



|| IN BETWEEN ||

BRIGHTON COFFEE HOUSE:
AN EXTENSION TO THE JURYS INN WATERFRONT HOTEL

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II The Pleasure of Sharing Space II

Site:

Located in Brighton City Centre, close to the sea front. The site is on Bartholomew Road around Little East Street. It is an existing building that is currently a part of the Green Diamond apartment building. It is attached to the Jurys Inn hotel and located next to Brighton's Town Hall.

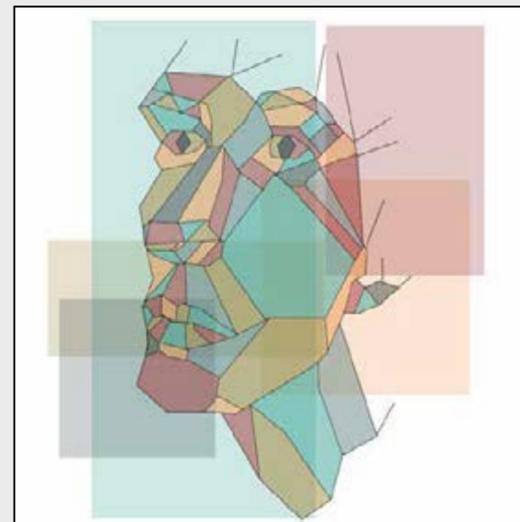
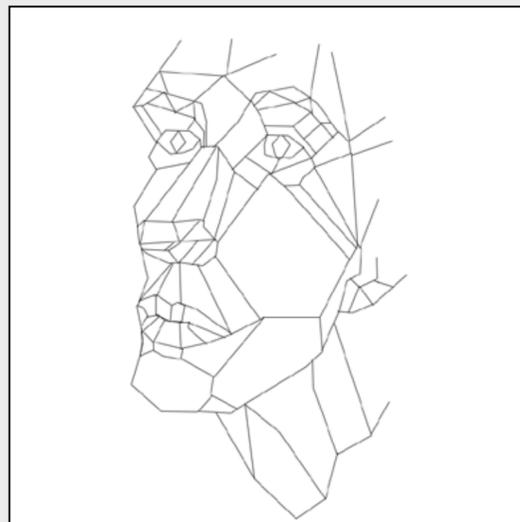
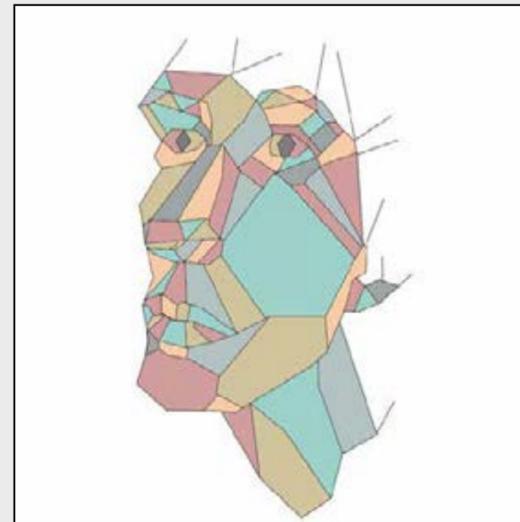
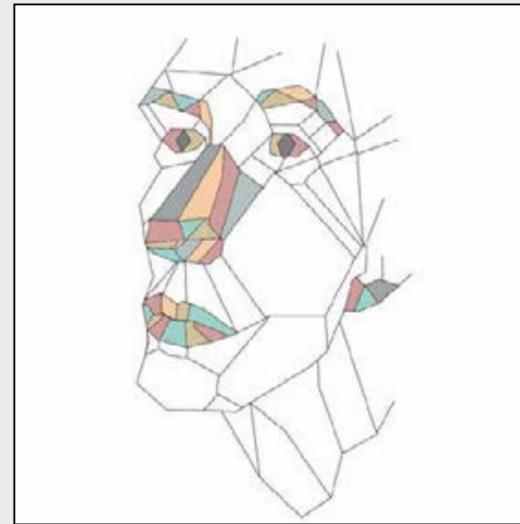
Program:

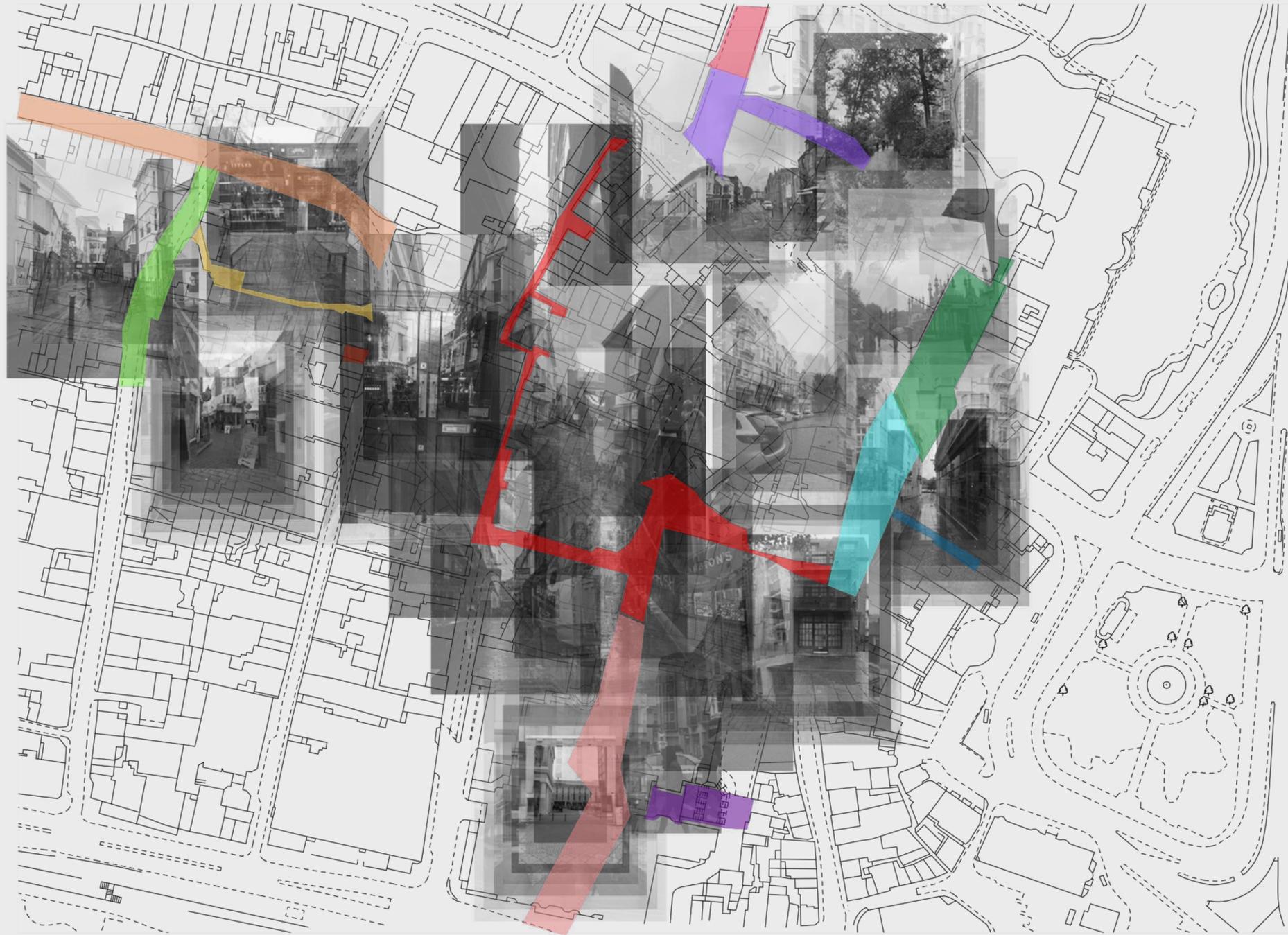
The studio's brief revolves around pleasure in which my project aims to create a space where multiple programs of pleasure take place. This proposal is a site-specific building that aims to highlight the pleasure of sharing space. I introduce the concept of a coffee house that aims to bring people together.

Thesis:

A coffee house is a vague concept to a space that could involve many programs. As we get more involved with our modern life, the use of social spaces becomes less for social interactions and more for specific people that choose to do a specific activity. Hence, I propose a new concept to a coffee house in Brighton, that can involve different social interactions and programs within one space. I propose to design a hotel extension that is site specific and can involve a venue to neighbouring buildings.

EARLY EXPLORATIONS:
PLEASURE OF DRAWING AND COLOUR





MAP 1

Thresholds on different points of the site are
Photographed and collaged (layered). The areas coloured
show where the photos have been taken.





MAP 2

A series of images of the site's thresholds. Highlighting the areas in which these thresholds exist.



CITY INVESTIGATIONS: THE PLEASURE OF PRIVACY



Public but locked out



Pleasure of eating publicly or "semi-privately"

MAIN OBSERVATION: THRESHOLDS IN ARCHITECTURE



Fragments and Thresholds

Brighton city centre is made of many **fragments** that overlap and impact the way we **experience space**. These **fragments** exist in **space and architecture** due to **thresholds**.



To further explore **thresholds**, I took this collage as an example of a fragment on site to further develop a device. This site

DEVICE RESEARCH AND STUDIES



STUDY 1:
LOIS RANNER (2000)

Artist Lois Ranner created a **site-specific** device for a museum to **interact with the elements in the gallery.**

This is similar to my idea for a device in which I plan to create a tool that helps me understand the thresholds on site.



Forces Under Pressure
by Juliette Verduzier, Etienne Maisonnial, Elisa



Conflict Zone
by Lou Denis-Motte, Elena Gaudin, Julie Aguilu

STUDY 2:
SCENIC DESIGN AND STAGE SETS

Scenic design or set design is the creation of theatrical, as well as film or television scenery. They aim to support the overall artistic goals of the production.

This study helps me develop a concept for my device, in which I will create a tool that one can use to set a scene using images of the thresholds on site.

Examples:

Paris Opera House

The sets of the plays chosen defines the main aspect of the context of the play.

This is similar to my idea of a device, in which I will design a (stage like) tool that is defined by the threshold of a site.

The 3D Collage Device

What is it?

A device that defines the different thresholds from any site by a series of photographs that combine to form a 3D collage.

How to use it?

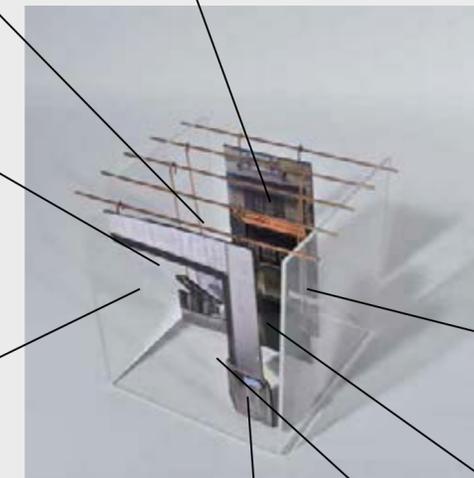
An individual visits a site and photographs are taken. Thresholds can be noticed but not always embraced. The device defines these thresholds and helps point out the different experiences by forming a 3D collage using the photographs.

Why is it helpful?

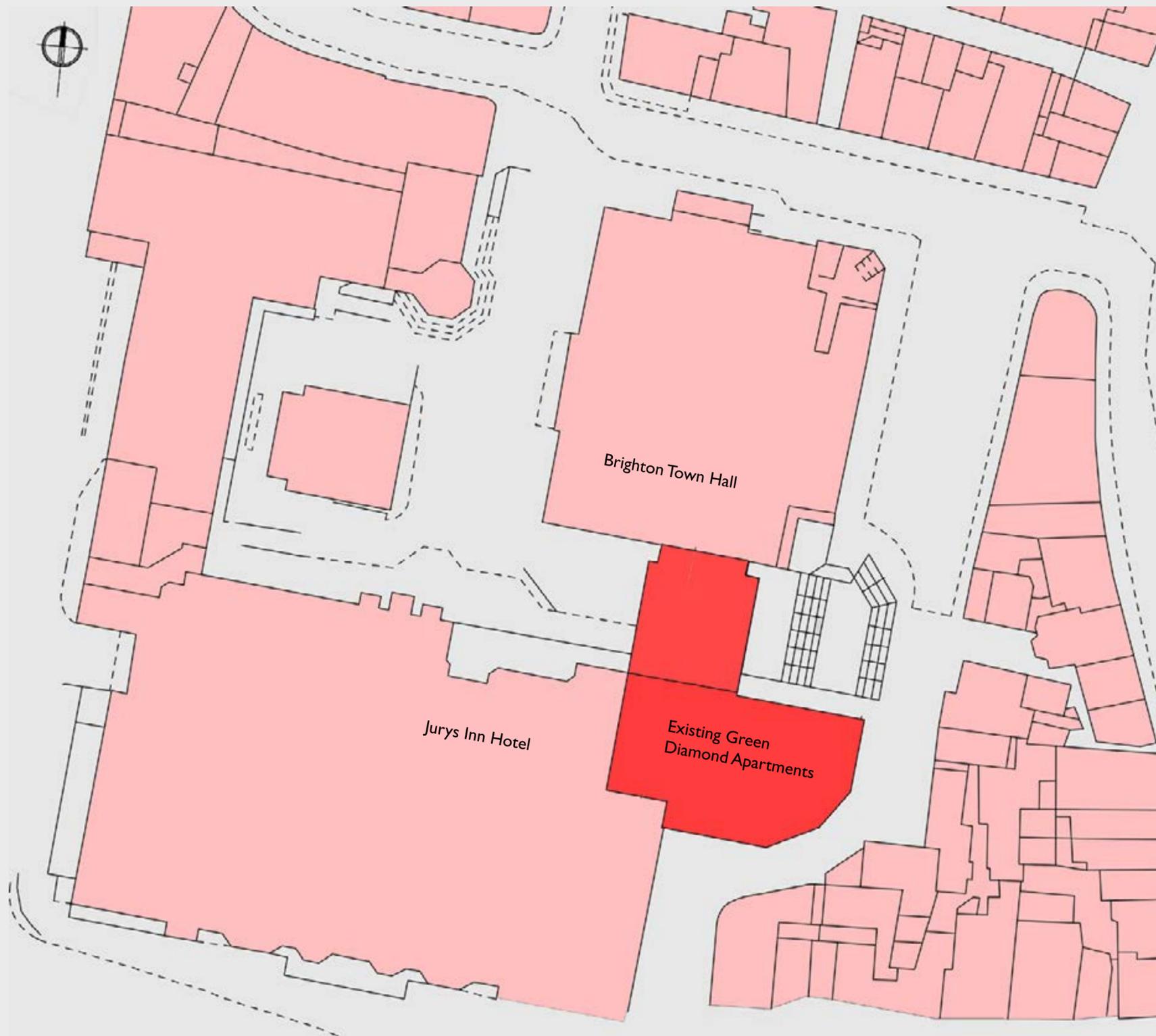
For an individual that lacks understanding of a site and the experience within, the device marks out the thresholds of a site which highlights the fact that every threshold projects a different type of experience.



Capturing the elements **in between** each threshold and the experience that they project.



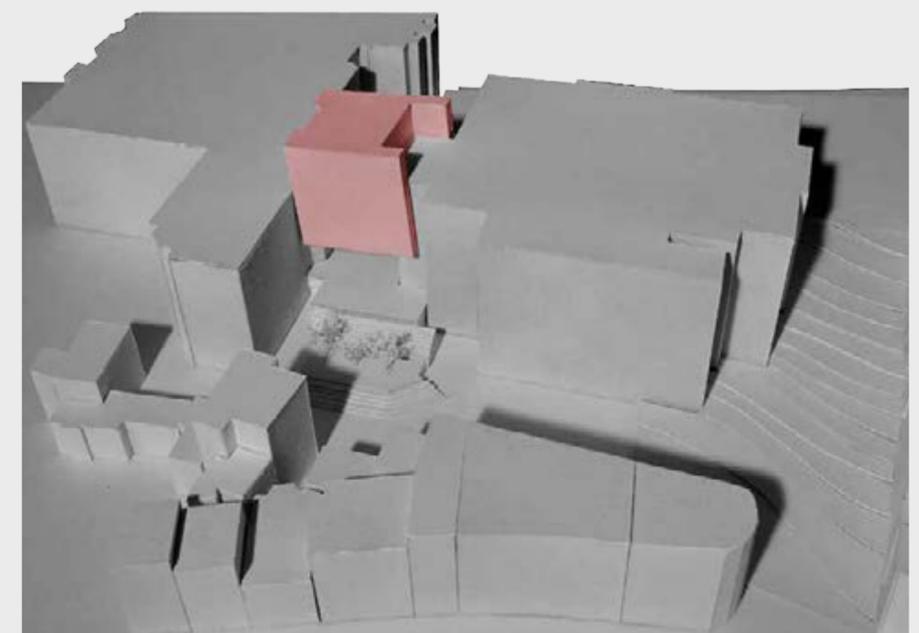
This experiment inspired me to design a building that involves thresholds. Playing with the illusion of privacy, and providing control in what can or cannot be seen and by whom.



PROPOSAL'S SITE

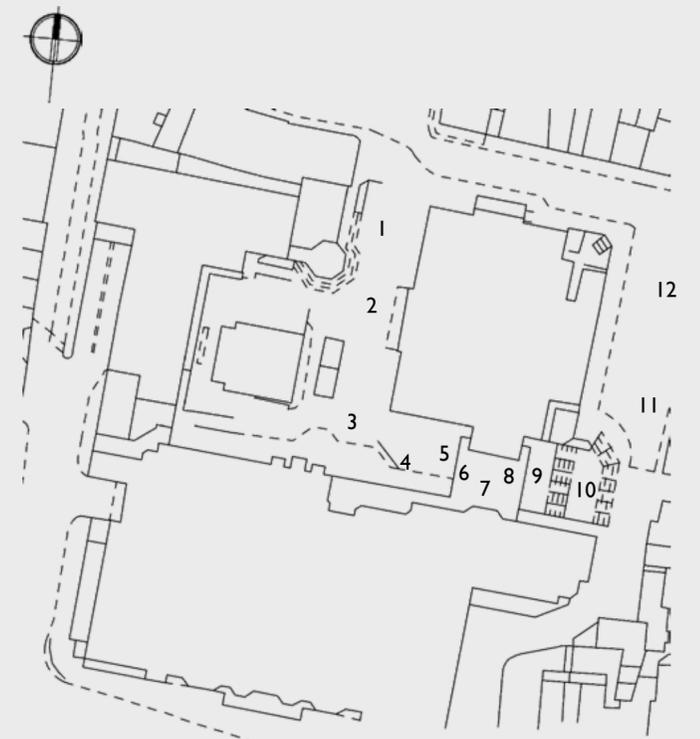
The site is located in **Brighton City Centre**, close to the **sea front**. The site is on **Bartholomew Road** around **Little East Street**. It is an **existing building** that is currently a **part of the Green Diamond** apartment building. It is **attached to the Jurys Inn** hotel and located **next to Brighton's Town Hall**.

