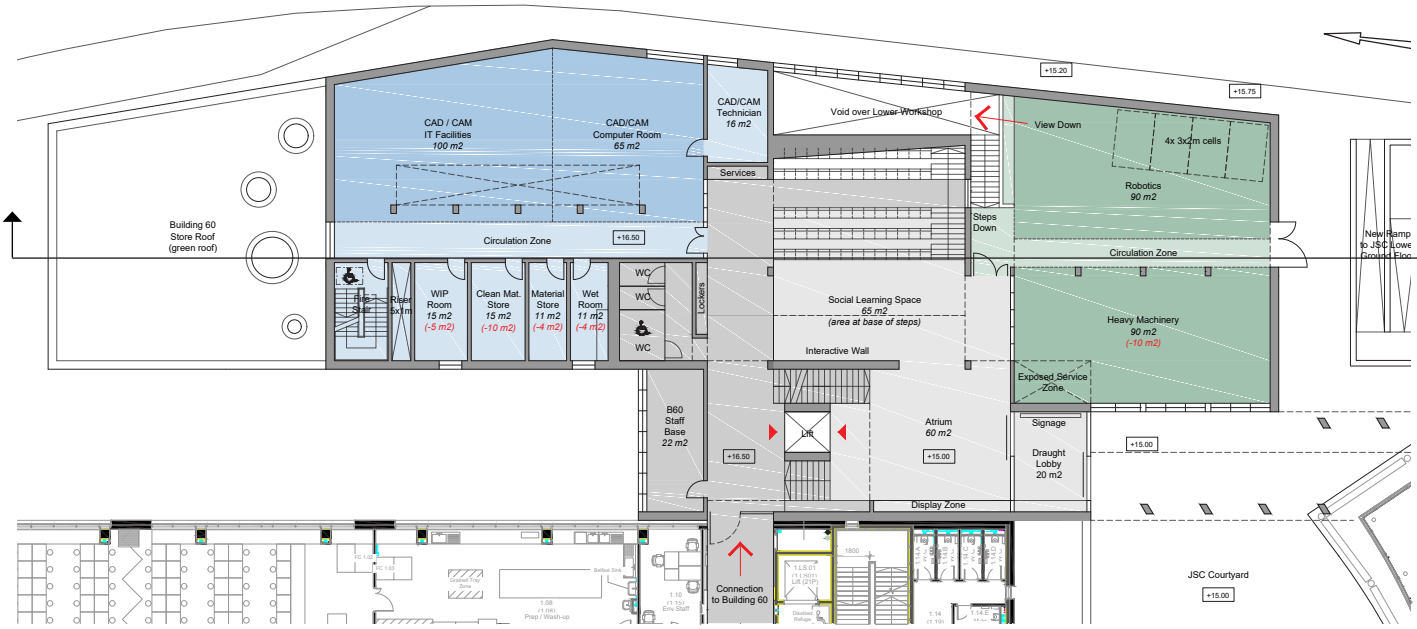
Portfolio

Project: **University of East Anglia - Building 62** 2018 - present
Role: Lead Architectural Designer @ FBM Architects
Client: University of East Anglia
Location: Norwich, England (UK)
Size: 25 000 square feet
Budget: £14 million

FBM Architects was awarded the contract to conduct detail design of this flagship new building for the emerging Robotics Institute currently being formed out of the University's School of Engineering. This award followed the successful RIBA Stage 0-2 concept design phase, where I served as the lead architectural designer, working closely with the University's estates team and faculty stakeholders.

The new building will include workshop space devoted to both additive (3D printing) and subtractive (CNC milling) manufacturing techniques. The unique split-level design responds to the slope of the site and the critical requirement that the new building would provide internal connections with the two neighbouring academic buildings to the south and east. A shared studio space for students and local industry events is located on the top floor.



A central atrium and auditorium space connects all of the different spaces within the new building:

View from the top of the auditorium steps

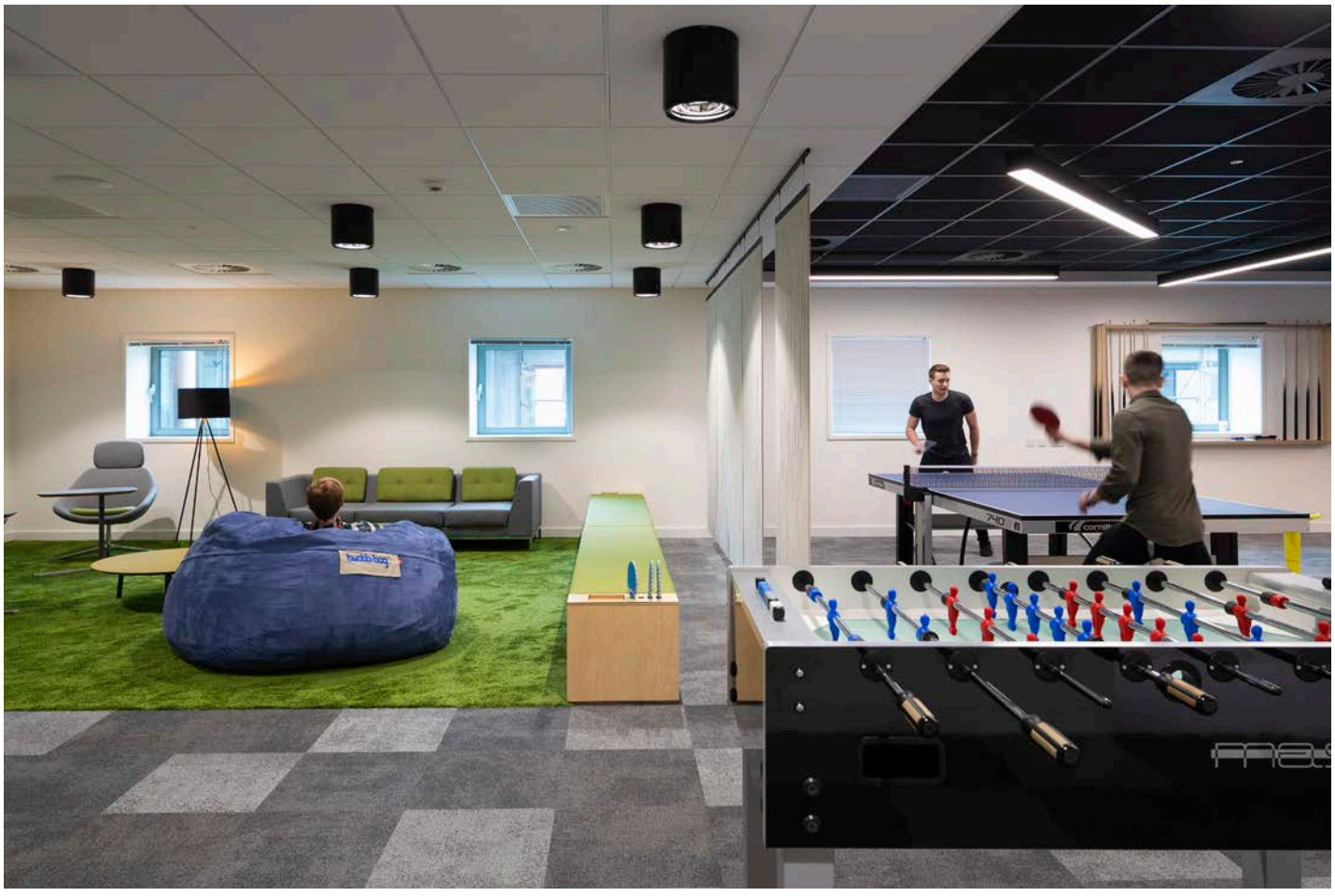
View from the Julian Study Centre Courtyard (looking north)

Project:	**IBM Games Room**	2017
Role:	Project Architect @ FBM Architects	
Client:	IBM and CBRE	
Location:	Hampshire, England (UK)	
Size:	7 200 square feet	
Budget:	£1.2 million GBP	

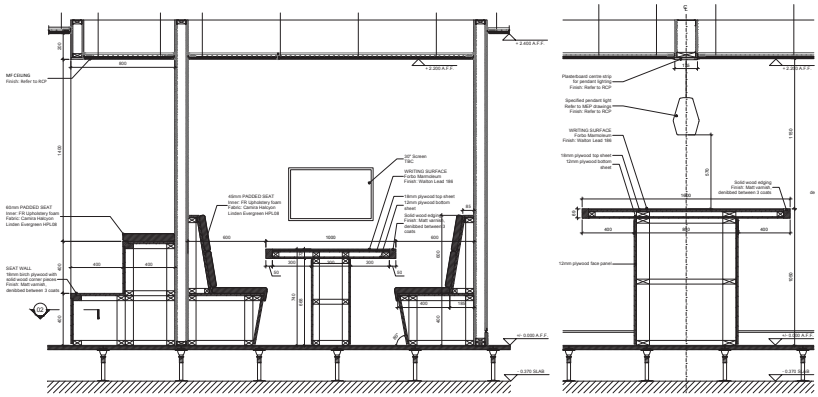
At Fraser Brown MacKenna Architects, I manage the office's portfolio of projects for IBM, the multinational IT corporation.

This project involved the creation of a new collaborative hub for staff members at IBM Hursley, IBM's research division in the south west of England. I worked with the client stakeholder group to draw up a design that merged too opposing aspects of the brief - a place to work and a place to play. The design comprises a central spine wall that absorbs a line of twin columns through the centre of the space. This spine wall incorporates booth seating, a kitchenette, and a large dining table, but more importantly serves to provide visual and acoustical separation between the two areas, which have fundamentally different needs.

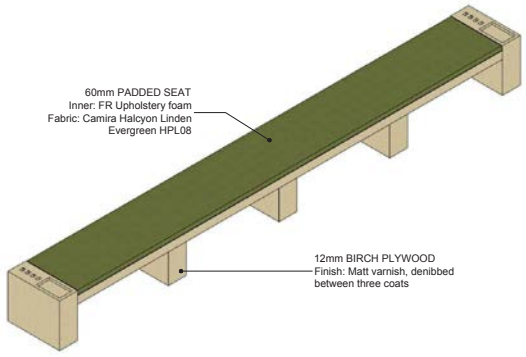
The completed project was very well received by the business community at IBM Hursley and has since led to further commissions from this important blue chip client.



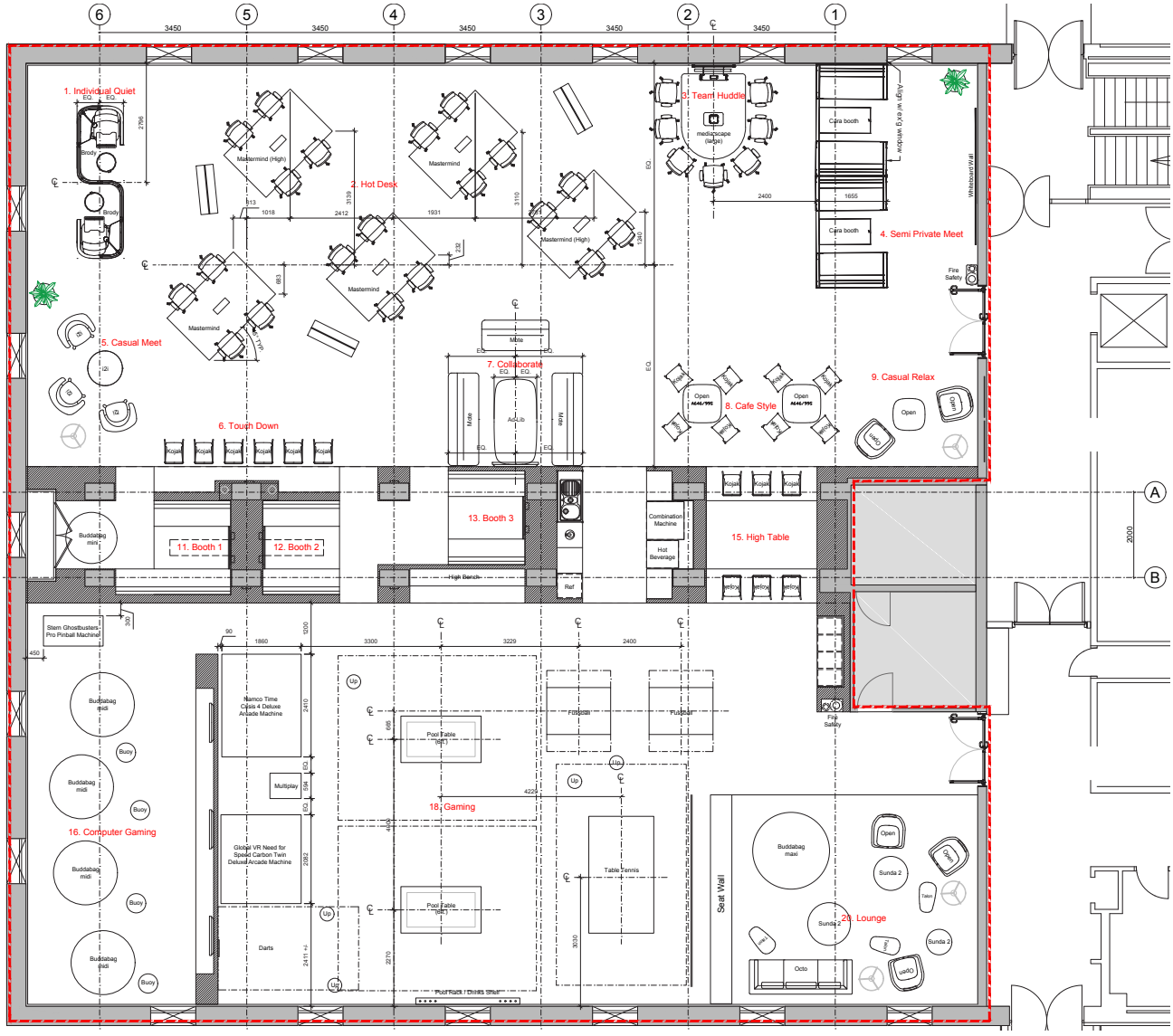
Extracts from the construction drawing set:



Detail drawings through custom booth seating and dining table

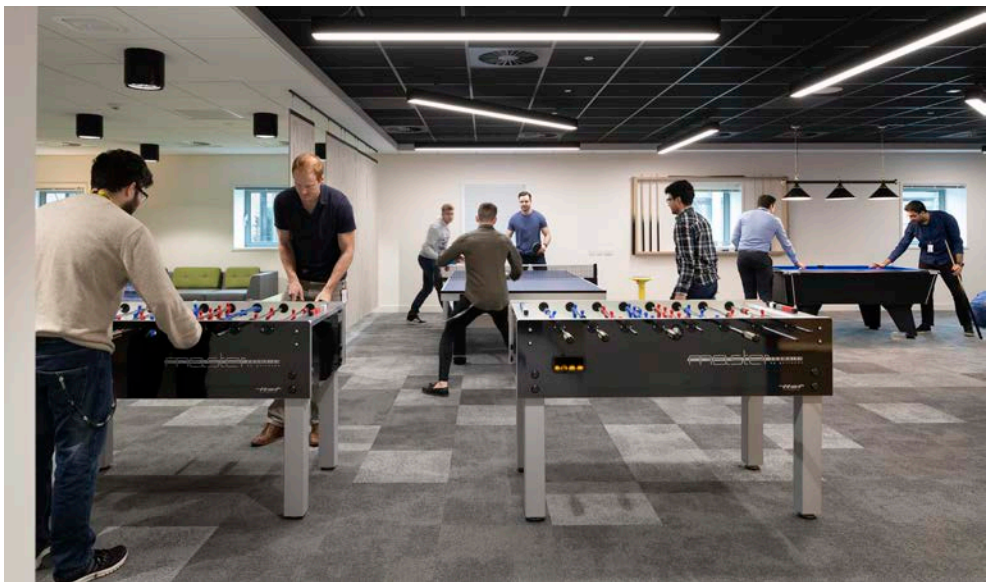


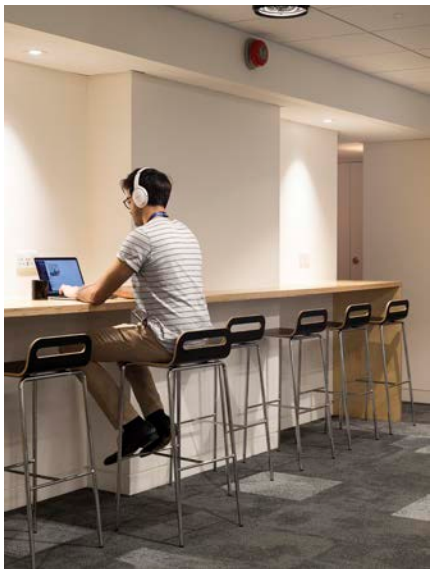
Axonometric of custom upholstered wood bench

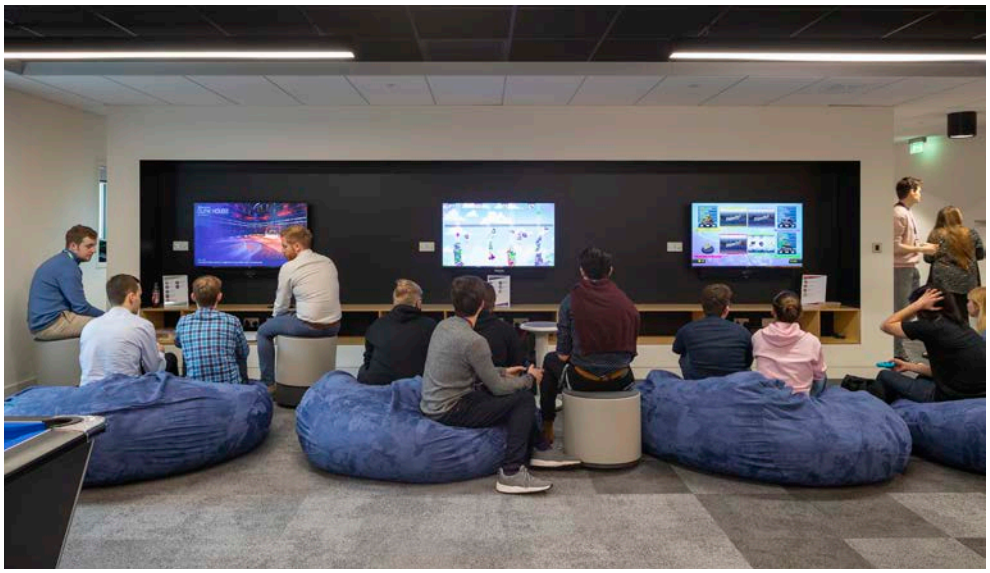


As-built floor plan

Photographs of the finished project:







Project: **Heathrow Hotel** 2017 - present
Role: Project Architect @ FBM Architects
Client: Elite Group
Location: London, England (UK)
Size: 220 000 square feet
Budget: £30 million

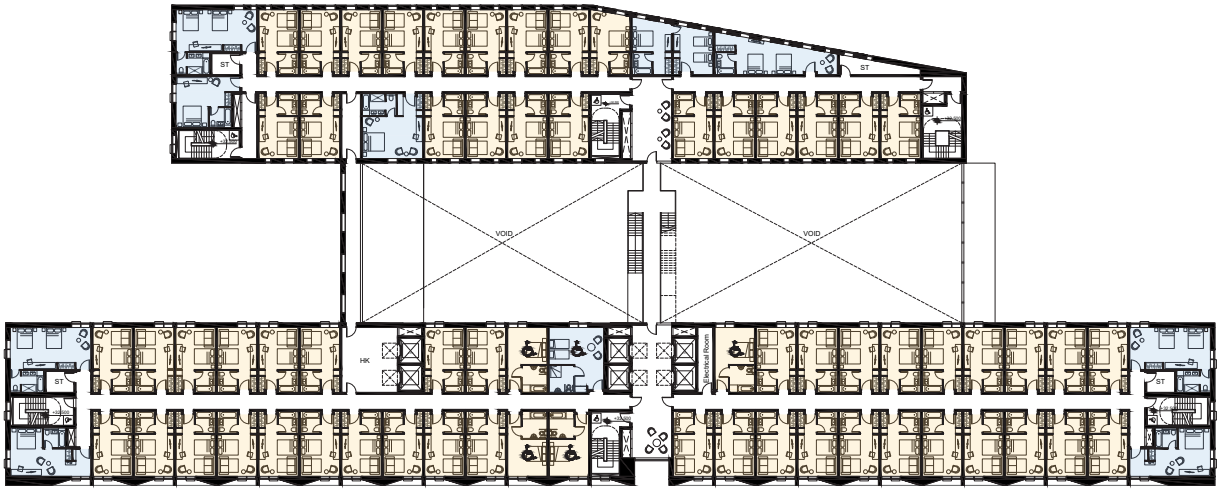
I am currently leading on the design of a new 326 bedroom, 5 star hotel next to Heathrow Airport in London.

This client for this project is an experienced hotel operator in central London. Recent growth has led them to expand their offerings in London's strong hotel market and they approached FBM to design their first airport hotel. I worked closely with the client and their consultant to develop an initial proposal. The project is currently in the detail design phase.

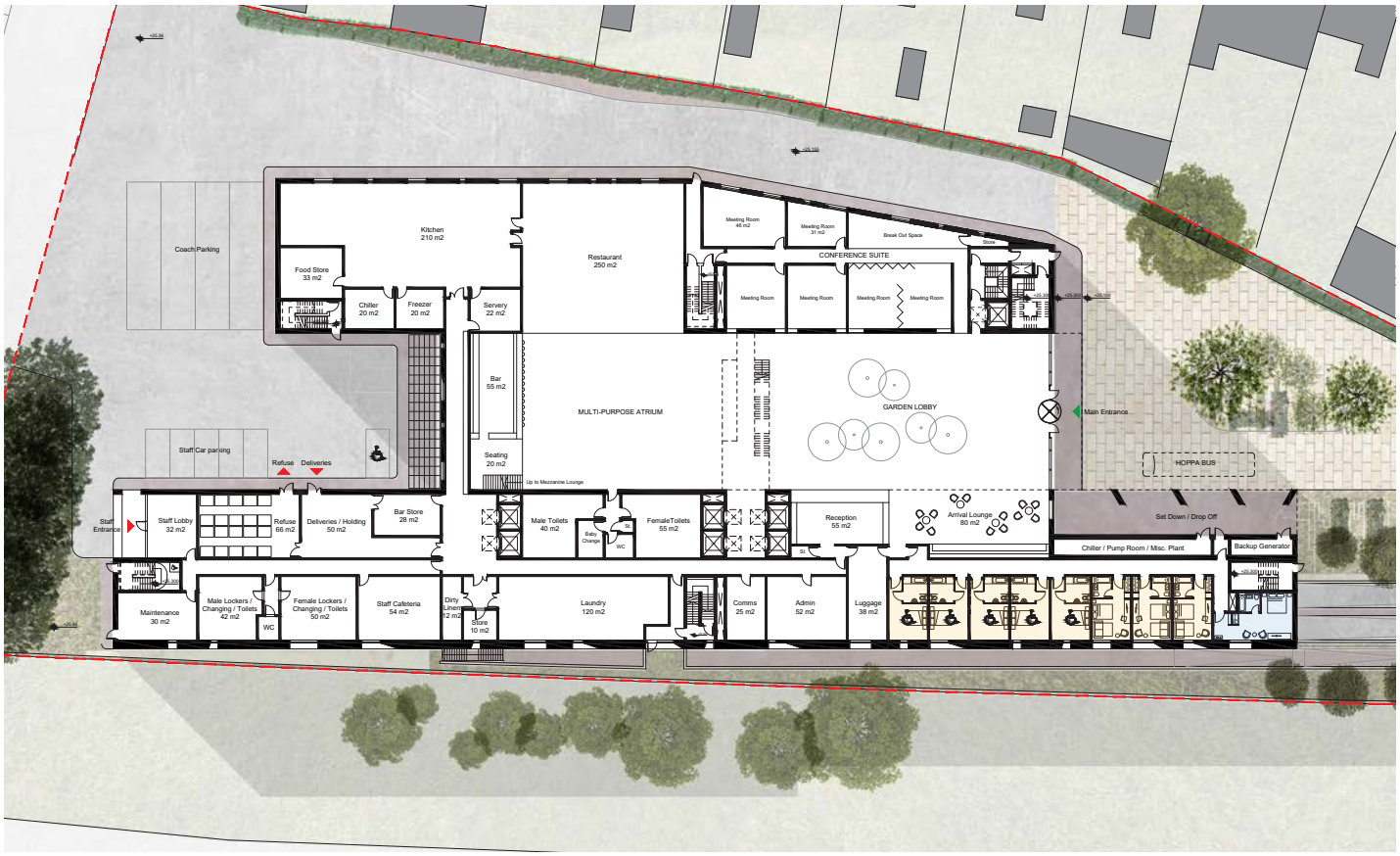
I hotel is comprised of two linear blocks. This is the considered the most efficient hotel configuration and is also a response to the particular site, which is long and narrow. Between these two blocks, a large folded roof structure constructed of cross-laminated timber forms a dramatic entry foyer and multi-purpose room, which can be used for receptions, conferences, and special events, including weddings.

Facilities typically associated with a 5-star hotel, such as a leisure centre, spa and swimming pool, are also provided.

A large atrium space spans between the two linear accommodation blocks:



Typical Upper Floor Plan

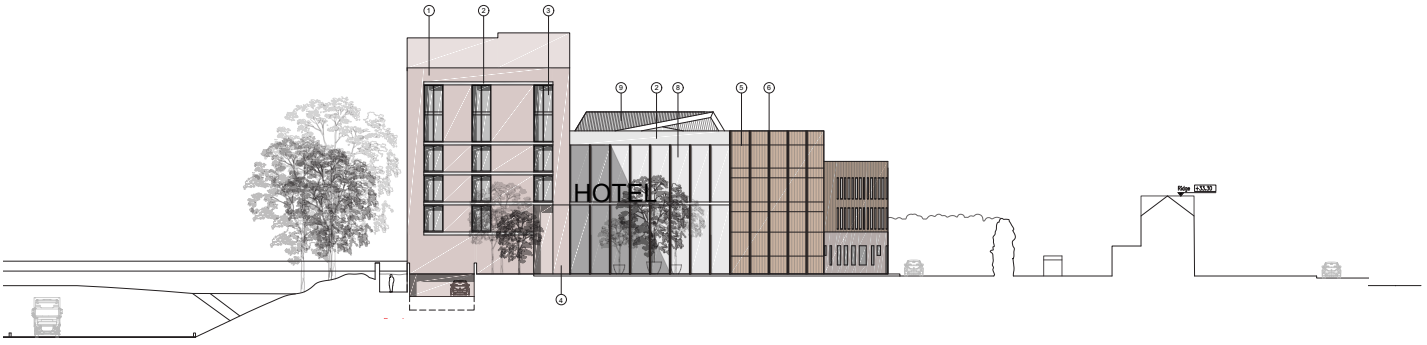


Site Plan

The external treatment of the facade attempts to create something of heft and significance in an area dominated by bland hotel exteriors. The chosen brick material is in keeping with the surrounding residential context.

