



SPB
ARCHITECTURAL TECHNOLOGIST

PORTFOLIO
SNEH PARESH BAROT

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(2017/2018)**



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(2021)



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(2022)



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(2022)

Dementia Care Home/Supported Apartments (2017/2018)

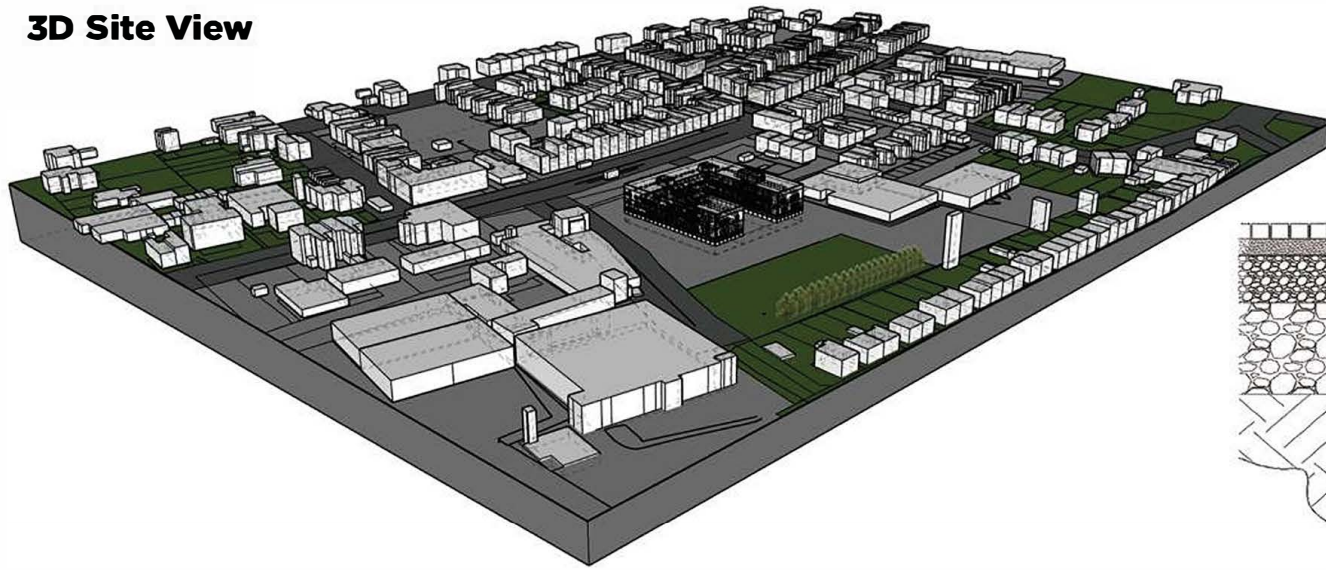
The four and a half Acre site is in Beeston, Nottingham on the junction of Chilwell Road. The project site was part of a wider masterplan scheme for a mixed-use scheme including housing , retail, senior living, healthcare facilities and business uses.

According to the brief, we were to design a 72 bed Dementia care home within a land parcel measuring 1.5 acres and a budget of 25 Million Pounds, split in 3 elements including Luxury, Activities and Supported Apartments.

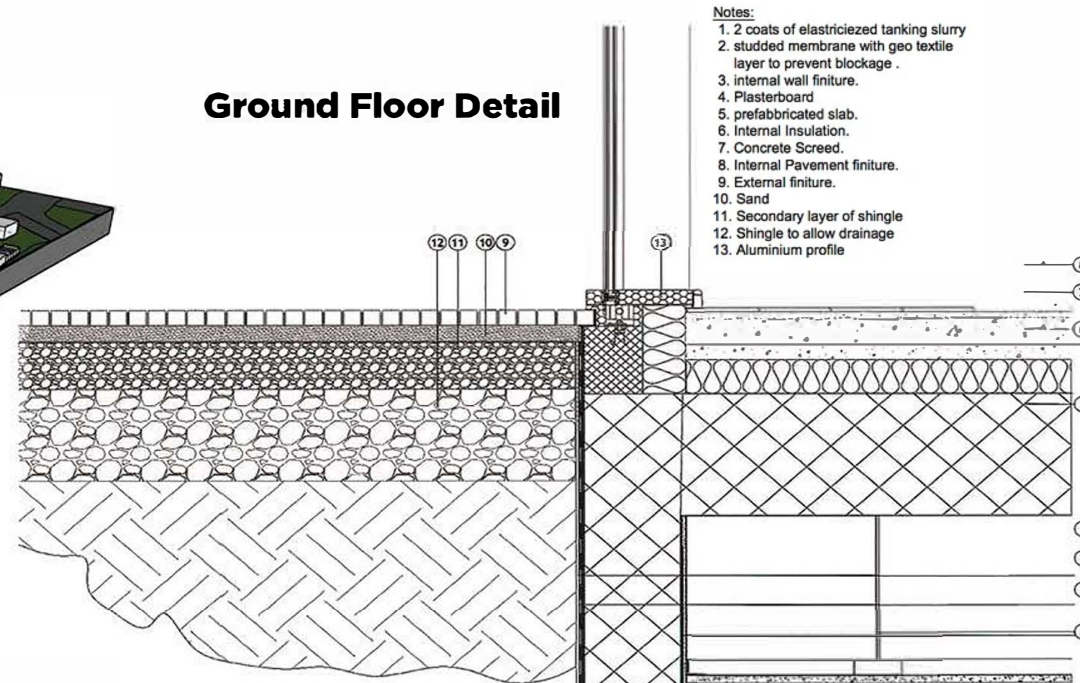
The proposal must maintain the ethos of Belong Ltd. while providing an innovative setting and services that ensure high quality living.

Softwares Utilised: Autocad, Revit, Enscape, Photoshop.

3D Site View



Ground Floor Detail



BREEAM



Energy
Range of U-Value for the envelope elements 0.13-0.18 W/m2 (According to Part L Building Regulations)
Solar Panels- Approx. 20% of the energy of the building



Health & Well-Being
Natural Ventilation
Mechanical Ventilation (10m3/h/y)
HVAC



Innovation
Use of Modular Construction
Rainscreen cladding with brickwork effect
Curtain Wall



Land Use
Green Space
Existing Trees (English Oak)
Green roof



Materials
Steel
Glass
Aluminium
Minimum use of reinforced concrete



Management
Time Management
Create each compartment one at a time



Pollution
Minimum Pollution
Modular Construction (No dust, No CO2)



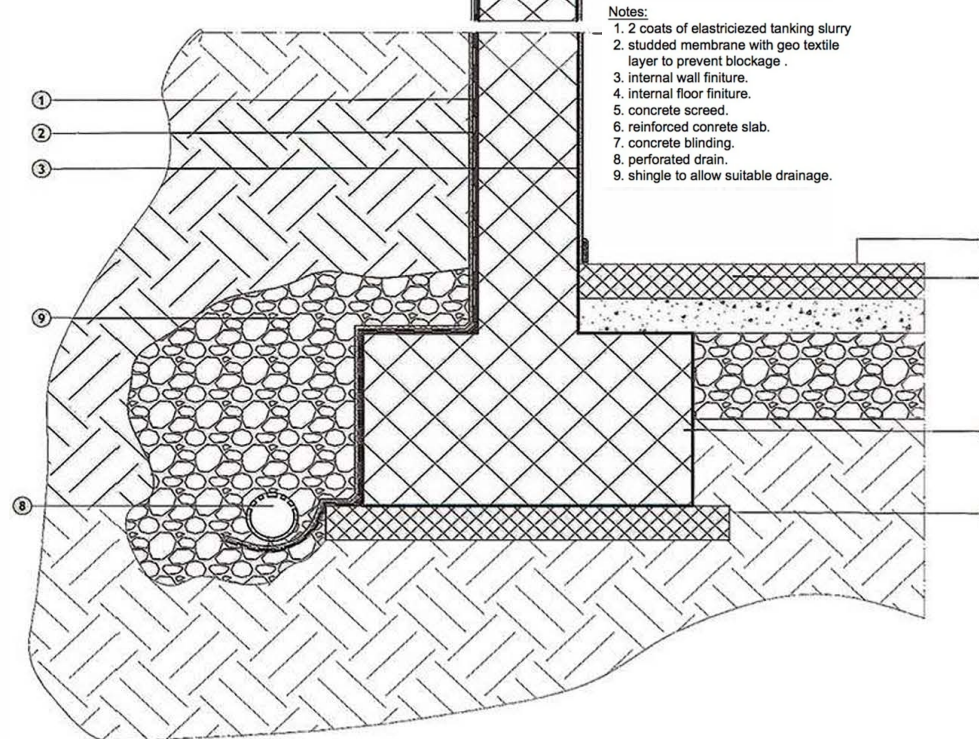
Transport
TramLine
Bicycle Storage Space
Public Transport Stops