Note that my site extended to take over the penthouse of the Green Diamond apartment building which was **not considered when building the site model**.



Site Map:	Scale: 1:500 at A2
Site Model:	Made in: 1:200 at A2
Aerial View:	Sourced from Google Maps

SITE IMAGES



Site Map

Scale: 1:1000 at A2

A COFFEE HOUSE: THE PLEASURE OF SHARING SPACE



"When we live in places where we invest in social infrastructure, places like libraries, or parks, schools, athletic fields, we reap all kinds of benefits. We become far more likely to interact with people around us, whether they are friends and family or neighbours who we haven't gotten to know. And when we don't invest in social infrastructure – if we neglect it, if we let it fall apart – we tend to grow more isolated."

- Eric Klinenberg on 99 Percent Invisible

Listening to this podcast inspired me to create a space for people of different backgrounds and different purposes. The space **I want to design imposes the idea of sharing space and social interactions.** **A coffee house is a vague concept** to a space that could involve many programs. As we get more involved with our modern life, the use of social spaces becomes less for social interactions and more for specific people that choose to do a specific activity. Hence, **I propose a new concept to a coffee house in Brighton, that can involve different social interactions and programs within one space.** I propose to design a hotel extension that is site specific and can involve a venue to neighbouring buildings.

PROGRAM STORY LINE

The **Jurys Inn** is buying off the **Green Diamond apartments** as a part of a new expansion. My client (the Jurys Inn owner) desires an **unorthodox space within the hotel**. As a result I will design a lobby that is not only indented to host visitors of the hotel, but also **create a social space to share and welcomes different programs**.



Current Jurys Inn hotel



Current Green Diamond Apartments

To continue creating an unorthodox lobby, I aim to design a building that is **site specific and welcomes everyone passing by** as well as the activities happening on site. One of the most significant **neighbouring programs is the Town Hall, where people often get married**. Taking this in consideration, I intend to **connect my extension of the Jurys Inn with the Town Hall to create a possible venue for weddings**. The wedding venue can then also be **used for other occasions**.



Brighton Town Hall

Although typical weddings take place privately, I **propose to create a venue that challenges the privacy and publicity of the programs within a building**, in which while there may be a **wedding** taking place, someone else might use the same space to have a **cup of coffee** or have a view of the **sea front**.



The site and Brighton Sea front

CLIENTS AND BUILDING USERS



Bride and groom: needs space to hold the **celebration and their guests**



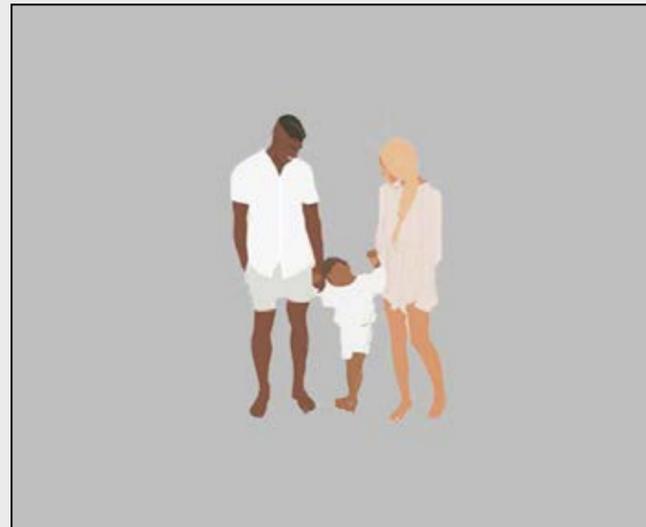
People who take their **coffee on the go:** needs **multiple access from site for convenience**



People choose to have their **coffee indoors:** needs **seating areas that can accommodate people** who choose to have their cup of coffee **alone or with company.**



Artist - book club owners etc: People might want to **host meeting or presentations** within the space. This can be **semi public or private.** This would either require a **space that accommodates a group of people or venue for even larger crowds**



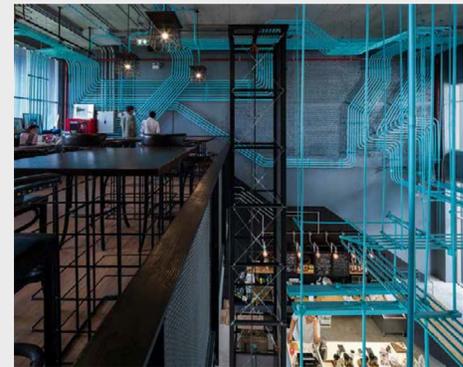
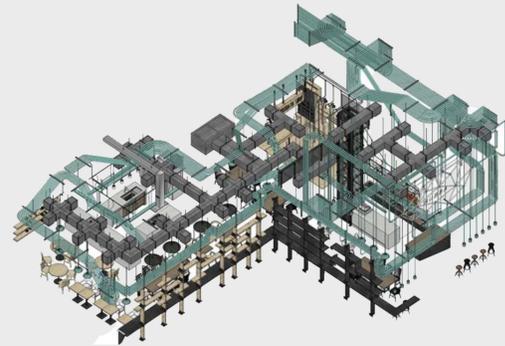
Families and **hotel visitors:** Since Brighton is a **tourist town, and many choose to stay at the Jurys Inn,** they require a **space for their morning coffee.**



As I explore the **pleasure of sharing space,** I intend to design a **space that forces interaction between all building users and play with concept of privacy and publicity.**

PRECEDENT STUDIES:
TO FIND SIMILAR EXISTING PROGRAMS AND EXAMINE THEM IN TERMS OF THEIR
ARCHITECTURAL ELEMENTS AND THEIR LAYOUT ON SITE

1. HUBBA-TO CAFE
THAILAND



Plan(s) of Hubba-to Cafe

Hubba-to by Supermachine Studio (2016):
"The project strengthens the concept of being a "hub" and reinforce their "co-working" philosophy."

In relation to my project:
This cafe presents both private and semi private spaces within. There are thresholds that create a barrier between these areas and allow a sense of control to who can access and view the space.

2. BAKER ONE
CHINA



Plan of Baker One Cafe

Baker one by Lukstudio (2014):
"A small bakery that stands on within the busy city of Shanghai"

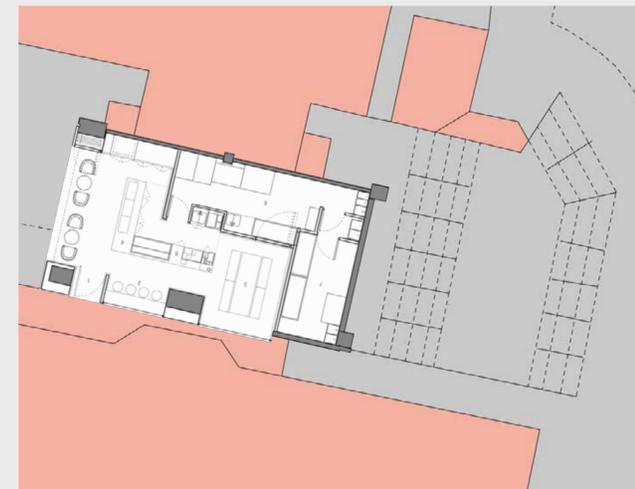
In relation to my project:
This cafe has many thresholds that might be considered as unnoticeable, such as the different levels and the change of materials.

TESTING OUT THE LAYOUT OF THE PRECEDENT STUDY ON SITE



Hubba-to on site Scale: 1:200 at A0

TESTING OUT THE LAYOUT OF THE PRECEDENT STUDY ON SITE

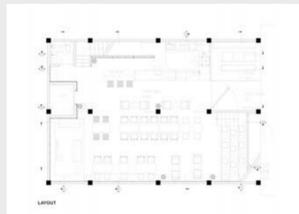


Baker One on site Scale: 1:200 at A0



Site Map Scale: 1:1000 at A0

3. MOST SIGNIFICANT STUDY:
 TUJUHARI COFFEE
 INDONESIA

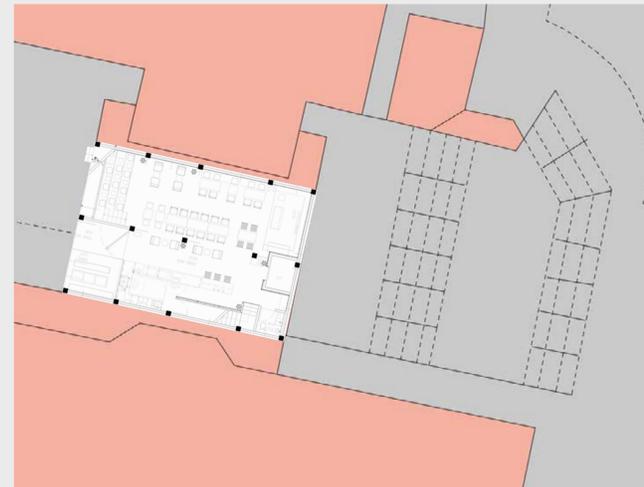


Plan of Tujuhari Coffee ground floor

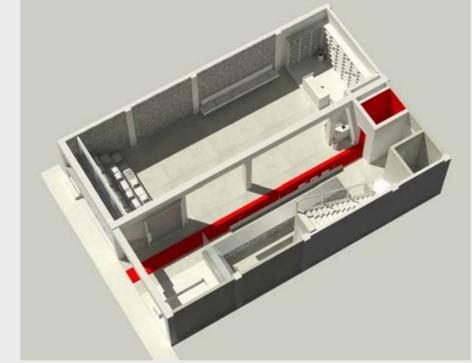
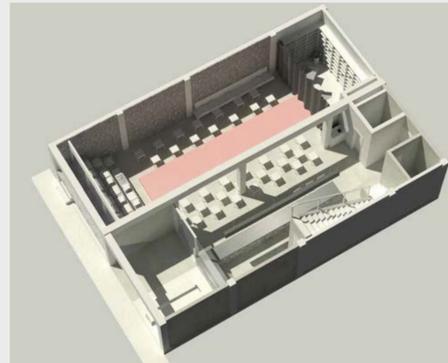
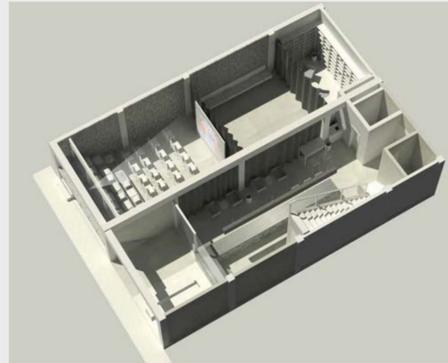
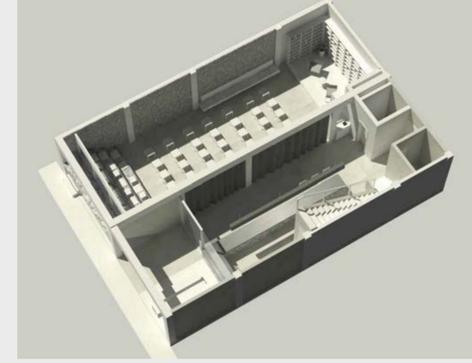
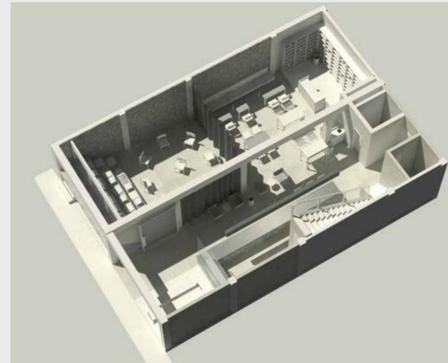
Tujuhari by Studio Kosa Architecture (2019):
 "This pilot project is designed to be more than just a coffee shop but an open platform for any programs related to work, art and culture: a social condenser on a mini scale, where programs overlap and intersect in the same space. People with different backgrounds, interests, and activities coexist in the same environment which drives social interaction."

In relation to my project:
 This cafe is most similar to my proposal and thesis. It combines more than one program in a space and offers flexibility within the building. The project also uses columns as an architectural element that gives control of privacy.

TESTING OUT THE LAYOUT OF THE PRECEDENT STUDY ON SITE



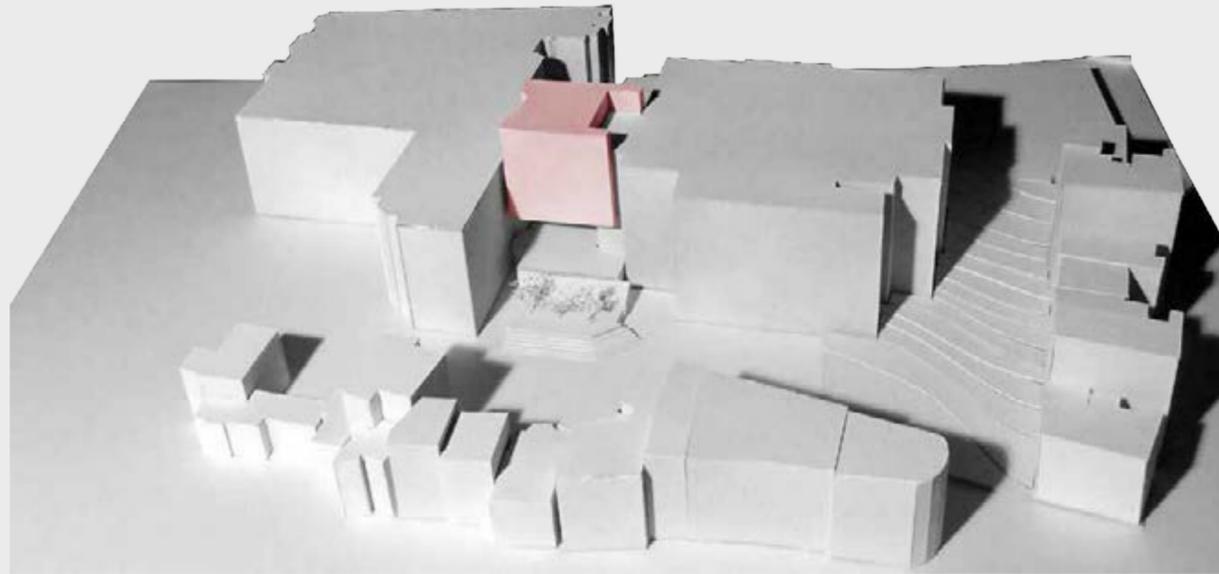
Tujuhari on site Scale: 1:200 at A0



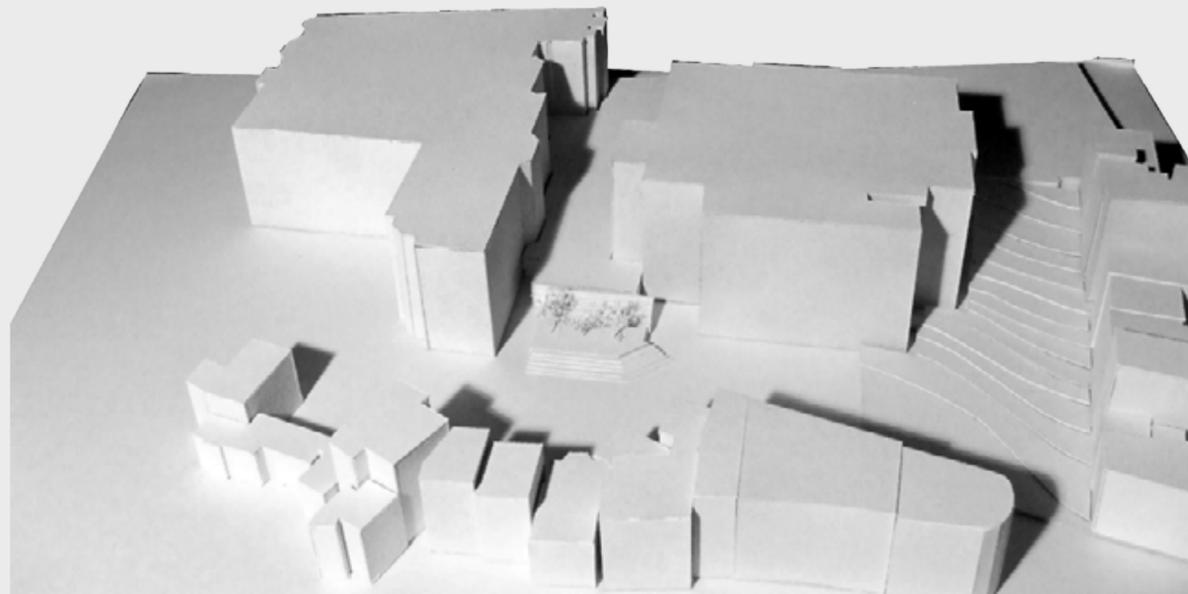
This digital model demonstrates the different ways that the space can be used depending on the different programs and activities. The use of columns and curtains gives control over the space. This project relates well to my exploration with thresholds and inspires me to further explore columns and curtains in my design.