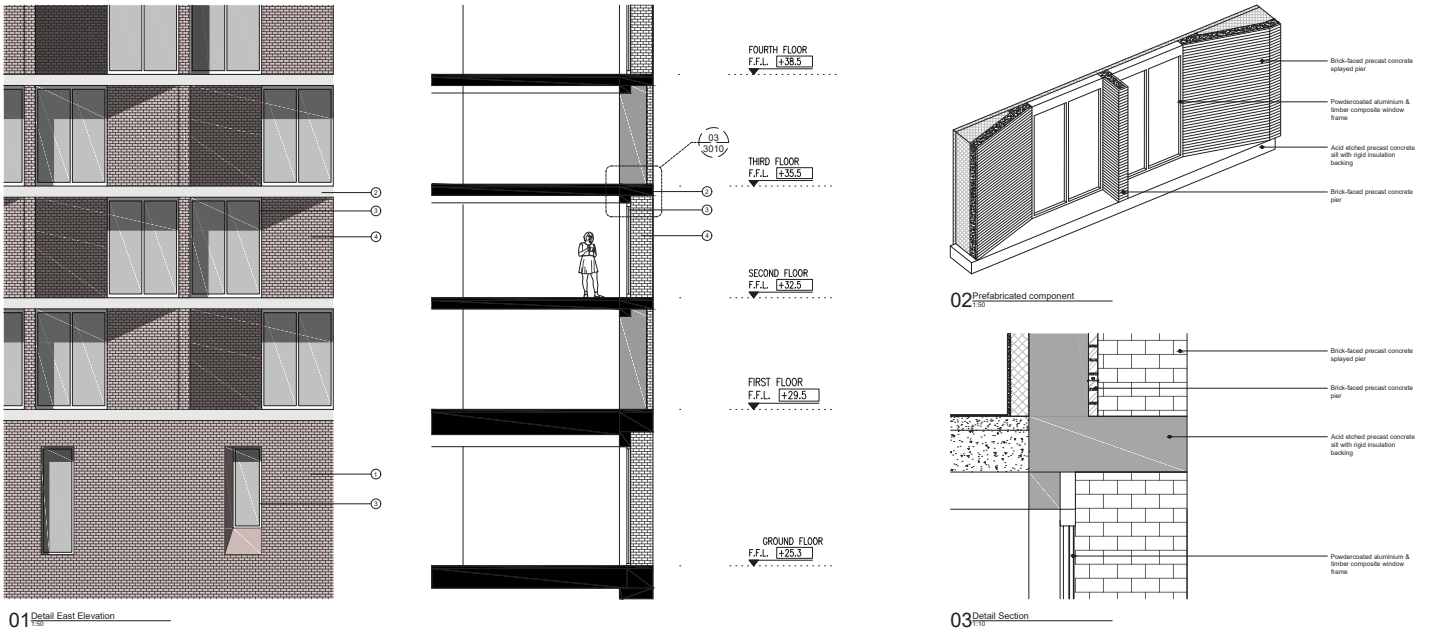
East Elevation

Long Section looking east



Context Section looking south

The design of the hotel is optimised for modularity and this is the intended construction method. The use of precast concrete facade panels and bathroom ‘pods’ will dramatically reduce the amount of construction work on site.



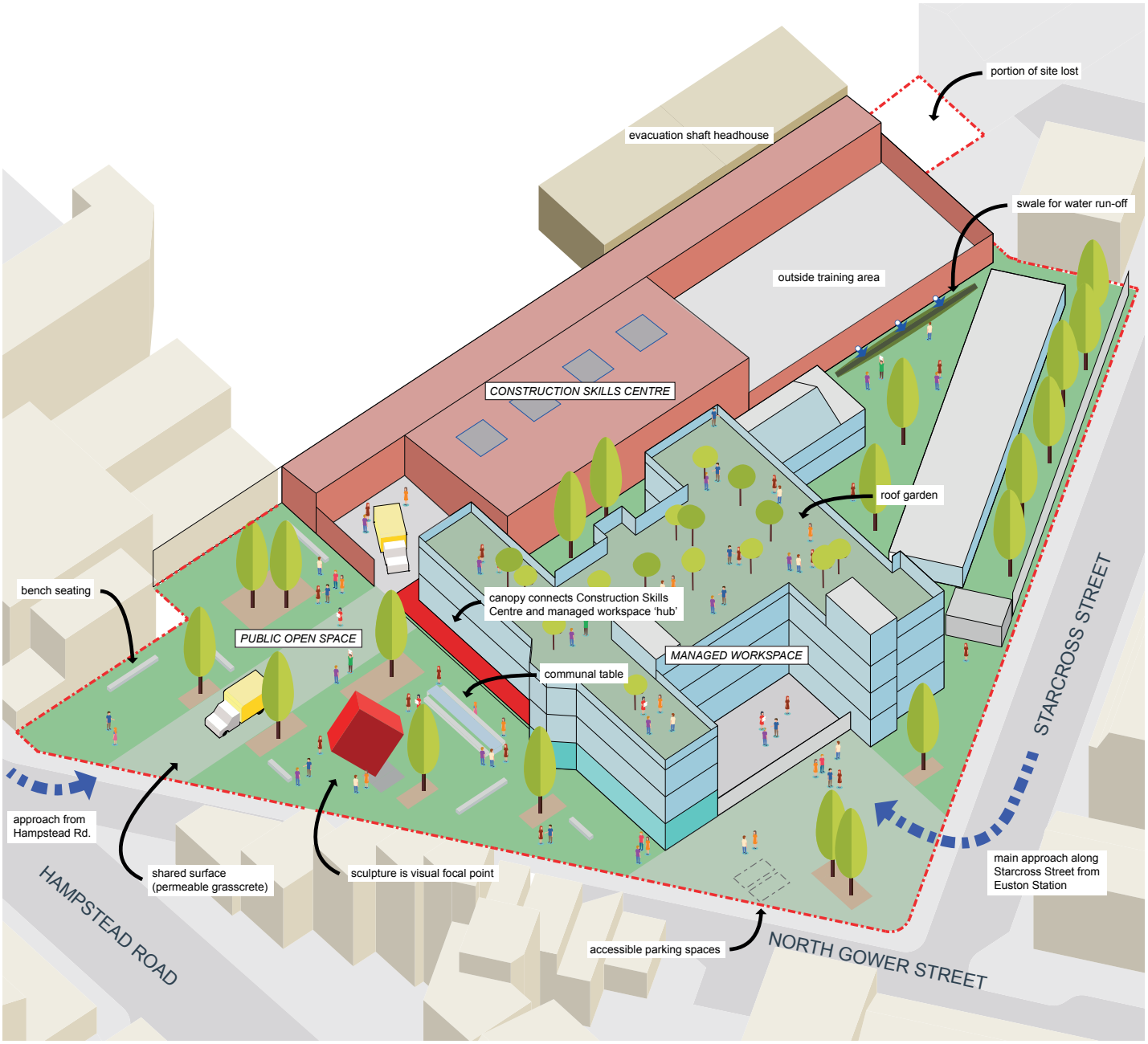
Indicative construction detail drawings

View of hotel from arrival forecourt

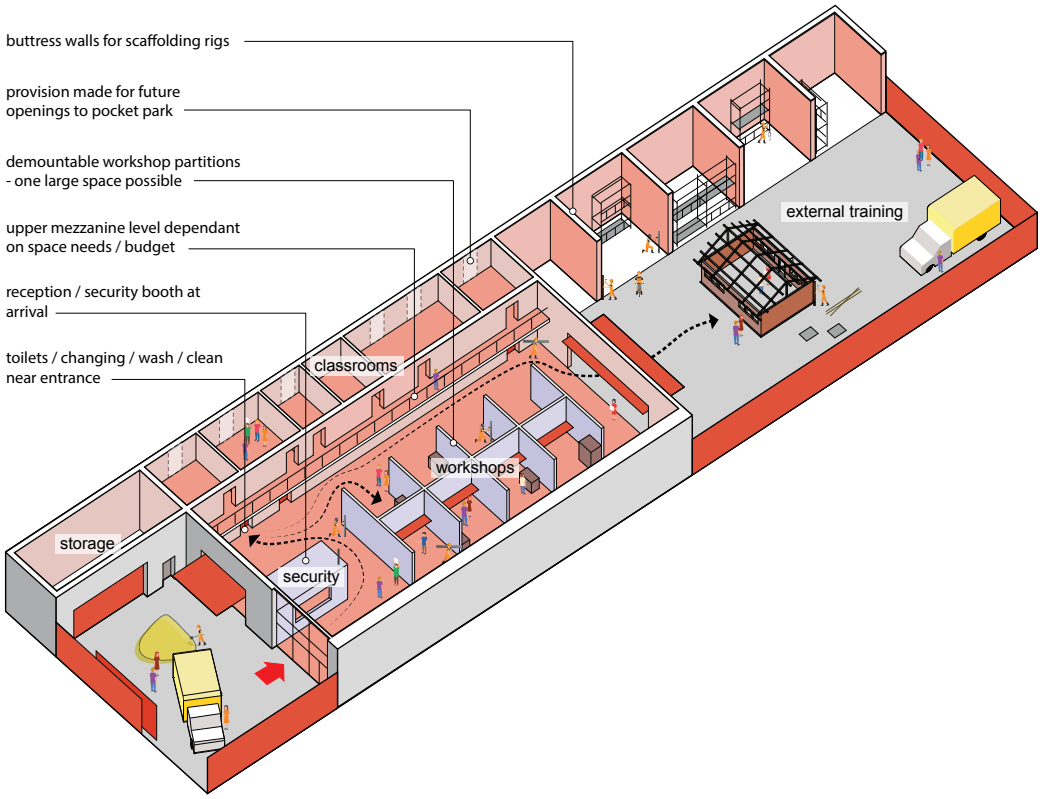
Project:	**Euston Skills Centre**	2017
Role:	Lead Architectural Designer @ FBM Architects	
Client:	The London Borough of Camden	
Location:	London, England (UK)	
Size:	80 000 square feet	
Budget:	£4 million	

This design was submitted as part of a competition hosted by the London Borough of Camden for the repurposing of an early 20th century school next to Euston Station in the heart of central London.

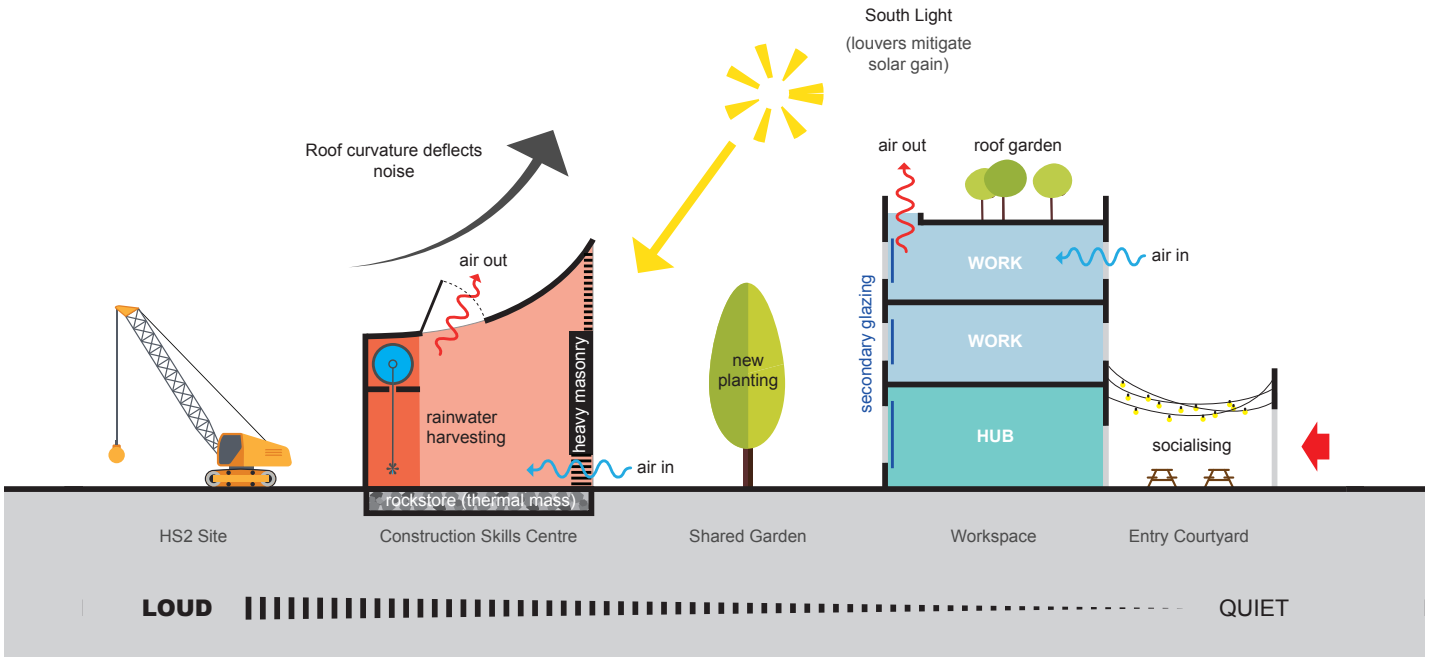
I designed FBM's proposal and produced this competition entry, for which we were awarded First Prize ahead of 164 competitors. The project is now in the detailed design phase, with construction due to commence in Fall 2019.



A key component of the brief was the design of a new Construction Skills Centre for the training of local apprentices:



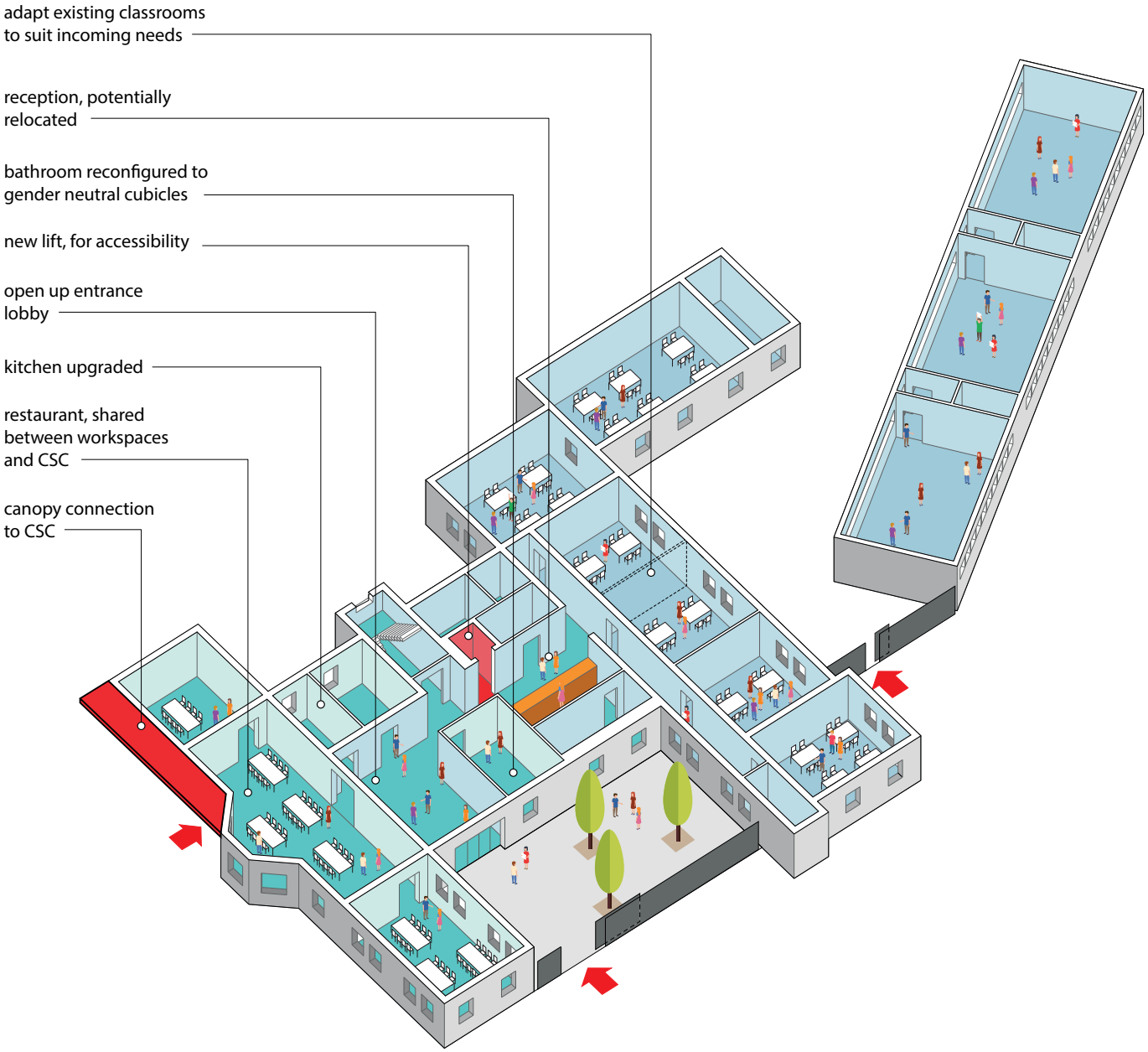
Exploded axonometric of the new Construction Skills Centre



Concept section

Another major aspect of the brief was the renovation of the existing three-storey Victorian school into contemporary co-working office space and an adjoining pop-up cafe:

Existing school building



Exploded axonometric of new co-working space (Ground Floor)

Project: **University of East Anglia - Building 60** 2017 - present
Role: Architectural Designer @ FBM Architects
Client: University of East Anglia
Location: Norwich, England (UK)
Size: 120 000 square feet
Budget: £31 million

Work is currently underway on this integrated teaching and laboratory building for the University of East Anglia. I played a key role in developing construction details and presentation drawings for this project. I was also heavily involved in the development of the digital model used in the creation of a virtual reality experience of the design proposal. A collaboration with the digital design studio Hobs 3D, this was used to showcase the building to prospective students and University board members.

This project is now under construction. Some further information below:

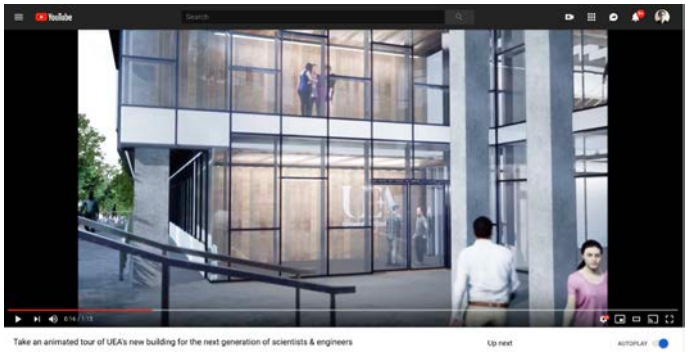
Rather than providing home to just one department or faculty, the building will contain high quality, flexible teaching rooms and laboratories for use by multiple departments or faculties, creating an environment in which cross-fertilisation of ideas and innovation can flourish, fostering a spirit of discovery enabled by connections between students, researchers and academics in the finest traditions of the founding ethos of the university. In developing our design proposals for the new building (called "Building 60" until a more permanent name is chosen), we have sought to remain faithful to the ambitions of the original masterplan for the campus, designed by Denys Lasdun; that each building should contribute to the well-being of students, how they live, work and interact – and that the buildings should respect the geology and attractive landscape of the site.

I collaborated with Hobs 3D to create a virtual reality experience of the proposed building. A pop-up 'VR Cube' was installed at UEA to showcase the design to prospective students as well as the university's board members.

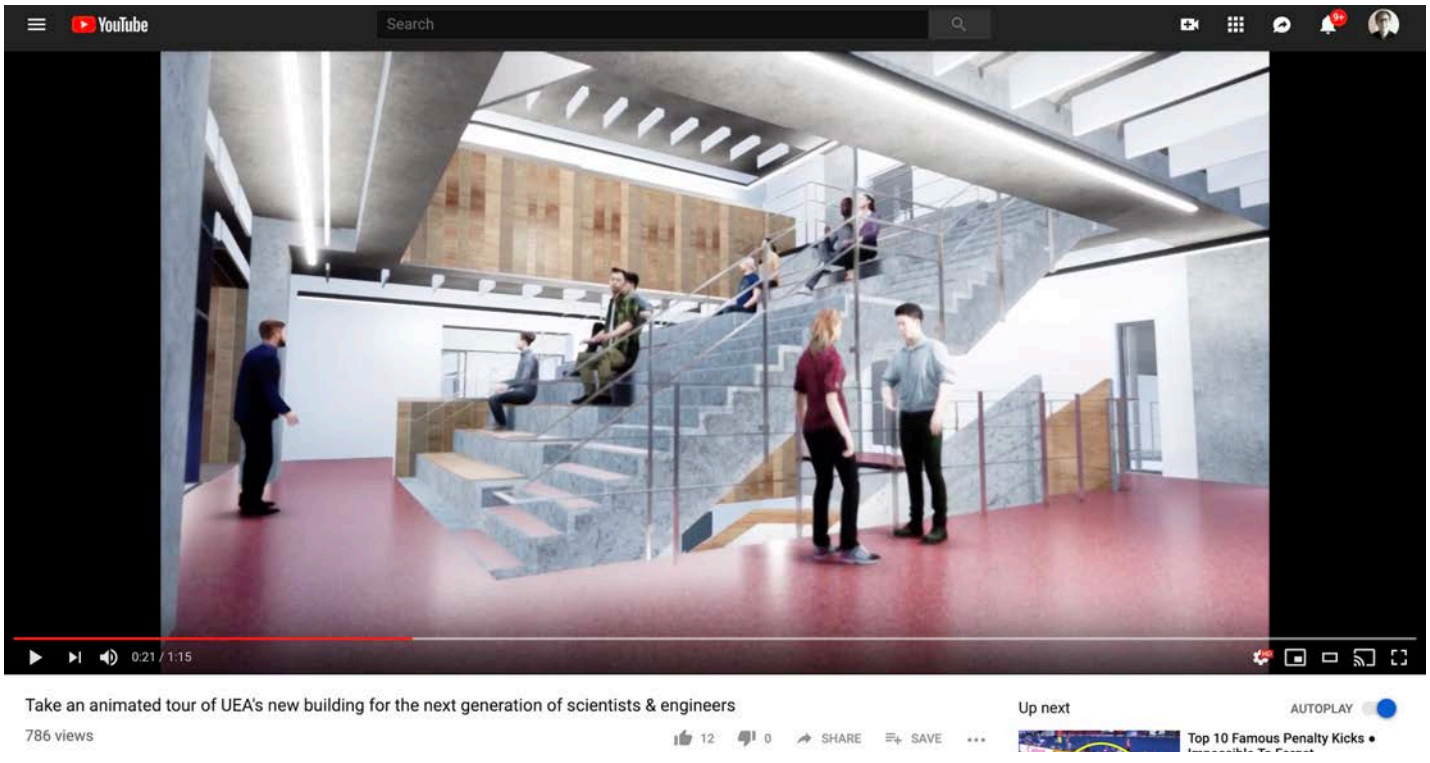
The pop-up 'VR Cube' on site at UEA

This is me testing the VR experience

Screenshots of building overview from YouTube video online



Screenshot showing main entrance from YouTube video online

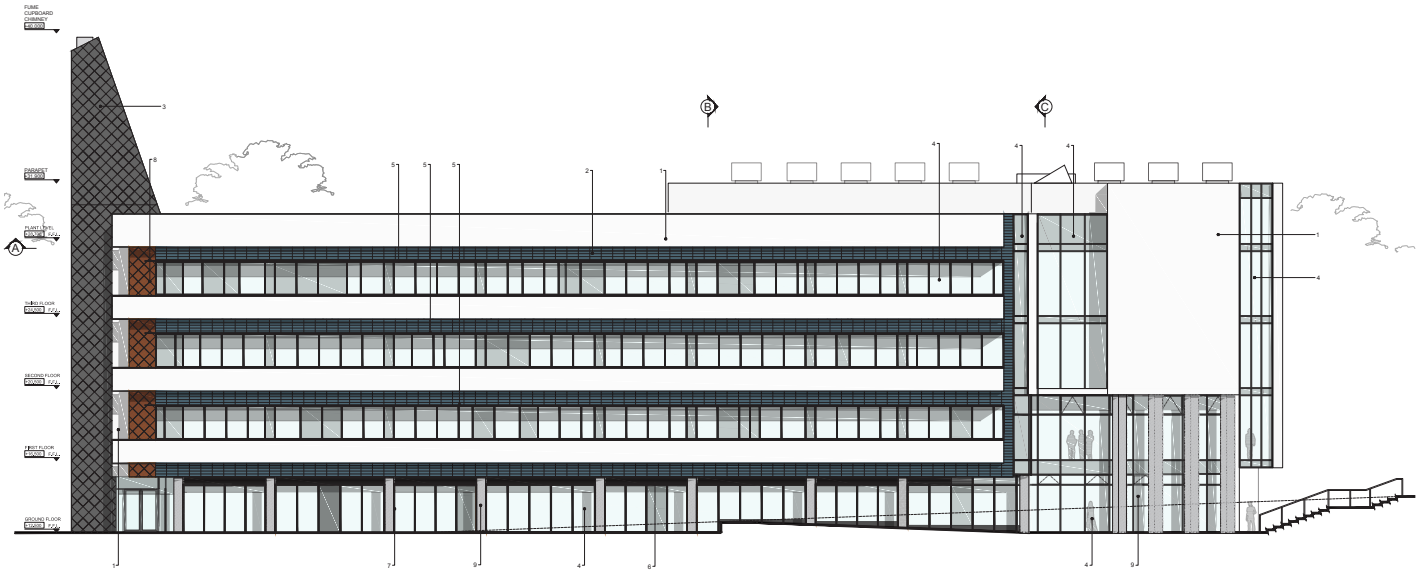


The VR experience was converted to an animated tour and can now be viewed on YouTube

I developed presentation drawings and images for this project:



Render images created with the 3D model

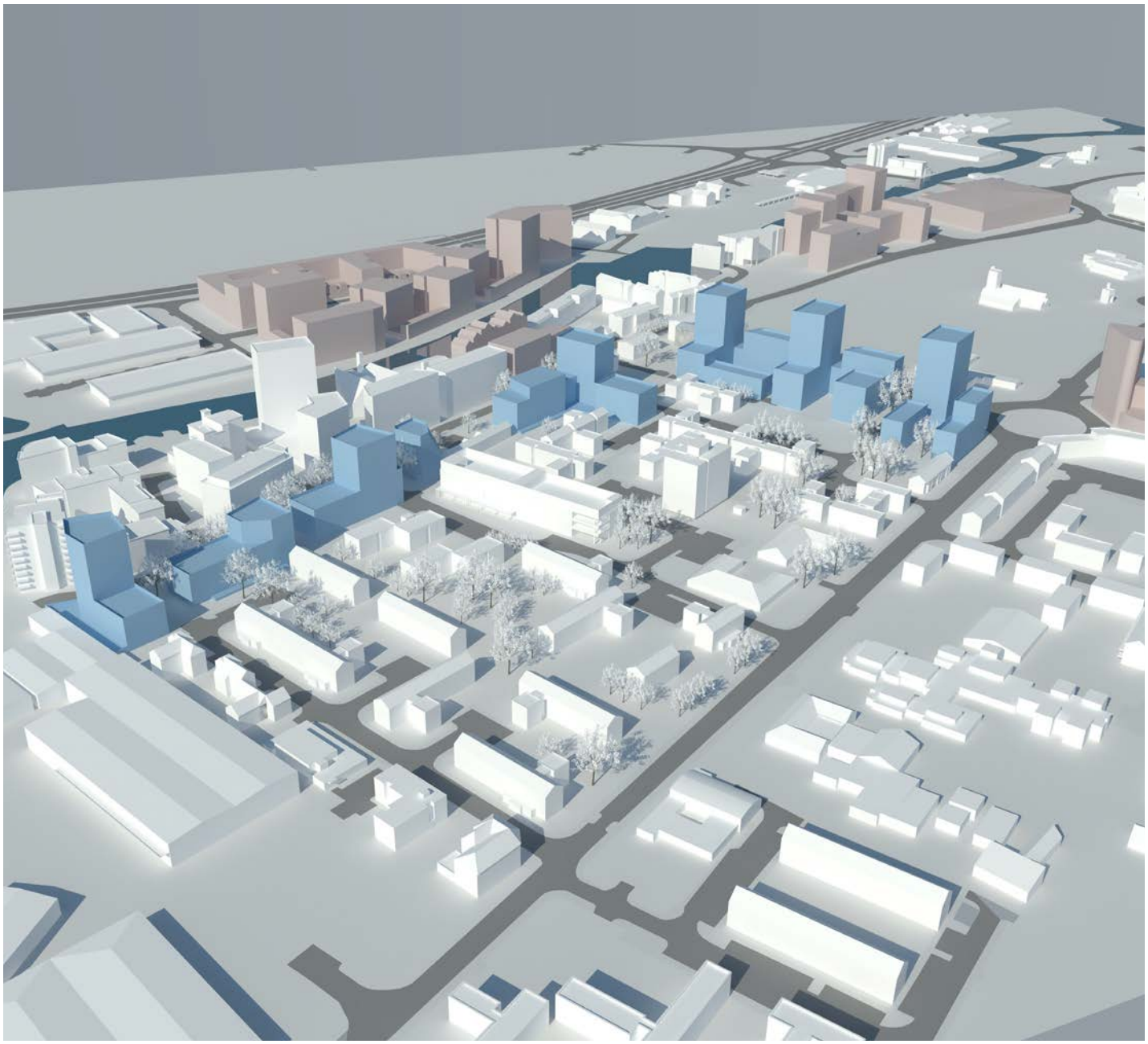


South Elevation

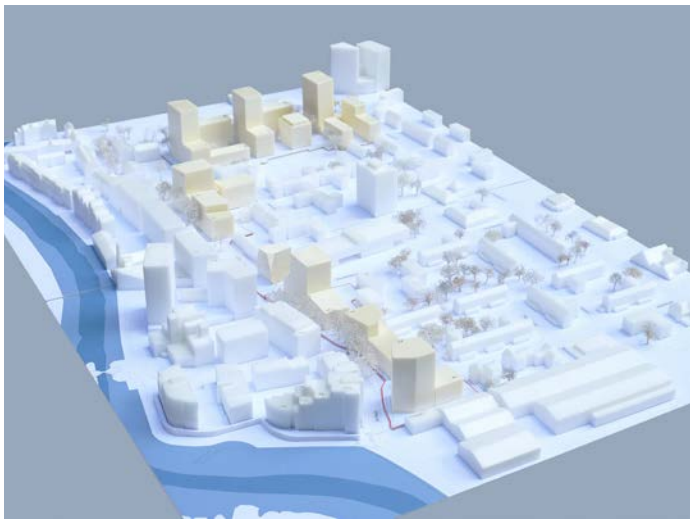
Recent site photo of the building under construction

Project: **Gascoigne Estate Masterplan** 2016 - present
Role: Architectural Designer / Project Architect @ FBM Architects
Client: Be First (development arm of London Borough of Barking and Dagenham)
Location: London, England (UK)
Size: 2.4 hectares
Budget: £250 million (estimate)

FBM Architects was appointed by the London Borough of Barking and Dagenham to lead a multi-disciplinary team to bring forward the redevelopment of the Gascoigne West Estate as part of the Borough's strategy to provide new homes and vibrant town centres. The site comprises three plots of land totalling 2.4ha around the north and western fringes of the Gascoigne Estate. The estate is typical of the 1960s designs of the time, with low density and low rise apartments and maisonettes and one twelve storey tower block in the centre of the site set within areas of largely undefined open space.



The design evolved through the extensive use of digital and physical models. I led this work in the office and was heavily involved in the community engagement process. This ensured that the needs of local residents, organisations, schools and businesses were fully considered in the final masterplan proposal.



Physical model of proposal (design development)

Consulting with the local community

Digital model of proposal (design development)

Final Landscape Plan (showing extensive public realm)

The following pages are extracts from the Design Code that I played a leading role in developing as part of the masterplan proposal:

Gascoigne West | Barking

Design Code

2.2 Vehicular & Pedestrian Circulation

2.2.1
The character and functionality of streets within the Gascoigne West masterplan is set out in Parameter Plan 933-P-0503 'VEHICULAR & PEDESTRIAN CIRCULATION'.

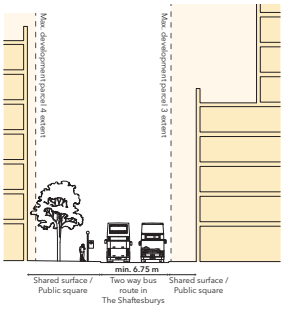
2.2.2
The application boundary established in Parameter Plan 933-P-0500 'APPLICATION BOUNDARY' safeguards the future provision of a two-way bus corridor along The Shaftesburys.

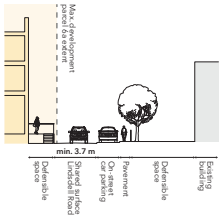
2.2.3
The specified boundaries of Development Parcels 3 and 4 safeguard the minimum required highway width to allow two-way bus access between Abbey Road and The Shaftesburys.

2.2.4
The vehicular circulation layout prevents the creation of any new 'rat-runs'. The bus-only route linking Abbey Road with The Shaftesburys will have restricted access upon its introduction.

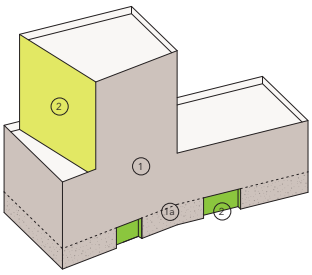
2.2.5
Pedestrian and cycle routes should reinforce existing connections/crossing points, and establish new connections with the following key nodes:

- Barking Town Centre (via St Pauls Rd crossing)
- Ice House Quarter - Creative Industries
- Gascoigne Primary School - Shaftesburys Site
- St Josephs Primary School
- Gascoigne East - Howard Gardens (via The Clarksons cycle and pedestrian link)





4 Building Appearance



(1) Primary Material

(1a) Primary Material - Feature Zone

(2) Secondary Material (x2 permitted)

4.1 Materials

4.1.1
The palette of materials should be limited.
To ensure a coherent architectural language is established throughout the neighbourhood.

4.1.2
A primary material and up to two secondary materials may be applied to any single building.

Solid balcony balustrade treatments are regarded as a secondary material - transparent balcony balustrade treatments are not.
To allow designers flexibility in their approach within a consistent framework for the neighbourhood.

4.1.3
The primary building material should be brickwork.
To provide a consistent aesthetic treatment with a robust finish, which unites the architectural language of different buildings.

4.1.4
Secondary materials may be contrasting in their appearance, exploring the use of colour and texture.
To allow designers flexibility in their approach within a consistent framework for the neighbourhood.

4.1.5
Areas of primary material may - through the use of texture, pattern, bonding - create zones of 'feature' finishes which define key elements within the facade, for example plinths, courtyards, parapets or entrances.
To allow designers flexibility to develop a high quality architectural response within consistent framework for the neighbourhood.

4.1.6
Close attention should be paid to the junctions of materials.
To ensure simple, robust detailing.

4.1.7
All materials should be durable, robust and easy to maintain.
To ensure a high quality finish over the life span of the development.

4.3 Balconies

4.3.1
Balconies should be carefully integrated into the architectural language of the facade.
To create a coherent architectural language across the wider neighbourhood.

4.3.2
All balconies should achieve a minimum depth of 1.5m and meet the minimum areas set out in the Mayor of London's Housing SPG (March 2016) according to unit type.
To ensure adequate provision of private outdoor amenity space to each dwelling.

4.3.3
The use of recessed and semi-recessed balconies should be considered in more sensitive locations, e.g. adjacent to roads or on lower storeys.
If included, consideration must be given to maximising natural daylight to dwellings.

4.3.4
Balconies should not have fully glazed balustrades. Partially glazed elements are acceptable.
To provide privacy to each balcony, reduce maintenance and minimise visual clutter.

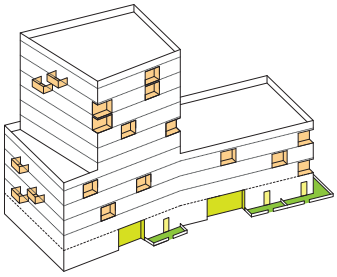
4.3.5
Balustrades should be visually integrated into the main balcony structure.
To ensure a unified, uncluttered appearance.

4.3.6
Solid balcony treatments should be regarded as a Secondary building material (maximum of two per building). Permeable balustrade treatments are not considered to be a Secondary material.

4.3.7
Balcony soffit treatments should be designed to conceal the main balcony structure.
To ensure a unified, uncluttered appearance.

4.3.8
Boundary treatments to ground floor defensible space should be designed to complement balcony treatments to upper floors.

4.3.9
Any external 'deck' or 'gallery' circulation spaces should not address primary street frontages.
To present a clearly defined building frontage with a coherent architectural language.

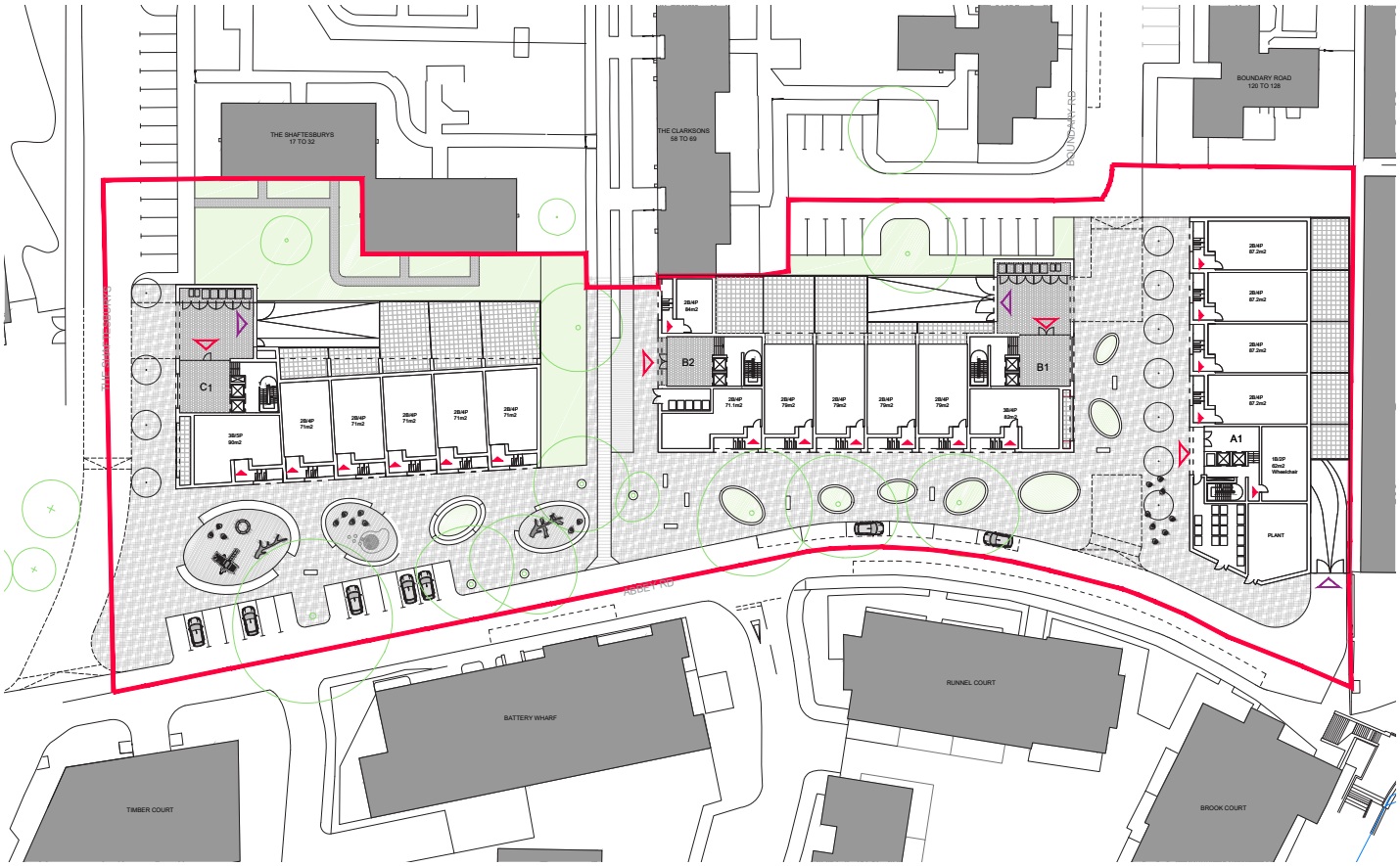


Balcony strategies can be varied across different facades to diversify architectural appearance or respond to specific opportunities and constraints such as aspect, orientation, noise, or overlooking.

I am currently leading the detailed design stage of Phase 1 of this scheme, which will provide approximately 200 residential units, with a budget of £45 million:

Block A looking south east along Abbey Road

Blocks B and C looking north along Abbey Road



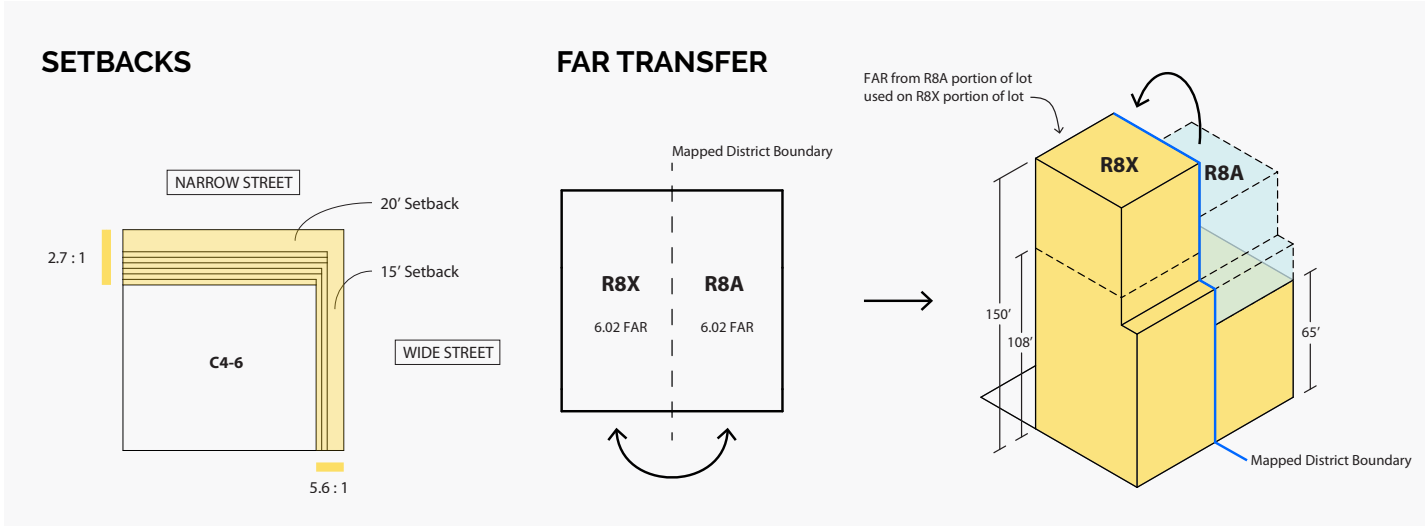
Progress site plan presented at a recent meeting with the local planning department

Project: **Envelope** 2016 - present
Role: Zoning Analyst and Illustrator (contract)
Client: Envelope
Location: New York City, NY (USA)
Size: n/a
Budget: n/a

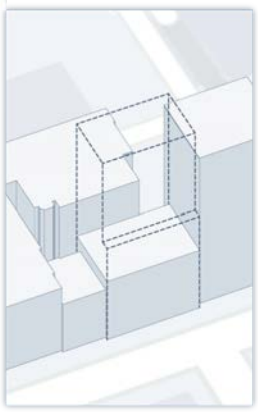
Envelope is a software company, spun out of a long-time collaboration between award-winning SHoP Architects and the Director of MIT's Civic Data Design Lab. The primary product enables instant, dynamic 3D visualisation of the development potential of all zoning lots in NYC.

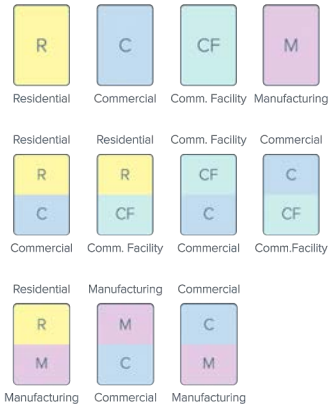
Utilizing my experience in architecture and my familiarity with NYC zoning laws, I worked with the product team to conduct quality analysis in the lead up to the beta release of their first product. I also translated relevant aspects of complicated zoning text into legible diagrams, to be used as an internal resource for a software team unfamiliar with standard zoning concepts.

I have continued to work with Envelope over the past two years to help define their visual identity, creating illustrations and marketing material in collaboration with the company CEO. This has involved diagrams and GIF images for the company investment deck, material for customer presentations, and graphics for the marketing website.

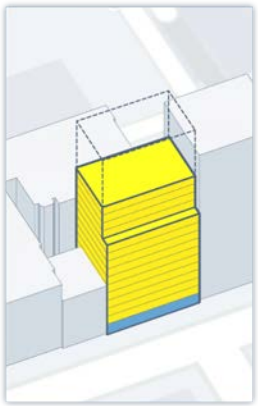


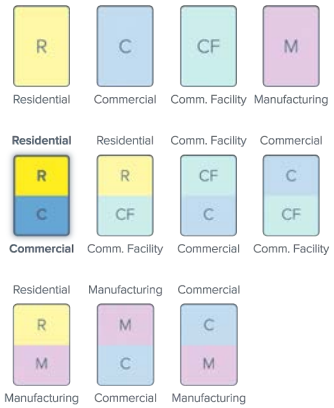
The following illustrations were created for the investment slidedeck and marketing website:



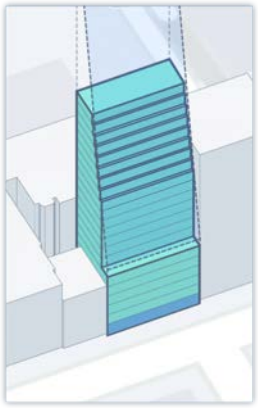


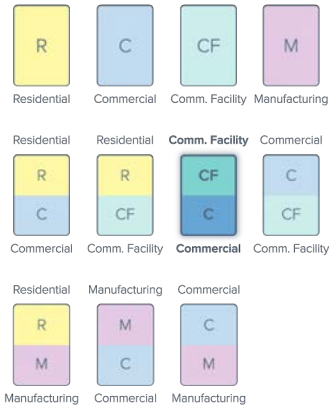
Existing



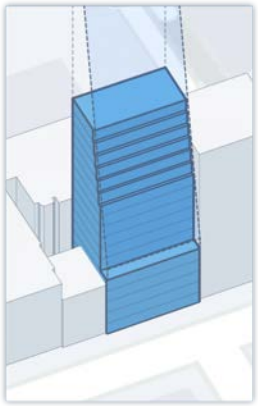


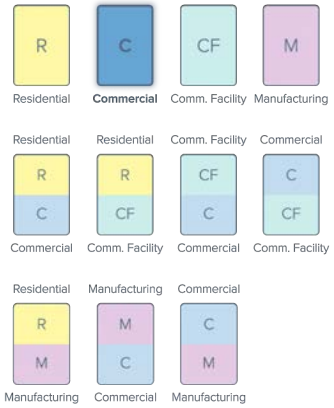
Residential use class





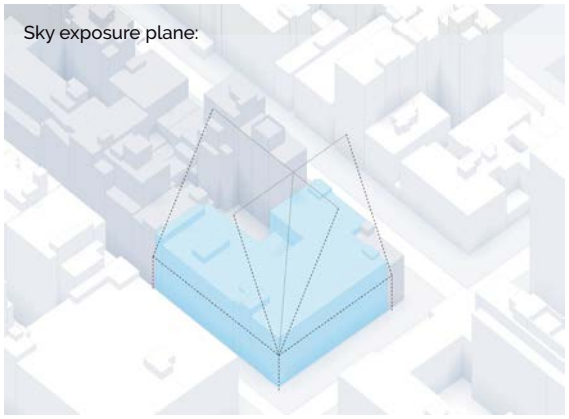
Community use class



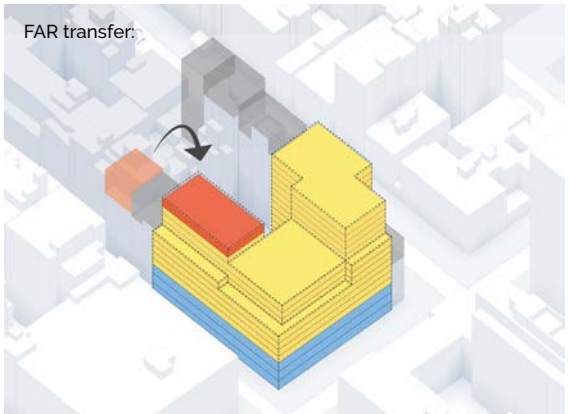


Commercial use class

Sky exposure plane:

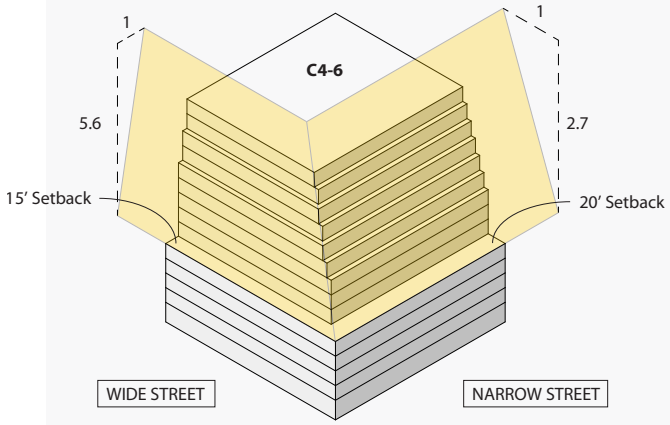


FAR transfer:

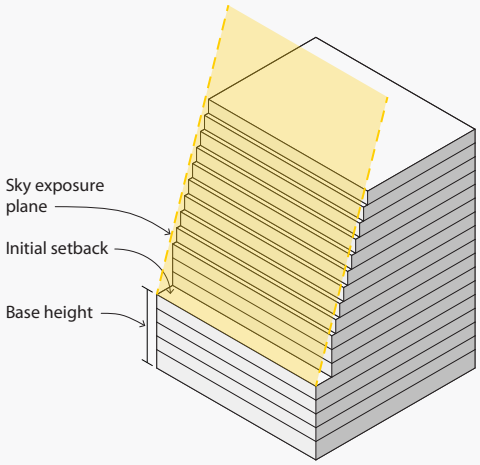


The following diagrams were created as part of a design guide for Envelope's software team:

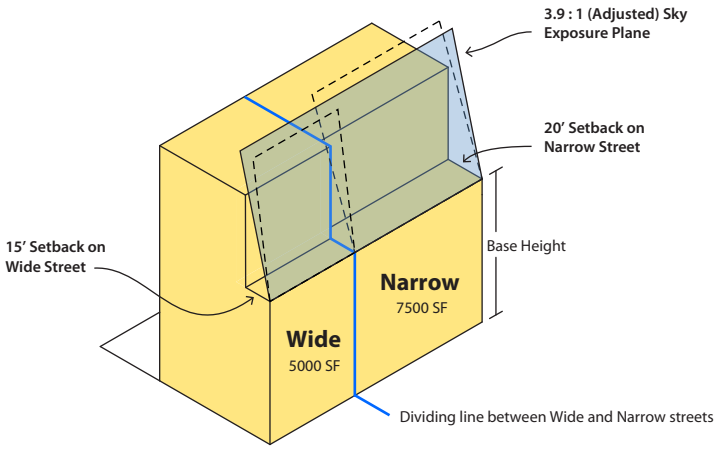
WIDE VS. NARROW STREET



SKY EXPOSURE PLANE



ADJUSTED SKY EXPOSURE PLANE

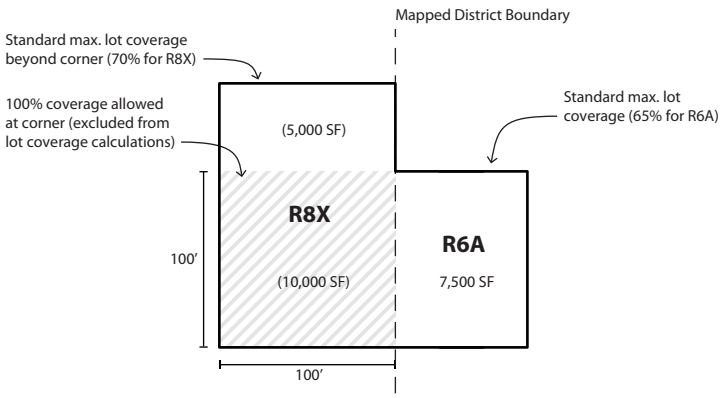


Sky Exposure Plane 5.6 : 1 (wide) 2.7 : 1 (narrow)

$$\frac{(5.6 \times 5000) + (2.7 \times 7500)}{(5000 + 7500)}$$

Adjusted Sky Exposure Plane **3.86 : 1**

LOT COVERAGE @ CORNER



Max. Lot Coverage 70% 65%

$$\frac{(70 \times 5000) + (65 \times 7500)}{(5000 + 7500)}$$

Adjusted Max. Lot Coverage **67%**

Project: **Super Garden Season 9** 2017
Role: Motion Graphics Designer (contract)
Client: Vision Independent Productions
Location: Dublin (IE)
Size: n/a
Budget: n/a

In 2017, I was approached by VIP to produce motion graphics for Season 9 of Super Garden, a 5-episode reality television show for a primetime slot on RTE One, Ireland's national broadcaster and most viewed television channel, In each of the episodes, I developed the design of an aspiring landscape architect into a digital 3D model. I then used this model to create fly-through video footage that enabled the viewing audience to visualise the proposed designs.