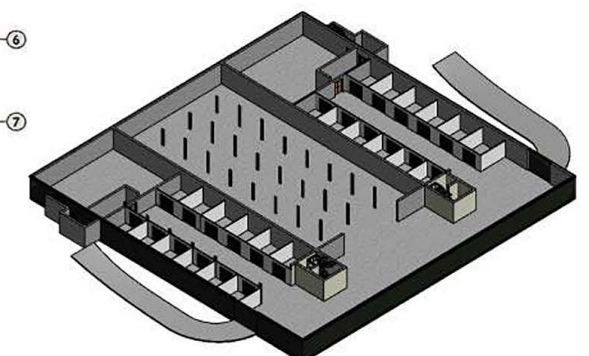
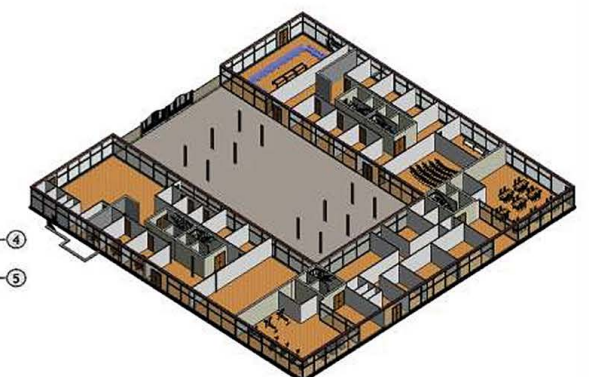
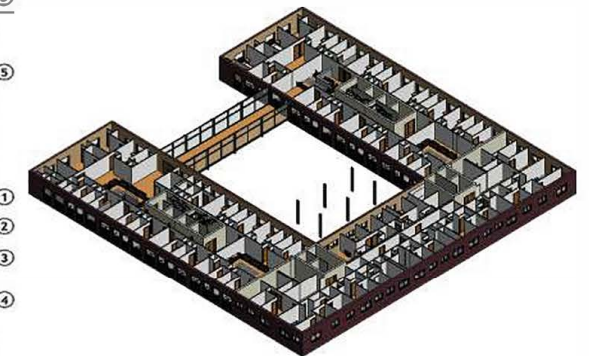
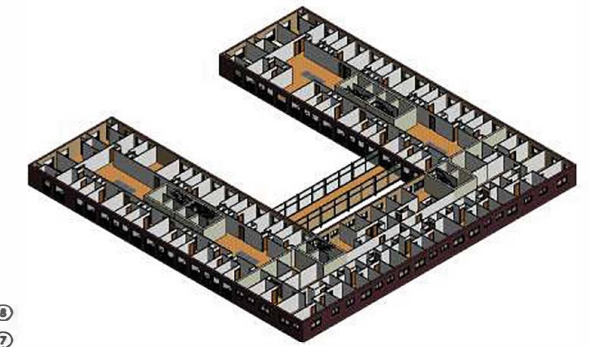
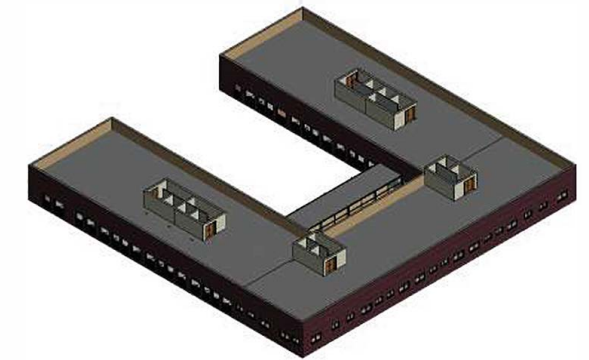
Waste
Minimum waste of Materials
90% of the steel is recyclable
Recyclable Waste storage



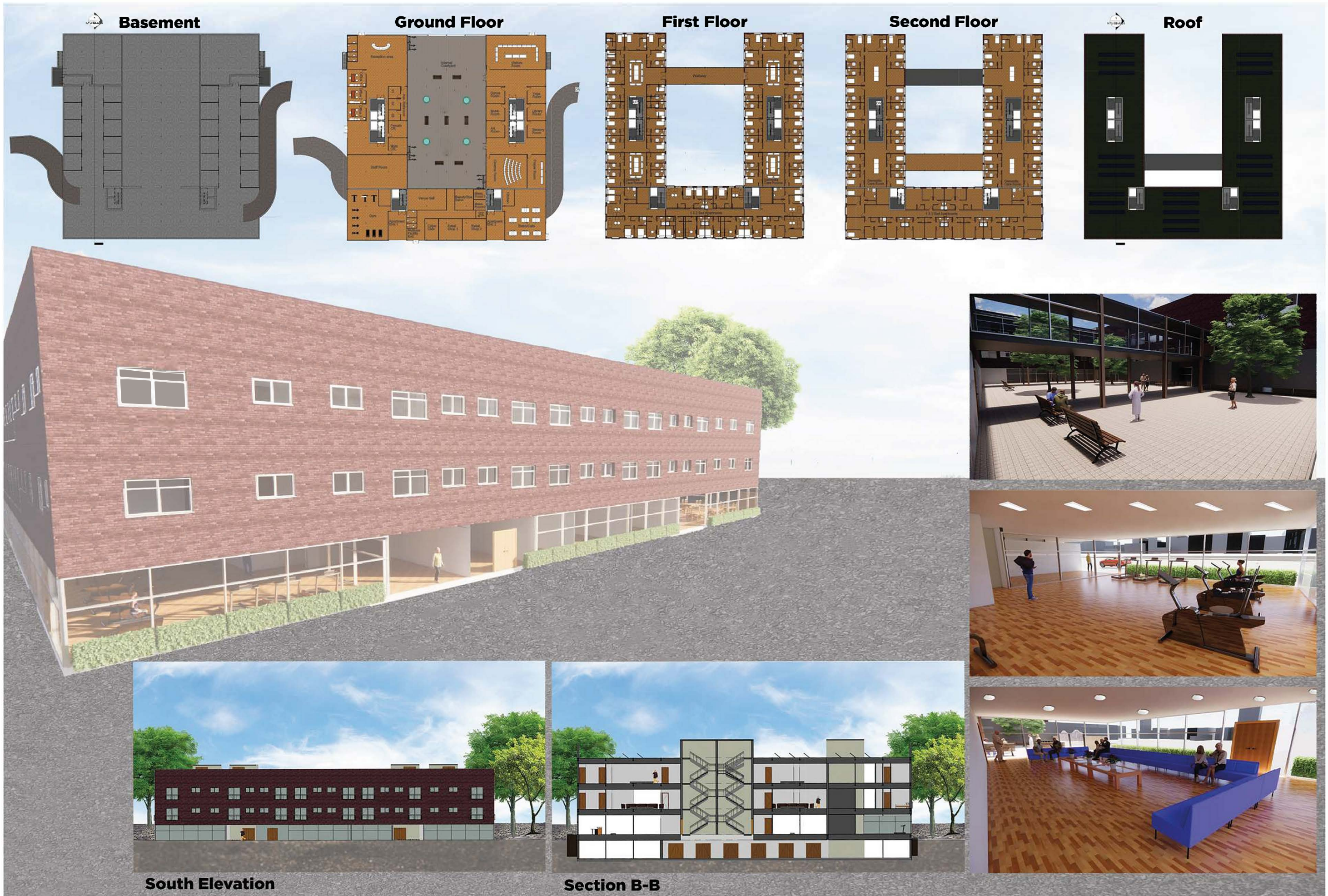
Water
Grey Water Harvesting
SUDS



Basement Detail



Axonometric View



South Elevation

Section B-B

WA Hospice & Palliative Care Center (2019/2020)

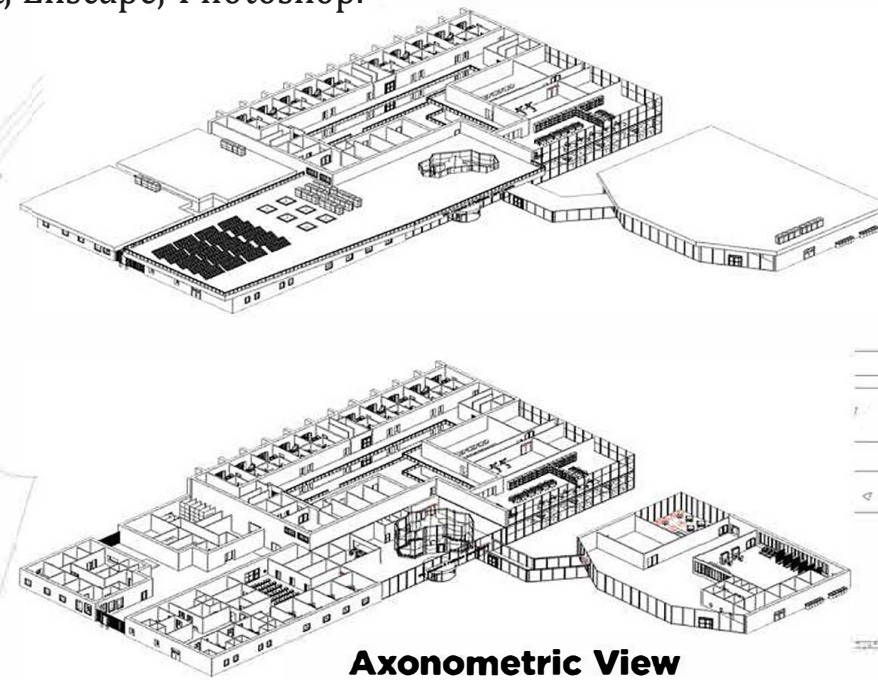
Located to the North-East of United Kingdom, in South-West Essex of the Waltham Abbey Council, the proposed development will target the increased elderly population of the District town and aim to provide betterment of Healthcare facilities within the Care sector.

The proposed hospice care development will provide the locals of Waltham Abbey town with well established Medical, Healthcare and Palliative care facilities creating a home away from home ambiance. The population of Waltham Abbey is older than the National and Essex average age.

