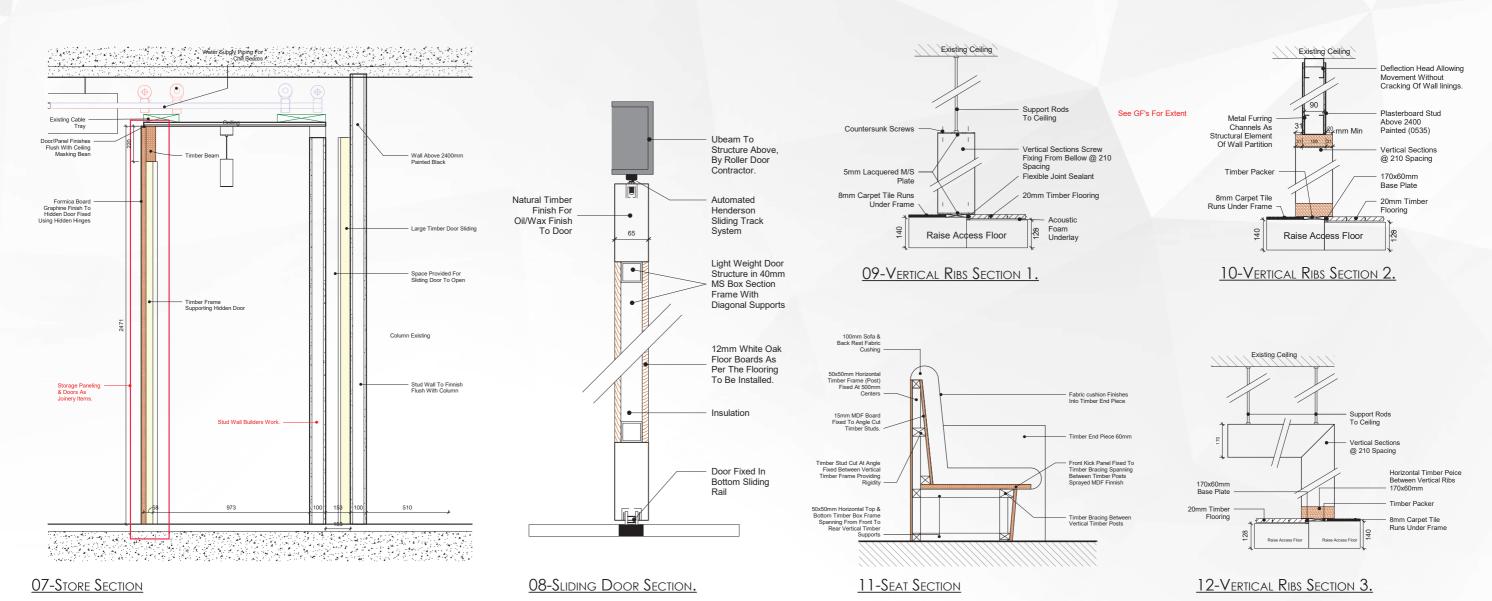
05-Tea Station Elevation.





#### 3D-Store & Meeting RM Section (Revit)

06-Store & Meeting RM Plan.