Site Map Scale: 1:1000 at A0



SITE MODEL



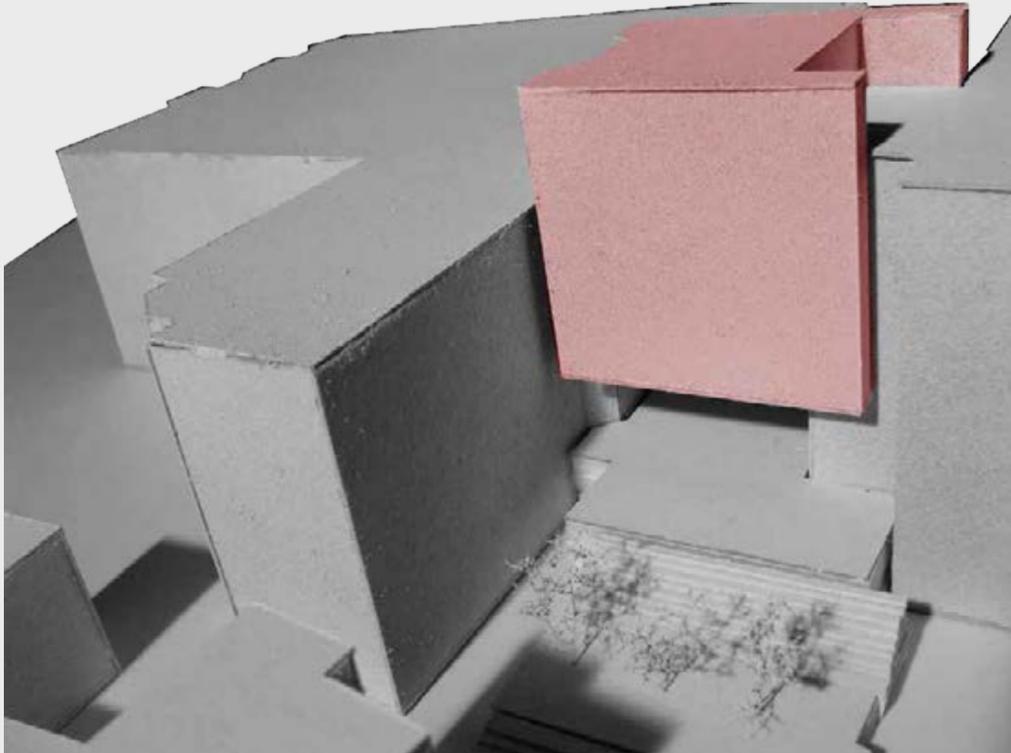
I intend to **demolish a part of the existing Green Diamond apartments to use for my proposal**. This gives me the advantage of having a view of the sea front, creating a space that involves many thresholds

Note that my site extended to take over the penthouse of the Green Diamond apartment building which was **not considered when building the site model**.

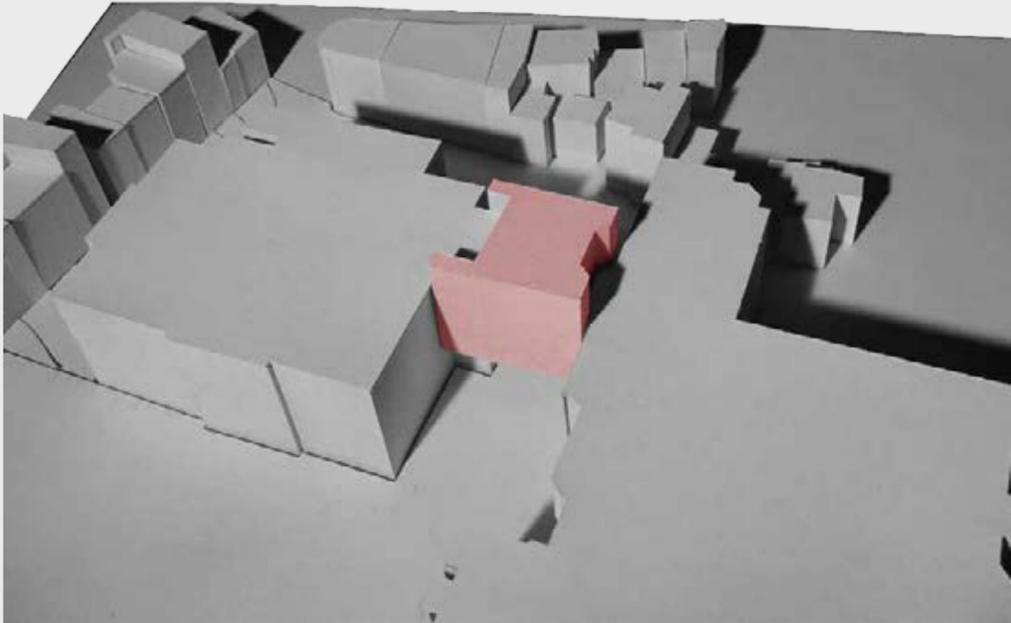
SITE MODEL IN DIFFERENT ANGLES



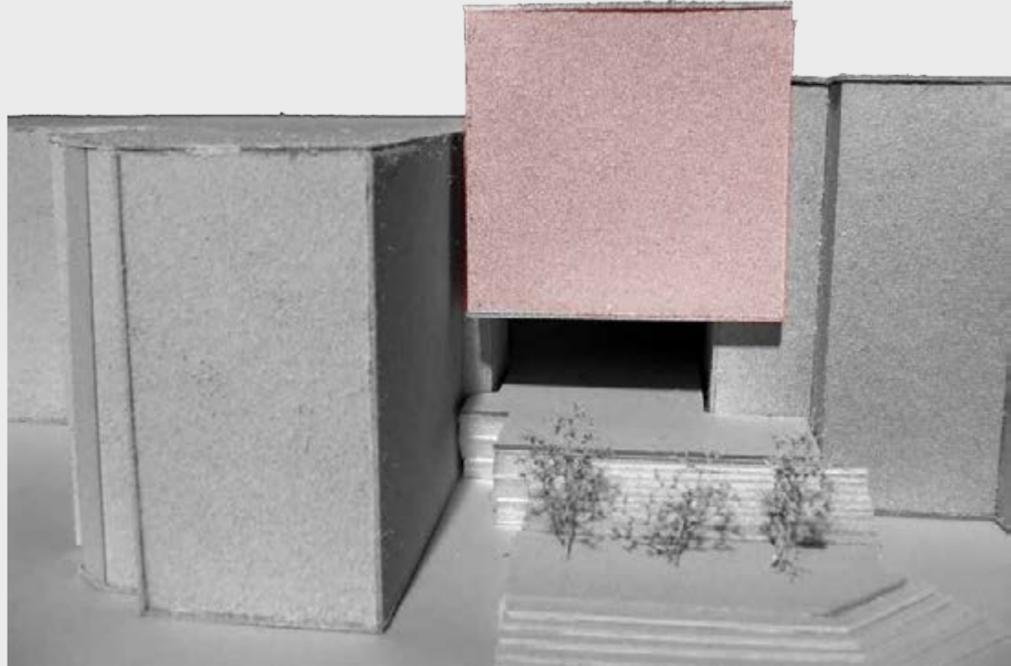
East facing angle



West facing angle



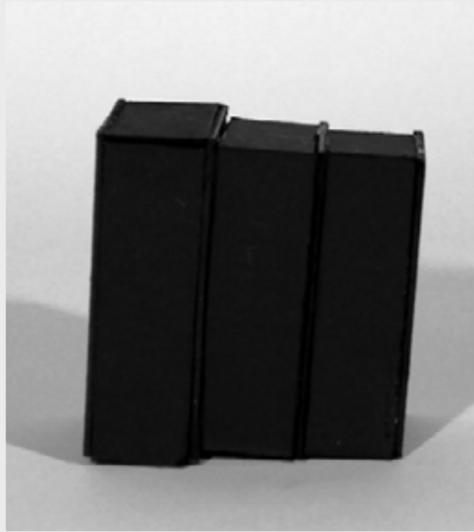
Top view



East elevation

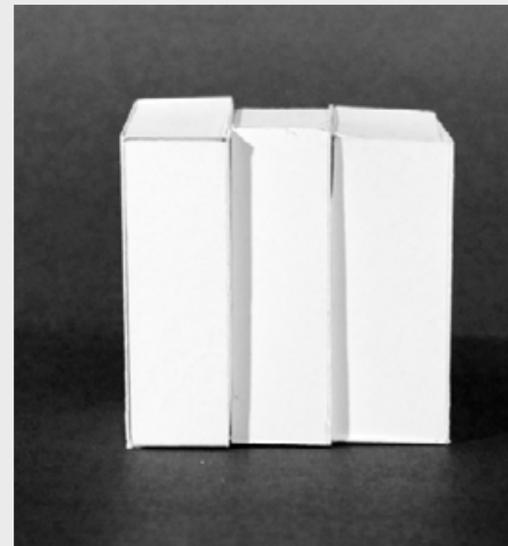
EXPRESSIVE MODEL IN 1:200

MODEL 1



With my expressive model I aim to develop an idea for the mass or shape of my building. Since the idea of **thresholds** is the main aspect of my architecture, I wanted that to also translate into the mass of the building in which I explore the shape above

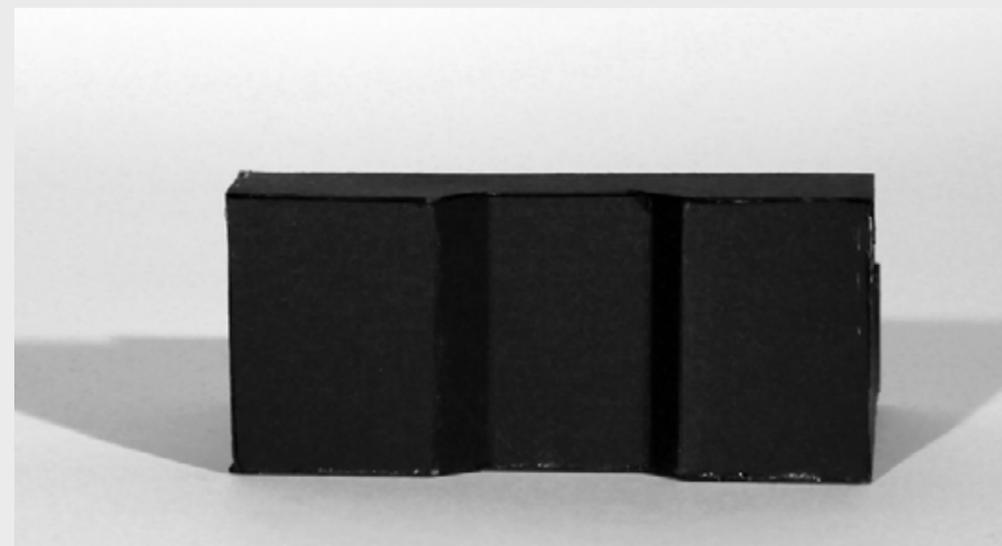
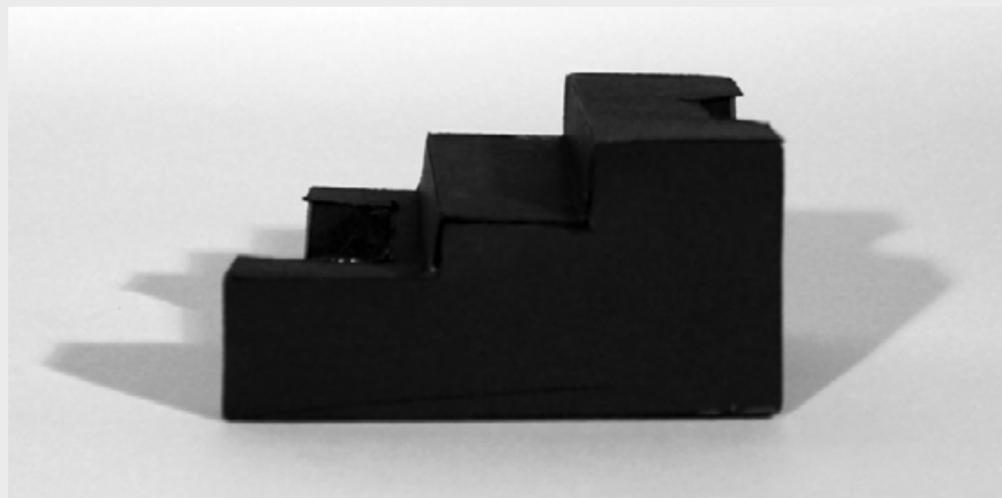
MODEL 2



Following the same idea, I continue to experiment with the mass of the building using a different material and a slightly different shape.

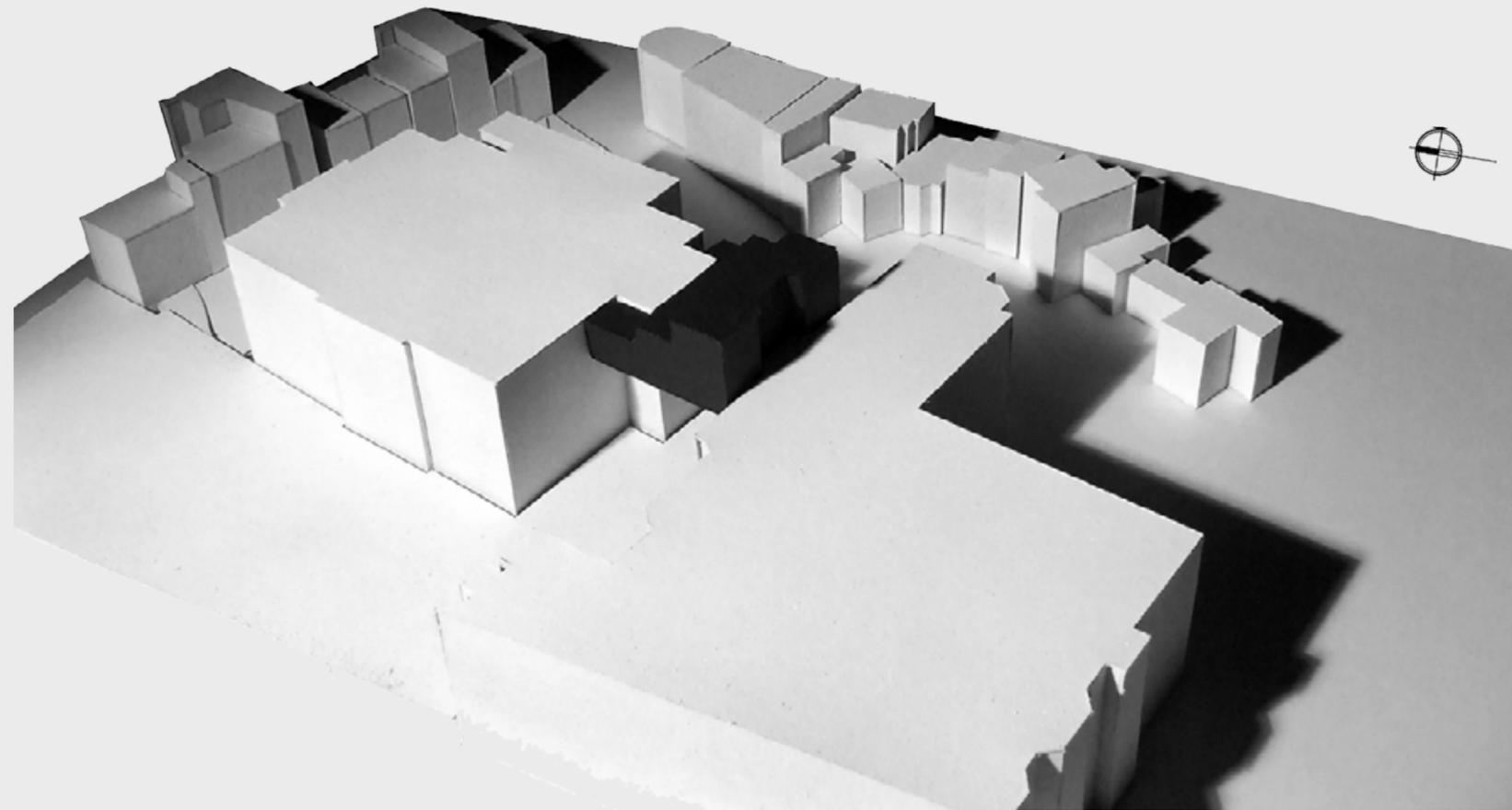
VISUALISING THE EXPRESSIVE MODELS (AND MASS) ON THE EAST ELEVATION OF THE SITE





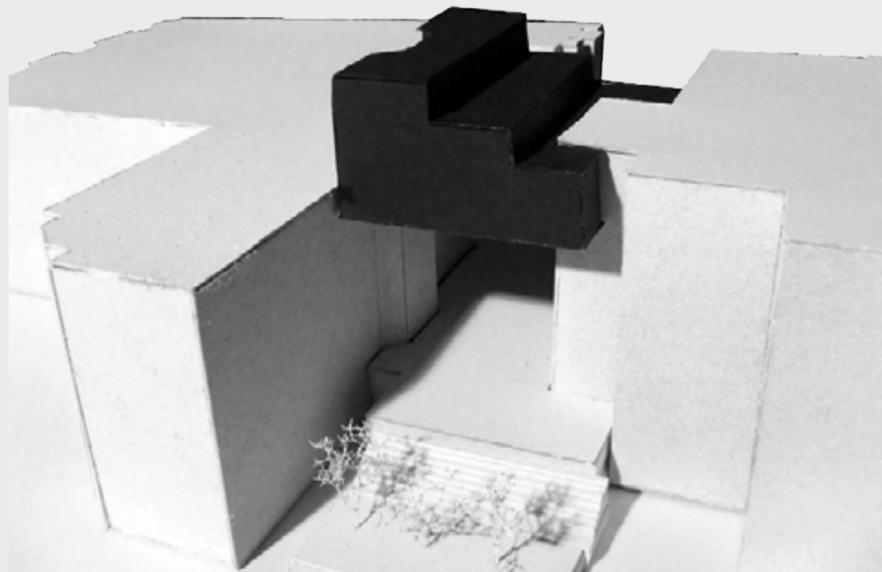
MODEL 3

I continue to create a model with similar features that I can **test on the site model**. I choose to make this is black to differentiate the site model from the expressive model.