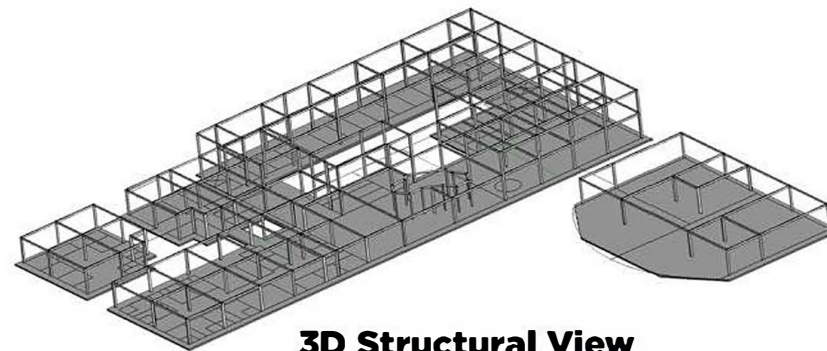
Therefore the proposed scheme would benefit both in medical & care services providing a modern, contemporary atmosphere in a serene and peaceful environment.

Softwares Utilised: Autocad, Sketch-up, Revit, Enscape, Photoshop.

Proposed Site Plan



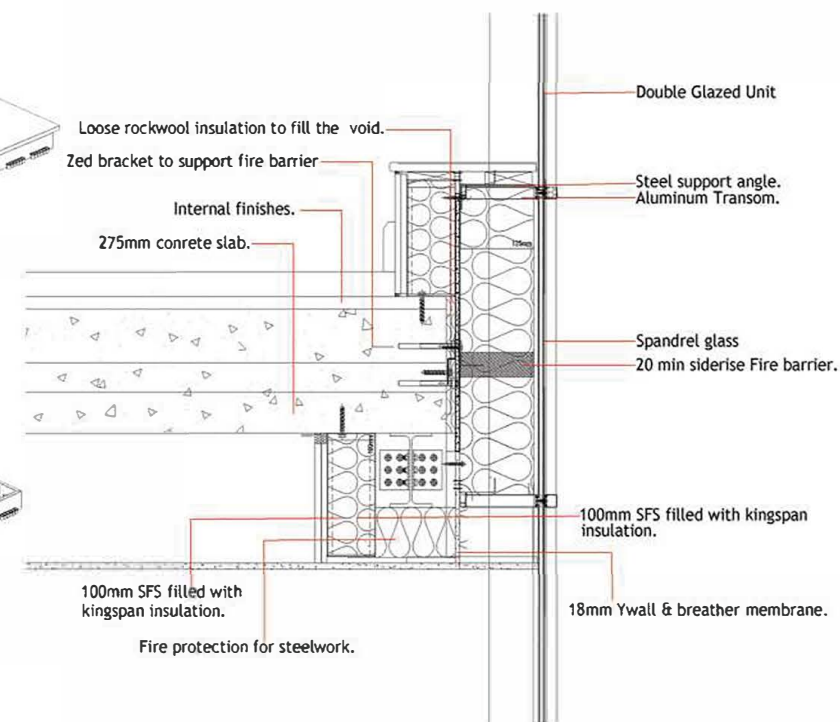
Axonometric View



3D Structural View



Curtain wall Detail



Curtain wall Section

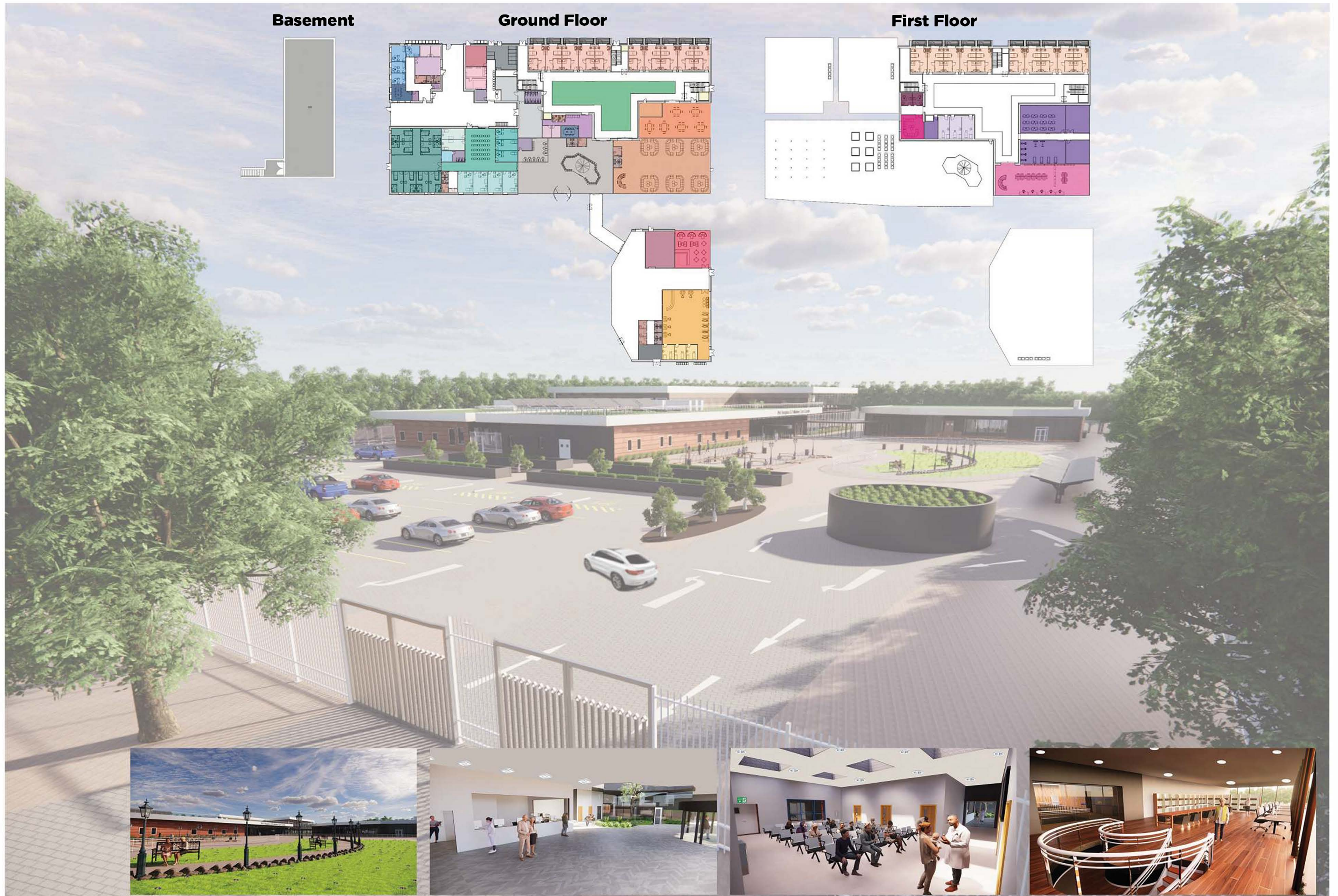
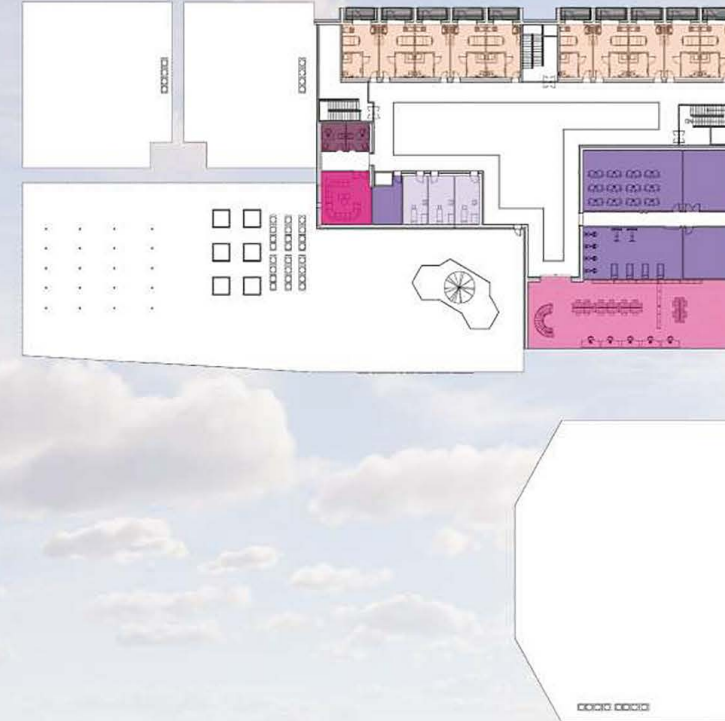
Basement



Ground Floor



First Floor



Work Experience:- Dementia Care Home Proposal (2019)

During my Placement Year I had the opportunity to work for an award-winning London-based architect; RM Architects, specializing in retirement housing, commercial offices, listed buildings, luxury residential. In the course of my 6 months work experience I worked on a proposal for a 2-storey care home with multi-functional facilities in Essex, whereby I developed the initial Site & Floor Plans, a 3D Model as well as re-evaluated the Elevations and Sections for the proposed development.

Softwares Utilized: Autocad, Sketch-up, Lumion, Photoshop.