This series was aired on RTE One in April - May 2017 and achieved an average 28% viewership share.

Screenshot of 'artist's impression' 3D video footage I created for Episode 1

Screenshot of the completed garden from Episode 1

I prepared video footage for all five episodes. Below are a series of screenshots from Episode 2, which went on to become the winning design. This garden was subsequently showcased at Bloom, Ireland's premier gardening festival.

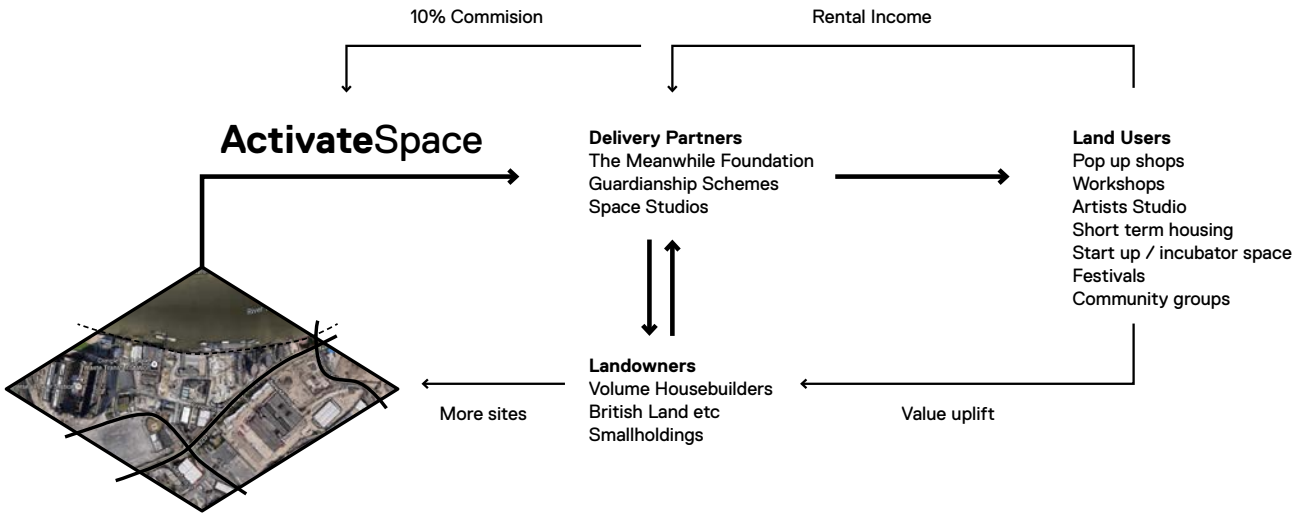
Screenshot of 3D video footage I created for Episode 2

My name features in the credits at the end of each episode

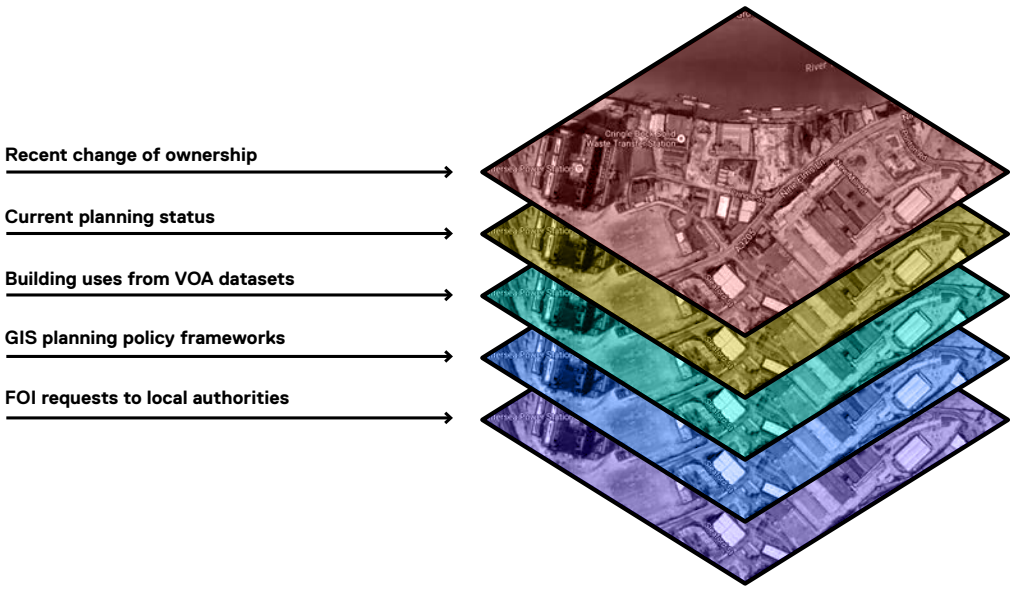
Project:	**Activate Space**	2016
Role:	Designer as part of a team entry to the 2016 Future Cities Catapult Hackathon 2016	
Client:	Private	
Location:	London, England, UK	
Size:	1 400 square feet	
Budget:	$750, 000	

As part of a 'Planning Hackathon' organised by Land Insight and the Future Cities Catapult, I was the designer on a team that proposed a data-driven tool to identify vacant real estate, kick-starting growth within a niche property sector.

Business Model



Multi-Layered Search Methodology



Finding Opportunities

- ✓ Availability
- ✓ Applicable Use Class
- ✓ Contactable Landowner

= Vacant Land Opportunity

Planning Application Identified

1. Postal Codes
2. Application Statuses
3. Owner & proposal
4. Contact Information

Further information on Activate Space as part of the Future of Planning Hackathon organised by The Future Cities Catapult

Underutilised property is a public eyesore and contributes to a negative urban streetscape. Such sites do not generate income for the landowner, and are often a liability in terms of maintenance and upkeep.

Our team proposed that intelligent use of open-source data can unlock these spaces for temporary and adaptive re-use. The methods that existing groups use to source this kind of low-cost, low-commitment property is both labour-intensive and inefficient. Our product aimed to act as a catalyst in the chain, providing data-driven tools that allow the quick and easy identification of vacant sites. With a mutual benefit to both sides, our model aimed to Activate Space.

The team; I am second from the right in picture

Key Partners

Delivery Partners:
- Borough Councils
- The Meanwhile Foundation
- Space Studios
- Office Genie
- Property Guardianships

Key resources:
- Planning applications
- Key Partner's existing relationships

Partner Activities:
- Community engagement
- Transactional and legal implementation

Key Activities

Model:
- Data Collection
- Utilising Delivery Partners existing relationships
- % commission charged on rented spaces

Key Resources

Data:
- Planning applications
- Land Insight
- Vacant sites (FOI requests)
- GOAD Experian Plans
- Valuation Office Agency
- Ordnance Survey

Value Propositions

Customer Values:
- Low cost, low commitment
- Space for innovation & growth

Land Owner Values:
- Secure asset through active occupation
- Lower maintenance costs
- Transforming image
- Increased prospect of commercial use

Community Value:
- Enlivening streetscape
- Engaging community in regeneration; Reducing risk

Customer Relationships

Key Relationships:
- Landowners
- Key Partners

Channels

- Identify vacant land using multi-layered search methodology
- Communicate with landowners to assess viability
- Transfer vacant land details to Key Partners

Customer Segments

We seek to create shared value by connecting land owners with land users.

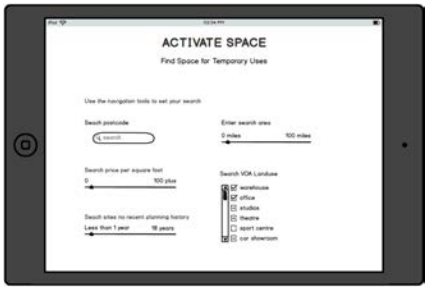
Suppliers:
- Landowners
- Asset managers
- Pension funds
- Speculators
- Investors

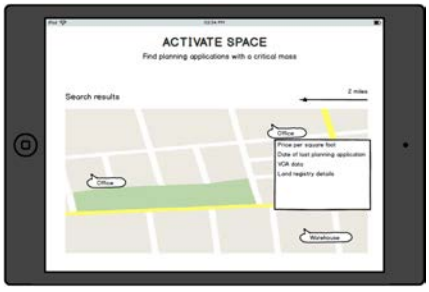
Direct Consumers:
- Community organisations (e.g. Meanwhile)
- Property Guardianships (e.g. Camelot)
- Workspace providers (e.g. Space Studios)
- Commerce (e.g. Deliveroo)
- Artist collectives (e.g. Assemble)

Cost Structure
- Initial labour costs sourcing and providing data
- Sustainable and scalable commission based revenue model
- Significant growth potential

Revenue Streams
- Work directly with delivery partners (Meanwhile, Property Guardianships, Space Studios, etc.) to connect them with land owners
- Activate Space commission fee is 10% of rented rate

Business model canvas



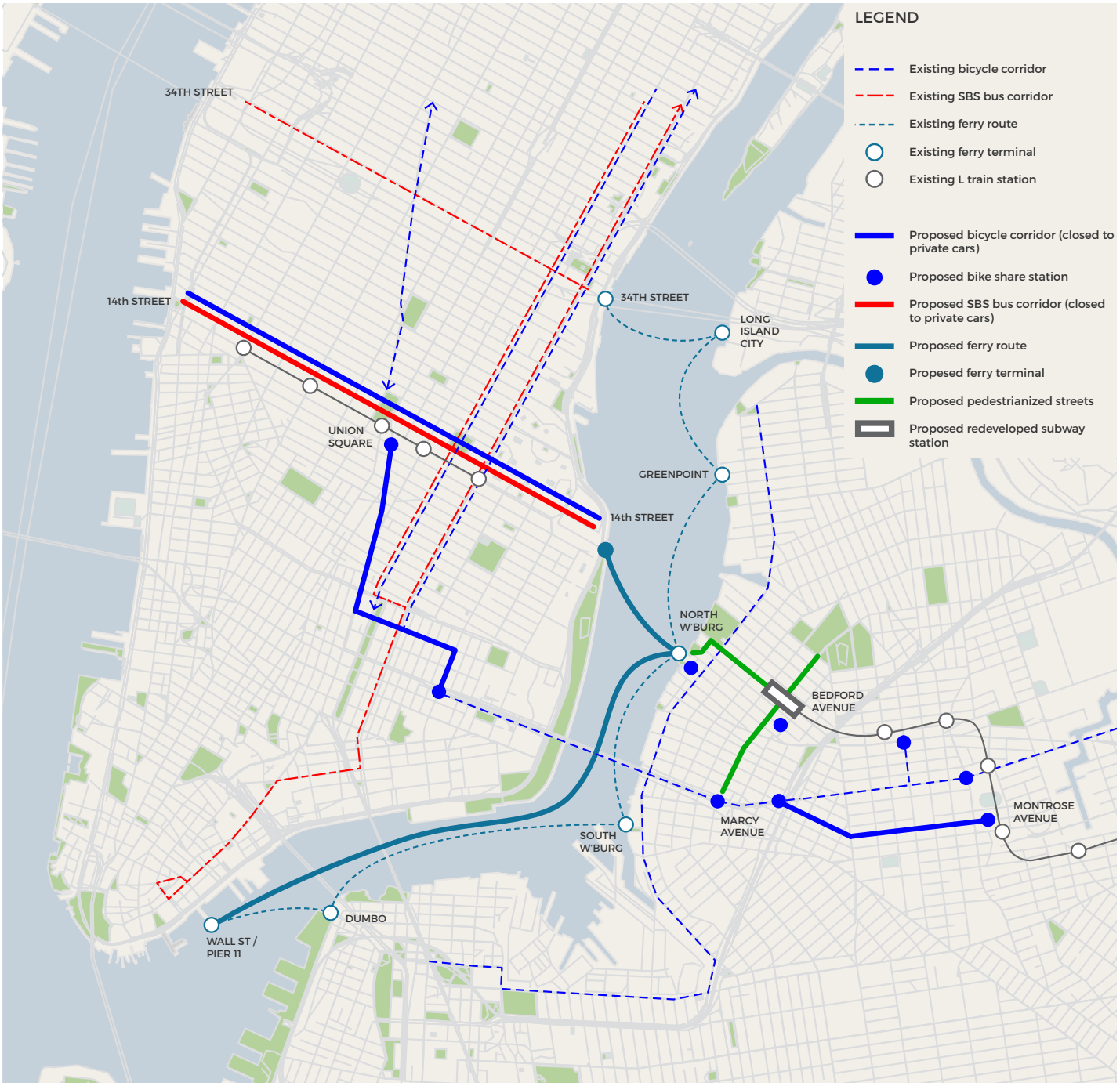


Extract from application prototype for iPad / tablet computer

Project:	**L Train Shutdown**	2016
Role:	Designer	
Client:	Presented to the Urban Design Forum	
Location:	New York City, New York (USA)	
Size:	n/a	
Budget:	n/a	

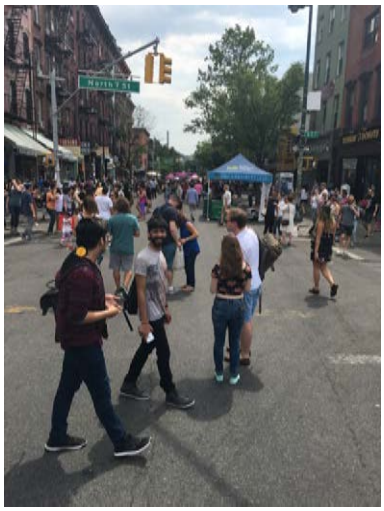
This proposal considers the imminent shutdown of the L train as a unique opportunity, one that forces us to implement viable transportation alternatives for commuters between Brooklyn and Manhattan.

I developed this proposal as a response to the Urban Design Forum's "Onward: Mobility in the Next New York" open call for ideas.



The shutdown of the L train presents opportunities to develop more sustainable infrastructure:

NO L MEANS MORE J M A G



PEDESTRIANIZE

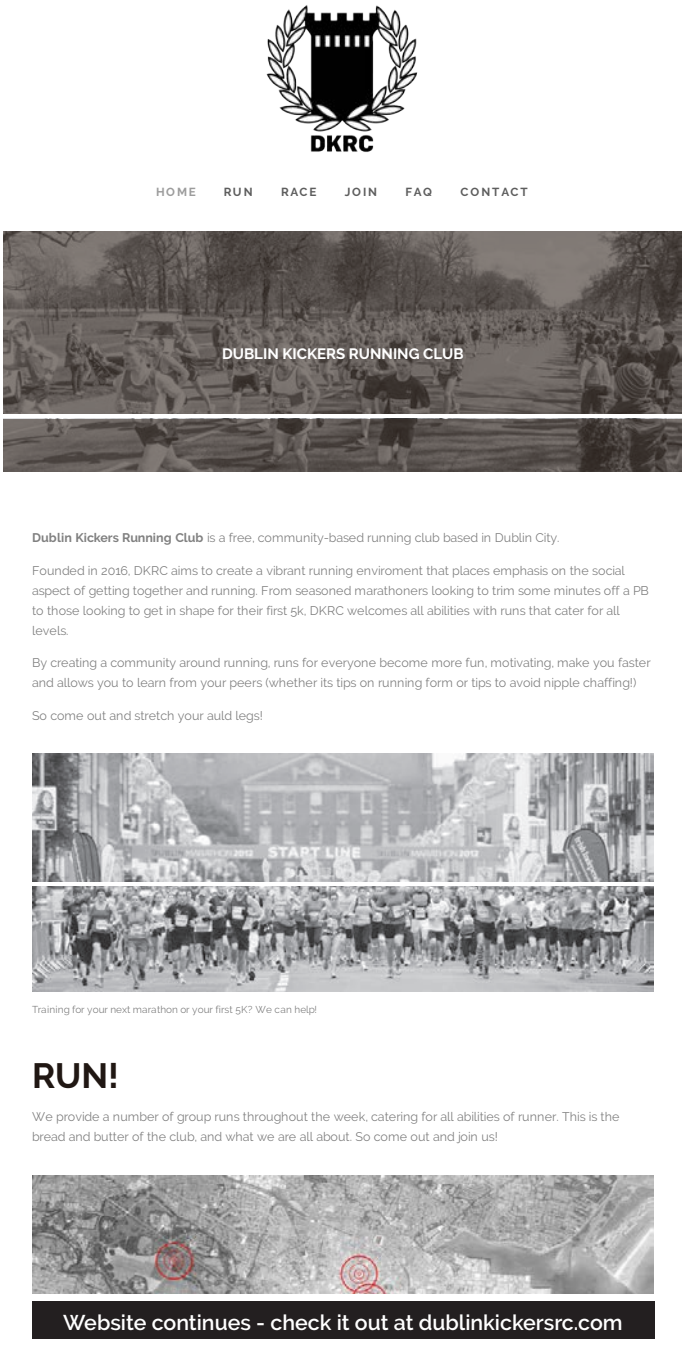
The situation demands that alternatives of ferry, bicycle, and bus rapid transit. A new express ferry service could ship commuters directly across the water from Williamsburg to midtown, bypassing current stops further north in Queens. 14th Street could be closed to traffic, with dedicated bus and bicycle lanes. Express ferries could link up with the existing terminal at 34th Street, and the M34-SBS.

Finally, there is an opportunity to redefine the area around the Bedford Avenue L stop, the heart of an ever-growing Williamsburg neighborhood.

Bedford Avenue presents an opportunity for pedestrianization

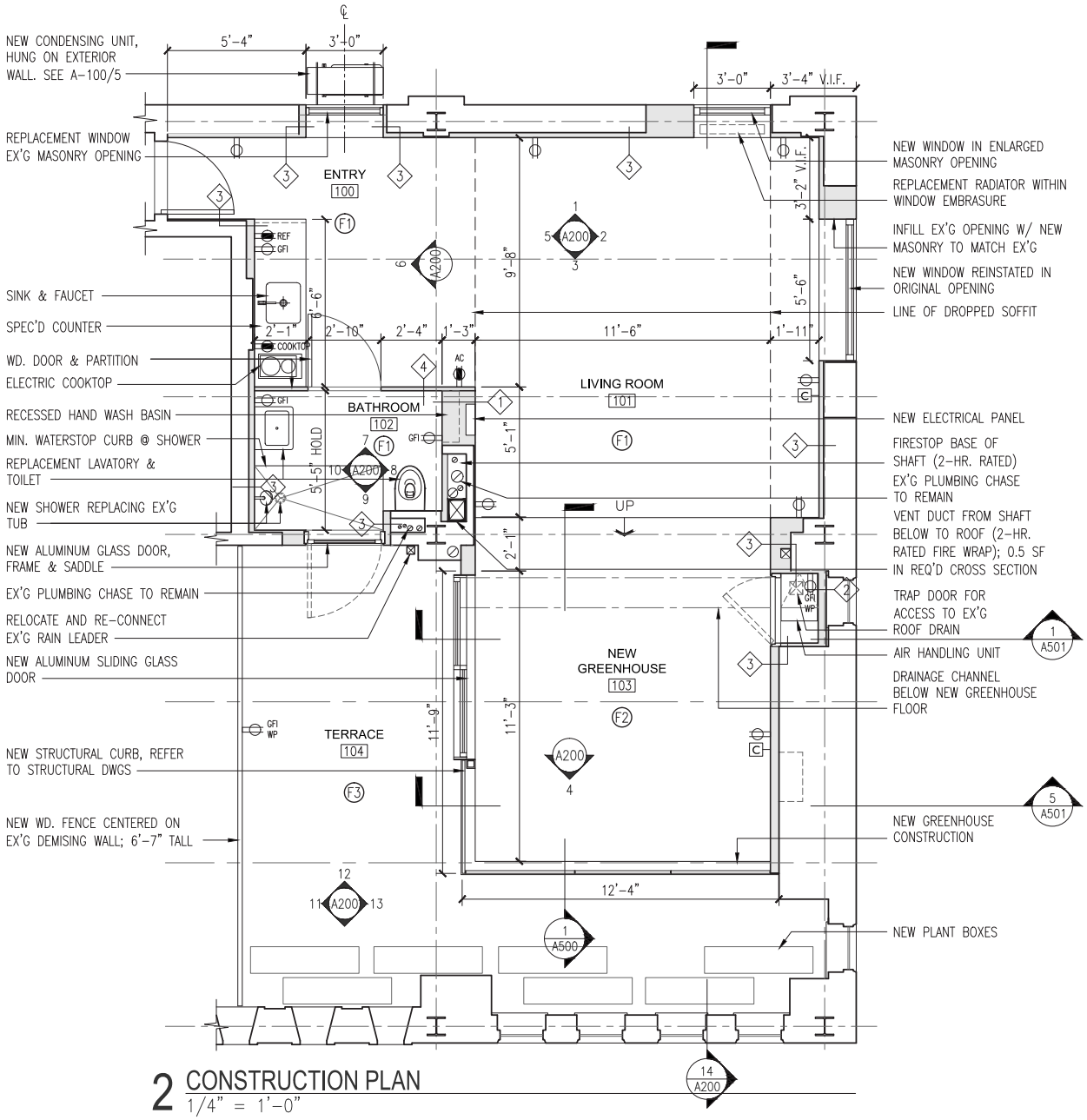
Project:	**Dublin Kickers RC**	2016
Role:	Graphic / Web Designer	
Client:	Dublin Kickers RC	
Location:	Dublin (IE)	
Size:	n/a	
Budget:	n/a	

In the summer of 2016, I was commissioned to create the visual identity of Dublin Kickers Running Club, a free, community-based running club based in Dublin City. This included design and development of their website and all supporting graphic information. I chose a clean monochrome aesthetic, with touches of red to visually engage the user. A 'simple scroll' system is utilised, allowing all of the information to be shown as one continuous stream. As such, it is optimized for both desktop and mobile platforms.

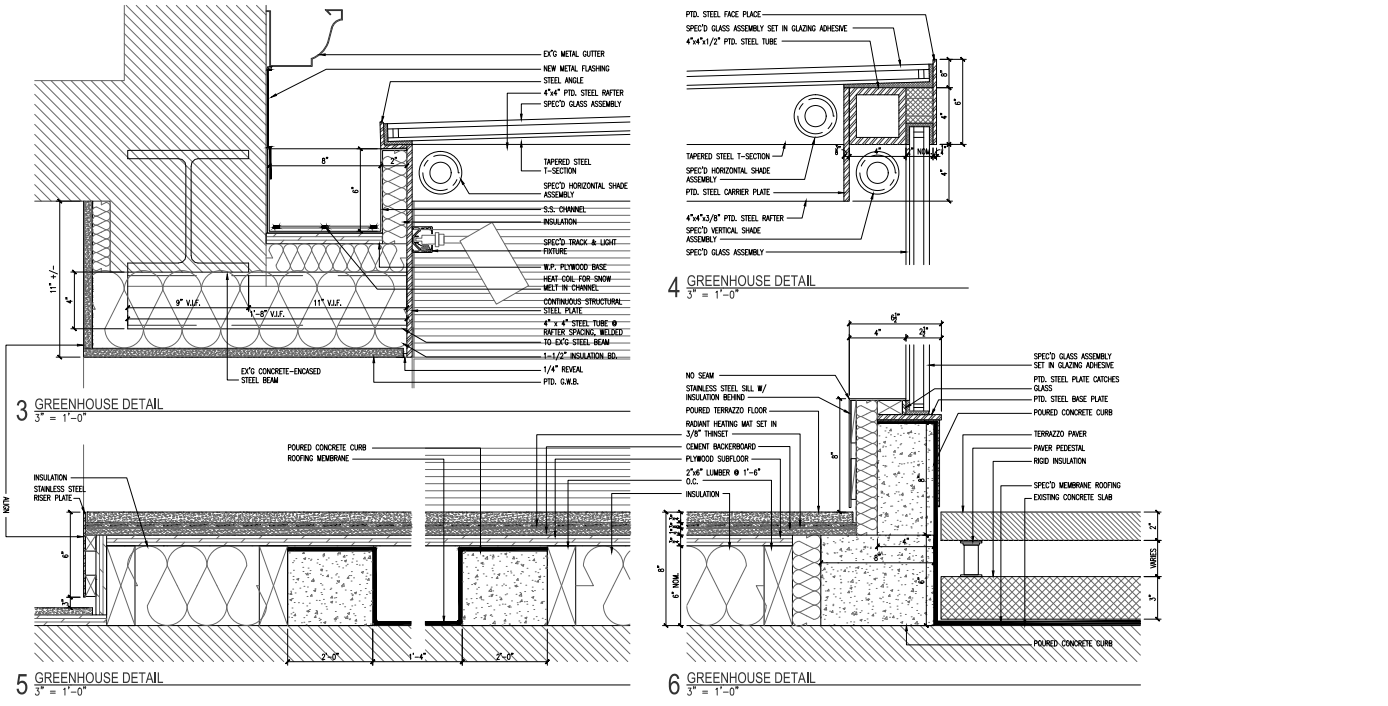


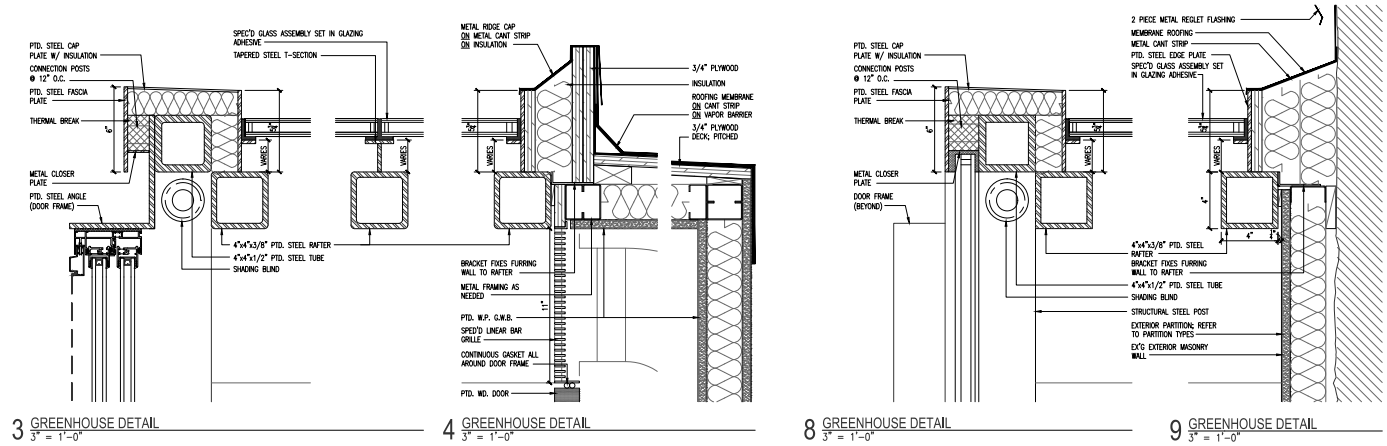
Project:	**Hotel des Artistes**	2016
Role:	Lead Architectural Designer @ Belmont Freeman Architects	
Client:	Private	
Location:	New York, New York (USA)	
Size:	800 square feet	
Budget:	$1.25 million	

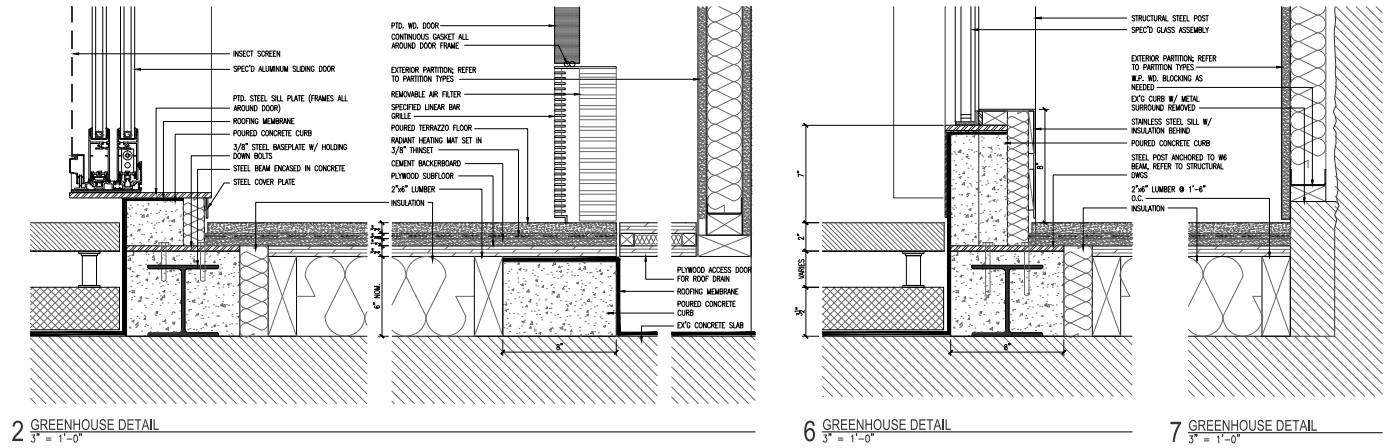
I led the design of a small studio apartment renovation for a wealthy client, herself a former architect, at the historic Hotel des Artistes property in Manhattan's Upper West Side. A temporary custom-designed metal and glass sunroom is the key feature of the new layout, which also includes a tailored kitchen exactly suited to the owner's needs. The palette of materials is luxurient, whilst minimal detailing adds to the contemporary feel. Ths project is currently under construction.