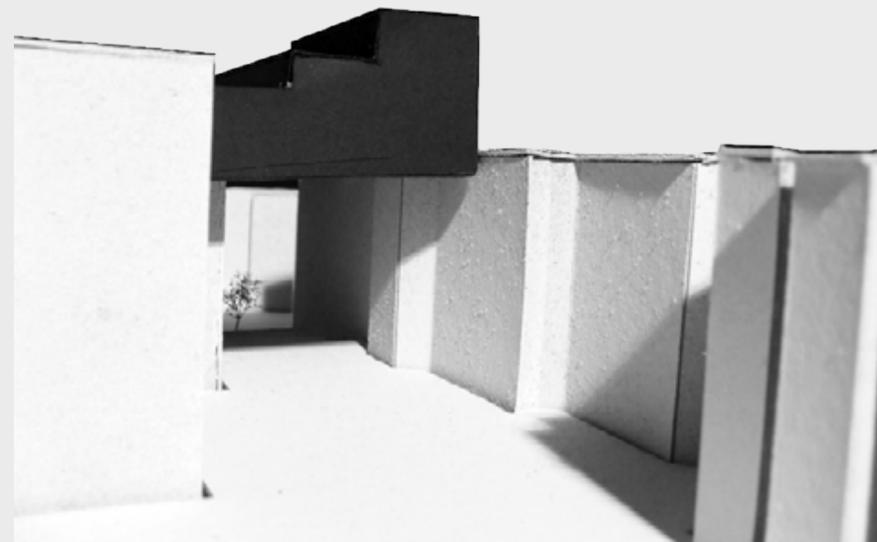


EXPRESSIVE MODEL ON SITE

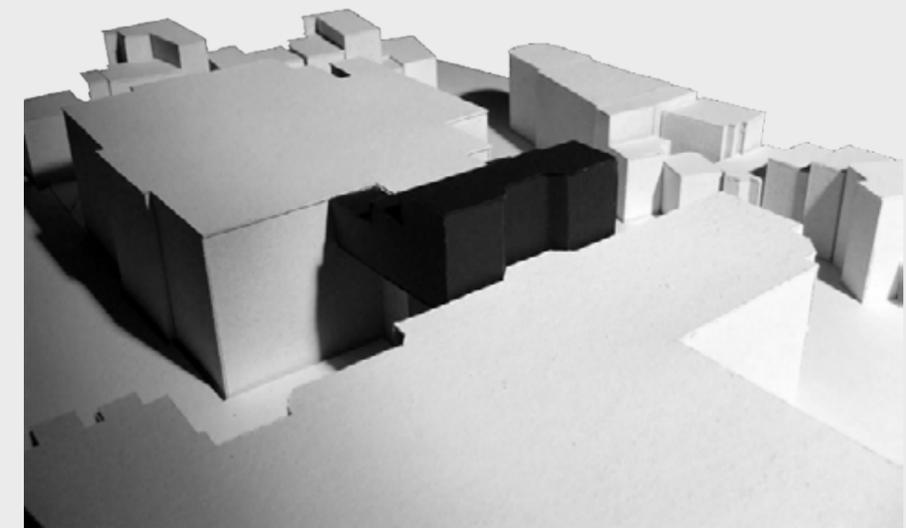
I express the volume of my model by trying to **translate the levels of thresholds I intend to design**. This gives me the opportunity to have a view of the sea front, as well as the chance to project different experiences with the change of thresholds in my buildings. This will depend on the program of each space.
This inspires me to design a “floating” building that hangs in between the two buildings it is mostly associated with, the town hall and the Jurys Inn hotel.



East mass elevation



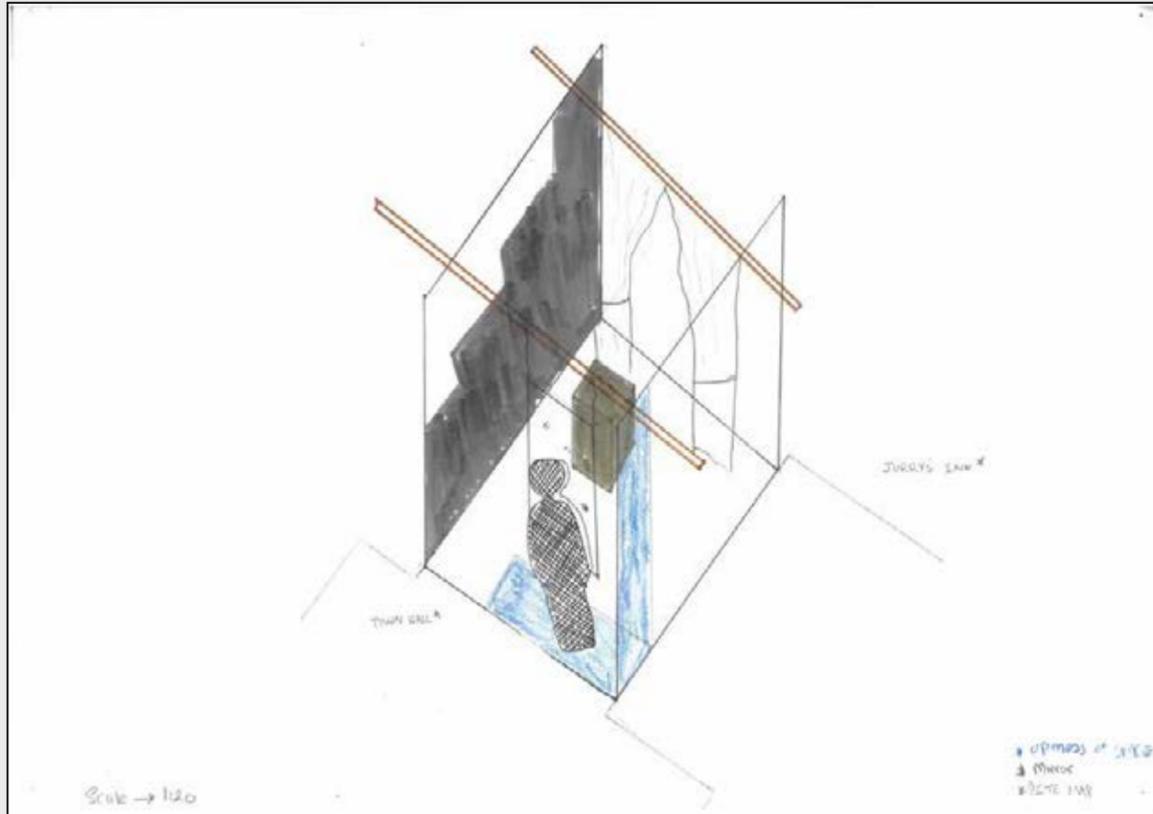
West mass elevation



Expressing having space that is **higher than the buildings on site** to be able to view the sea front

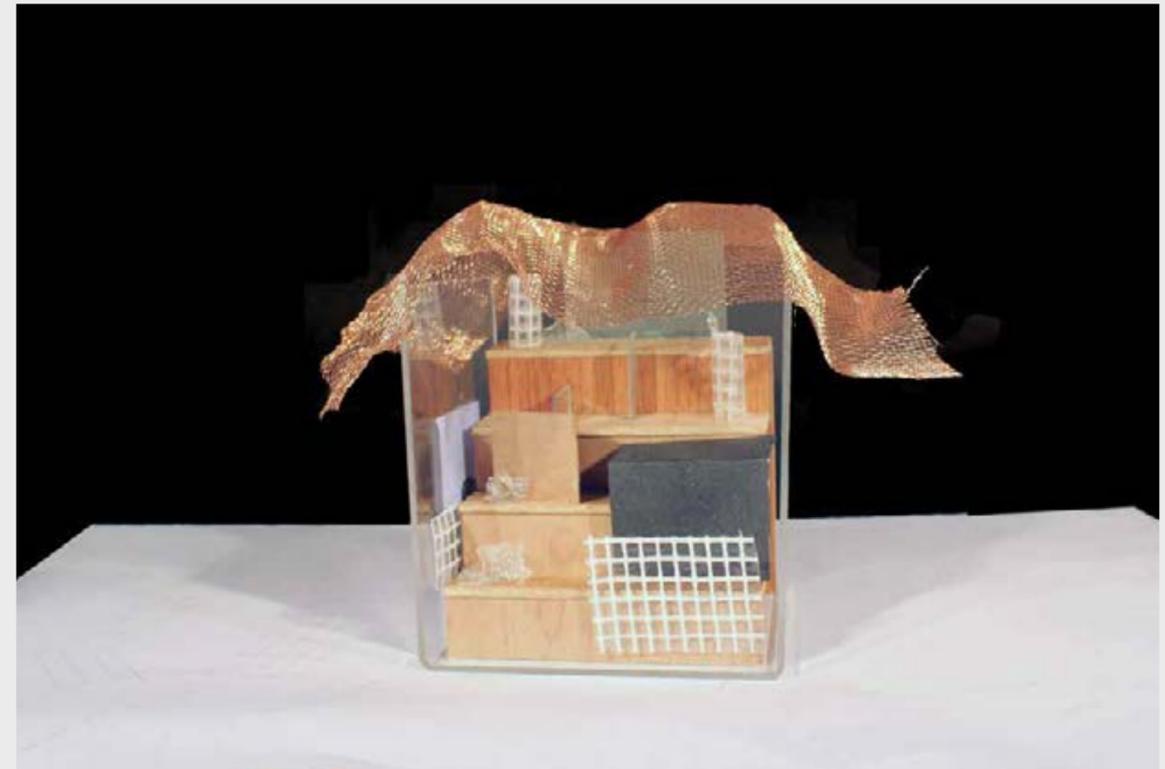


3D collage device



Interior expressive model sketch

INTERIOR EXPRESSIVE MODEL

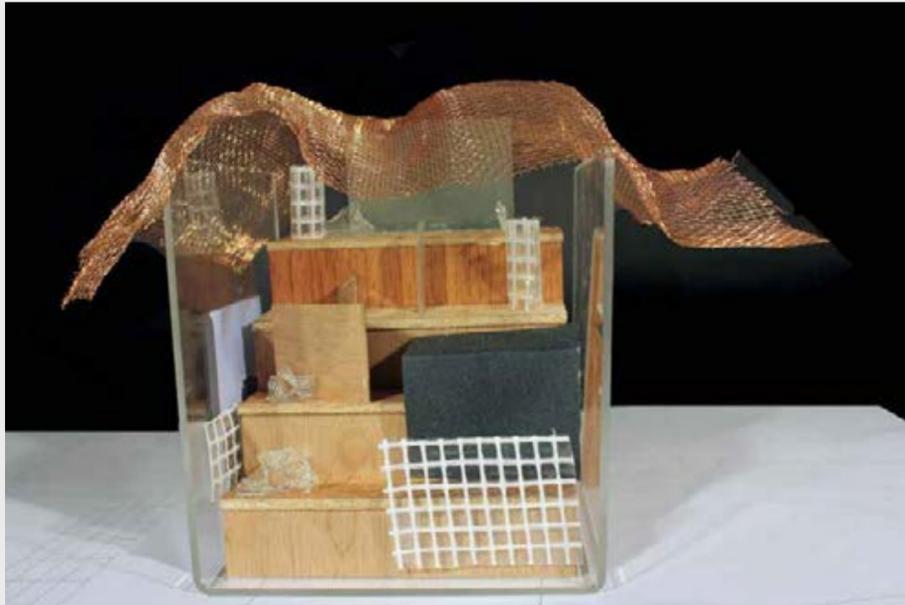


Using the device I have already created as a base start, this model translates **the idea of having different types of thresholds and fragments on different levels that carry different programs.** With this model I also explore the proposal's site position even more, by **placing the model on to a scaled drawing of the site.**

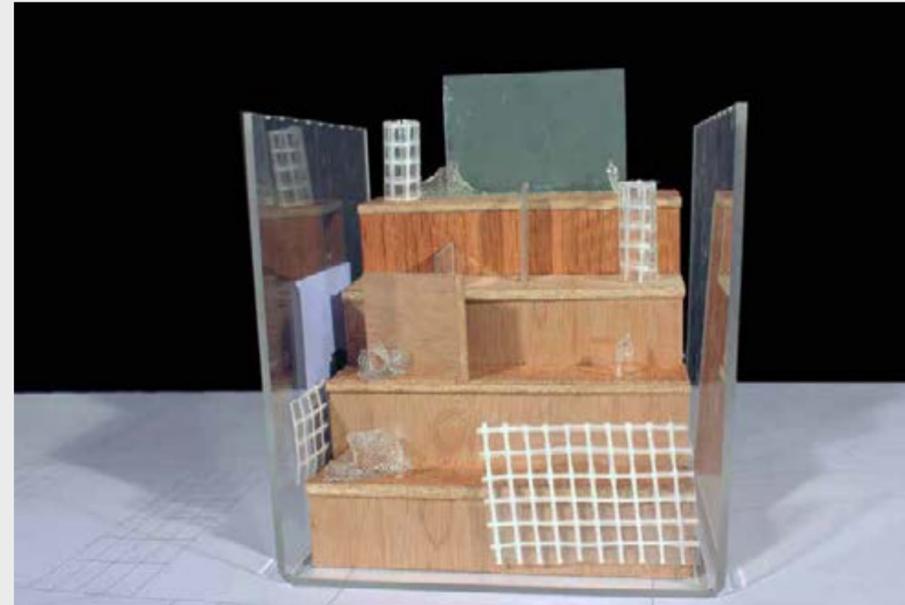
This model helped me think about the different elements that can be designed in a building as threshold that project different experiences.

Made in: 1:100

INTERIOR EXPRESSIVE MODEL IN DIFFERENT ANGLES



Elevation 1



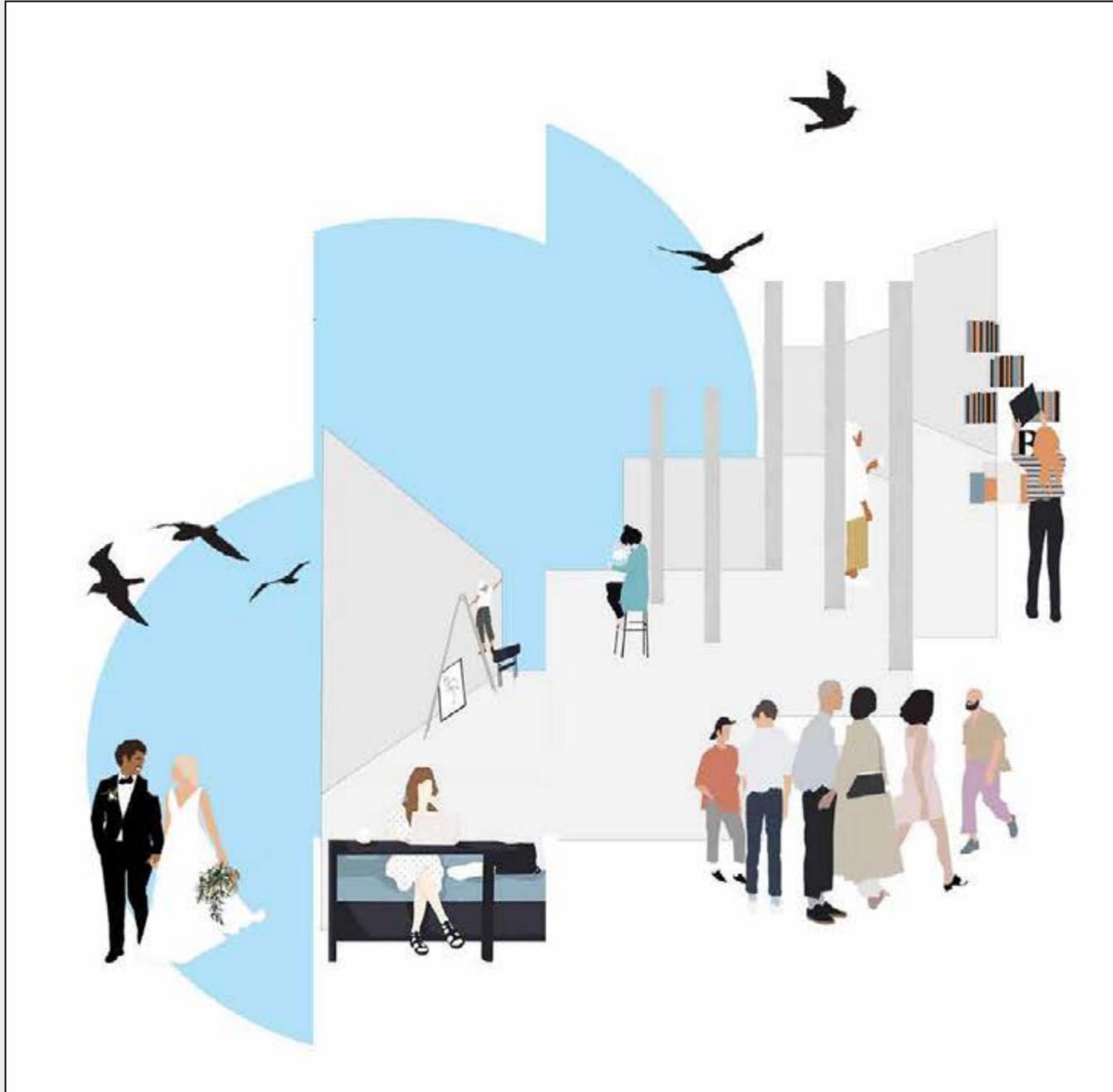
Model without "roof"



Elevation 2



Details

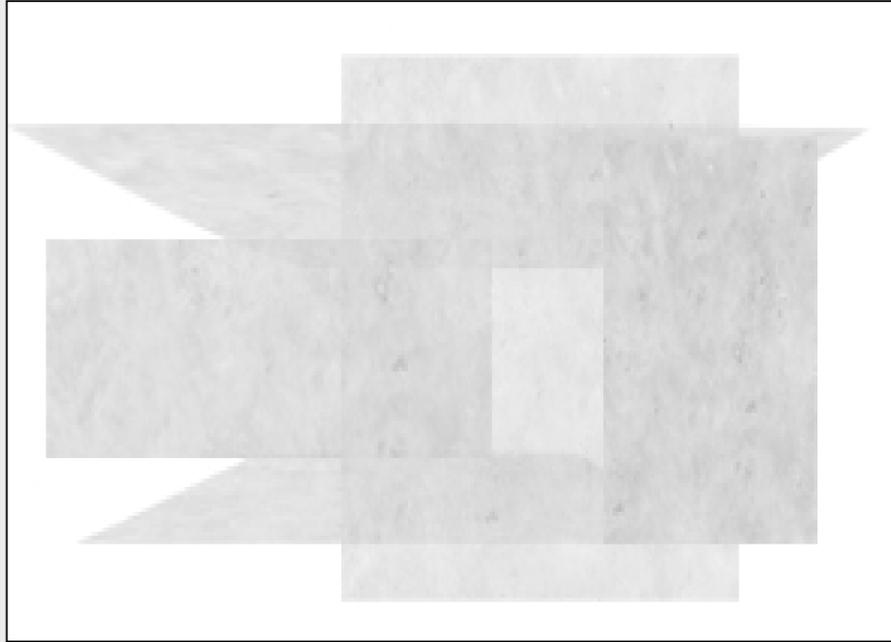


INTERIOR MOMENTS COLLAGE (1)

Within this interior moment collage I explore the **different programs that might take place within** my designed space. This might include having a cup of coffee, reading and displaying art, as well as a wedding venue for the neighbouring town hall. **I aim to design a space that welcomes social interactions, whether it is private, semi public or completely public.**

This collage also suggests a **clean grey finish**, and to achieve this I propose using **concrete**. The collage also shows a **sense of openness**. To achieve this I propose **large windows**. I also explore the idea of having **columns as a design element for adding thresholds to my building**.