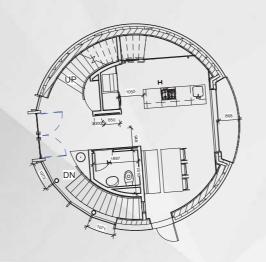


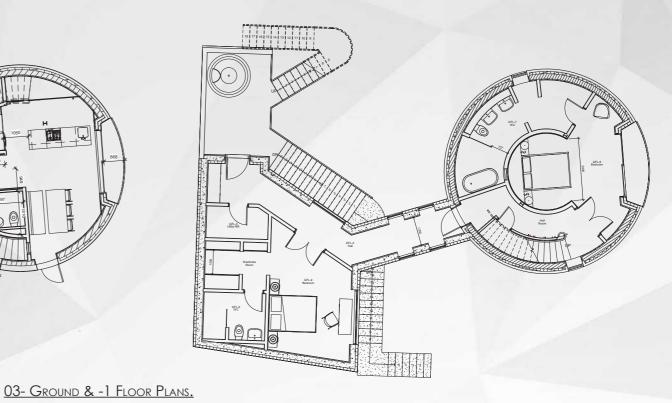
Page-14

## Clearwater Cove

The Tower at Clearwater Cove, located at Cumberland Street, Dun Laughaire, Co. Dublin, involves the construction and utilization of a four-level apartment within an existing decommissioned water tower. This includes the addition of a new top-level floor above the existing apartment, situated within the lower two levels of the former water tower. Furthermore, the development encompasses the construction of a separate single-storey utility room attached to the lowest level of the proposed apartment through an enclosed link walkway structure. It also features a balcony/terrace and pedestrian link/access to Cumberland Street at the entrance level, a balcony at the top-level floor, an external stairway to the ground level within the Clearwater Cove development, and minor revisions to the glazing of the existing apartment below. Parking facilities will be provided within the existing authorized car park of the Clearwater Cove development.

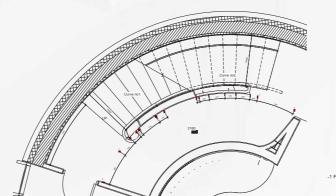
In this project, my responsibilities included compiling design and construction drawings, as well as tender documentation. Additionally, I was responsible for creating both photographic and video renderings. The unique circular shape of the building presented certain challenges, such as accurately plotting level points for the multiple curved partition wall cut-outs (see figure 5). I also focused on arranging attractive and functional spaces within the building and ensuring smooth circulation and accessibility across all levels.





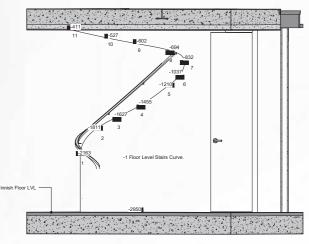
Roofing Detail

02-SLIDING DOOR & ROOF DETAIL.



1st Floor.

04-1st Floor Stairs Curve's Plan.

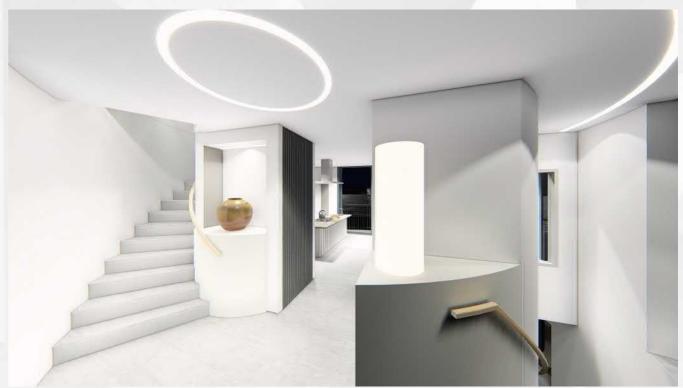


05-1st & -1 Floor Stairs Curve Plot Elevation

01-CURTAIN WALL ENTRANCE DETAIL.