The project is defined by carefully considered custom detailing to make maximum use of the limited space:



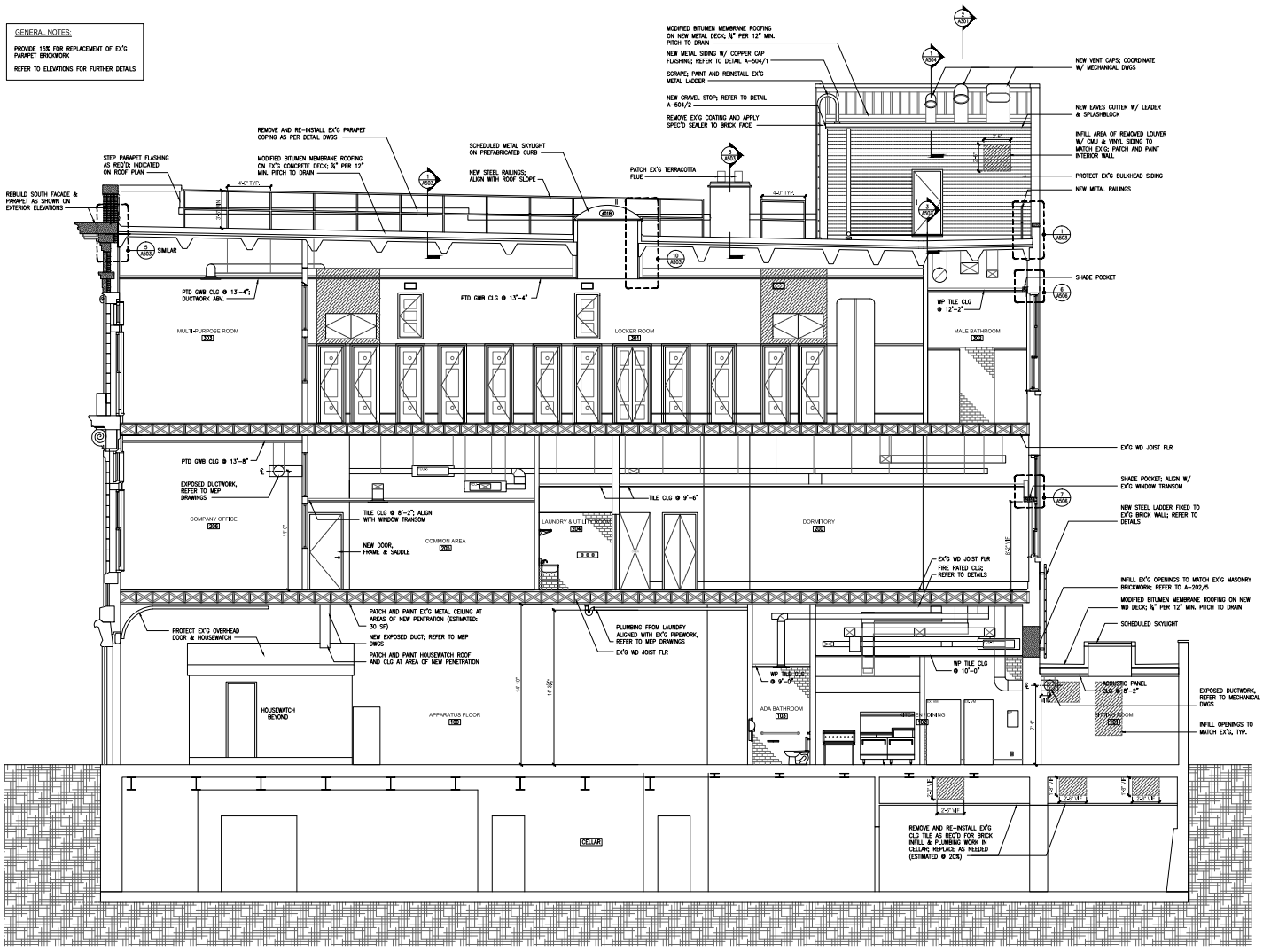




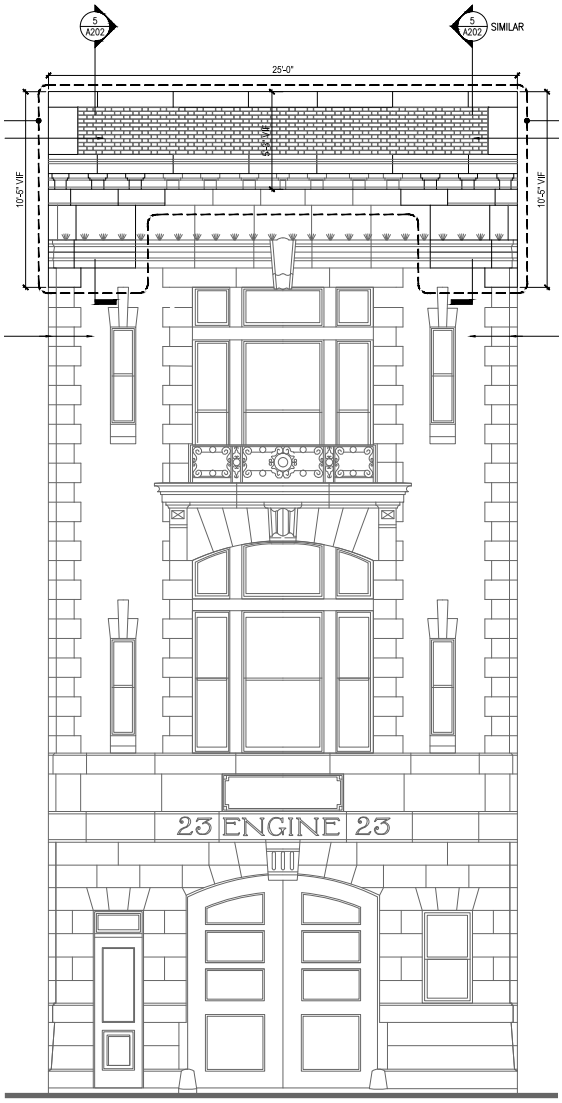
Detail drawings of the custom metal and glass sunroom

Project:	**FDNY Engine Company 23**	2014-2016
Role:	Lead Architectural Designer and Project Manager @ Belmont Freeman Architects	
Client:	Fire Department of New York (FDNY) and the NYC Department of Design and Construction (DDC)	
Location:	New York City, NY (USA)	
Size:	14 500 square feet	
Budget:	$6 million	

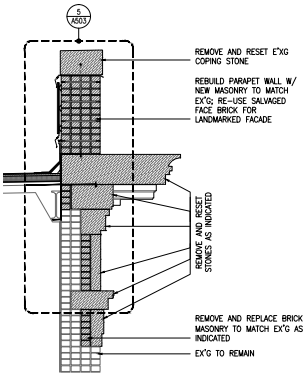
As part of New York City's Department of Design and Construction 'Design Excellence' Program, Belmont Freeman Architects (BFA) was chosen as one of twenty selected firms for the design of public projects in the city. Although the contract term is 3 years, BFA was the first firm to be awarded consecutive terms owing to the exceptional standard of their work. Upon award of this second contract, BFA hired me as Lead Designer for this project, the gut renovation and redesign of FDNY Engine Company 23, a historic Beaux-Arts building designated as a historic city Landmark.

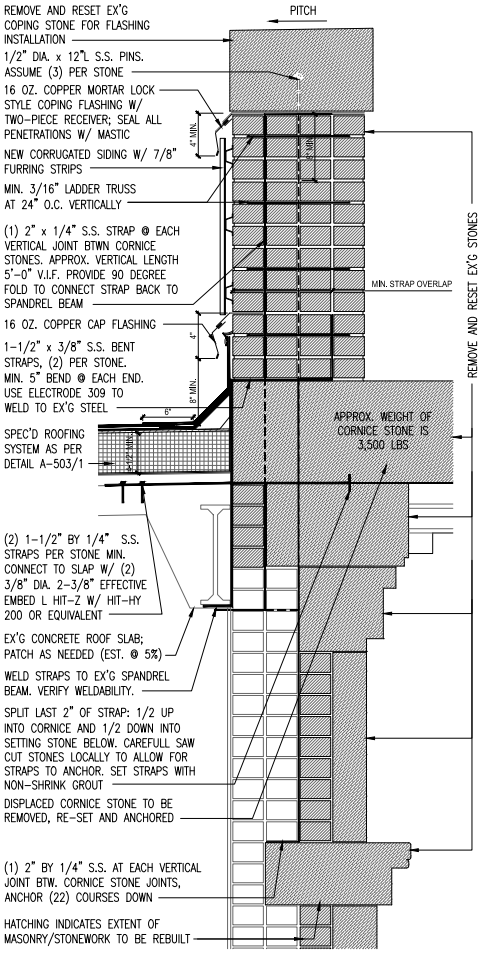


The drawings below describing the rebuilding of the landmarked Beaux-Arts facade. I collaborated with the structural engineer and a masonry conservation expert in order to develop these details.



South Elevation

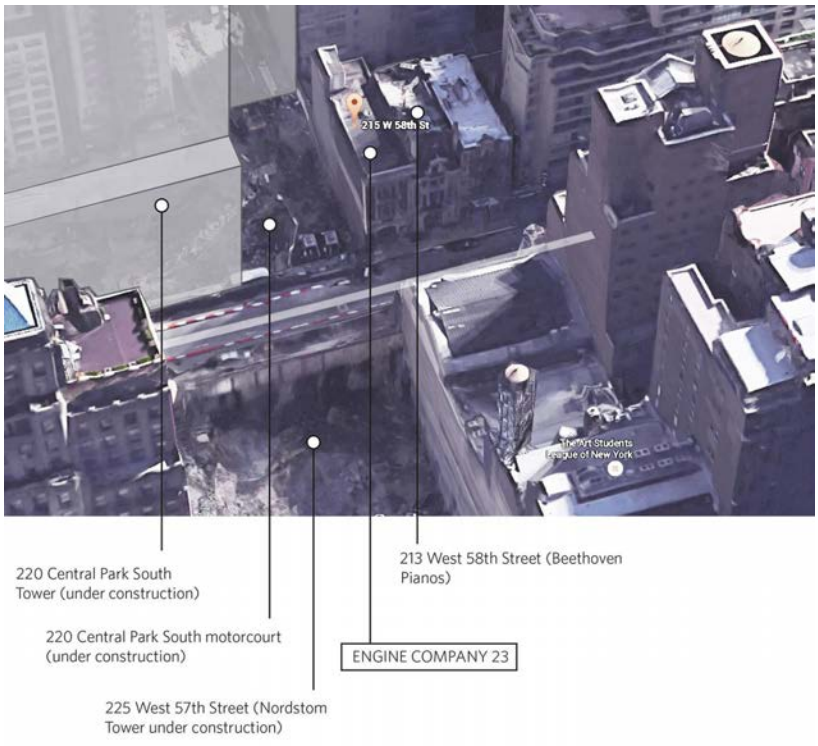


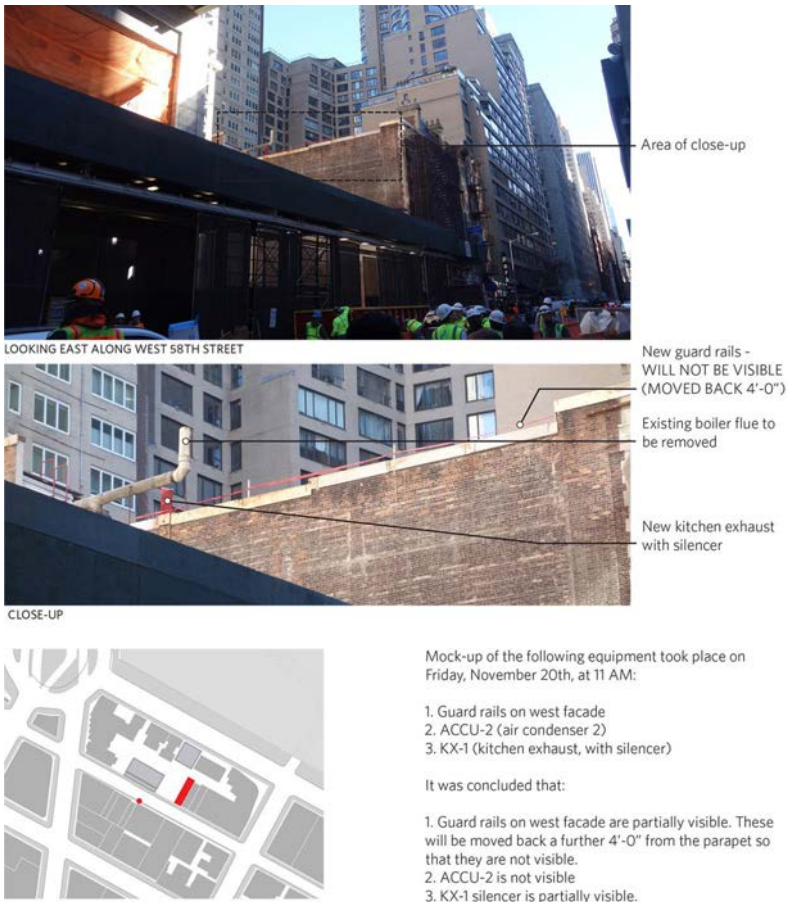


Detail of facade reconstruction

Inspecting the existing facade using FDNY apparatus

I presented the proposal to the Landmarks Preservation Commission, where the design was unanimously approved:

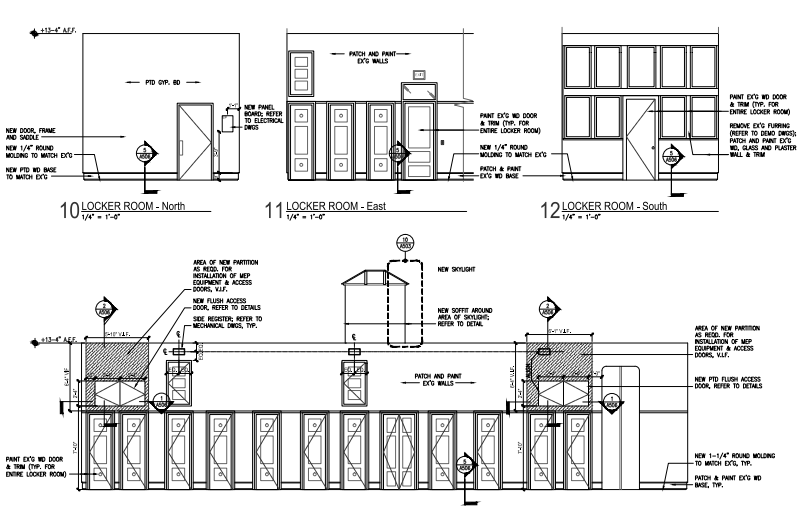




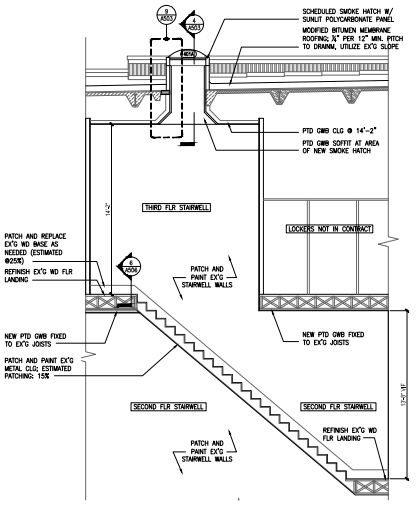
Presentation material showing our physical mock-ups of the visible alterations

Historic Beaux-Arts facade to be repaired

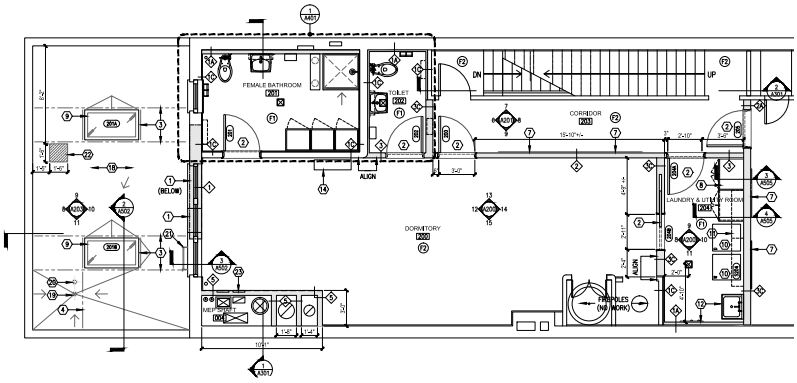
Extracts from the bid drawing set:



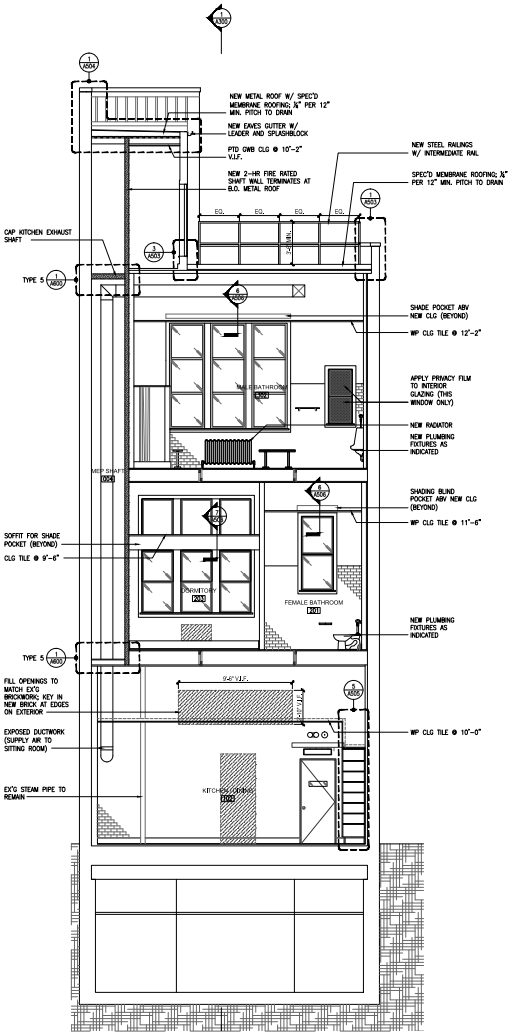
Internal elevations on the Third Floor (showing installation of HVAC units over lockers)



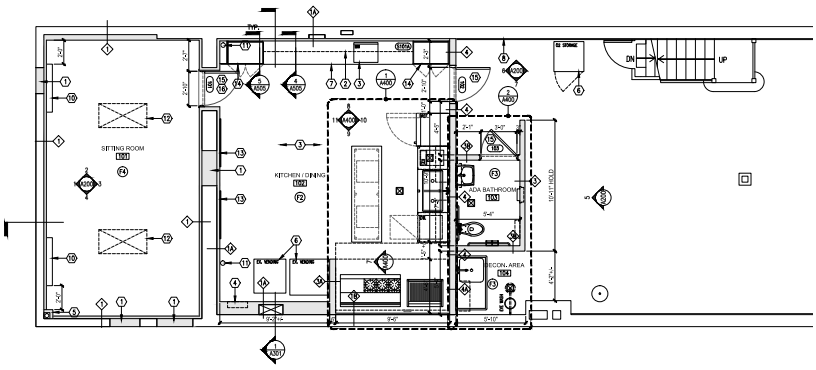
Partial Section (showing work in stairwell)



Second Floor Plan (showing new private quarters and rooflights to renovated living room)



Short Section



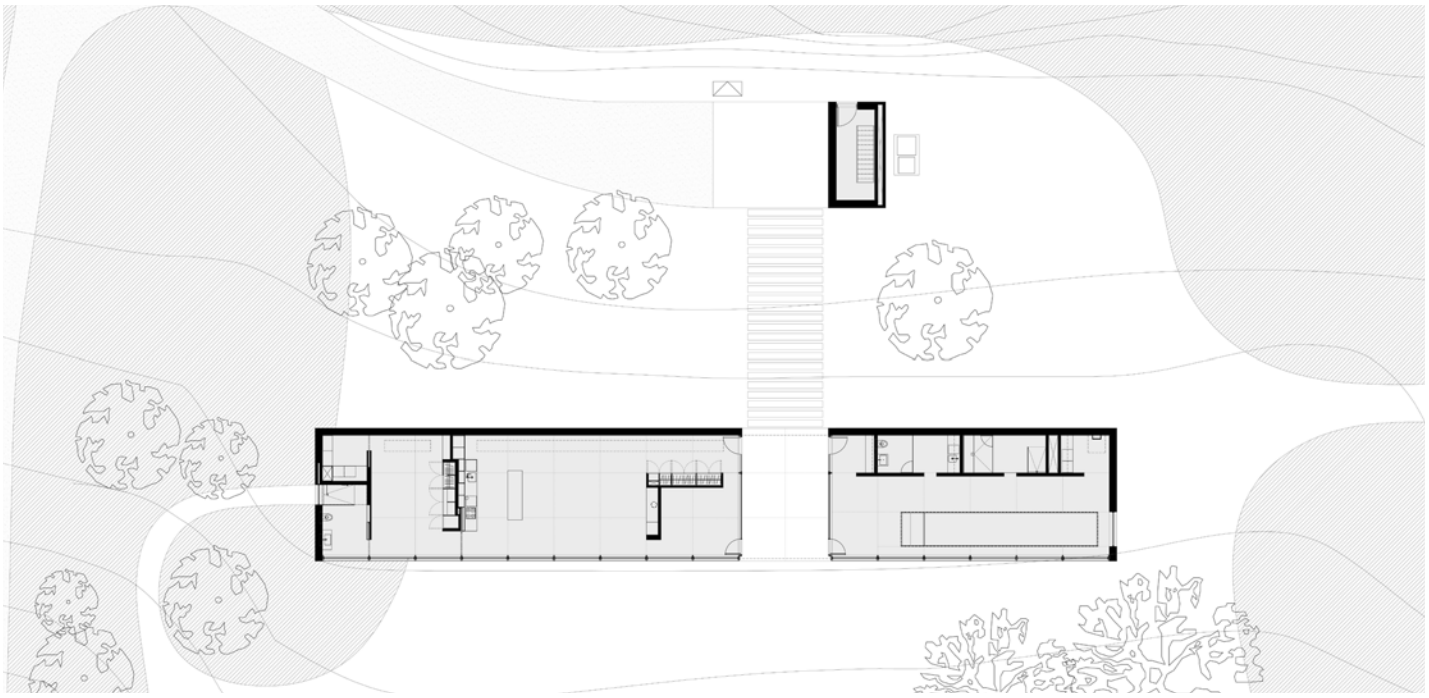
First Floor Plan (showing flipped kitchen and living room)

Project: **Martha's Vineyard Residence** 2015
Role: Architectural Designer @ Belmont Freeman Architects
Client: Private
Location: Chilmark, MA (USA)
Size: 14 500 square feet
Budget: $6 million

A new house on twenty-nine acres of ocean-front property in Chilmark. The wood and glass structure will be low and modestly scaled to sit gently on the terrain. It consists of a 1,450 sf one-bedroom residence attached by a breezeway to a 950 sf spa with indoor lap pool. The project is designed to Passive House standards for optimal sustainability. Automated shutters of perforated stainless steel provide shading to the 120-foot-long south-facing glass facade when raised, and storm protection when closed. The project includes extensive landscaping to protect fragile wetlands and restore the meadows of the former sheep farm.