Site Plan



South Elevation

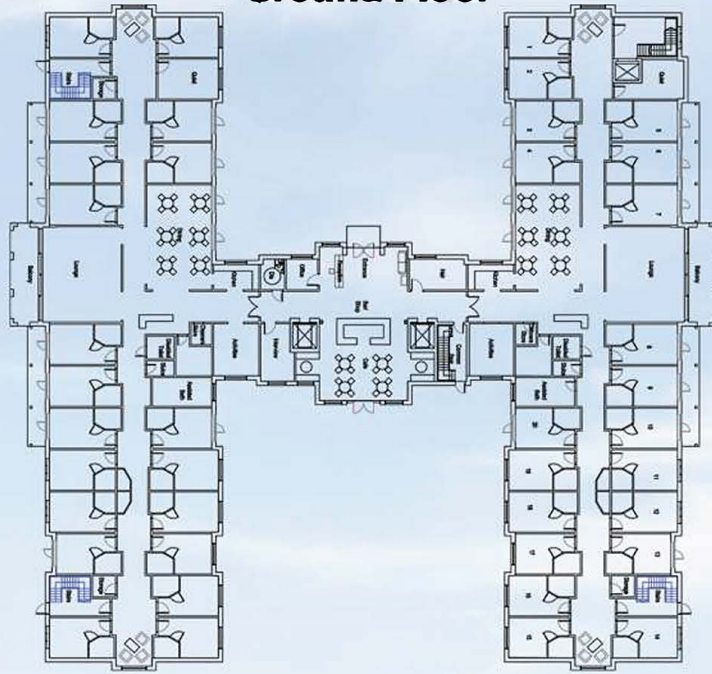


Section A-A

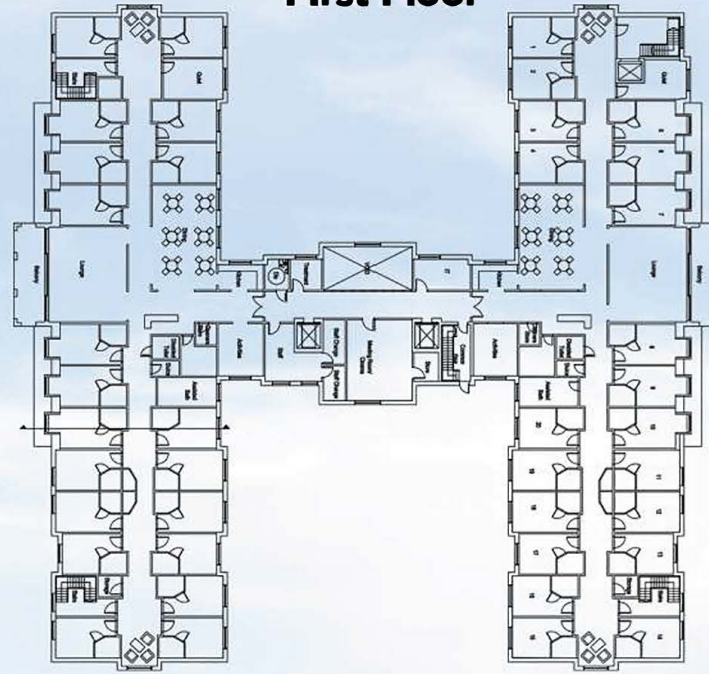
3D Model Views



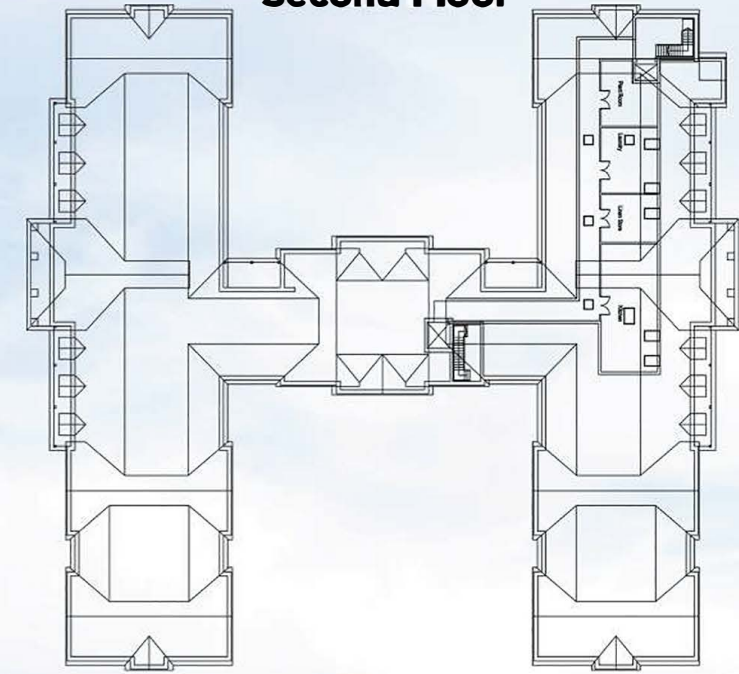
Ground Floor



First Floor



Second Floor



Work Experience:- Chaplins House Modular Cabins (2021)

A template design was developed for Modular Cabin homes to facilitate prefabrication for rural locations to minimise environmental impact.

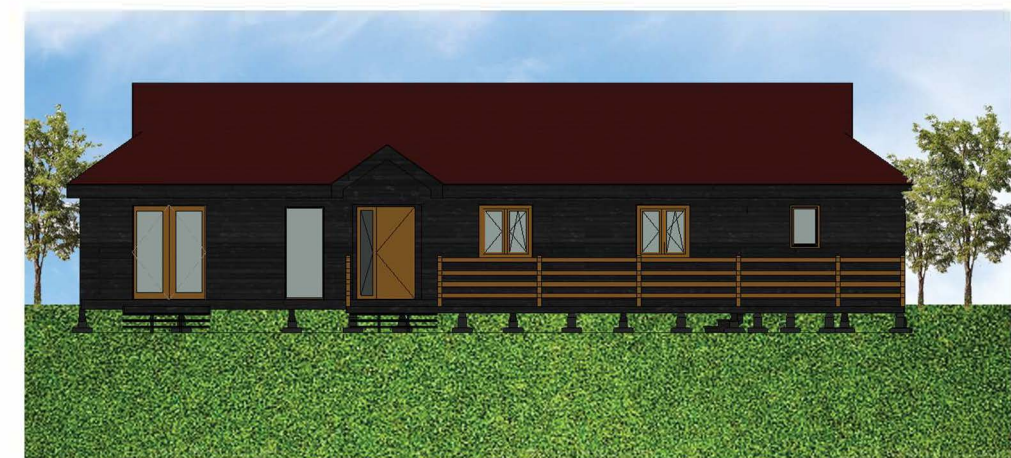
Renders of the 3D model were created with the exported Revit model. The layouts, 3D model and renders were used to visually communicate the design and spaces to potential clients.