EXTERNAL ROAD ENTRANCE (LUMION RENDER),



ENTRANCE STAIRCASE (LUMION RENDER),



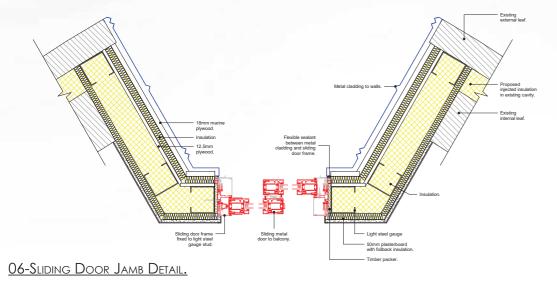
PENTHOUSE BEDROOM (LUMION RENDER),

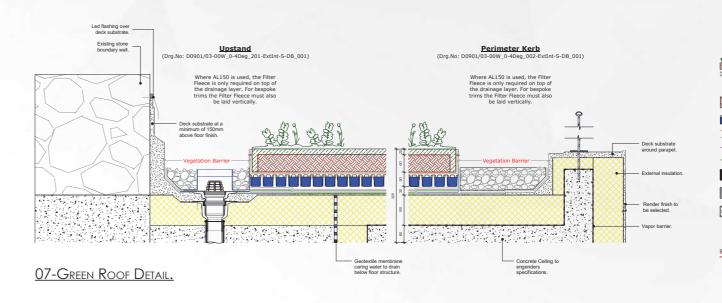


KITCHEN (LUMION RENDER),



LIVING ROOM & BAR (LUMION RENDER),





## Ohana Foxrock

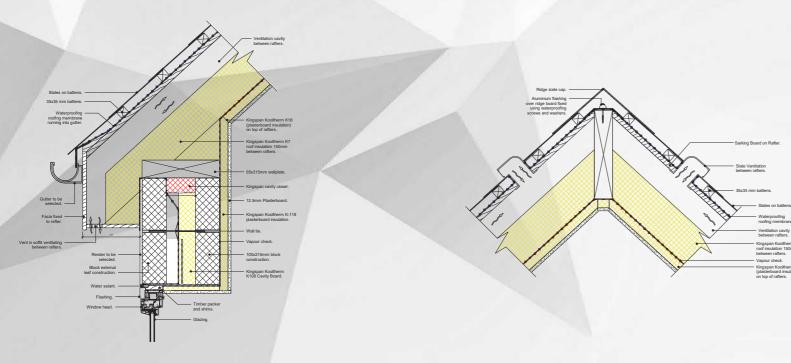
Ohana, located in Foxrock, Dublin 18, underwent a comprehensive restoration project that involved reconfiguring internal spaces and constructing a two-storey extension measuring 72sqm. The extension included a new stair core, porch, dormers, and updated windows throughout the property.

One of the significant challenges we encountered during this renovation was the construction of the new roof for the stair core extension, primarily due to the complex junctions with the existing roofs. To address this, we had to rearrange the rainwater and foul water systems, incorporating a new soakaway on the site to facilitate stormwater discharge.

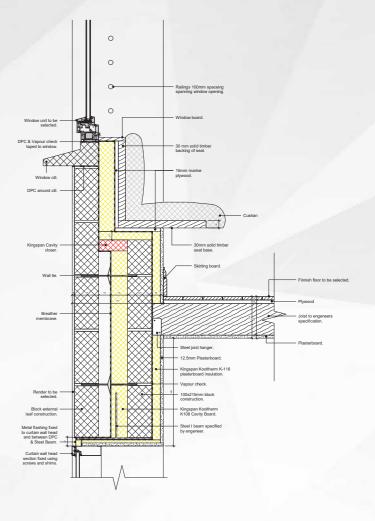
The project also featured extensive paneling, meticulously designed to ensure symmetrical aesthetics throughout the building. Furthermore, we incorporated hidden doors into various rooms, showcasing attention to detail. Custom joinery elements such as built-in window seats, wardrobes, and storage shelving were thoughtfully designed and meticulously detailed for different areas of the property.

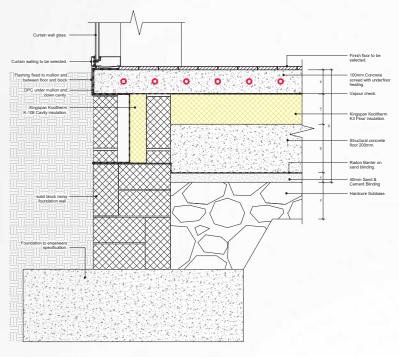
02-Eaves Detail.