Perspective view from the south

Location Plan

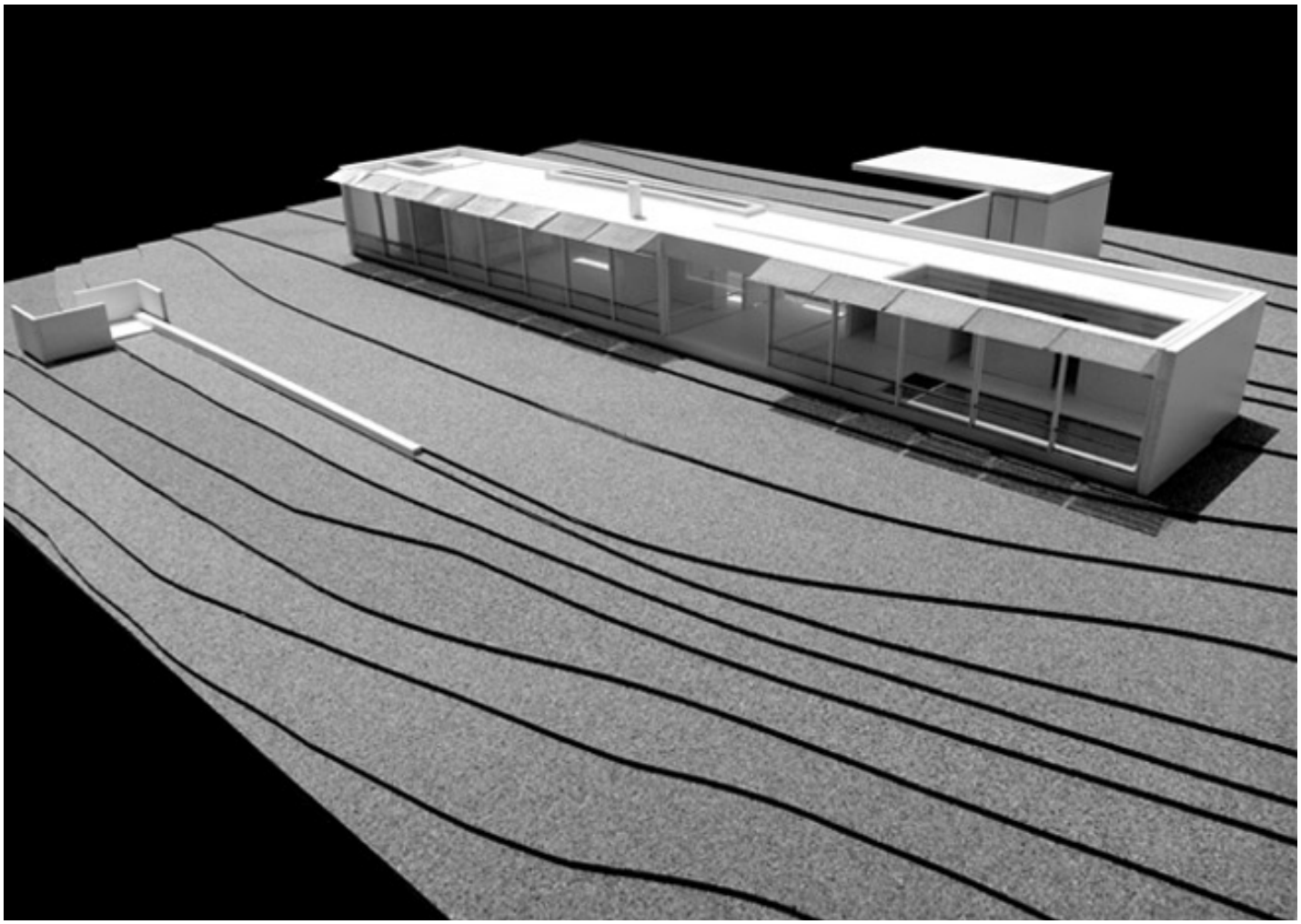


Site Plan

3D renders and a physical model that I created during the design of this project:

Kitchen, living, and dining room

Pool room and sauna



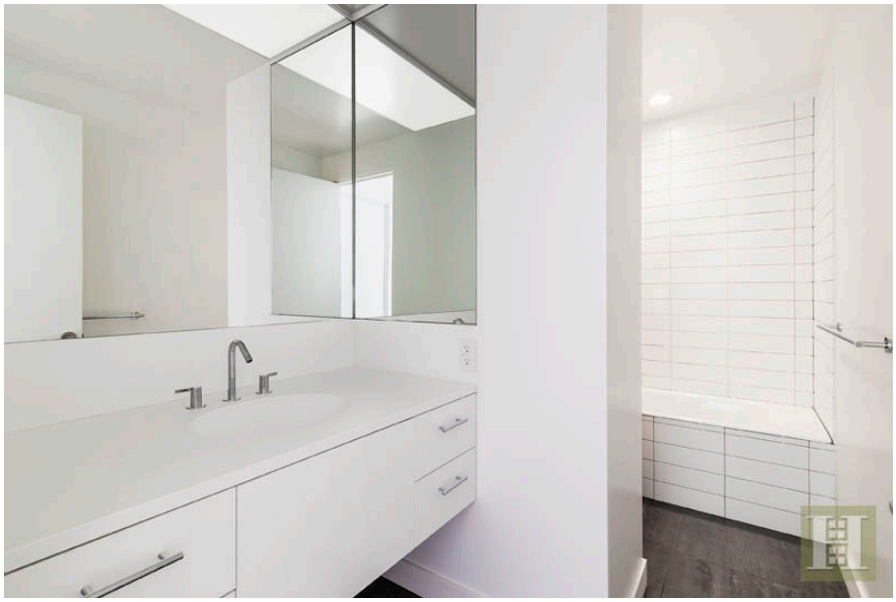
Cork and white card model

Project: **159 Madison Avenue** 2014 - 2015
Role: Lead Architectural Designer @ Belmont Freeman Architects
Client: Private
Location: New York, New York (USA)
Size: 1 400 square feet
Budget: $750, 000

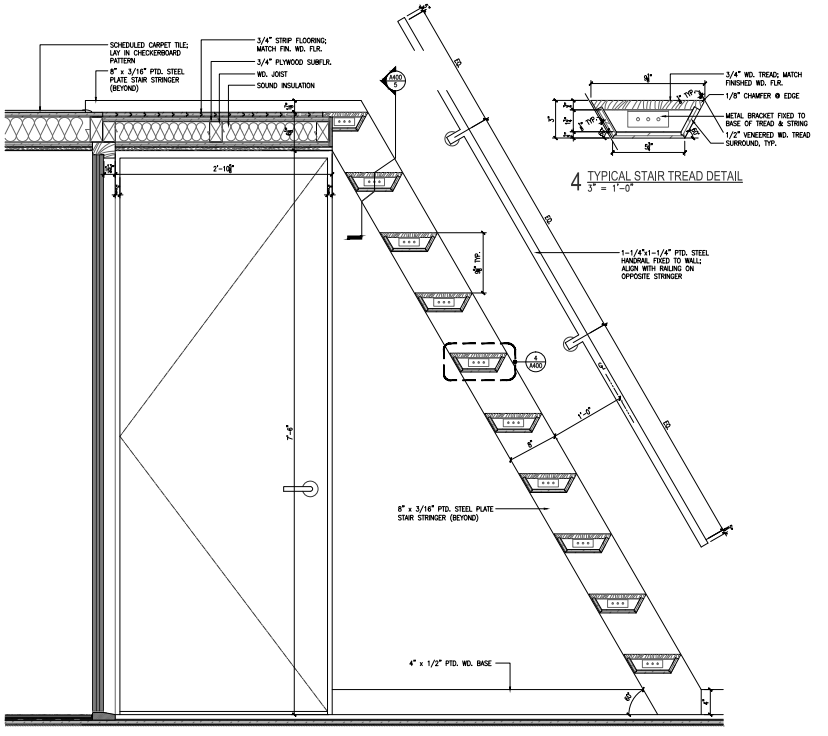
I led design and construction in the gut renovation of this 1911 co-operative penthouse apartment. Existing ceilings were removed, providing + 5'-0" additional height and allowing the insertion of a loft space - valuable new floor area for the apartment owners. A minimal white palette of materials and custom designed elements are incorporated throughout, including a metal and wood stair, and kitchen and bathroom elements.

← Loft space over kitchen

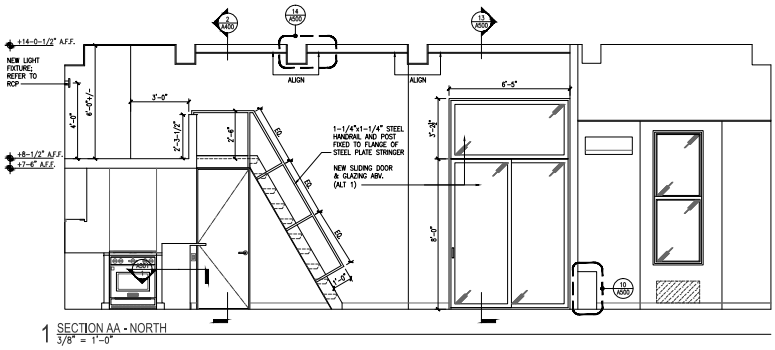
← Kitchen



Master bathroom



3 SECTION THROUGH STAIRS - NORTH
1-1/2" = 1'-0"



1 SECTION AA - NORTH
3/8" = 1'-0"

4 TYPICAL STAIR TREAD DETAIL
3" = 1'-0"

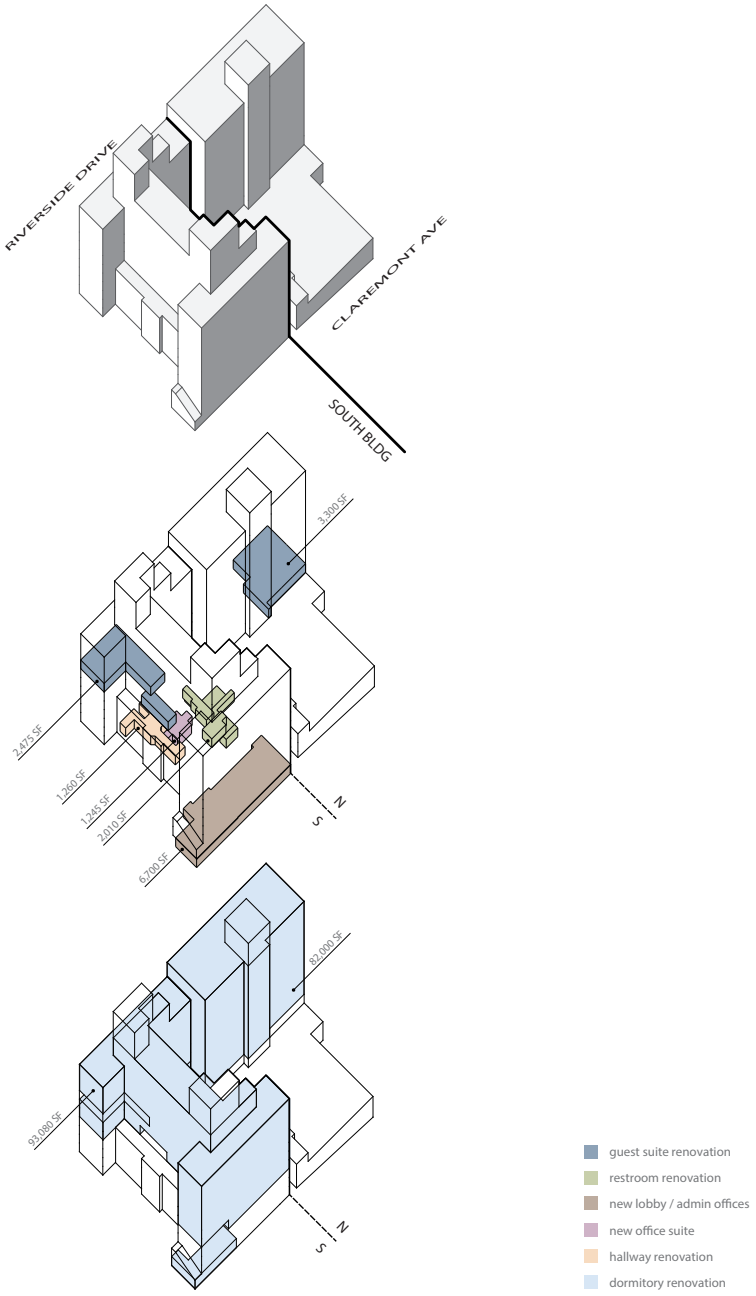
Custom metal and wood stair

Project: **International House NYC** 2014 - 2016
Role: Lead Architectural Designer @ Belmont Freeman Architects
Client: International House NYC
Location: New York, New York (USA)
Size: 10 500 square feet
Budget: $6 million

Phased renovation of two buildings for a non-profit residence and program center for the city's top universities, including Columbia University, NYU, and the Juilliard School. I worked with the client's real estate team to develop a renovation strategy for the residential rooms. Separately, I conducted zoning analysis and master planning for a prospective new building for the institution.

I-House North

I-House South



Overview of I-House renovation areas

Various design proposals that I developed as part of the multi-phased renovation of I-House North and South buildings:

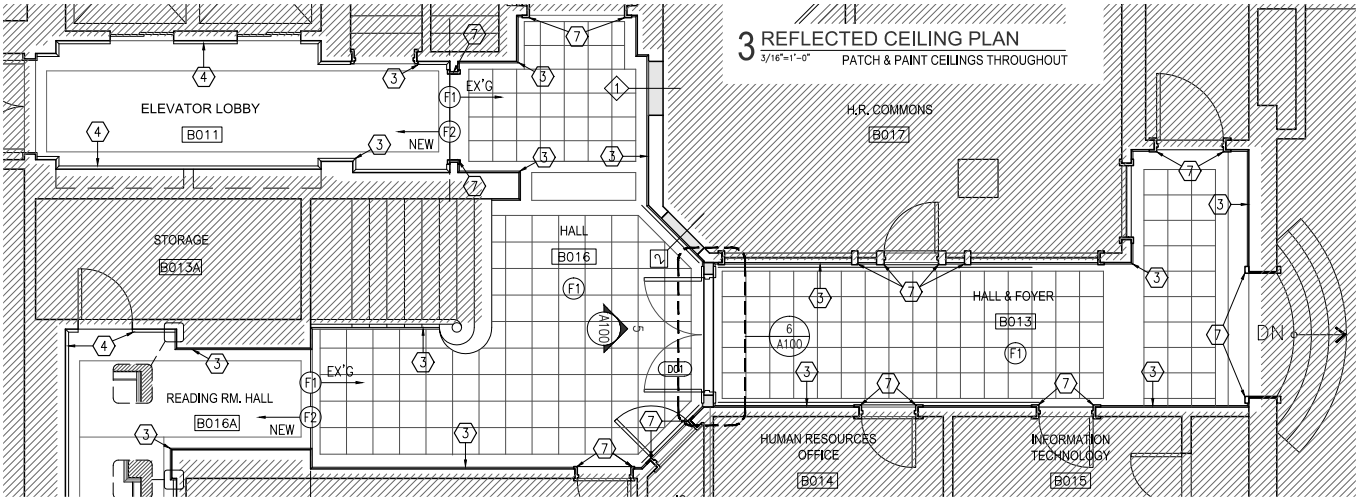
Proposal for a renovated main reception area at I-House North

Rendering of a new disabled bathroom stall

Rendering of a typical renovated residential room

Rendering of a typical renovated bathroom

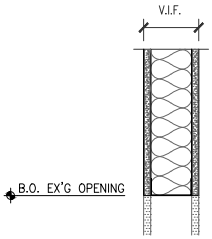
Construction details that I developed for the renovation of interior spaces in I-House South:



3 REFLECTED CEILING PLAN
3/16"=1'-0"
PATCH & PAINT CEILINGS THROUGHOUT

1 DOOR INFILL, FIN. ONE SIDE

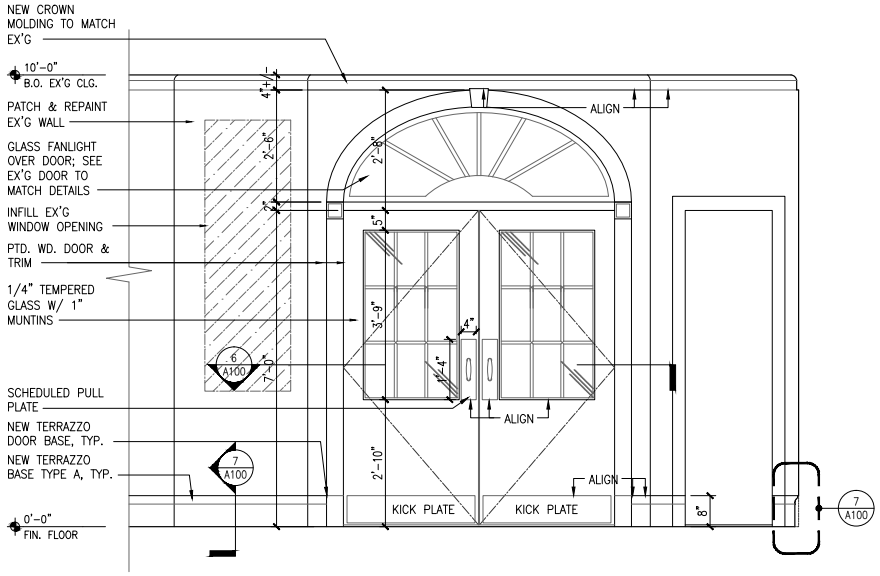
- (1) 5/8" CEMENT BOARD
- 20 GA. METAL STUDS (AS NEEDED) W/ UNFACED FIBERGLASS OR MINERAL WOOL INSULATION: THICKNESS EQUAL TO DEPTH OF STUD CAVITY
- EX'G WALL FINISH



2 WINDOW INFILL, FIN. BOTH SIDES

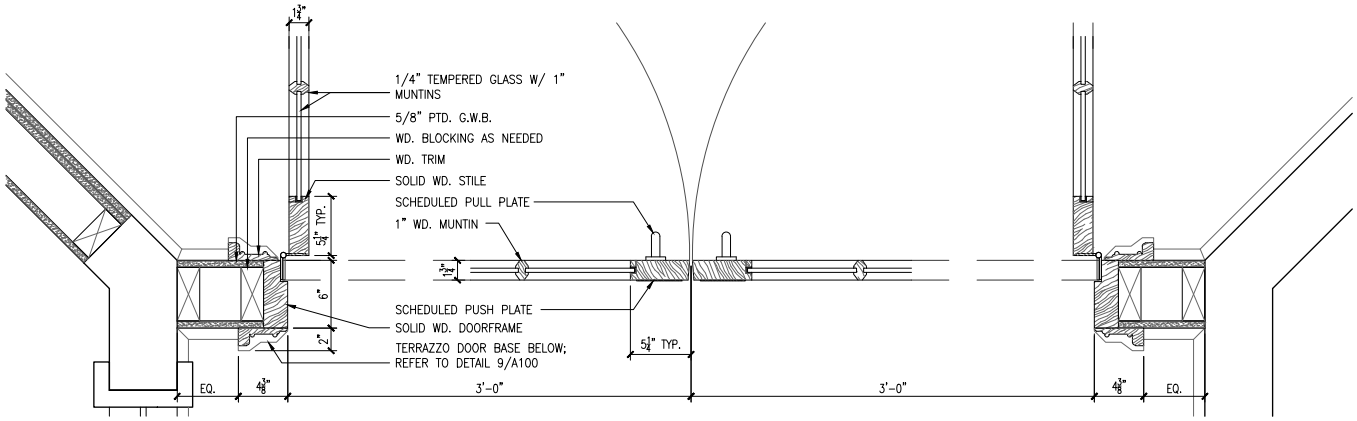
- (1) 5/8" CEMENT BOARD
- 20 GA. METAL STUDS (AS NEEDED) W/ UNFACED FIBERGLASS OR MINERAL WOOL INSULATION: THICKNESS EQUAL TO DEPTH OF STUD CAVITY
- (1) 5/8" CEMENT BOARD

4 PARTITION TYPES
1-1/2"=1'-0"



5 ELEVATION
1/2"=1'-0"

NOTE: THE INTENTION IS THAT THIS NEW DOOR AND FRAME MATCH EXISTING DOOR AT DINING ROOM

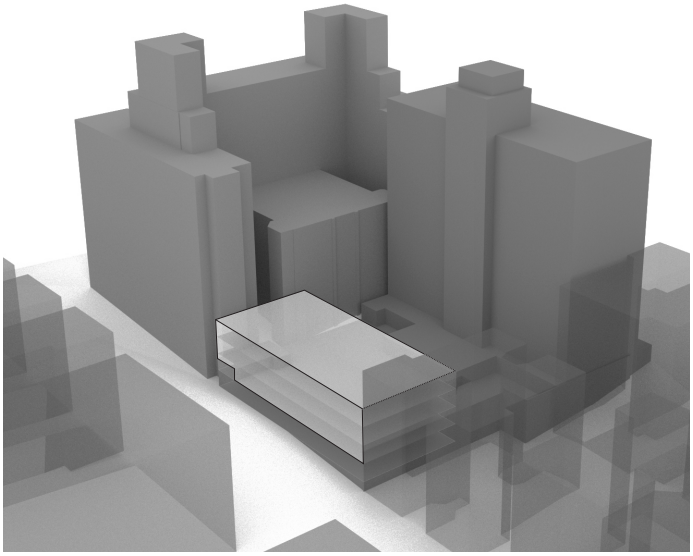


6 DOOR DETAIL (D01)
1-1/2"=1'-0"

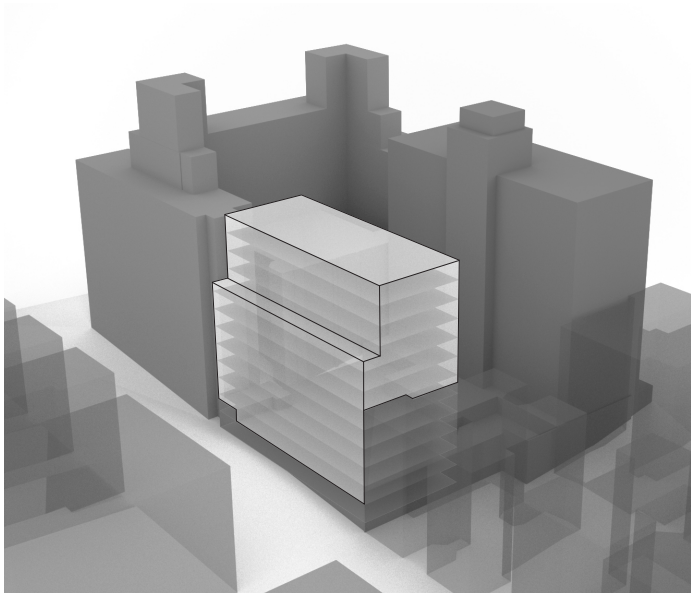
USE HWS1 ; REFER TO SPEC

Extracts from zoning study I prepared for a new building adjacent to I-House North:

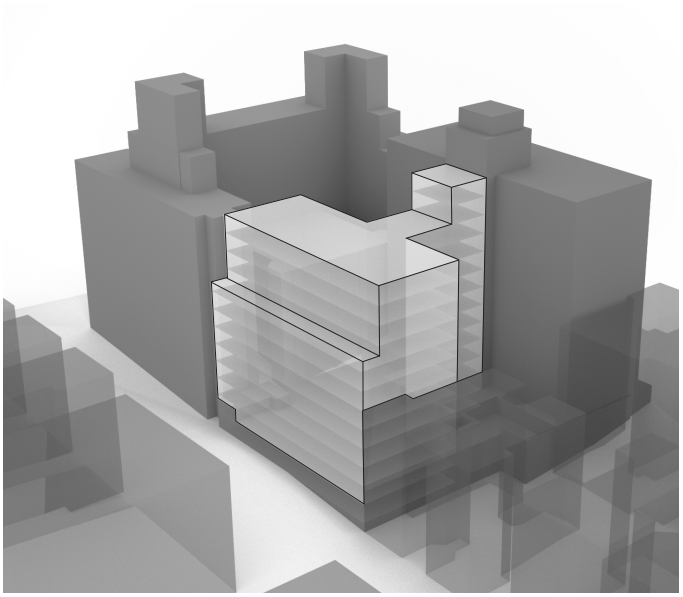
Aerial photo the existing I-House North and South buildings



1. Approximately 20,625 gross SF of construction correlating to the unused development rights for the I-House North building, per base zoning.



2. Approximately 70,625 gross SF of construction correlating to available development rights for the I-House North building, if developed under the Quality Housing program.



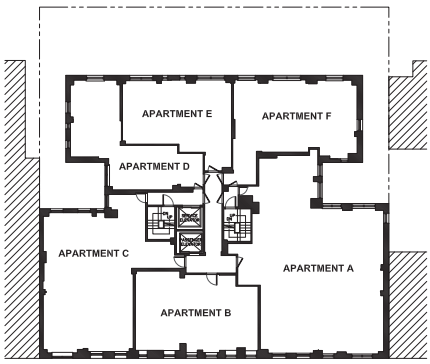
3. Approximately 90,800 gross SF of construction correlating to available development rights for the combined I-House North and South building lots, if developed under Quality Housing.

Project:	**12 East 88th Street**	2014
Role:	Lead Architectural Designer @ KinlinRutherfurd Architects	
Client:	Private	
Location:	New York, New York (USA)	
Size:	40 000 square feet	
Budget:	$1.25 million	

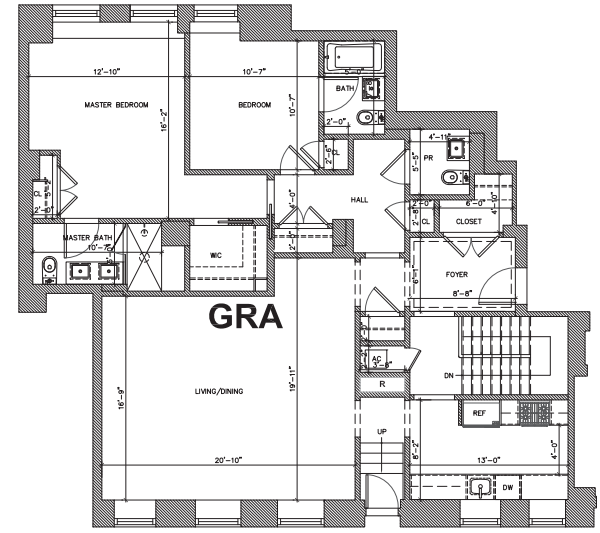
12 East 88th Street is a prestigious address in Manhattan's Upper East Side, next to both Central Park and the Guggenheim Musuem. I led this project for KinlinRutherfurd Architects during the early design development stages, where I worked closely with the client, Simon Baron Development, to survey the existing building and then design the apartment layouts for all 29 condominium units. The project is now complete.