Softwares Utilised: Revit, Lumion, Photoshop

3D Visual



North Elevation

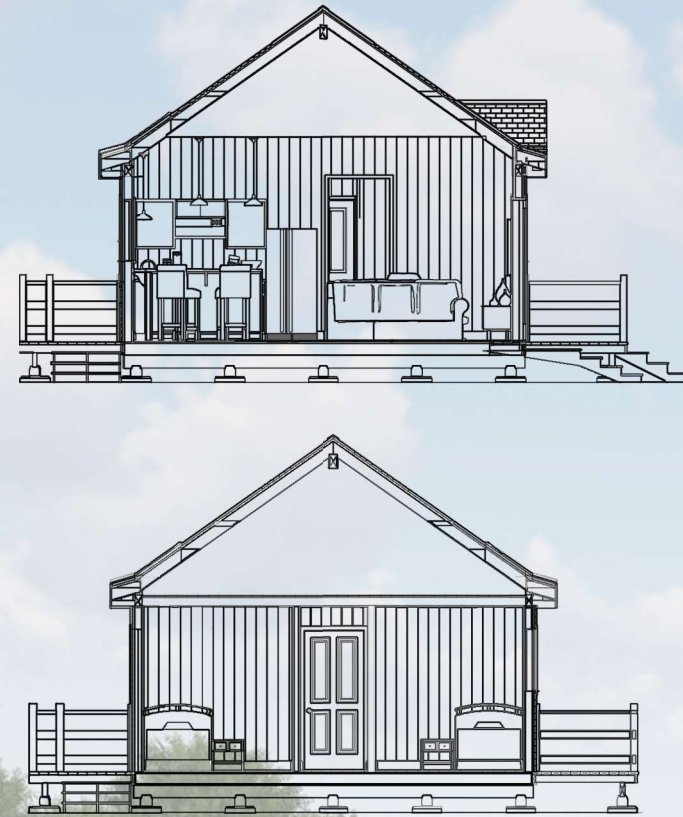


South Elevation

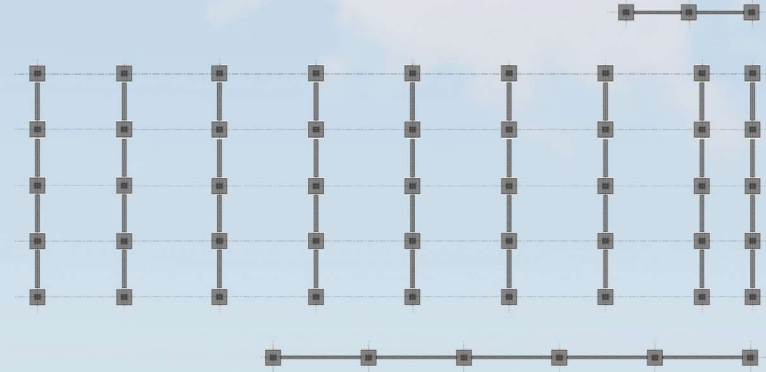
3D Model Views



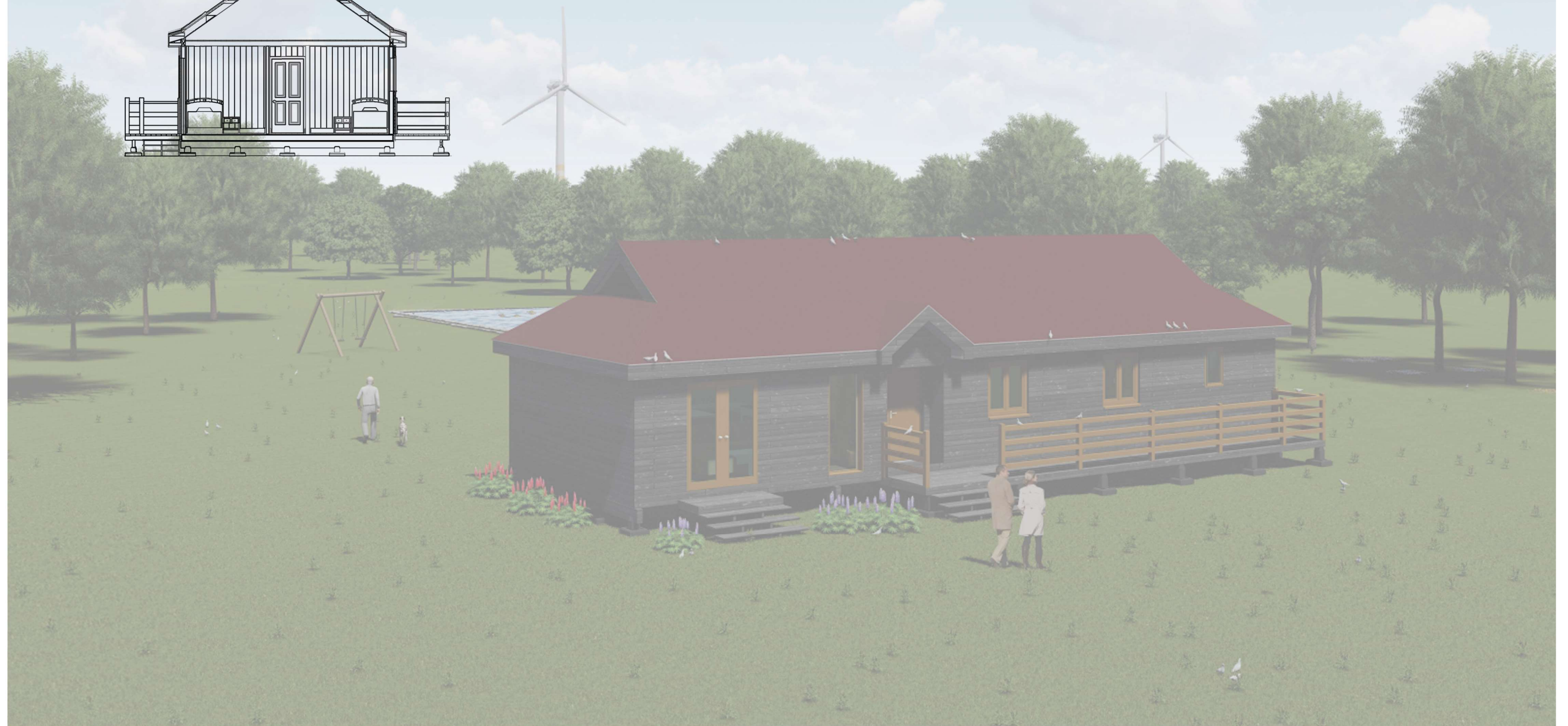
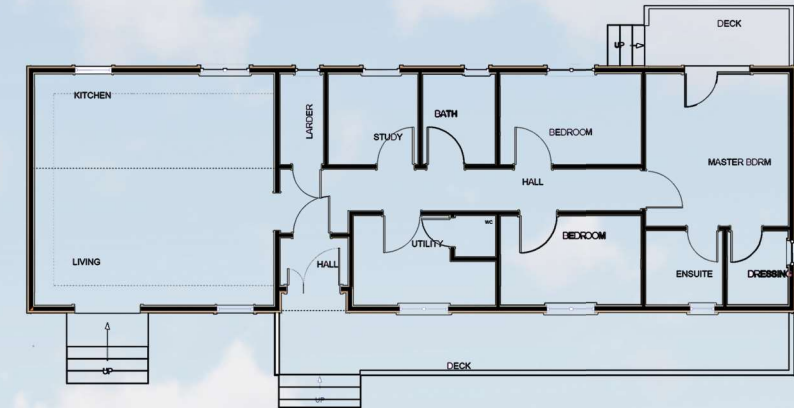
Sections



Foundation



Ground Floor

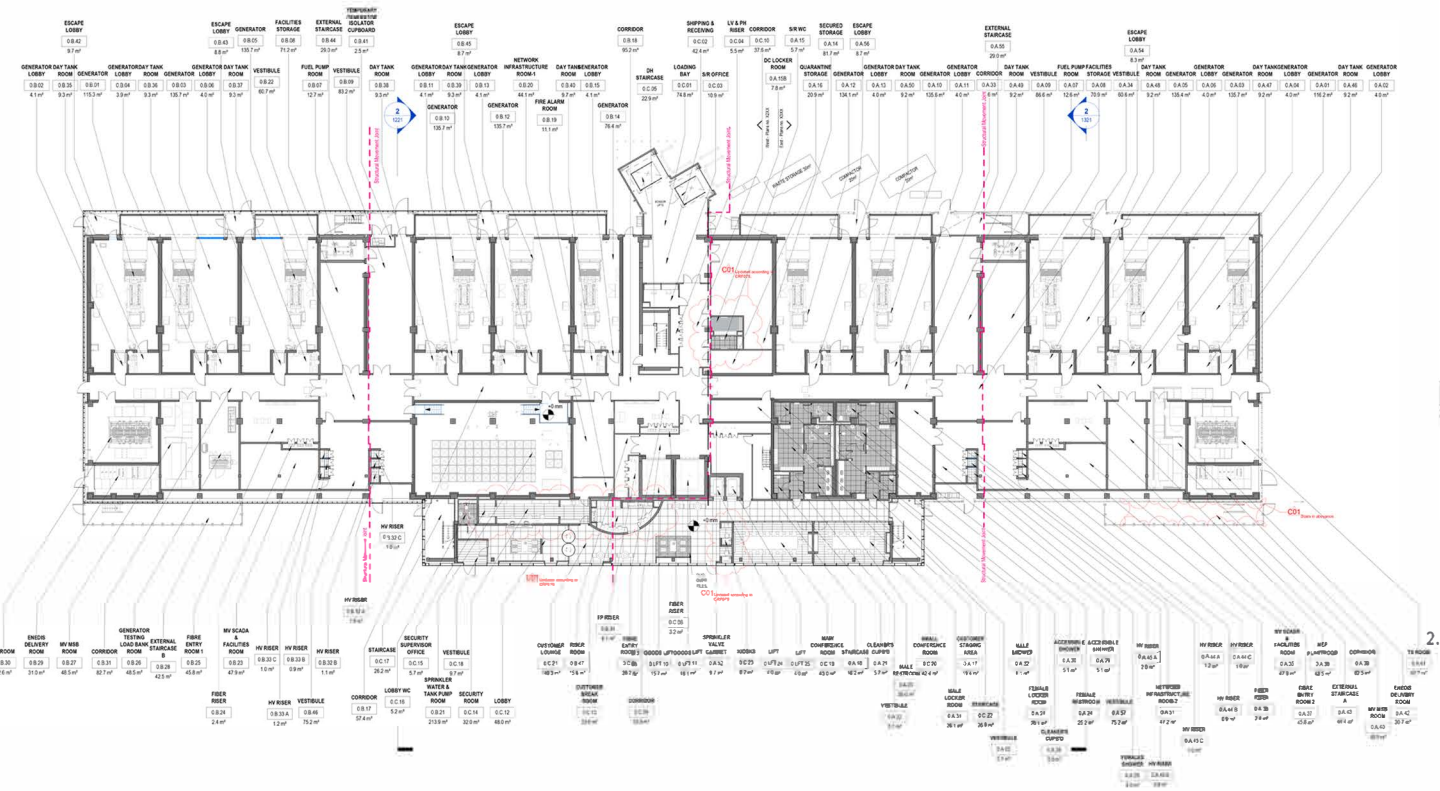


Data Centre – Meudon, Paris

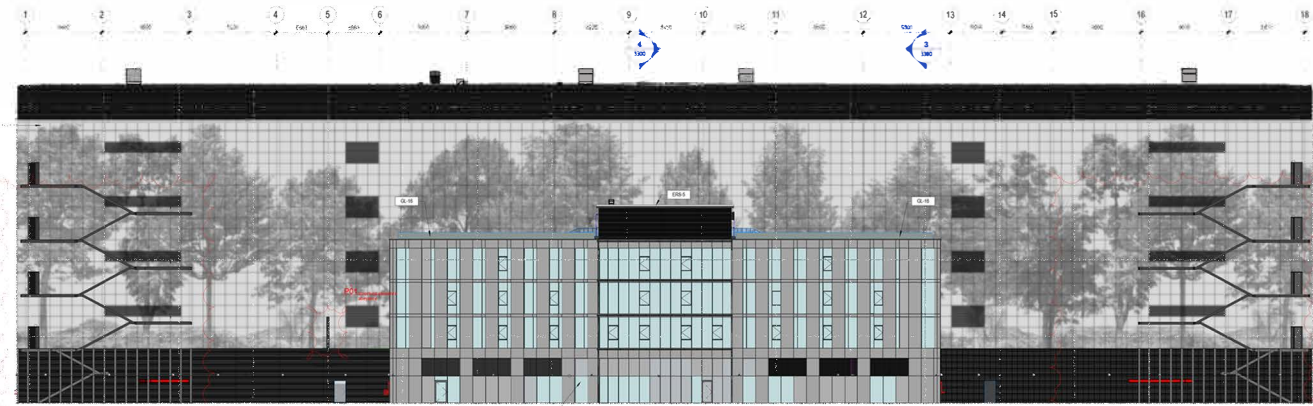
5 Storey 13,890 sqm site area RIBA Stages 04-05

3DReid were appointed by contractor Mercury as architectural consultants for a new data centre in Paris. Due to the specialist nature of building services in the DC sector, the MEP consultants acted as lead designer on the project. The complexity of the design interfaces, dynamic nature of the client requirements and tight programme made the design coordination, to be completed by 3D Reid, a unique challenge. I was responsible for developing technical construction details, implementing project changes instructed by the client, coordination with specialist suppliers incorporating client specifications, uploading models to BIM360 & client stage deliverables. I was also a member of the core team responsible for coordination and implementation of the multidisciplinary engineering requirements.