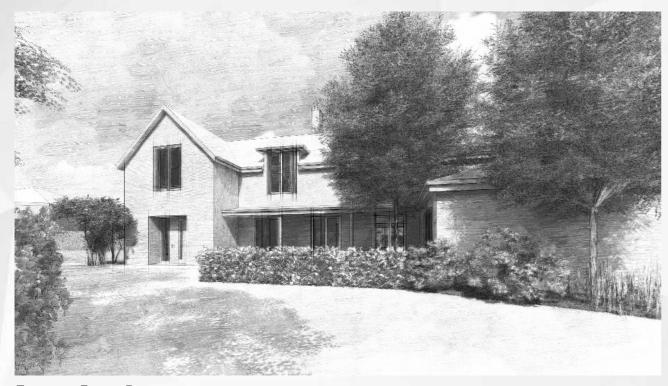


03-RIDGE DETAIL.





04-FLOOR, WINDOW&DOOR DETAIL.

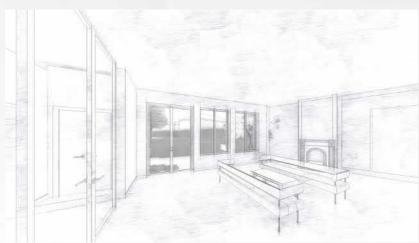


External Front Render.



REAR EXTENSION RENDER.

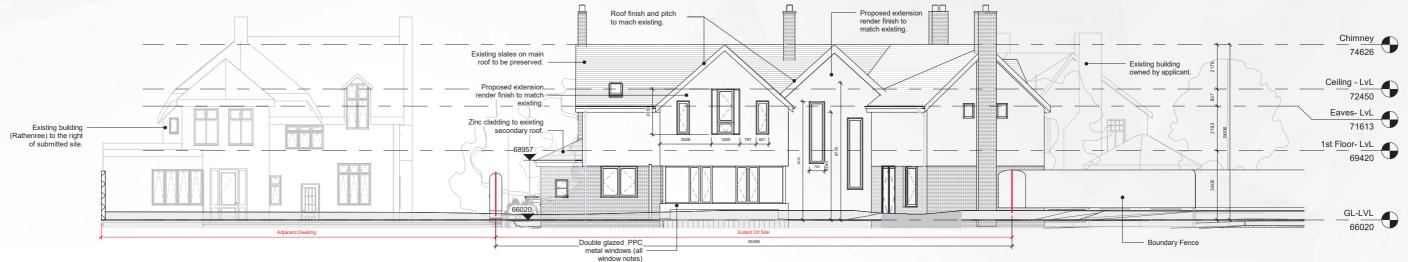




EXTERNAL FRONT RENDER.



REAR EXTENSION RENDER.



05-REAR ELEVATION.

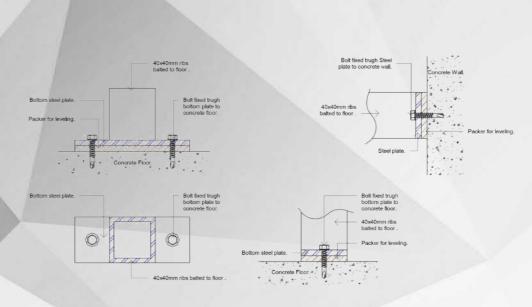
# **Ballast House**

Ballast House, situated on Westmoreland Street, Dublin 2, has a rich history dating back to the early 19th Century. As one of the first pavilion buildings constructed in Dublin, it holds significant cultural and historical value as a protected structure.

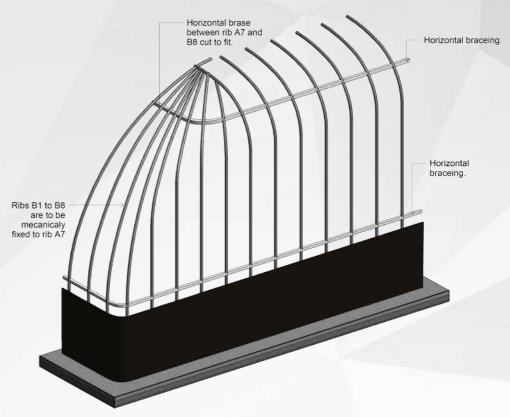
The comprehensive refurbishment and redesign of Ballast House transformed it into a 16,000 square feet commercial office space. The project was led by NBK Architects in collaboration with esteemed contractors including Townmore and Cushman & Wakefield.