The project led to the transformation of a tired rental property into twenty-nine luxury condominiums, including new shared amenity spaces, such as a gaming room (right picture below):

Photographs of the finished project



Typical Upper Floor



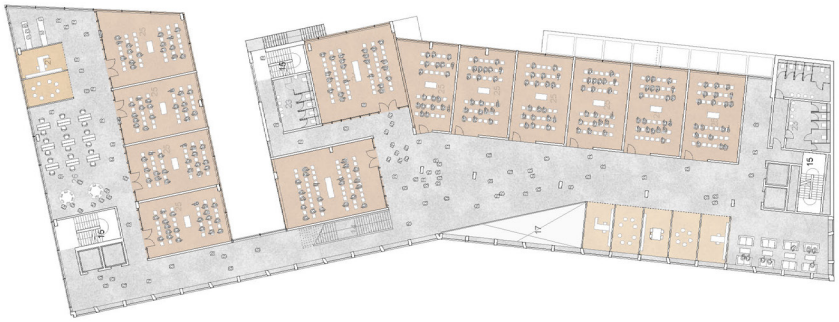
Ground Floor Unit layout

Typical unit layouts

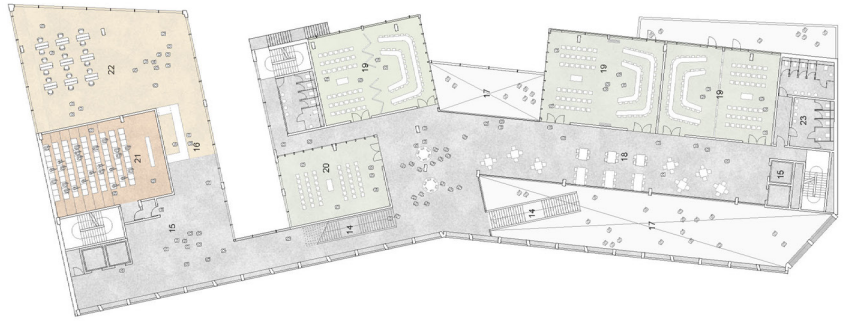
Project:	**London School of Economics Global Centre for the Social Sciences**	2013
Role:	Architectural Designer @ Grafton Architects	
Client:	London School of Economics and RIBA (competition organizer)	
Location:	London (UK)	
Size:	85 000 square feet	
Budget:	£90 million	

At Grafton Architects, I played a leading role in the development of a competition design for the new Global Centre for the Social Sciences, what was to be the LSE's largest ever building project. Our design was selected as one of 5 firms on a shortlist made up of some of the world's most renowned design firms, including Rem Koolhaas' Office for Metropolitan Architecture (OMA), and Lord Richard Rogers' Rogers Stirk Harbour + Partners. All five shortlisted proposals were exhibited at the London School of Economics, and were also published widely in the architectural press. As part of the anonymous entry system, we are labelled 'Team C' in all press material.

I devised the plan drawings for this competition, working closely with Directors Shelley McNamara and Yvonne Farrell:



Fifth Floor



Fourth Floor

Third Floor

Second Floor

I developed the section drawings for this competition, working closely with Directors Shelley McNamara and Yvonne Farrell:

I played a key role in the development of the elevation and facade strategy:

South Elevation

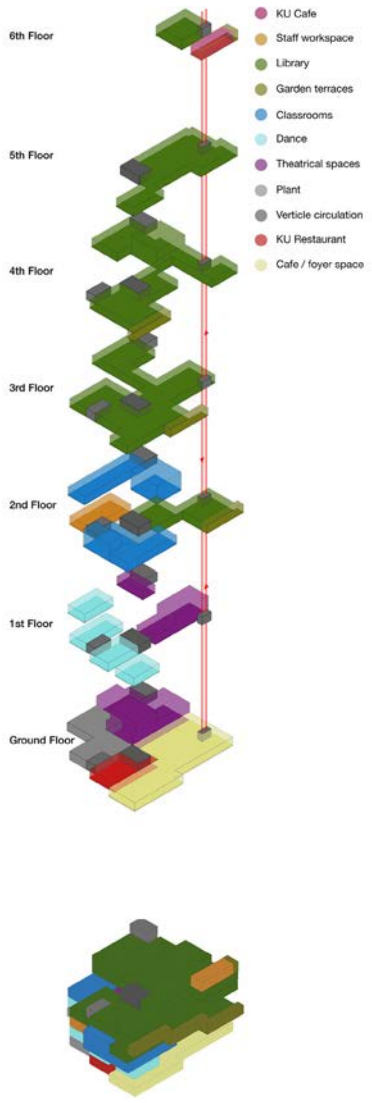
Project:	**Kingston University New Town House**	2013
Role:	Architectural Designer @ Grafton Architects	
Client:	Kingston University and RIBA (competition organizer)	
Location:	Kingston-upon-Thames, London (UK)	
Size:	120 000 square feet	
Budget:	£30 million	

Grafton Architects were invited to submit a design proposal for a new landmark building for Kingston University in London. I worked with them to develop this design before relocating to the USA in late 2016.

The building footprint sidesteps mature trees, recedes to form permeable edges, shade from sun and rain. It creates permeable thresholds setting the stage for public life. The open undercroft colonnade at ground floor level invites public use and activity. The three cascading terraces, which form part of the facade, form hanging gardens giving a sense of the landscape connecting from ground level to the top of the building.

First-prize winner of the Royal Institute of British Architects organized international competition. Now under construction.

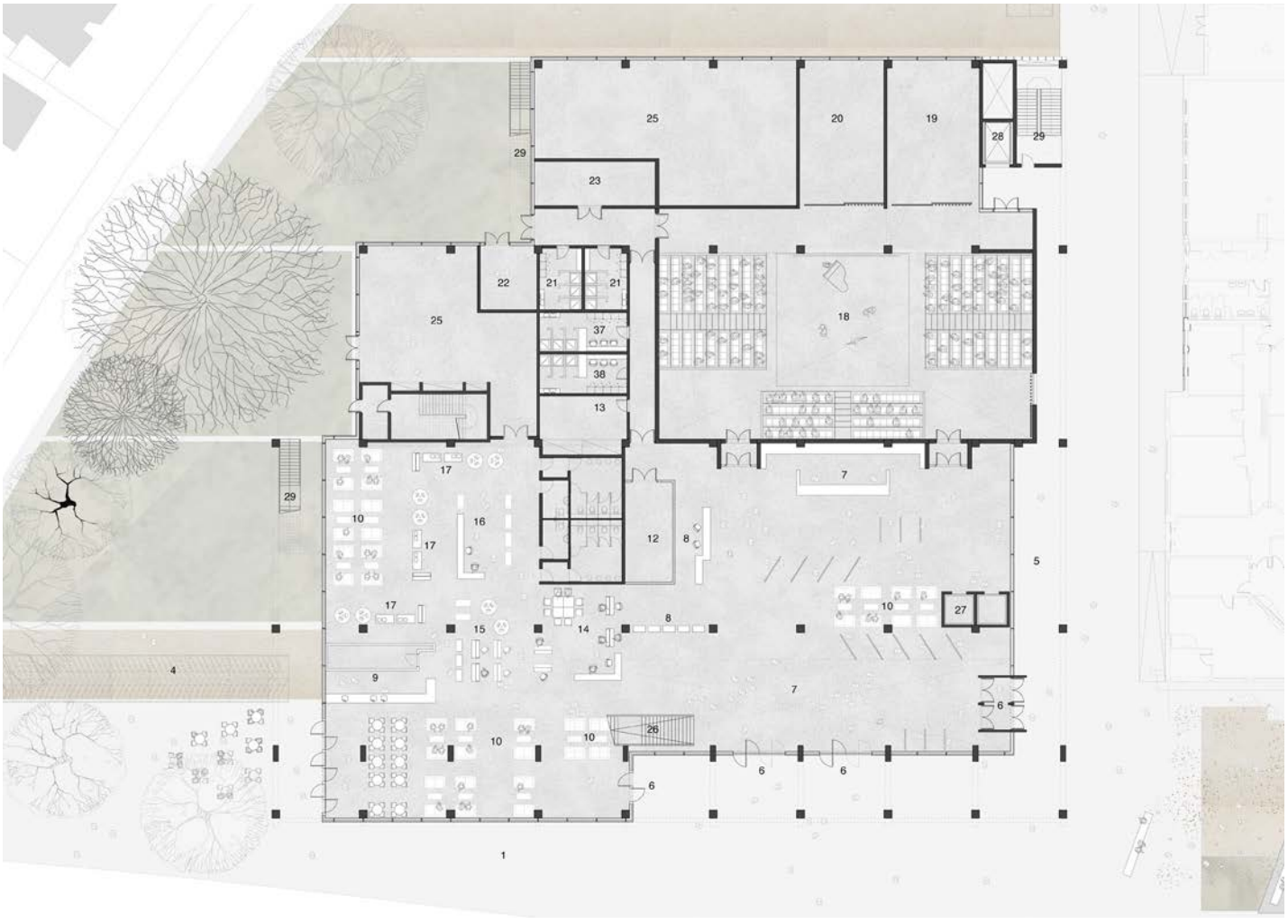
Perspective view of interior atrium



Building organisation diagram

I designed both plan and section drawings in line with the conceptual vision of the project, which was defined by overlapping levels and voids between floors:

Section looking north



Site Plan

I translated the complex spatial geometry into the following 3D perspective images in order to describe the design intent:

Perspective view of interior atrium upon arrival

Perspective view of multi-purpose auditorium

Project:	**Spenner Zement Headquarters**	2011
Role:	Lead Architectural Designer @ BOLLES-WILSON	
Client:	Spenner GmbH & Co. KG	
Location:	Erwitte, North-Rhine Westphalia (DE)	
Size:	18 000 square feet	
Budget:	€8 million	

Our team won first prize in an architectural competition for the design of the new administrative headquarters of Spenner Zement, the German cement manufacturer. The office deck is balanced on a considerably smaller ground floor, with the ingenuity of the project being the design of the beam. Working closely with the structural engineer, a parametric optimizing program removes redundant concrete to create the most minimal concrete truss beam possible.

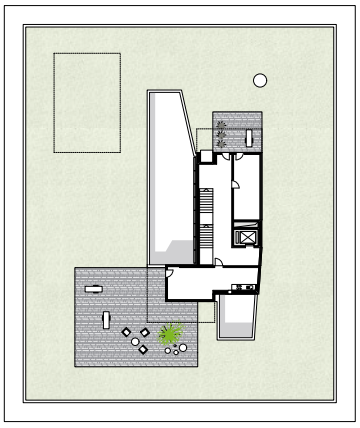
Winner of the Chicago Atheneum International Award 2012.

I design the interior spaces and developed 3D perspective images to describe the overall design intent:

Executive office photomontage

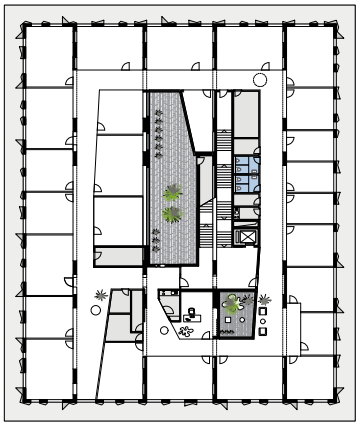
Arrival photomontage

I established the principles of the design and created all drawings and perspective images:

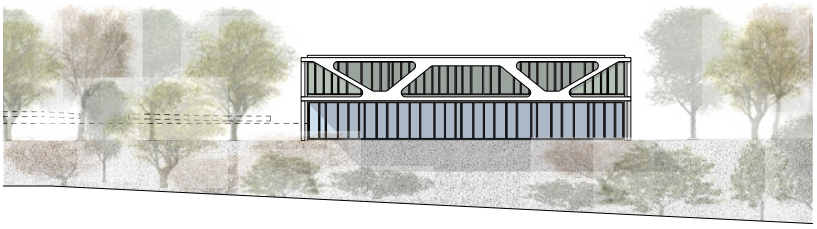


Roof Floor Plan

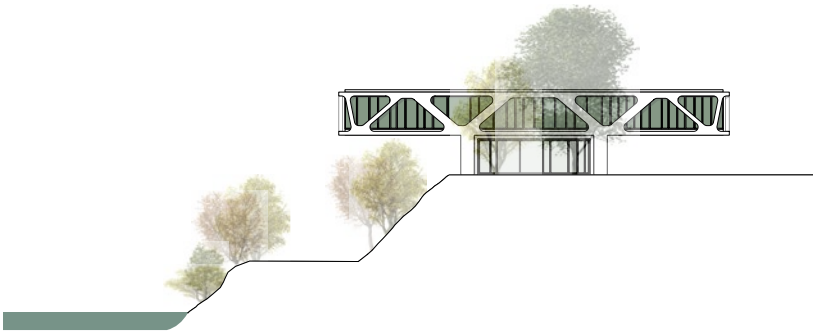
3D perspective of approach



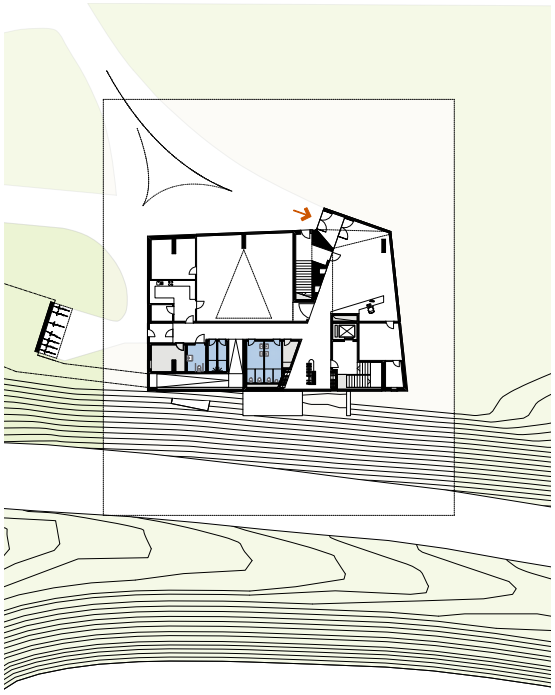
Second Floor Plan



North Elevation



East Elevation



First Floor Plan

Section

I utilized parametric software to remove redundant concrete and make the most efficient beam possible:

Parametrically optimised concrete beam (plaster mock-up)

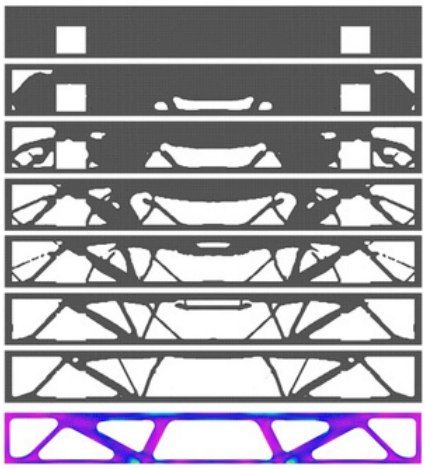
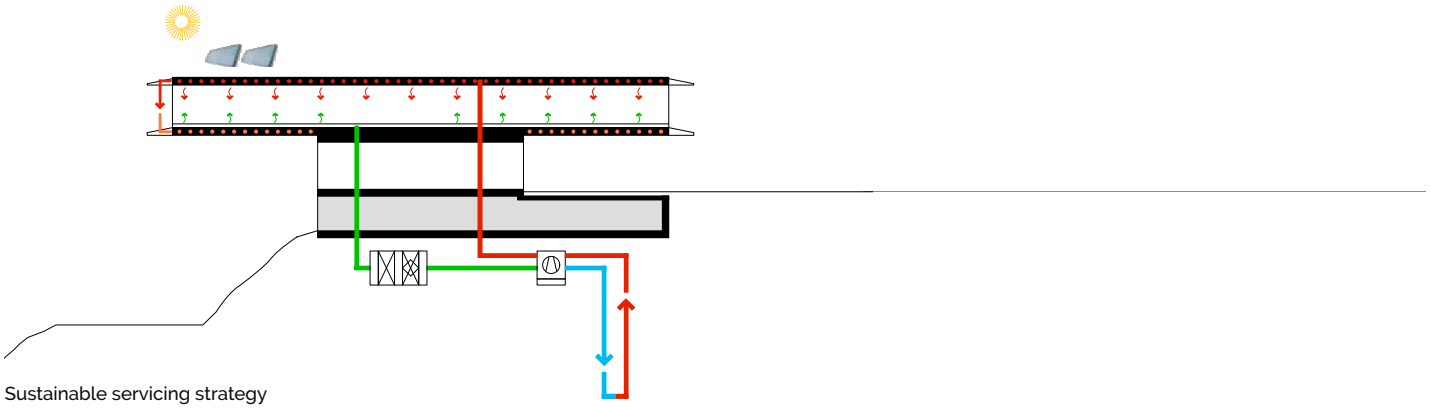


Diagram of Softkill process



Sustainable servicing strategy

3D render of exterior with dramatic cantilever over disused quarry

Project:	**DfB National Football Museum**	2011
Role:	Architectural Designer @ BOLLES-WILSON.	
Client:	DfB (German Football Association)	
Location:	Dortmund, North-Rhine Westphalia (DE)	
Size:	40 000 square feet	
Budget:	€32 million	

This competition was part of an invited competition to design a new Museum of Football for the German Football Association in the city of Dortmund. Located next the main train station, it forms the start of an Art and Culture Mile in the city.

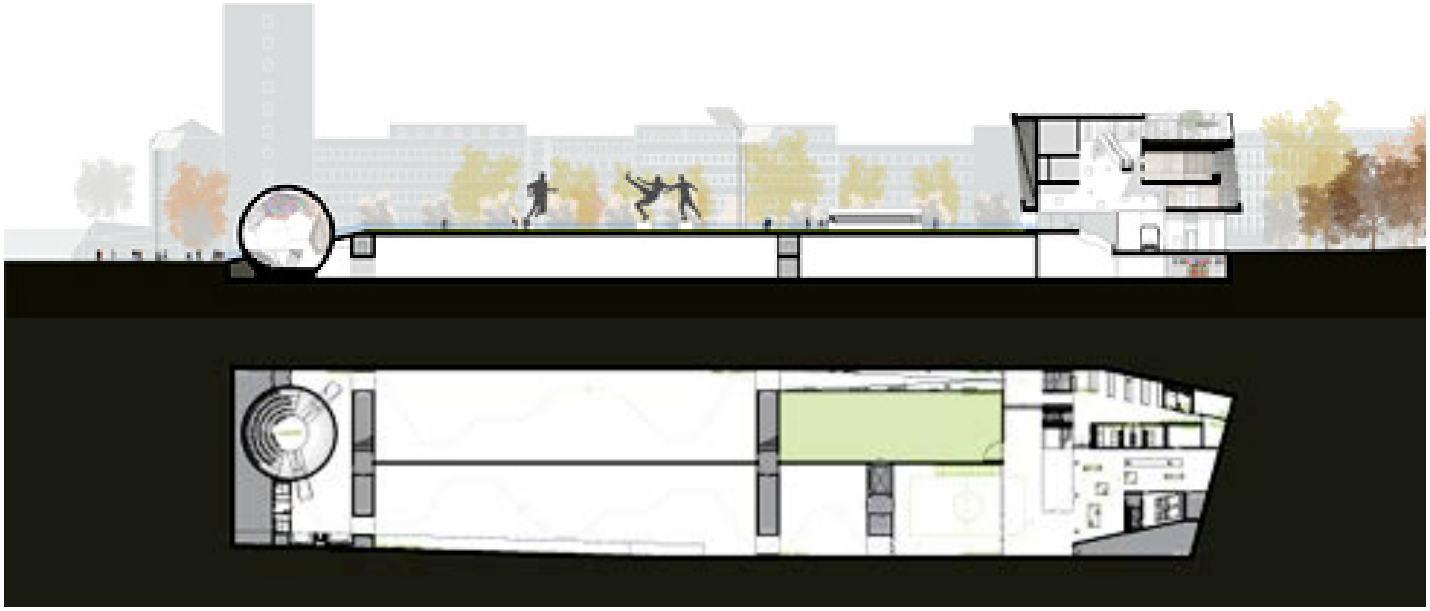
The new building was intended to house a permanent exhibition on football in Germany, as well as a selection of rotating exhibitions, play areas, archive facilities, and a cafe. Our design incorporate a raised podium to provide external play areas and a viewing platform where games would be shown on a large outdoor screen.

This design achieved a Highly Commended Award from a distinguished judging panel including Regine Leibinger.

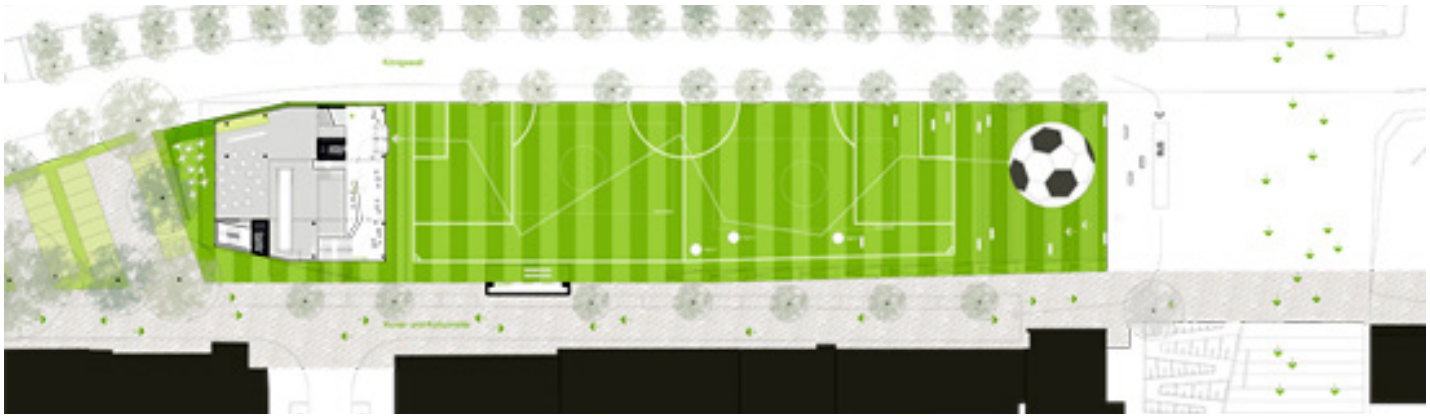
Perspective showing arrival from the train station

I worked closely with Peter Wilson and the BOLLES-WILSON competition team on the development of this design:

Rendering of the interior atrium space



First Floor Plan and Long Section



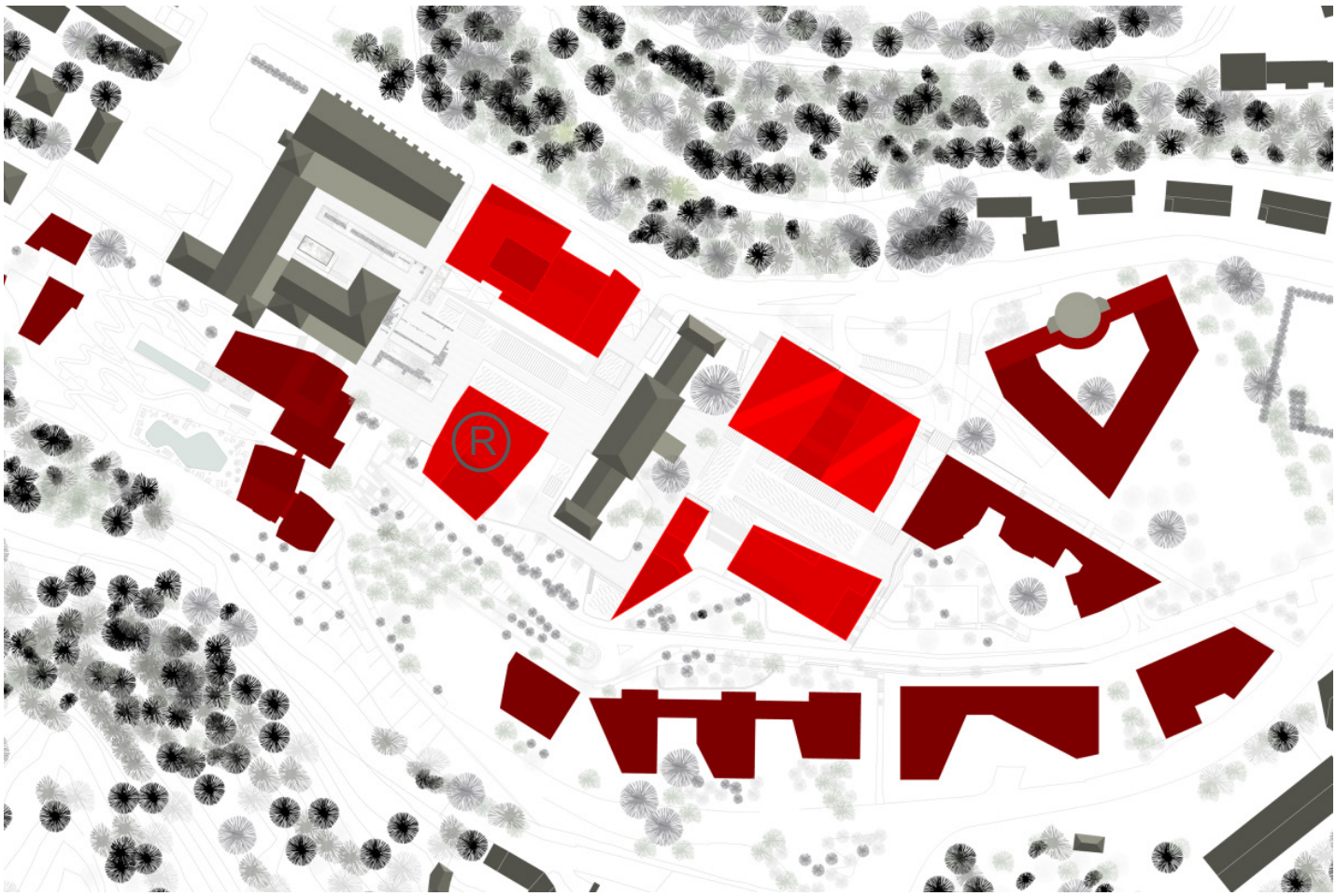
Site Plan

Project:	**Monteluce Masterplan**	2011
Role:	Architectural Designer @ BOLLES-WILSON.	
Client:	Commune di Perugia	
Location:	Perugia, Umbria (IT)	
Size:	6.5 hectares	
Budget:	Undisclosed	

BOLLES-WILSON had already won first prize in this competition by the time I joined the office, but I played a leading role in the design development phase of this large scale urban masterplan, right in the historic heart of Perugia, the capital of the region of Umbria in Italy. The project is now almost complete, as can be evidenced from the photographs shown on the following pages, The design was awarded the Premio Urbanistica Award for Quality of Public Space from the Italian National Institute of Urban Planning.