MATERIAL STUDY



I intend to use **concrete** as the main material for my design. I chose concrete for the **aesthetic finishing** it has. Although this material is known to **not be environmentally friendly**, I intend to create concrete (or what would then be a material similar to concrete) **using plastic and oyster shell waste found in Brighton** as aggregate, as well as **reusing materials from the demolished building**. I can also **use less cement in the making of new concrete**.

INTERIOR MATERIAL INSPIRATION



Source unknown



De Eenvoud Almere by HOOG Design

SUSTAINABLE MATERIAL STRATEGY

1. Using less cement in the making of concrete



Reducing the amount of cement in concrete would also reduce the strength of the material. Hence, this can be highly used on parts of the building that do not need much strength such as in wall finishings

2. Changing the aggregate of concrete to waste found in Brighton seafront (oyster shells and plastic)



This can be done by exposing plastic flakes to small, harmless doses of gamma radiation, which then pulverises the material into a fine powder, this is then mixed with cement paste and ashes to produce concrete



EXISTING AND PROPOSED (FACADE OF THE BUILDING)



Existing site



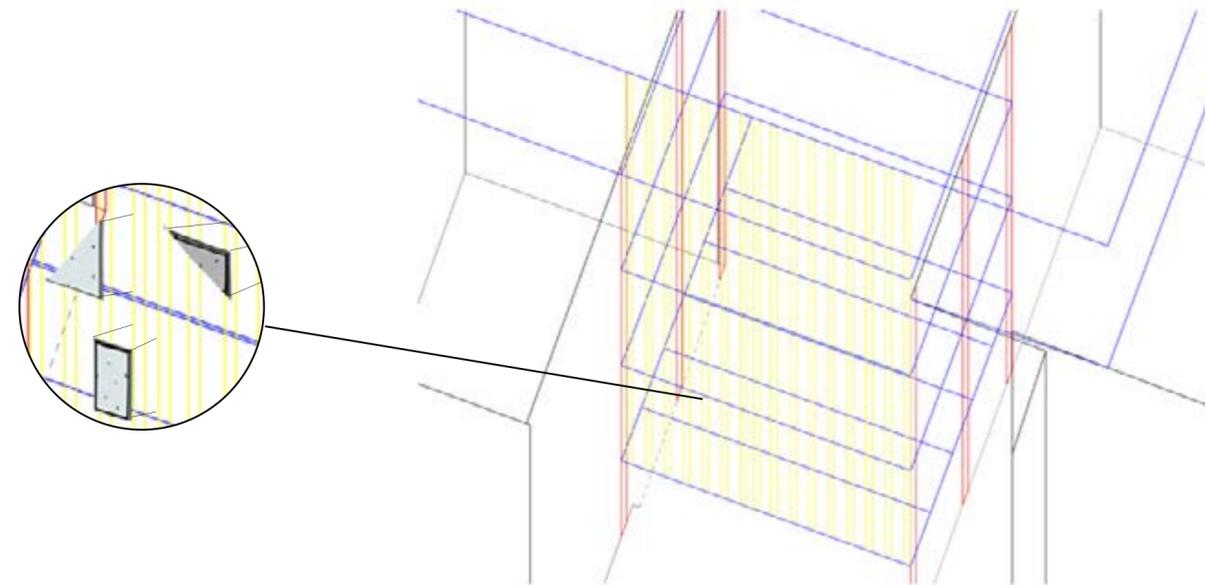
Bending in with the Jurys Inn windows

To create a more **sustainable project**, I choose to **reuse the materials** from the existing building, such as the facade. This will also allow the design **to bend in** with the existing Jurys Inn, **considering the fact that it is an extension for the hotel**. I will also reuse the **aluminium** from the existing facade in my proposal.



Facade of existing site

REUSING EXISTING FACADE



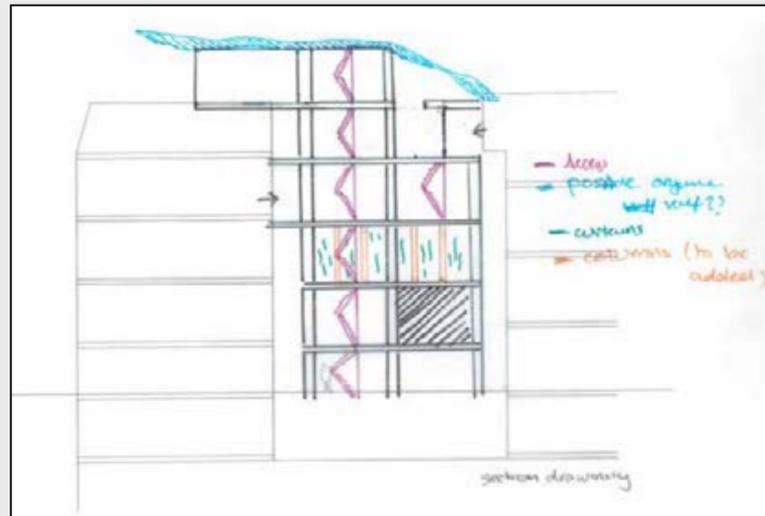
The existing building uses a **curtain wall stick system**. After dismantling the facade pieces, they can be reattached to the horizontal steel frame (blue) and a vertical frame can be assembled to hold the panels (yellow).

SKETCHES AND DESIGN EXPLORATIONS

I. DESIGN LAYOUT

Because I am working with **multiple programs**, and want to create a space that inhibits many **thresholds** and impact the way people choose to **socialise**, I started off by laying out the different possible set ups and thinking about how much of the site I might want to occupy.

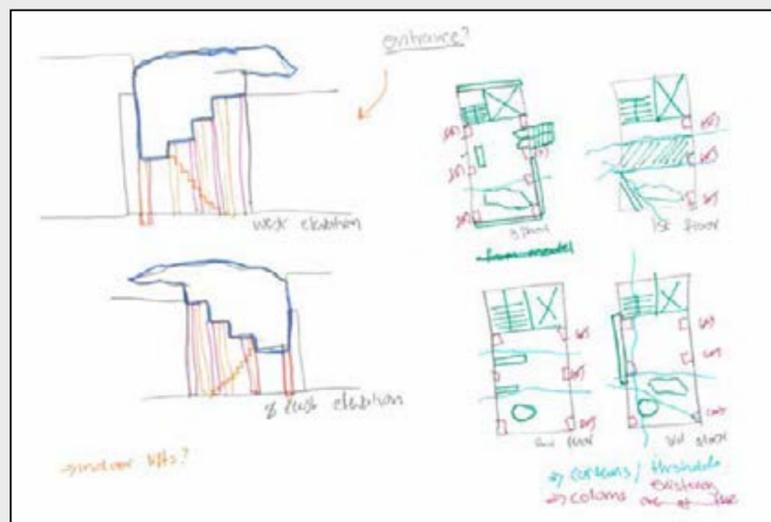
NOTE: sketches done in A4 sheet



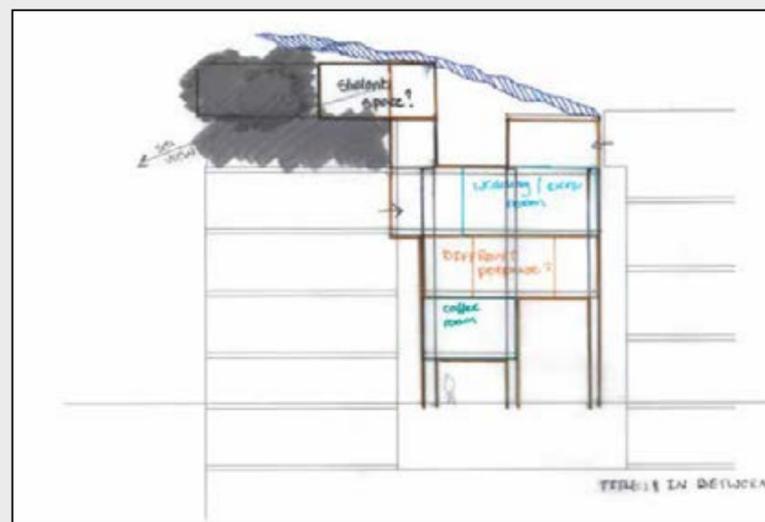
b) I move on to thinking about **access** and how people would get from one place to another within the building. I also think about **thresholds** in which much like my **precedent study**, I intend to use **columns and curtains**.



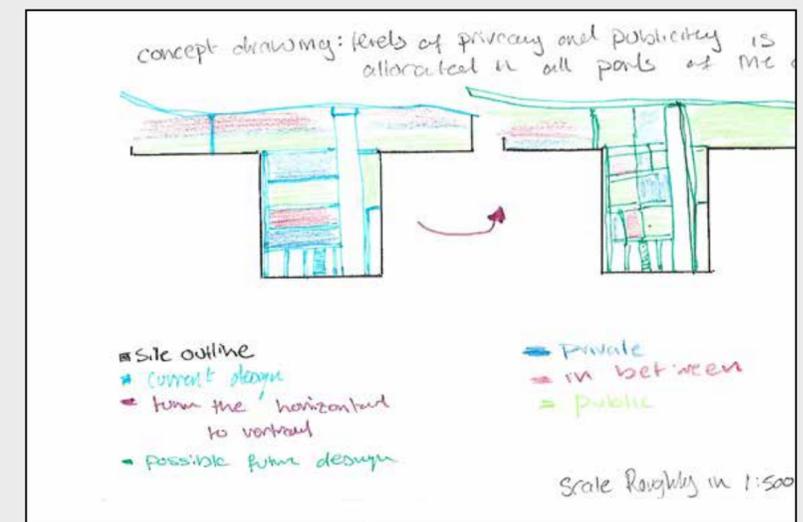
c) I express how want the **stairs** of my design to take people **from public to more private spaces** of the building. I also explore the idea of **mezzanines** in this sketch.



a) Combining the **ideas from to models** I have made, I start off by sketching the possible **shape** of the design, then laying out some aspects in **plan**. During this I considered using the existing structural columns.



c) I continue to think about the mass of the building and still **having the concept of thresholds translated within its shape**. Here I choose to **take over the penthouse of the existing building** and having a view of the **sea front**.



e) After further design developments, I sketch out **private and public spaces in the building**. I explore the possibility of having these spaces combine.

SKETCHES AND DESIGN EXPLORATIONS

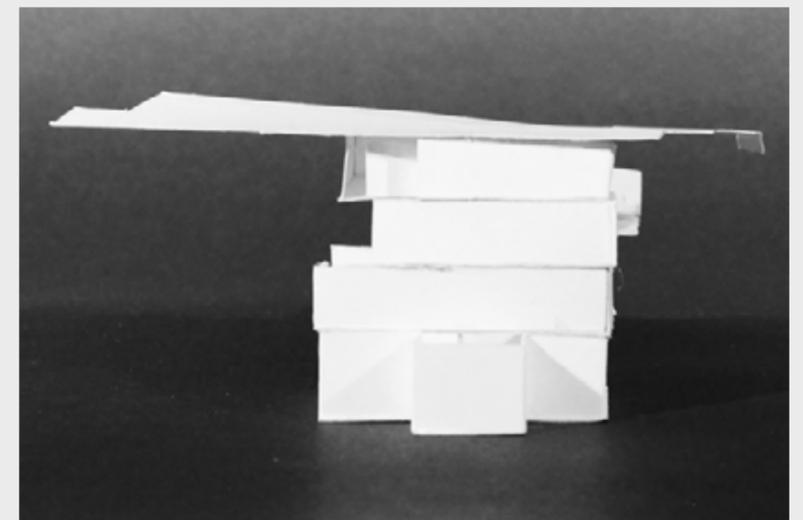
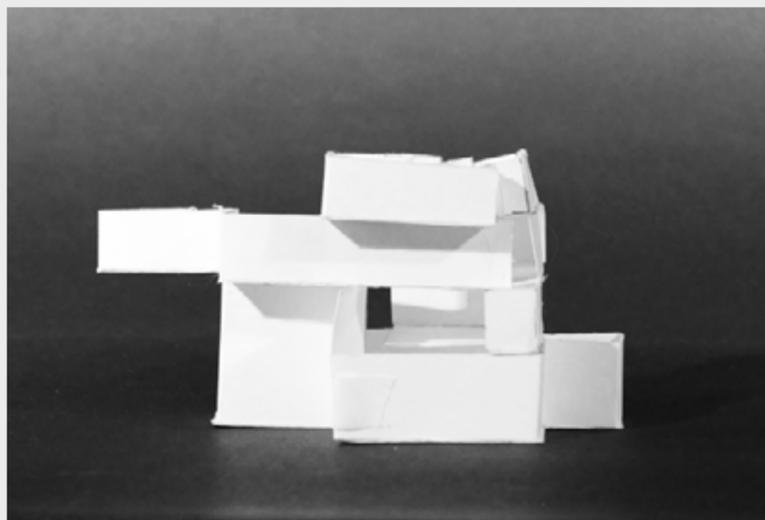
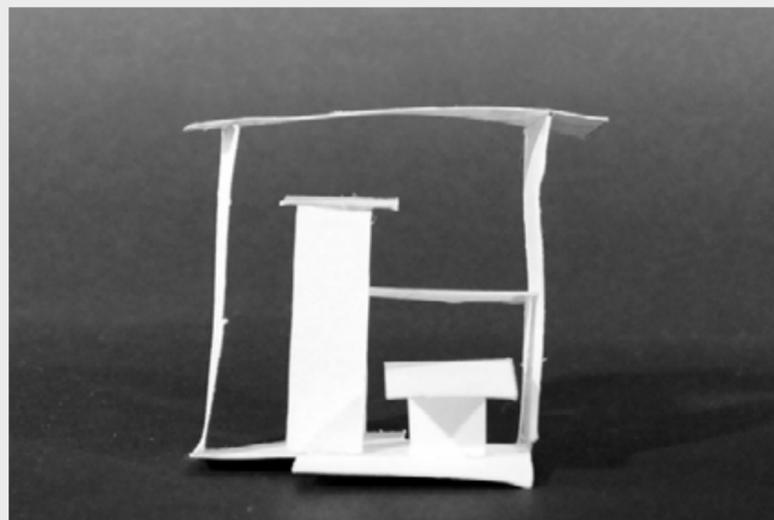
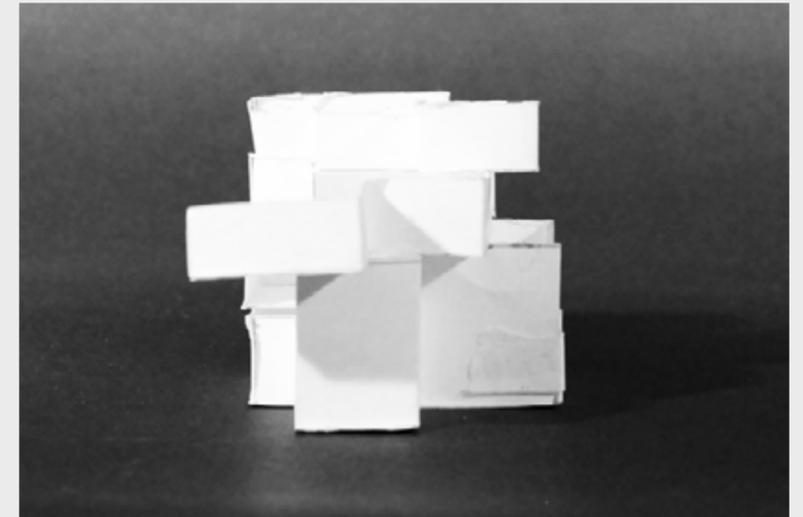
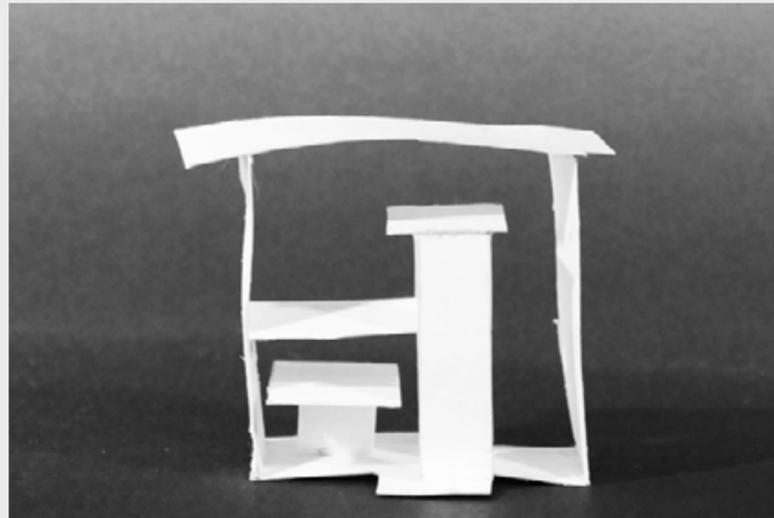
2. SKETCH MODELS

To understand the space I wanted in 3D, I produced 2 sketch models in different stages of my design.

NOTE: Models are made in 1:200

Model 1: This sketch model tests out the possibility of having **mezzanines** and different floor levels that **can interact with one another**.

Model 2: Because the design has an **irregular shape**, it was difficult to in-vision it at first. This model **enabled me to visualise my building in 3D**.