Within this project, my primary responsibility involved drafting construction drawings for the building's lobby. The concept design centered around an intriguing visual of an upside-down boat, accentuated by a series of vertical curved metal ribs resembling the boat's skeletal structure. Overcoming various challenges, such as accommodating the complex multi-axis curves and working within limited space, we successfully integrated a new escape staircase beneath the boat-like copper shape, ensuring a 60-minute fire protection rating.

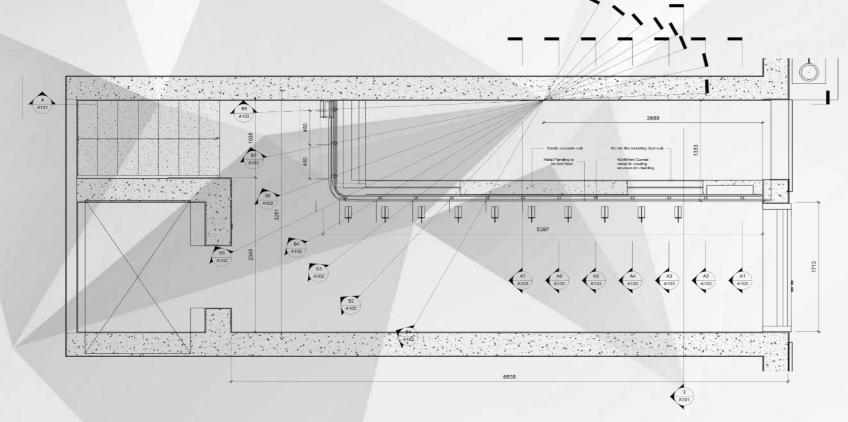
To achieve the desired aesthetic, we meticulously executed a series of sections through each vertical metal stud. This enabled us to fabricate 15 uniquely shaped box section frames, which were then clad with copper strips in a shiplap manner. The result was a striking and polished appearance, resembling the sleek exterior of a metallic boat.



**02-S**TEEL POSTS DETAILS



PRESPECTIVE SECTION RENDER (REVIT)



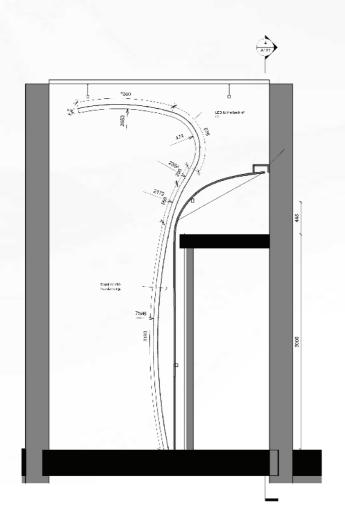
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03-Construction Section 10

01-FLOOR PLAN



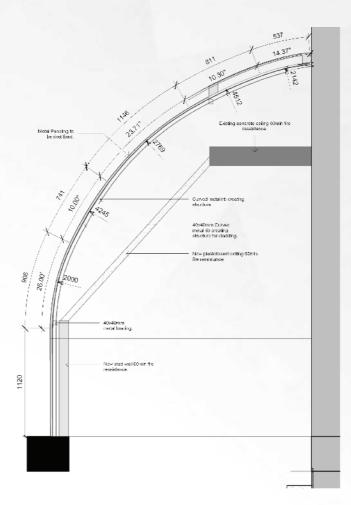
PRESPECTIVE SECTION RENDER (REVIT)



04-Construction Section 9



EXIT RENDER (LUMION&PHOTOSHP)



05- Construction Section B7



ENTRANCE RENDER (REVIT&PHOTOSHOP)