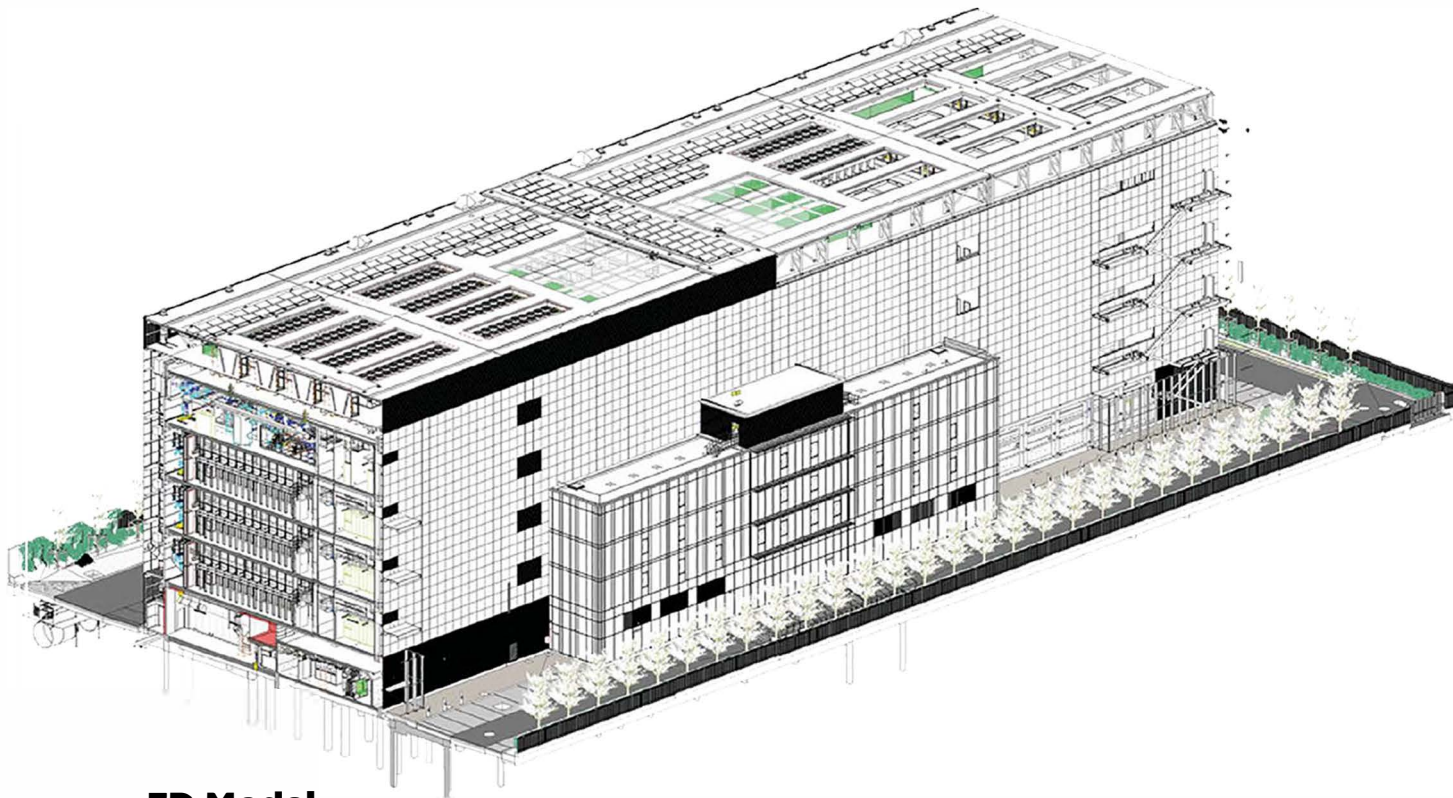
Softwares Utilised: Revit



GA Plan- Level 0G



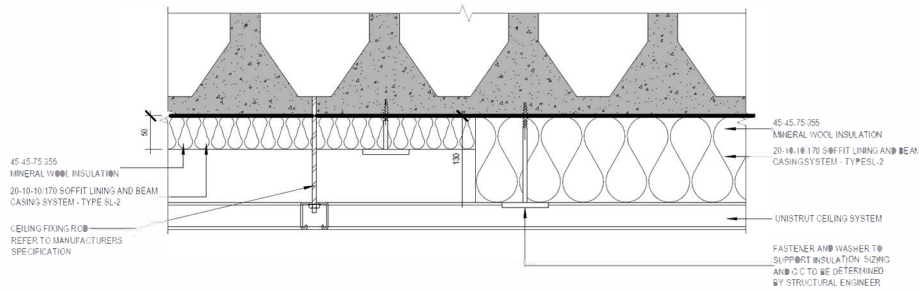
South Overall Elevation



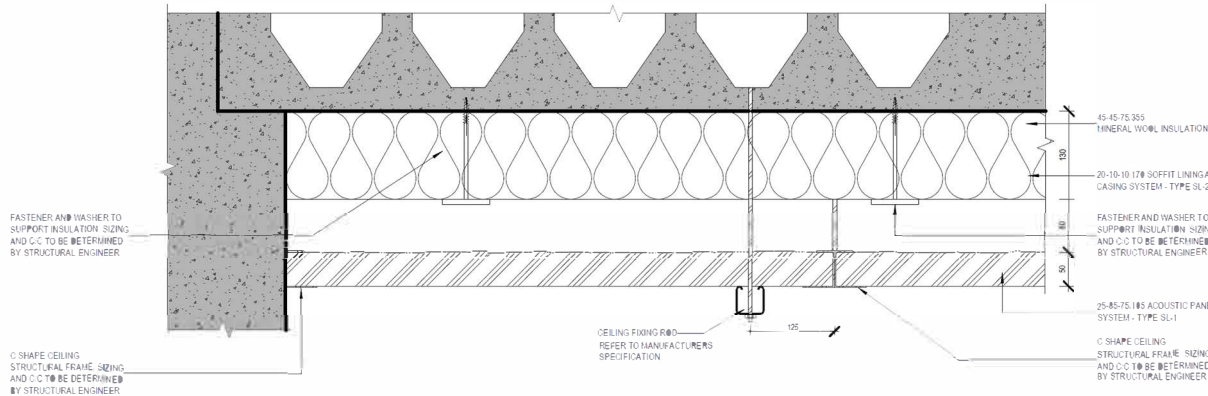
3D Model



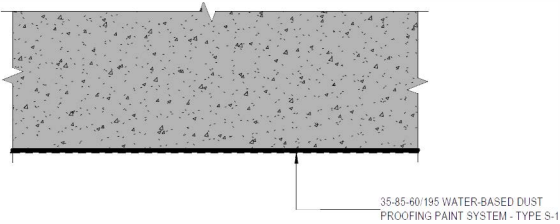
Construction Details



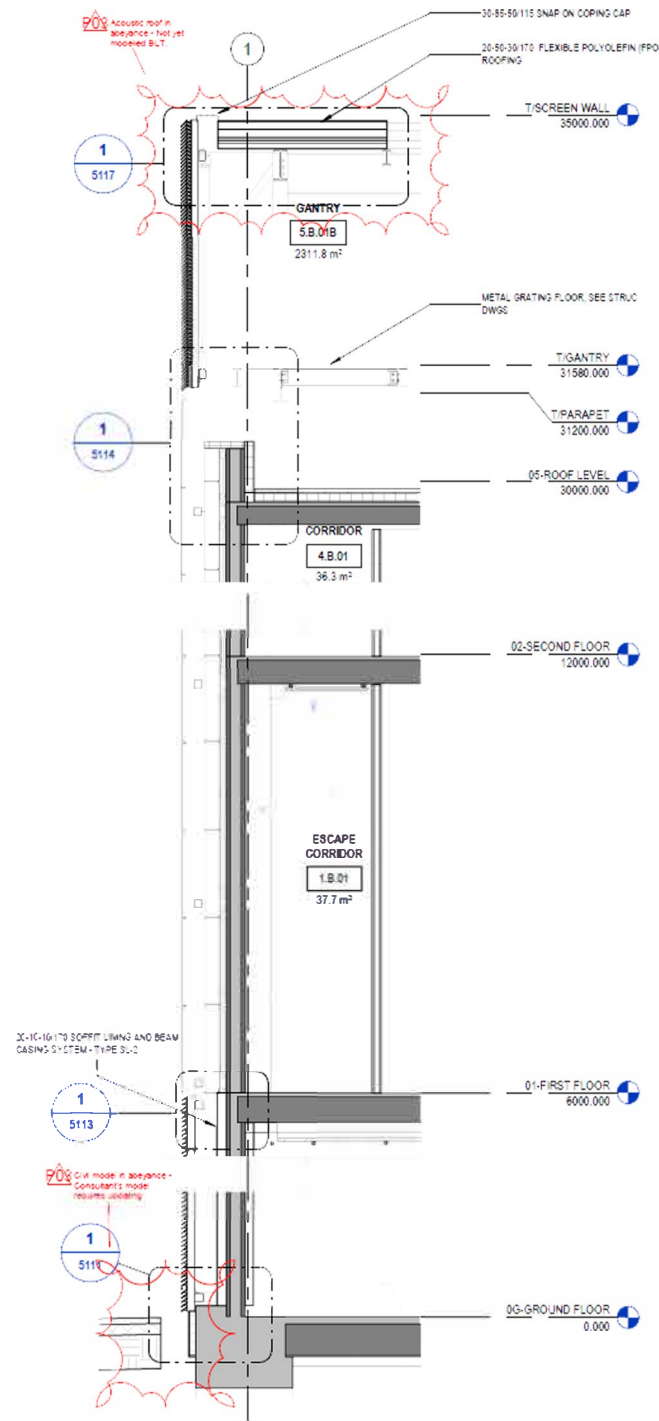