SKETCHES AND DESIGN EXPLORATIONS

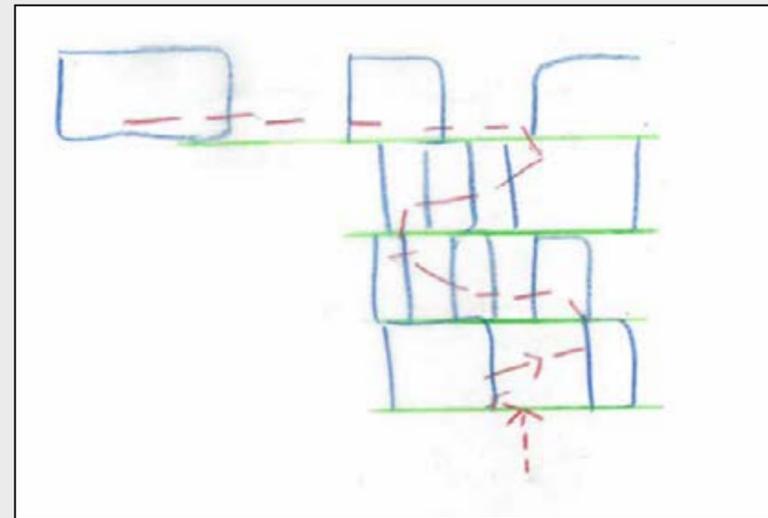
3. THRESHOLDS: COLUMNS, CURTAINS AND STAIRS

One of my **main interests** in this project is **thresholds** within architectural space. I explore and implement this into my design using **columns with curtains and stairs**.

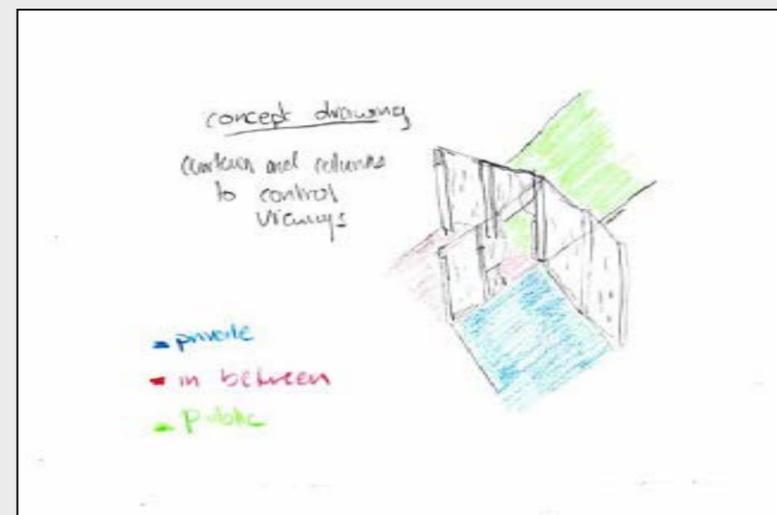
a) Columns with curtains: **As inspired by the Tujuhari Coffee Shop**, I aim to create a **sense of threshold** by using these design elements. This adds a **barrier between private and public spaces when needed**.



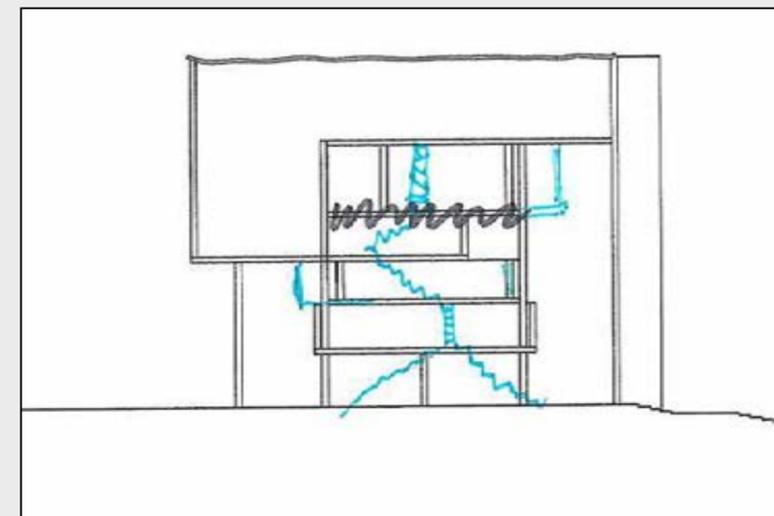
Tujuhari Coffee: privacy behind curtains



Drawn in A4



Drawn in A4

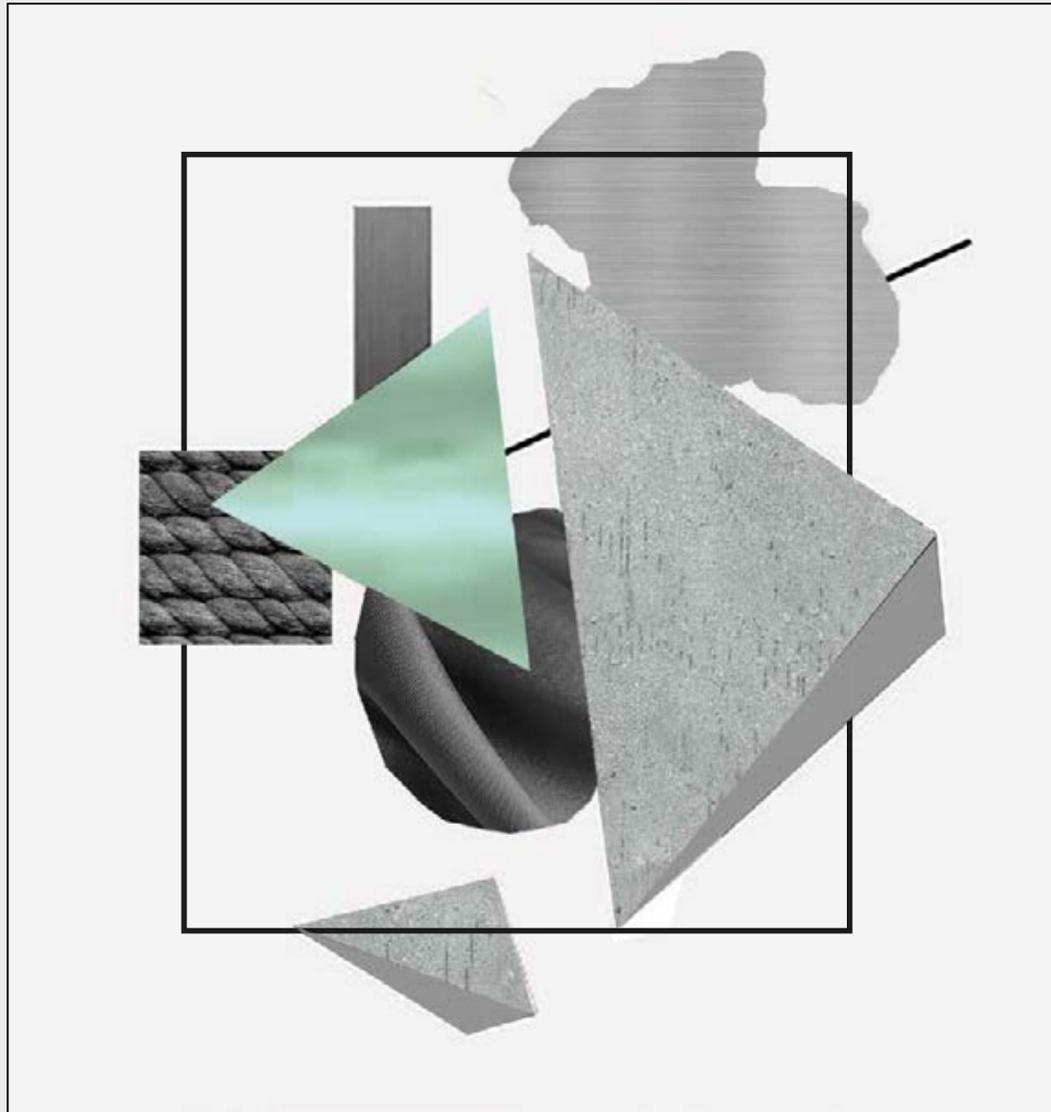


No scale

b) Stairs: **If the stairs of a building is located on the side**, an individual would just walk from one floor to another **without interacting with the people around**. However, **if the stairs are located in the middle of the building**, then that individual would **have to interact with other users of the building**. Even if someone **came for a wedding**, then can still pass by people that are **enjoying a cup of coffee**.

c) Ropes: **A scene of threshold can be formed by controlling what is visible and how much of it is visible**. To create this illusion I use **ropes for railings** which then became a significant element within my design proposal. I was inspired by a Norwegian studio (**Jarmund/Vignæs Architects**), that built a cabin in Oslo. The railing in the cabin is as follows:

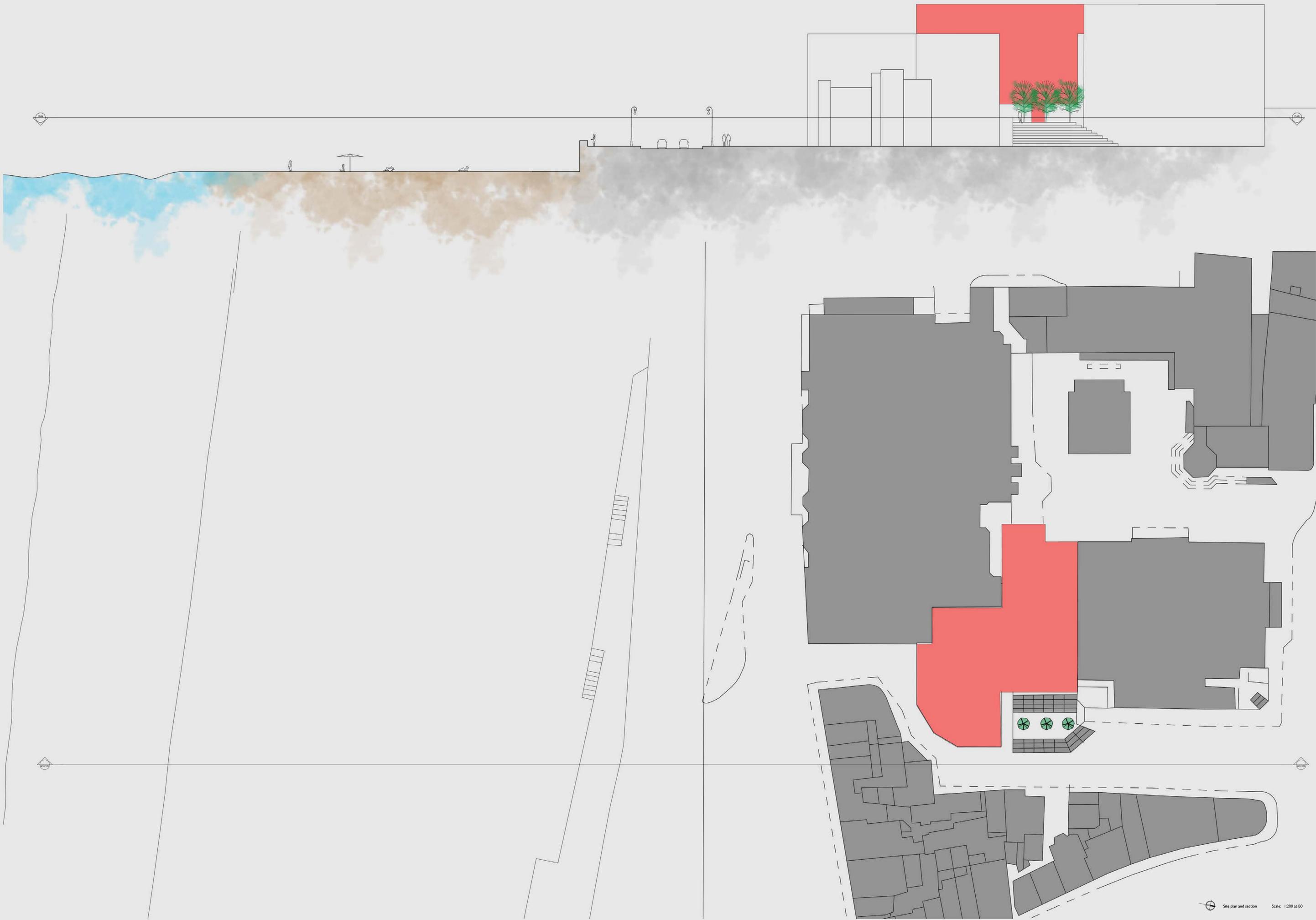




MATERIAL PALETTE

During research and explorations, I have concluded that I want to **use the following materials** in my proposal:

1. **Concrete render:** This is for the **interior finish**, in which I aim to produce my own concrete like material by using waste as aggregate and reducing the amount of cement.
2. **Facade glazing:** This will be reused from the existing building **on some parts of the West and East facade, as well as on the roof.**
3. **Aluminium:** This will also be used from the existing building **on areas of the facade that does not have glazing.**
4. **Steel:** This is mainly for **structural** purposes (outdoor visible columns), that **will be designed in diamond shape. This will allow reflections through out the day, adding a visual touch to the building.**
5. **Black ropes:** This is for the **railing of the stair** that create a sense of threshold and plays with the idea of privacy.
6. **Curtains:** This fabric material **will be attached to columns** when needed to add privacy to the space.



COMPOSITE DRAWING : SHOWING MATERIALITY, POSSIBLE MASS OF THE BUILDING AND DISTRIBUTION OF PROGRAMS



EXPLAINING THE POSSIBLE DISTRIBUTION OF PROGRAMS





INTERIOR MOMENTS COLLAGE (2)

In this interior moment collage further I explore the **different programs** that take place within my building. Here the different programs exist **within and share one space**. **This contributes to social infrastructure that benefits society in growing less isolated (as inspired by Eric Klinenberg on 99 Percent Invisible podcast).**

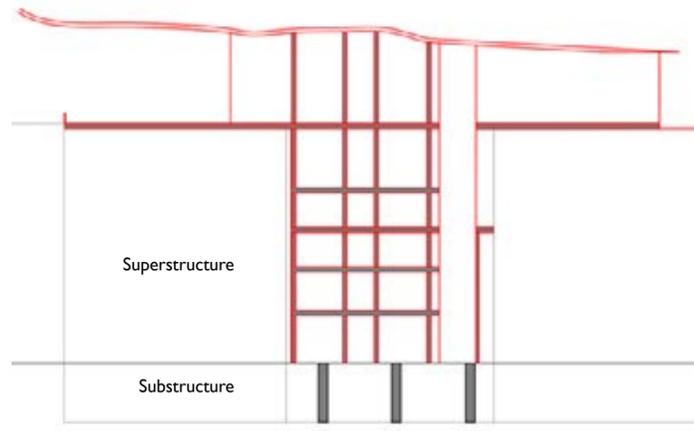
This drawing also expresses materiality in which I aim to follow the aesthetic of having a **polished concrete finish inside**, as well as **reusing the existing facade that features green glass windows**. The **columns and curtains act as a barrier and threshold that separates private from public interactions**. They suggest **flexibility** on when this could happen. I aim to design a space that **forces socializing between public and private events**.

Structural Systems Strategies

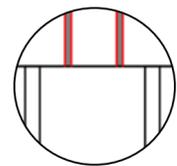
Strategy 1: Designing new structure

The design of the building is suspended off ground. Hence columns and are the main supporting structure that holds the building off ground. My first strategy is to design columns that fit the layout of my design.

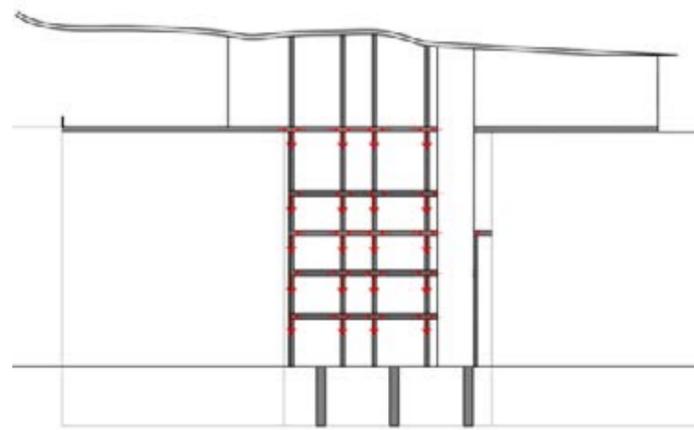
+ Flexibility in designing the shape and skeleton of the building



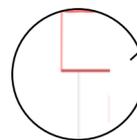
Structure of design with relation to the existing structure



- The new design structure does not align with the existing structure. This means that new substructure will have to disturb the existing car park.