The Competition Program, developed in close cooperation with the Commune di Perugia, called for a total of 65,000 sqm - 43% of which is student and private housing and 25% subsidised housing. The new urban Quartier is networked in terms of continuity of urban spaces and a rich programmatic mix including a maximum of 10% retail and 5% office use as well as hotel and conference facilities, local health offices, kindergarten and a new public park.

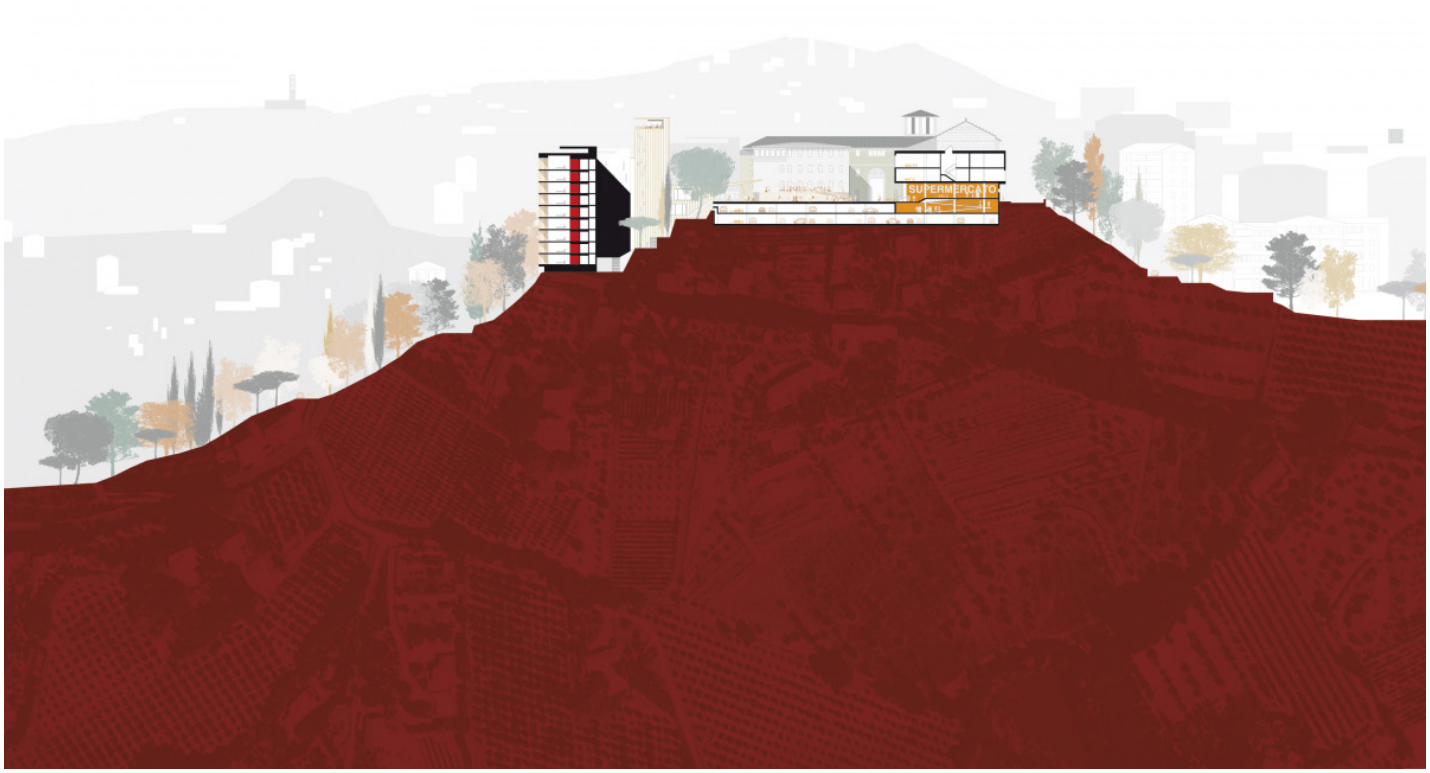
In particular, I developed the design of building 'R', indicated on the plan below and on the following pages.



Competition-winning site plan

Perugia is a classic Italian hill town known for it's defensive walls and historic centre:

Aerial view of Perugia showing masterplan areas by BOLLES-WILSON



Context section through Building 'R'

Building ‘R’, which I played a key role in designing, is now complete:

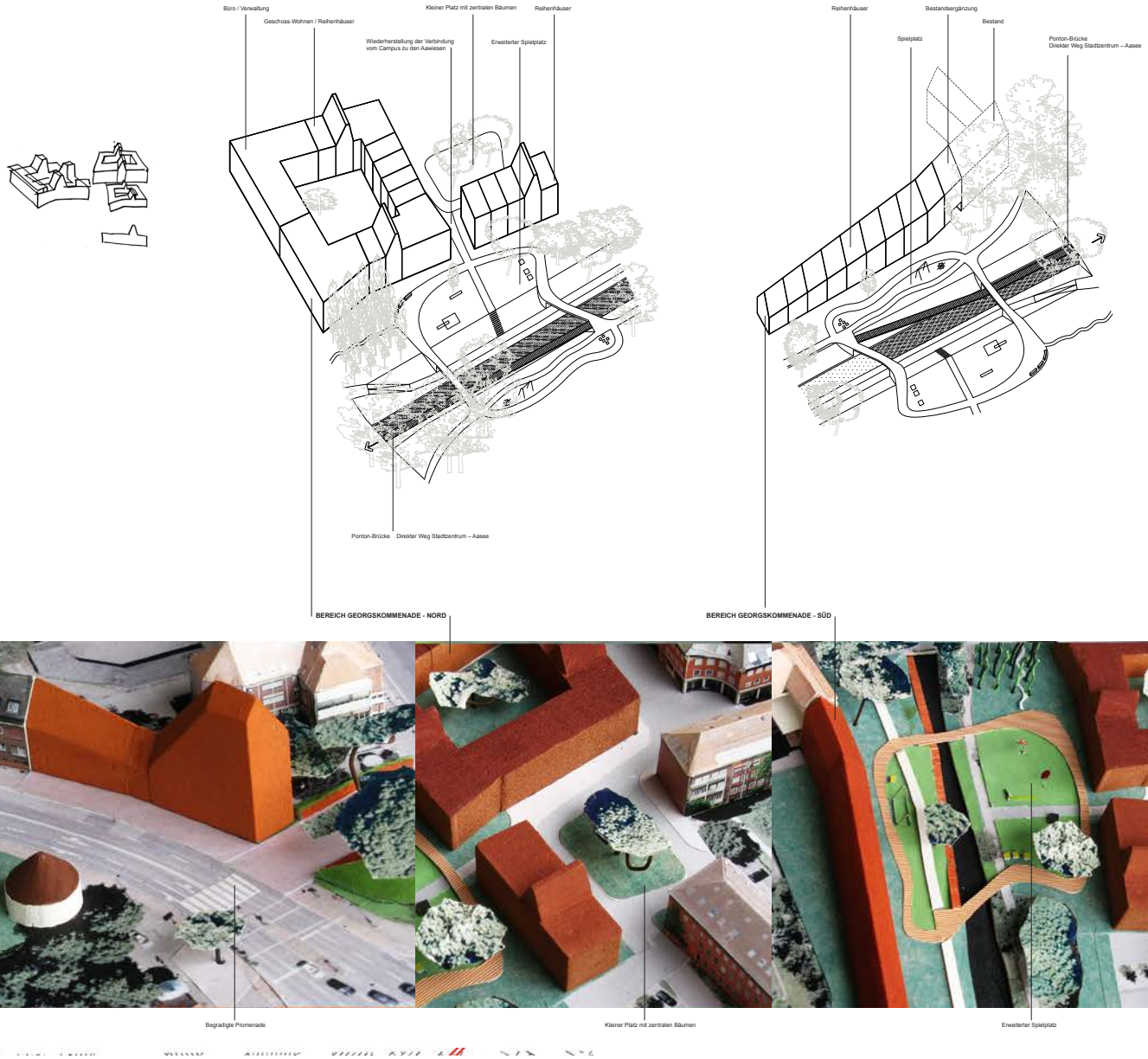
Completed Building ‘R’ on left

Aerial view of Building ‘R’

Project:	**Am Stadtgraben**	2011
Role:	Lead Architectural Designer @ BOLLES-WILSON	
Client:	Muenster Municipality	
Location:	Muenster (DE)	
Size:	N/A	
Budget:	N/A	

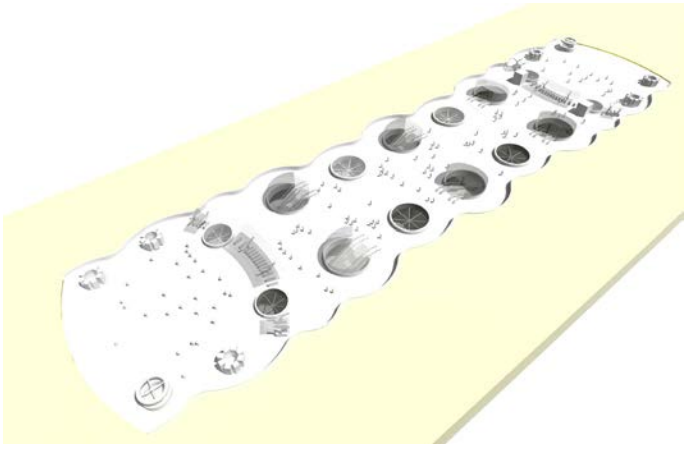
Working closely with Peter Wilson, I developed BOLLES-WILSON's competition entry for a minor 'masterplan' for this underserved area in central Muenster. The concept stitches new buildings into the existing built contextual fabric and reimagines a revitalized public realm.

BOLLES-WILSON were awarded First Prize in this competition entry.

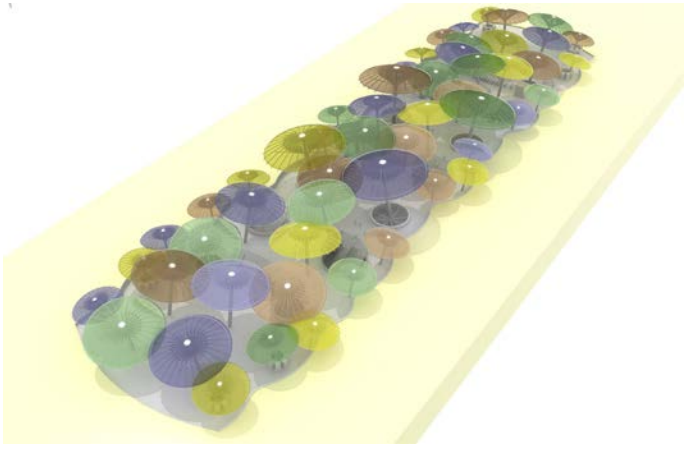


Project:	**Shanghai Disneyland Metro Sation**	2010
Role:	Architectural Designer @ MADA s.p.a.m.	
Client:	Shanghai Metro / Shanghai Shendi Group / Walt Disney Imagineering	
Location:	Pudong, Shanghai (CN)	
Size:	N/A	
Budget:	N/A	

Conceptual design for the new Shanghai Metro Disneyland station, part of the new theme park in Shanghai's Pudong district. Set to be the gateway to this magical wonderland, the design was conceived as a series of giant interlocking umbrella structures which acted as a playful protective canopy.



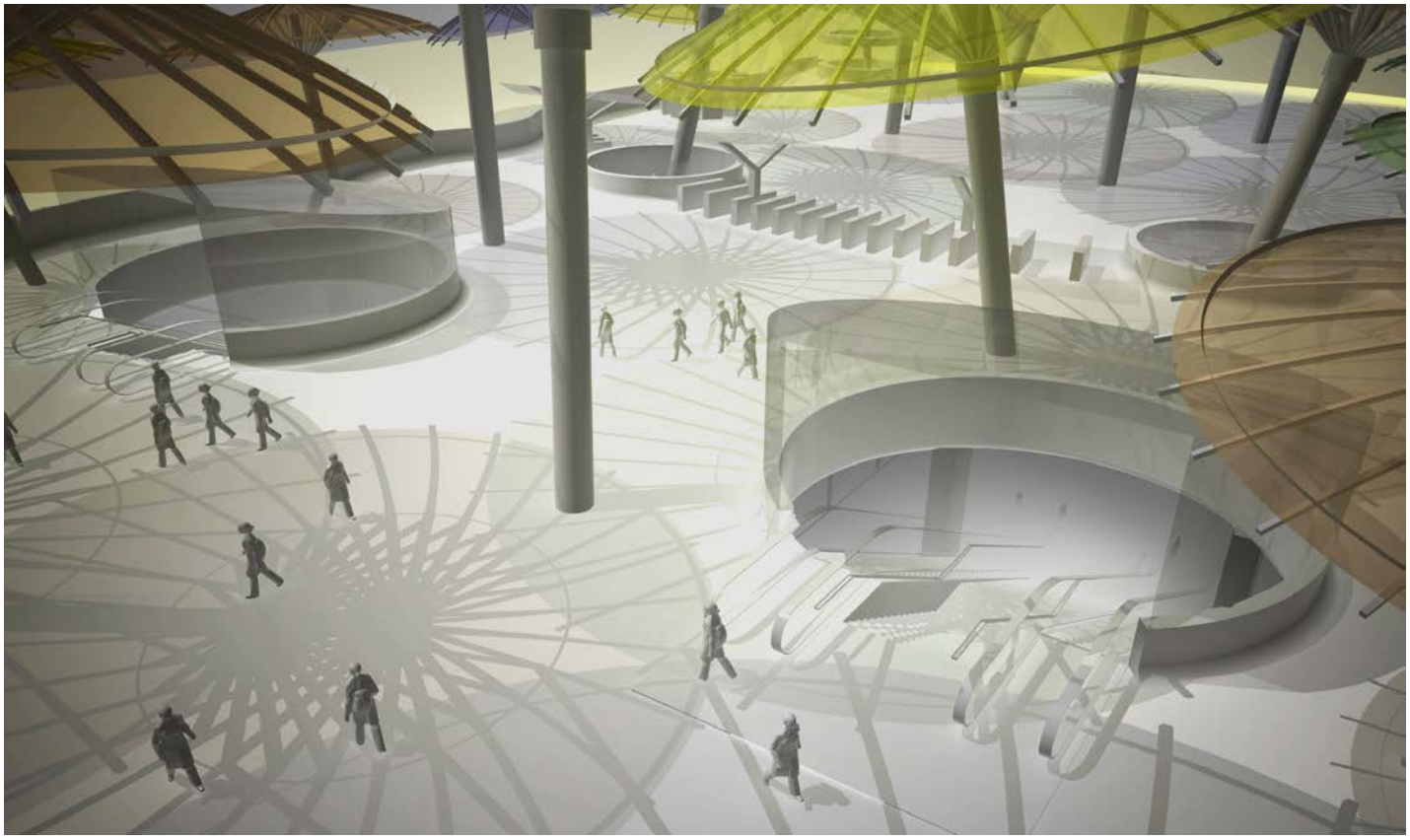
The metro station is arranged linearly, parallel to the tracks below



'Umbrellas' to protect against the rain

Perspective view of interlocking 'umbrella' structural columns

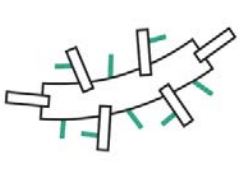
Using 3D modelling techniques, I devised a strategy of three component 'umbrella' sizes and varied these to create a dynamic spatical sequence that was also economically viable.



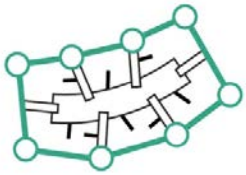
Project:	**Xujiahui Promenade**	2010
Role:	Architectural Designer @ MADA s.p.a.m.	
Client:	Xuhui Government	
Location:	Xuhui, Shanghai (CN)	
Size:	80 000 square feet	
Budget:	$120 million	

At the crossroads of one of Shanghai's busiest intersections lies 3 metro lines, 7 roads, an urban park, and Shanghai's highest grossing shopping district. The problem created by the congestion has manifested itself solely by impeding pedestrian life. There are few ways to safely cross the street, and a warren of underground passages built in succession do little to ease the flow of shoppers and nearby citizens.

Our team created an elevated promenade centered above the boulevard median, to connect the various malls, the ground surface, the urban fabric, and the metro system. Alleys and underutilized plaza areas are incorporated to produce a better street life and storefront retail areas. Program along the promenade creates a place to stay, to meet, and to stroll.



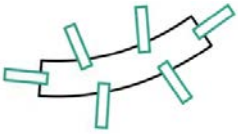
GROUND CONNECTION



RETAIL NODE LINKS

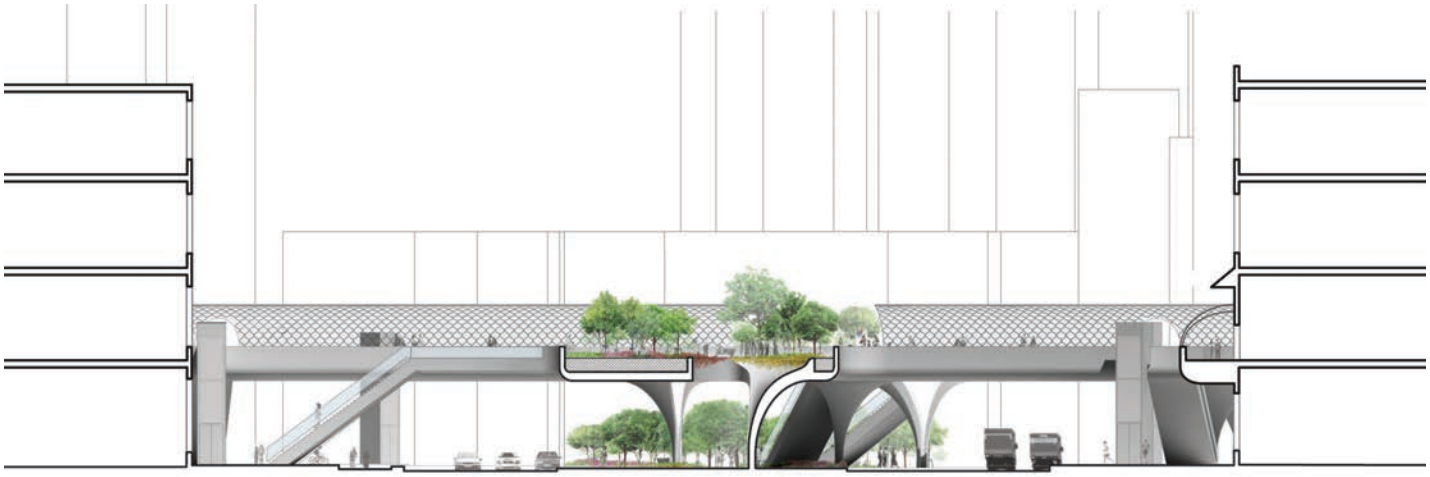
PEDESTRIAN PATHS

PROMENADE



RETAIL BRIDGES

I played in key role in the development of various design strategies that served to improve the quality of the public realm:



Cross Section

Site Plan

I designed the funnel shaped concrete columns that let daylight from the elevated promenade penetrate to the lower levels:

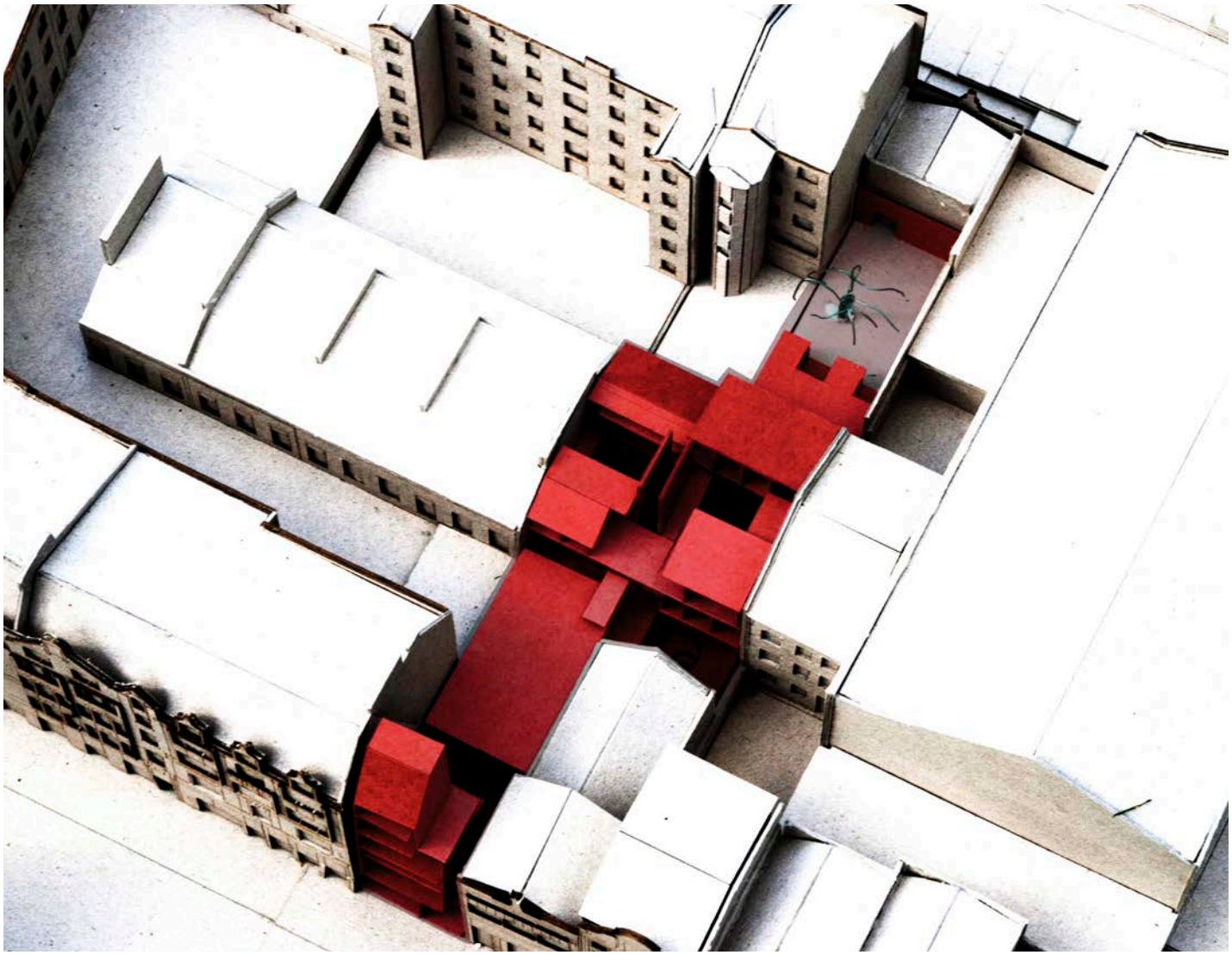
Aerial View

Project: **The Architecture of Curiosity** 2013
Role: Lead Architectural Designer and Researcher
Client: N/A
Location: Glasgow, Scotland (UK)
Size: 12 000 square feet
Budget: N/A

Inspired by ideas of 'the unknown', this Masters thesis proposed that an inherent curiosity can act to draw people through space, to explore what lies just out of view, just out of reach.

The project provides a house for writers, in the form of a dormitory. A series of tea rooms acts as a screen to the street, while a dining hall links the house to the city, and the city to the house. The intervention interacts with the existing fabric through a compress and release of spaces, both interior and exterior. This brings inside outside, and outside inside, tieing into the city of Glasgow, where the project is based.

This project was exhibited at the Bauhaus University in Weimar, Germany, as part of Bauhaus Open 2014.



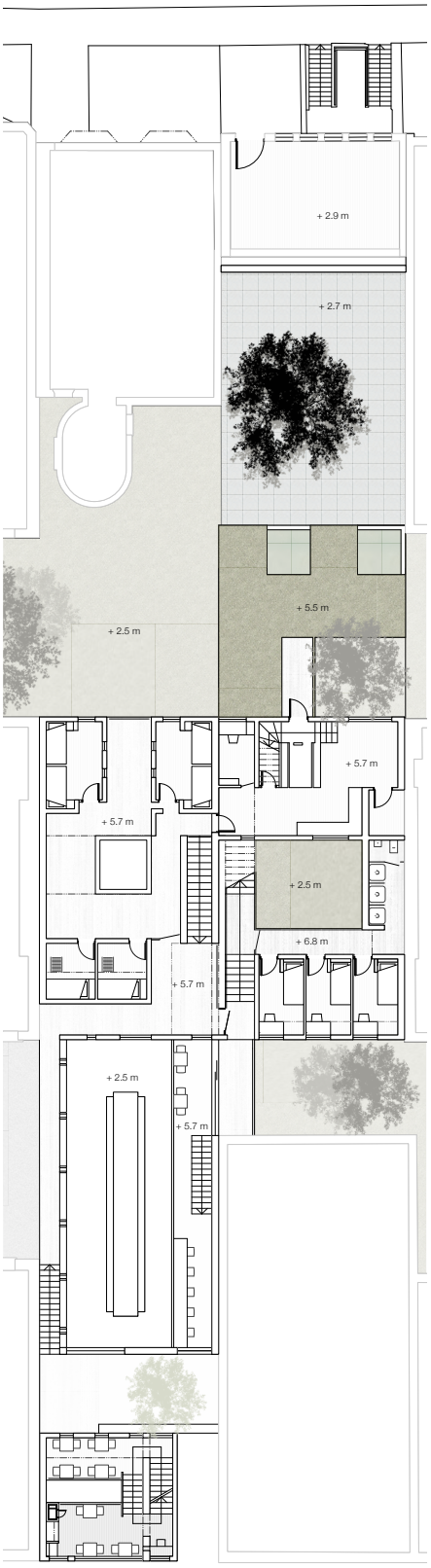
Physical model of the proposal in context

Experimenting with light and shadow, compress and release, inside-outside, and internal vista to create spatial drama and curiosity in architecture:

Curious entry through the existing undercroft

Long section

Section through dining hall



Ground Floor Plan