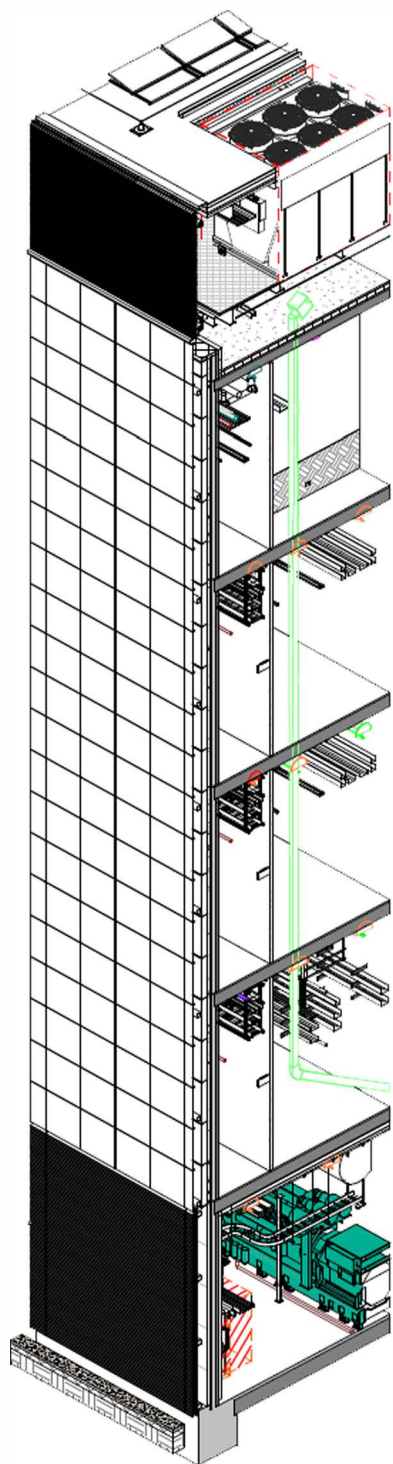
Ceiling Detail- Thermal Lining to Soffit



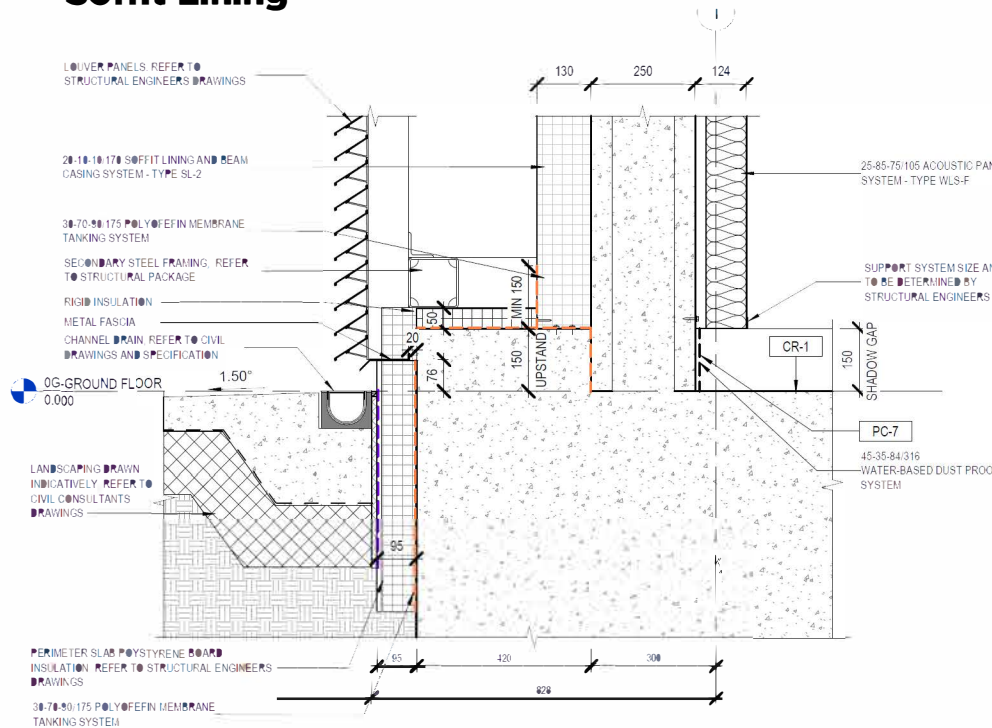
Ceiling Detail - Thermal & Acoustic Panel Lining System & Soffit Lining



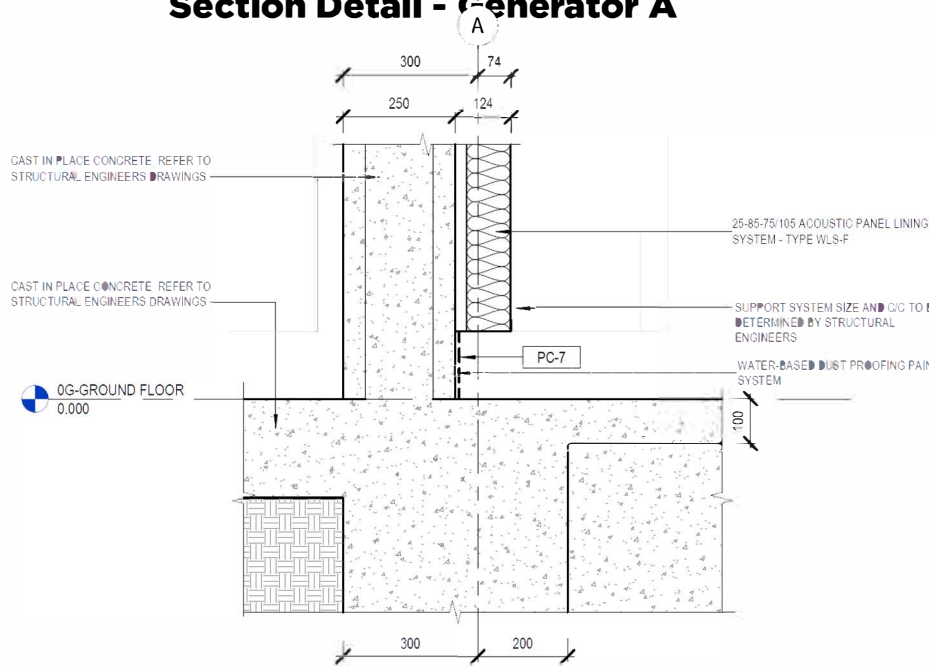
Ceiling Detail - Exposed Soffit (Dustproof Sealer)