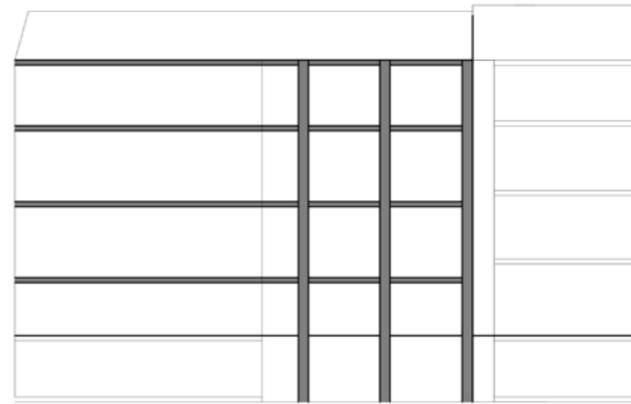


Load on the new structure



This part of the design layout requires more structure than what already exists

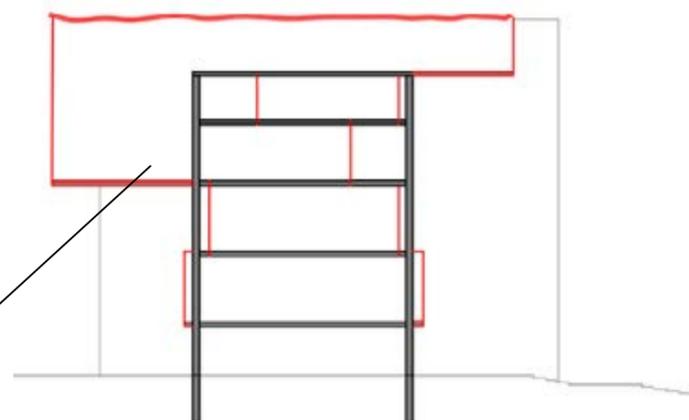
Strategy 2: Keeping and using the existing structure



Existing structure



East facing diagram of design on existing structure



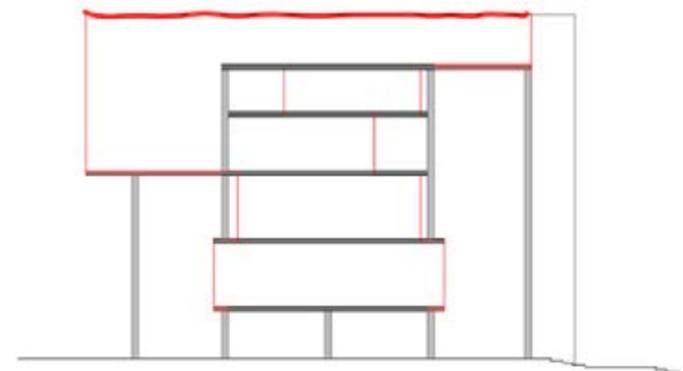
North facing diagram of design on existing structure

+ It is the more sustainable strategy that produces less waste and requires less energy.
- The layout of the building does not fit the existing structure in parts of the design

Strategy 3: Column free design: using the adjacent buildings for support



East facing diagram of design (column free)

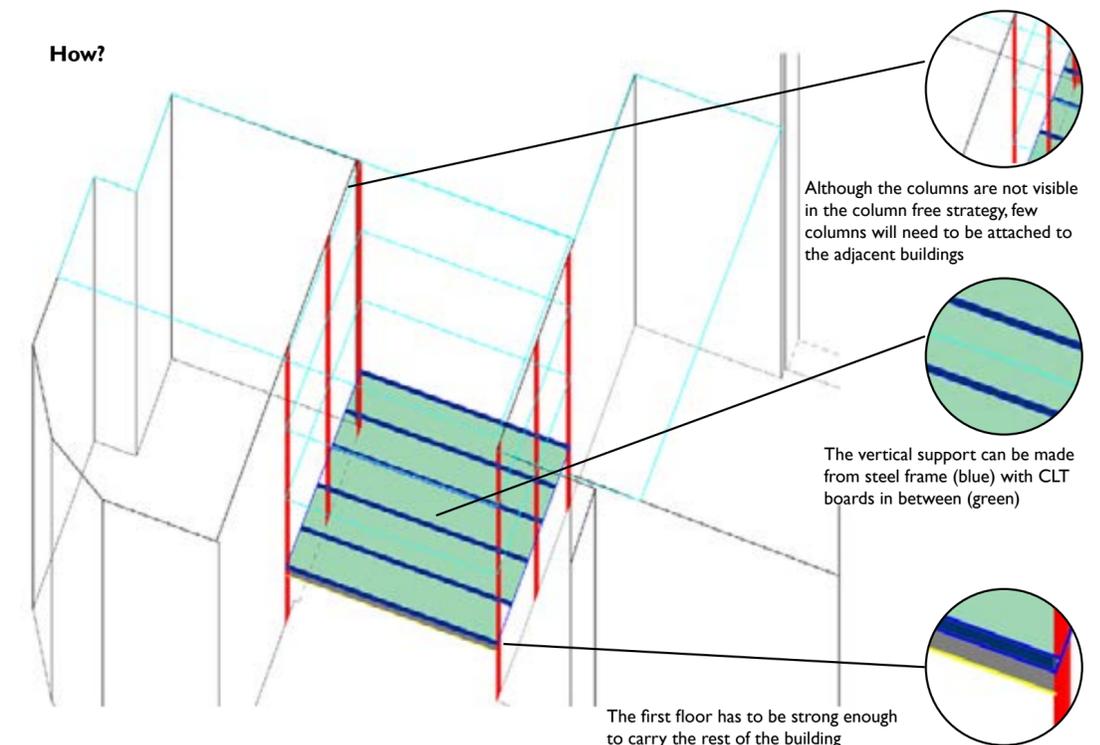


North facing diagram of design (column free)

+ It is a sustainable strategy that produces less waste and requires less energy.
+ Allows more flexibility than keeping the existing structure

Key Points:
There are three strategies that might work for holding my building up. There are disadvantages to the first two strategies. But the third strategy shows most advantages.

How?



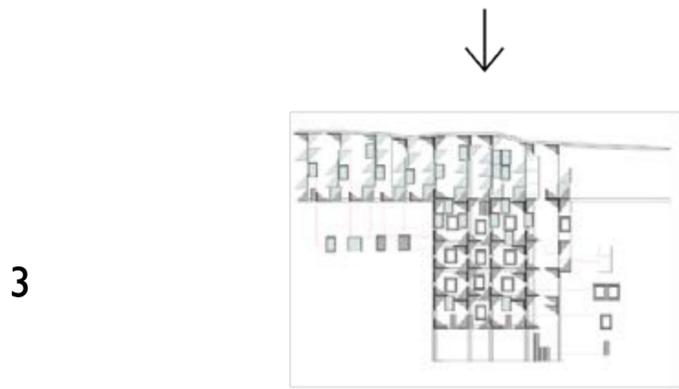
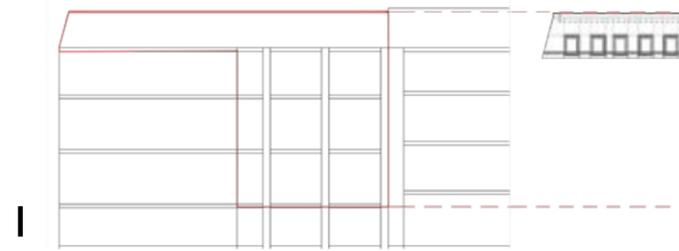
Although the columns are not visible in the column free strategy, few columns will need to be attached to the adjacent buildings

The vertical support can be made from steel frame (blue) with CLT boards in between (green)

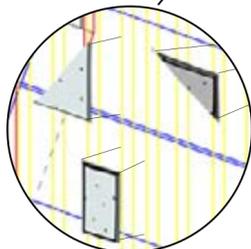
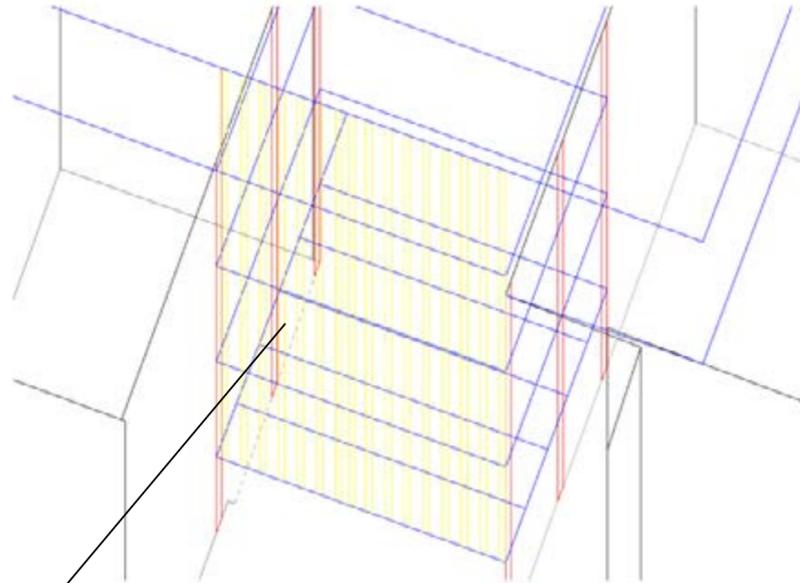
The first floor has to be strong enough to carry the rest of the building

Construction System and Materials Strategies

Construction system strategy



How?



The existing building uses a **curtain wall stick system**. After reconfiguring the façade pieces, they can be attached to the horizontal steel frame (see structural strategy page) and a vertical frame can be assembled to hold the panels (yellow).

1. The **first step** of my construction system strategy is to remove the existing façade by dismantling the pieces off the exterior surface of the building.
2. **Repair:** Parts of the existing building might need repair.
Recycle: Recycling the elements that cannot be reused.
Manufacture: Extra materials will be needed.
Construction: Assembling materials.
Re-manufacture: Redesigning the pieces of the façade from the existing building.
Waste disposal: Preventing contamination and ensure that smart waste management occurs
3. **Assembling** the redesigned and re-manufactured **façade of the building**



Images of the curtain wall stick system of the existing façade

Materials strategy: Finding a more sustainable approach to the materials of my building

Strategy 1: Changing the aggregate of concrete to waste found in Brighton seafront (oyster shells and plastic)



Why is does it harm the environment?



Why use it as a building material?



Why is does it harm the environment?

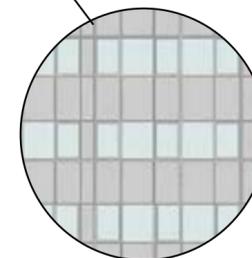


Why use it as a building material?



How?
By exposing plastic flakes to small, harmless doses of gamma radiation, which then pulverises the material into a fine powder, this is then mixed with cement paste and ashes to produce concrete

Strategy 2: Reuse



Hotels often produce waste such as overused duvet blankets. These can be reused as building materials such as insulation.

Why use it as a building material?



Reference: Brighton 'Waste House':
This project reuses old materials within its construction such as music toothbrushes in wall cavities.



<http://arts.brighton.ac.uk/projects/wastehouse>

Strategy 3: Using less cement in the making of concrete



Why is does it harm the environment?



Disadvantage:
Reducing the amount of cement in concrete would also reduce the strength of the material

Solution:
This strategy can be highly used on parts of the building that do not need much strength

Key Points:
Construction: Removing the existing facade and altering it to fit my design
Materials: Three strategies that explains sustainable ways to reuse elements that could harm the environment

Environmental Design Strategies

Acoustics strategy: To find the right reverberation time for each space in the proposal (using Sabine's equation), and the right materials that would achieve that.



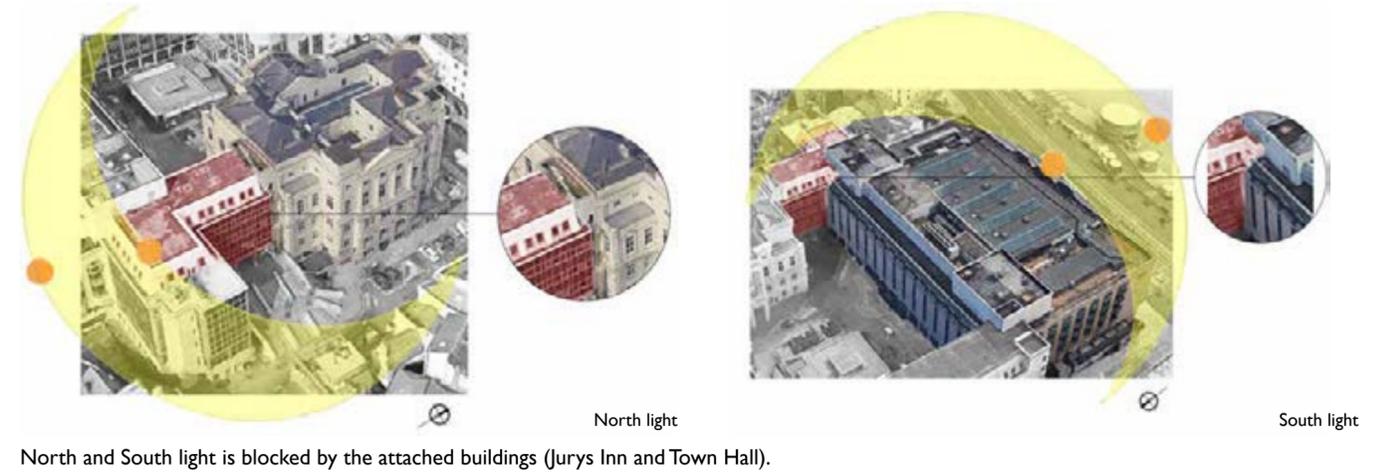
Using **Sabine's formulation**, I can find the sound absorbing coefficient (SAC) of any space.

SAC determines how well a surface absorbs sound. The **materials on the surface** of a space determines the reverberation time of the room. **What the space is used for** determines the required reverberation time.

Acoustic requirement (Reverberation time) of each space:
 Hotel lobby: 1.2 to 1.5 sec
 Coffee shop: 0.8 to 1.0 sec
 Wedding hall: 0.6 to 1.2 sec
 Quiet (small) space: minimum 0.3 sec
 Large space: maximum 5 sec

Lighting strategy: To maximise the natural light within my proposal as to using artificial light. This is the more sustainable approach.

Introduction to natural light on site.



North and South light is blocked by the attached buildings (Jurys Inn and Town Hall).



The West light is overshadowed by the neighbouring buildings.

East light is viewed very well at the east facing façade of the proposal

Using Sabine's formulation:

$$RT_{60} = \frac{0.16V}{\Sigma SA}$$

RT60: Reverberation time
 V: Volume of space
 ΣSA: Sum of each material surface area x the its sound absorbing coefficient (SAC)

Using Sabine's formulation I have calculated the following:

Using **concrete** (current design material)

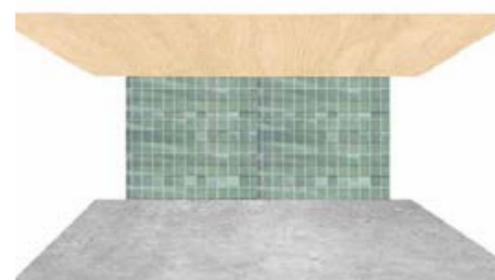
SAC: 0.05 at 250 Hz	Space	Volume	SA	Reverberation time
	Hotel lobby	609	28.85	3.4s
	Coffee shop	435	21.85	3.2s
	Wedding venue	978.75	43.7	3.6s
	Quiet space	435	21.85	3.2s
	Large space	3825	104.75	5.8s

The reverberation time of most spaces need to be altered to fit the acoustic requirements of each space. This can be done by changing the inner surface material. The reverberation time to the top floor can stay the same (no need in changing the materials).

Changing the materials of the inner surfaces

Space	Volume	Material	SAC at 250 Hz	SA	Reverberation time
Hotel lobby	609	Plaster	0.1	57.7	1.6
Coffee shop	435	6mm Plywood	0.25	87.2	0.8
Wedding venue	978.75	6mm Plywood	0.25	218.5	0.7
Quiet space	435	Wood	0.5	218.5	0.3

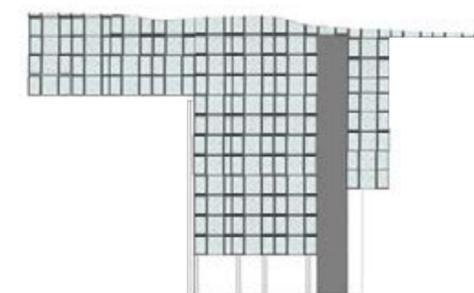
By changing the surfaces of the inner materials, the spaces meet the required reverberation time. **However, these materials might not meet the aesthetic requirements of the proposal or might not work as a building material.** For example, plaster cannot be used for flooring. In this case different materials need be used on the different surfaces of the space (floor, walls and ceiling).



Taking for example the hotel lobby and changing its surface materials, I was able to get the reverberation time needed for its use.

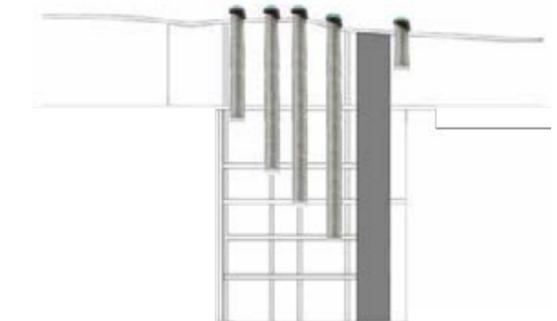
Space	Volume	Material	SAC at 250 Hz	SA
Hotel lobby	609	Concrete floor	0.05	10.15
		6mm Plywood ceiling	0.25	50.75
		Glass walls (large plate)	0.06	10.26
Reverberation time			1.3	

Strategy 1: Glazing on East facing façade

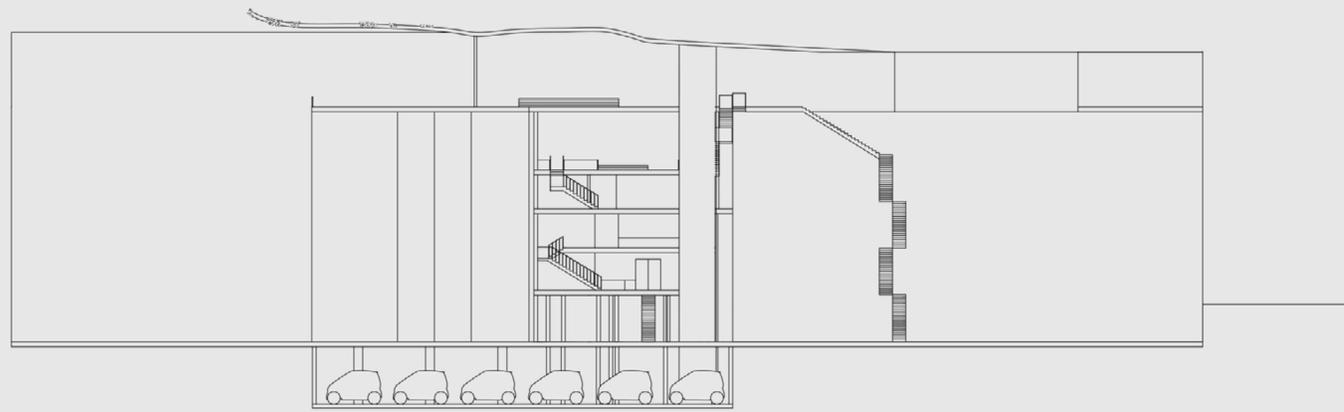


To maximise the natural light within my proposal, having glazing on East facing façade will **allow sun light though most parts of the building.** **Because the West Façade is overshadowed, there is flexibility on what the façade can be.**