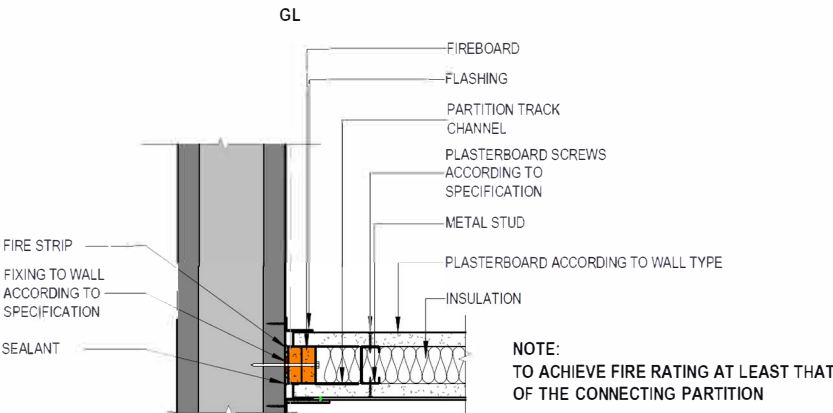
Data Centre - Section



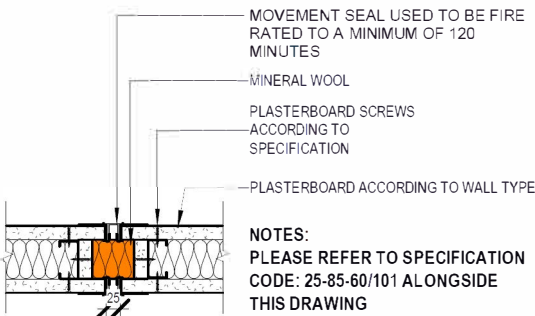
Section Detail - Generator A



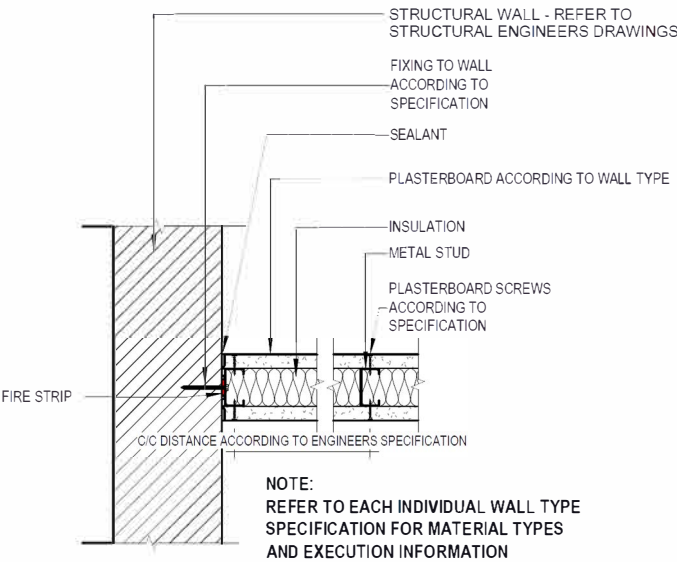
Section Detail - Generator B



Abutment Movement Joint



Wall Movement Joint System Detail



Generic Partiton Abutment To Structure Detail

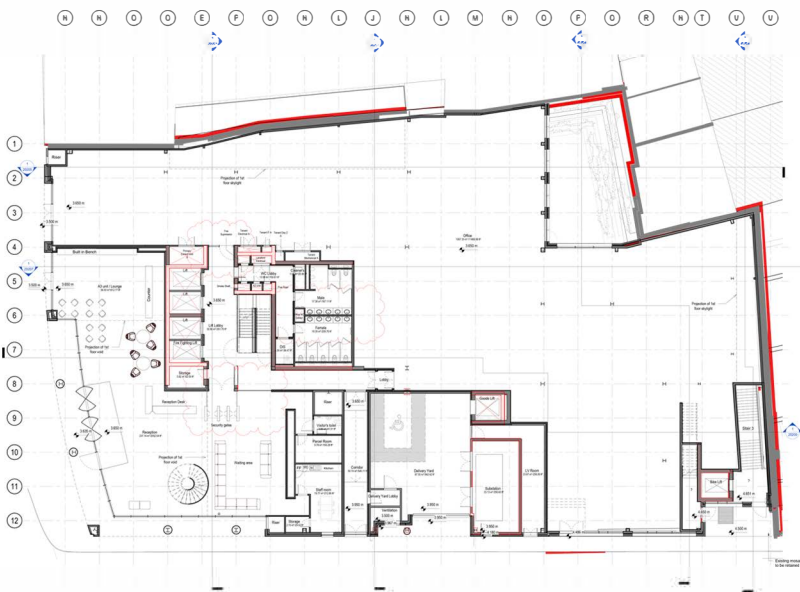
40 Broadway - London

8 Storey Approx. 9300 sqm office space RIBA Stages 04-05

3DReid were appointed by client Tellon Capital as architectural consultants for the redevelopment of an existing building situated in close proximity to St James's Park, London. The challenge was to integrate two independent buildings to meet the client brief, optimizing viable floor area, whilst working within existing constraints, including strict conformance to planning requirements for the building façade.

I was responsible for updating the BIM model for construction - this included: change management, coordination of slab setting out & penetrations for MEP services and resolving model coordination issues. I updated concrete stair models & resolved spatial coordination in accordance with the building regulations. I developed a 3D model for bespoke internal wall finishes which included feature stone cladding. I utilized Dynamo to share architectural Revit models and issue client deliverables to a demanding deadline. 40 Broadway targeted a BREEAM 'Excellent' rating, Wired Score 'Platinum' rating and Well 'Platinum' Certification.

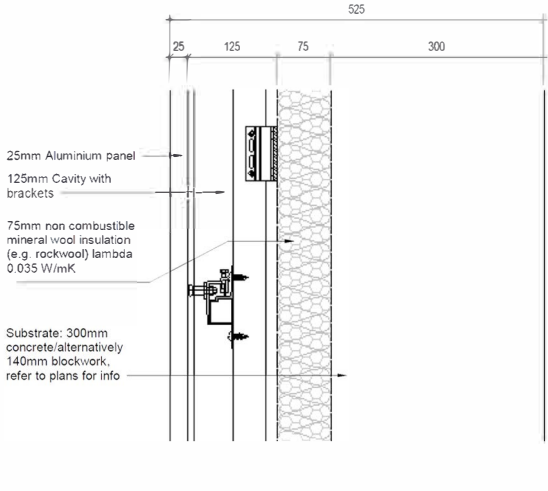
Softwares Utilised: Revit.



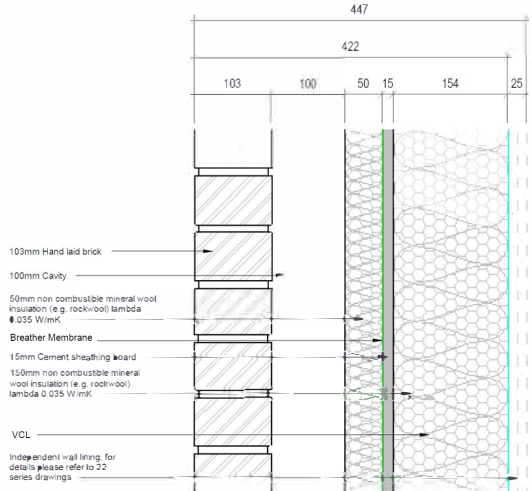
Ground Floor



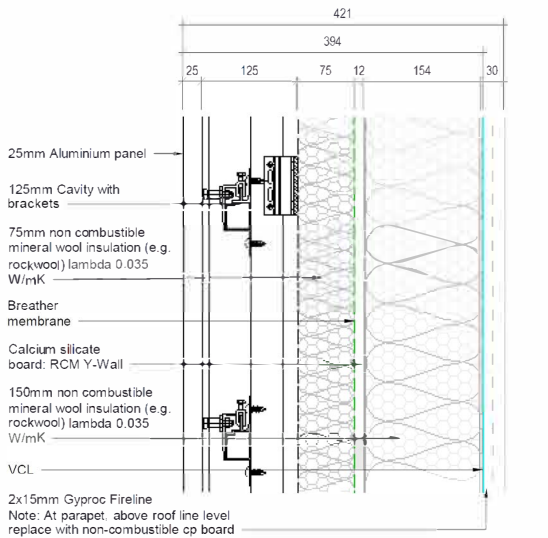
First Floor



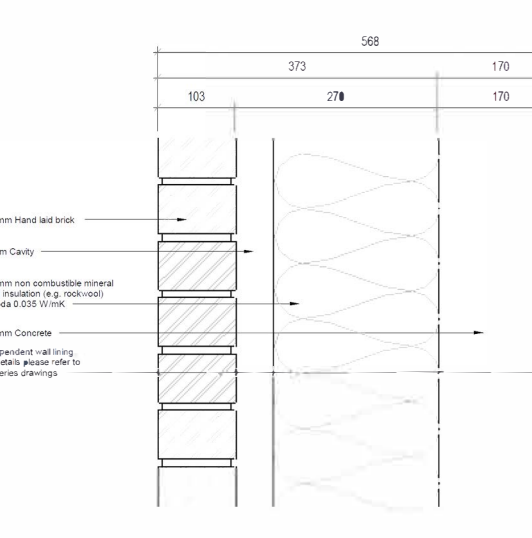
Aluminium panel rainscreen supported by SFS substrate



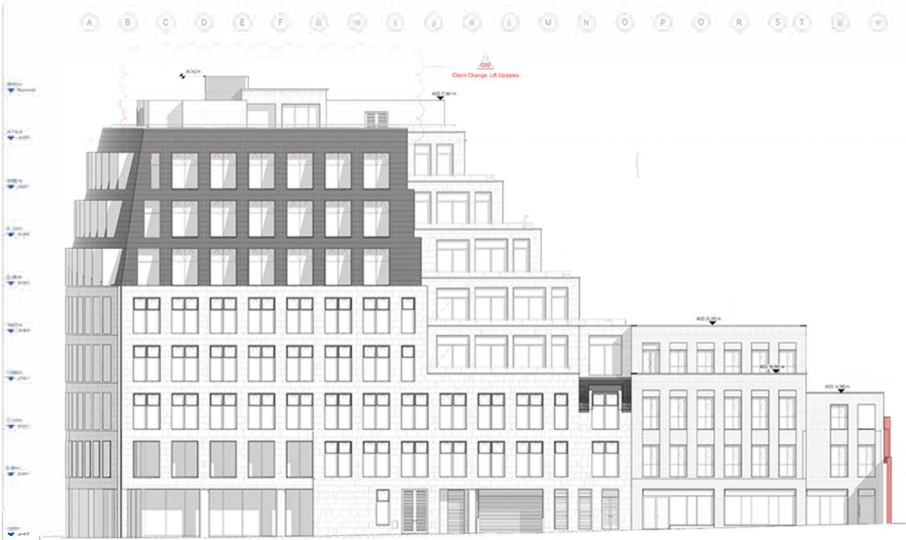
Hand laid brick supported SFS substrate system



Aluminium panel rainscreen supported by concrete substrate



Hand laid brick supported by concrete substrate



South Elevation





East Elevation



Reception area with feature stone wall



Reception arear with feature circular stair



Office Area Lift Lobby



Changing facilities lockers



Changing facilities toilets



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