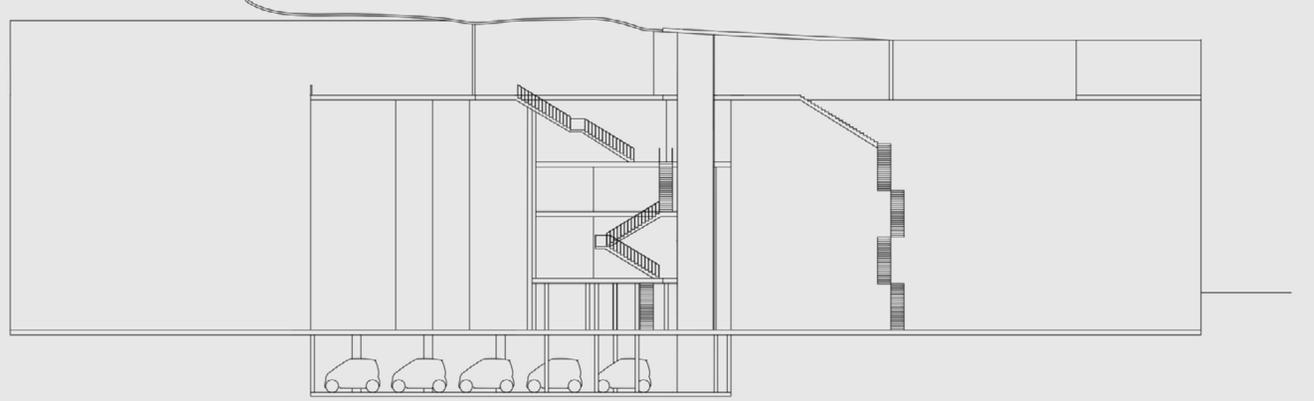
Strategy 2: Using a sun tunnel



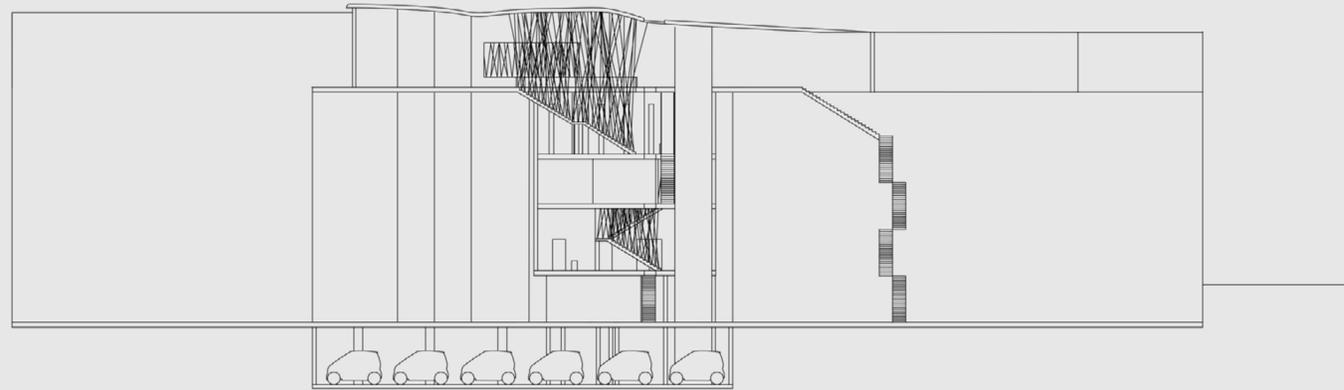
Using sun tunnels in my design can **bring in natural light to the building.** The **two disadvantages** of this are:
 1. Depending on the size of the sun tunnel, the amount of natural light might still be low
 2. This can disturb the flexibility of design of the building



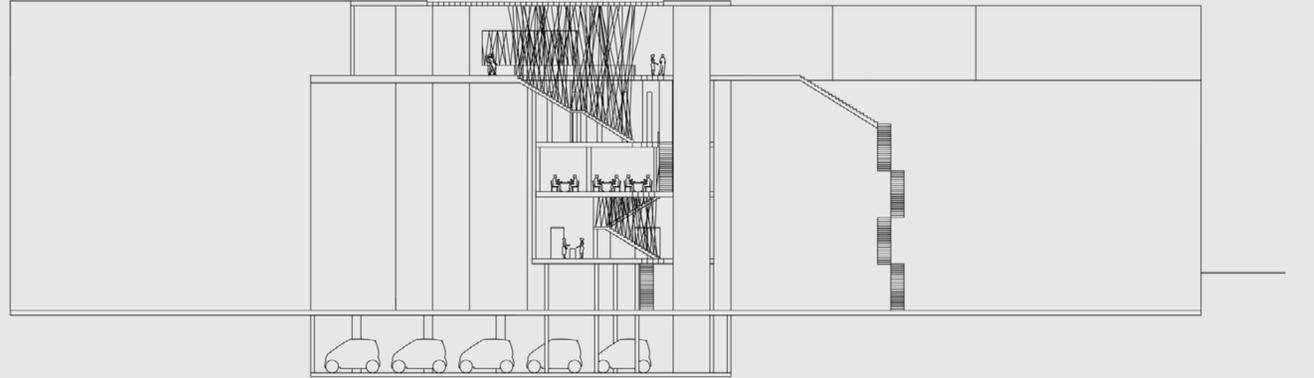
1. Combining early design explorations to form a building that stands in between and connects to the Town Hall and the Green Diamond apartments (what will soon be the extension of the Jurys in Hotel). I start to map out the basic architectural access elements such as stairs, lifts and doors. The roof gradually becomes a significant aspect of the design in which it starts off by being a curving feature within the architecture, as inspired by my interior expressive model.



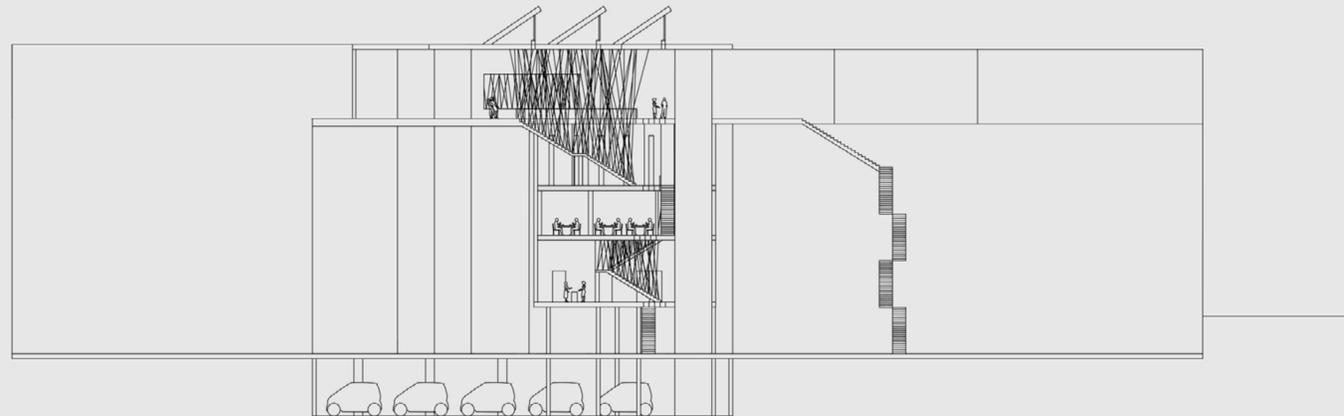
2. In order to have higher ceiling in the building I decided to eliminate one of the floors. In this iteration I start to explore the stairs further. I position them in the middle of the building to play with the idea of privacy and publicity through access. At this stage I was able to find out areas and aspects of the building that were important to my design.



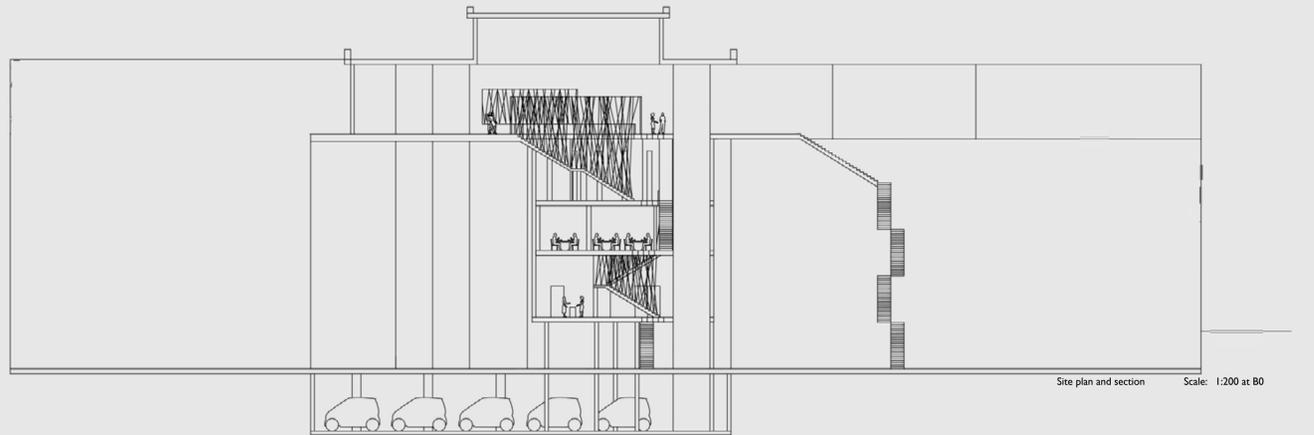
3. At this stage I explored the threshold elements in my building even further. I combined my studies and sketches to design elements such as columns and railing. The columns gives an opportunity of flexibility to what can be seen by the public and when. The railing is made out of ropes that give a sense of visibility, yet one cannot see completely through them. I then wanted to incorporate this idea within other parts of the building, in which I designed it so that some walls have a part that is pushed back and has ropes that become a feature within the wall. In this iteration, the ground floor has a closed waiting area. This concept did not appeal to me, but in the final design I decided to add an outdoor seating area that would make the space more luxurious.



4. In this iteration I explore inhabitation and how people use the space. This when the roof comes an important part of the design. Since the building is located on an overshadowed site, I wanted to maximize the amount of sunlight by using the roof. I then added glass floor slabs in some parts of the spaces that will drag the light from the top floor all the way down to the ground floor (the site). The glass floor add thresholds to the building and plays with the idea of what is private socialisation, forcing a type of interaction between programs by revealing what might otherwise be a private socialisation.



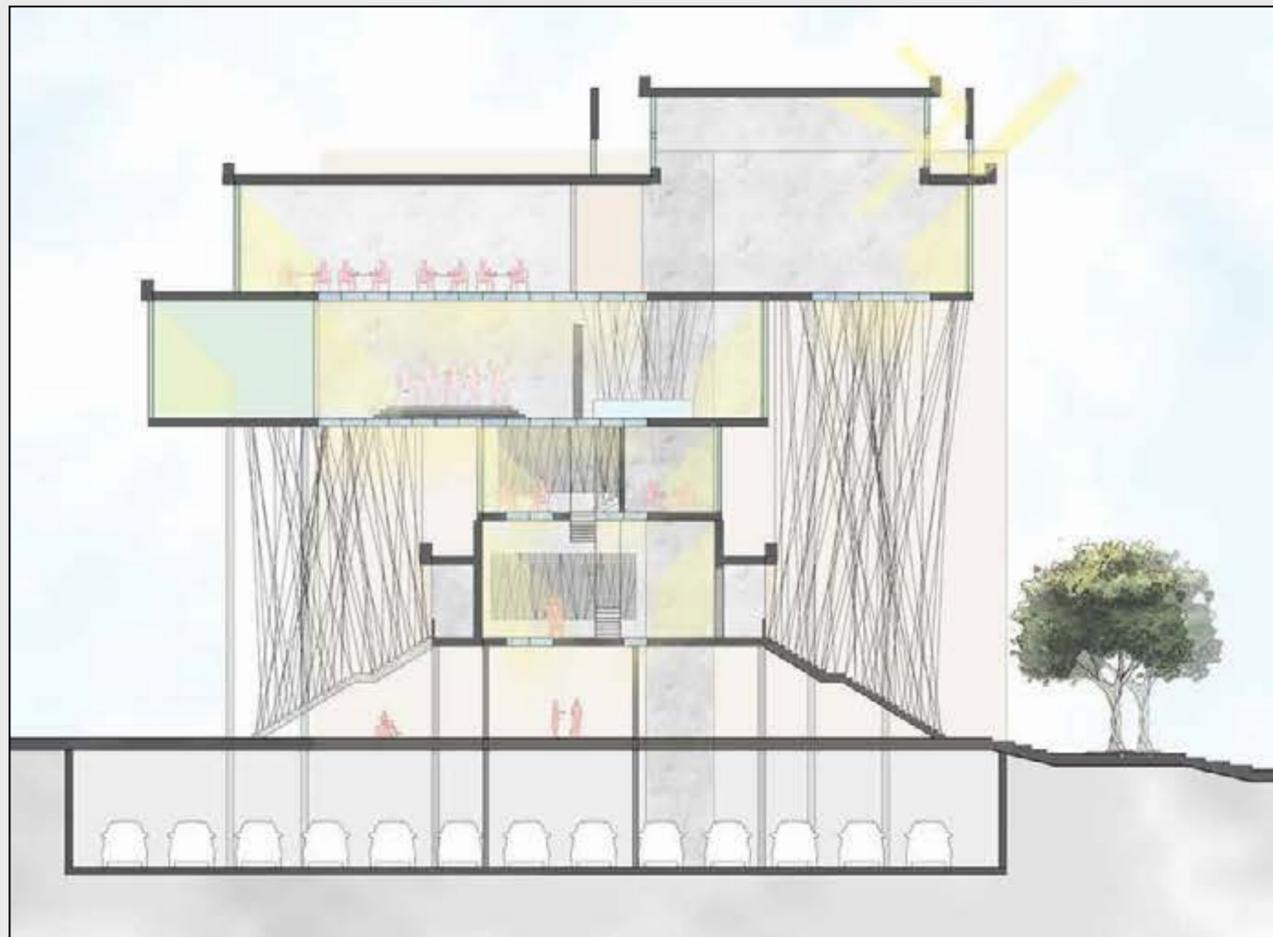
5. At this stage I study the different types of roofs that bring sunlight into the building. For instance, a sawtooth roof as seen by the iteration. During these studies I consider the movement of the sun and the direction of the glazed windows / façades.



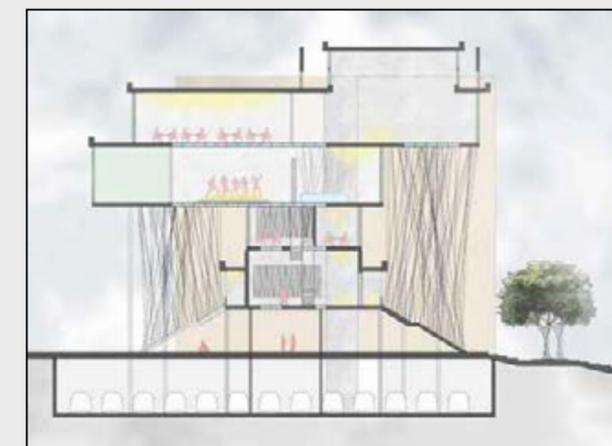
6. To abide with the aesthetics I wanted, I designed the roof as shown in the iteration. This allows sunlight into the building throughout the day yet prevents overheating. Due to the design of the roof, a frame needs to be added to hold the ropes from the railing

Site plan and section Scale: 1:200 at B0

LIGHTING: DAY AND NIGHT



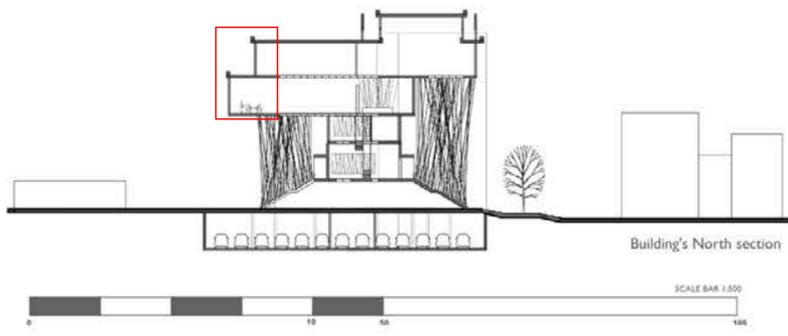
Composite North facing section (day)



Composite North facing section (night)

Day: From my **early studies** I began to design an **unusual roof**. However, because the **proposal is located in a dull area of the site**, I started to explore ways in which I can have **maximum natural light**. To do this, I designed the roof to light up the building using sunlight. I designed this to ensure that the **space would not overheat** during the summer and **keeping in mind the direction of sunlight**. This will **light the top floor up significantly**, and to bring this light into the rest of the building, I design **glass floor slabs that will drag the light from the top floor all the way down to the ground floor (the site)**. The **glass floor add thresholds** to the building and **plays with the idea of what is private rather than public, forcing a type of interaction between programs by revealing what might otherwise be a private socialisation**.

Night: Because I want the **aesthetics** of having a clean, polished concrete like finish inside my building, I intend to **artificially light** the building up at night through **hidden lighting** on floors and ceilings.



Building's North section

SCALE BAR 1:200

Curtain wall system mechanism
 Glazed facade (window) of curtain wall system
 Integral blinds within the curtain wall system: to be used when west sunlight becomes to aggressive on the space
 Glazed facade (window) of curtain wall system

Concrete render
 Connecting the concrete render to the timber beam, creating a false ceiling
 Ducts from the plant room of the existing hotel. The system uses heat recovery (MVHR), so no heat is wasted

Concrete screed
 Layer of mesh
 Gap to allow electrical wires and other similar services such as artificial lighting
 Mineral wool insulation, this floor requires acoustic insulation as it is for private use
 Pedestals
 Small timber beam
 Double timber beam to support the heavy curtain wall system above and carrying load
 Cross laminated timber deck: 150mm thick

Note: The concrete used in the building is made out of recycled oyster shells and plastic waste as aggregate. Also reduced amount of cement, making the material significantly weaker than average concrete, and so the timber structure is able to withstand the concrete's weight

Glass balustrade with timber handle
 Concrete paving
 Layer of mesh
 Floor slopes down, hence the change in the size of the pedestals
 Waterproofing layer
 Thermal insulation: foam glass, keeping the structure (and so the building from the inside) warm

Waterproofing layer to allow vapour control
 Small timber beam
 Glue laminated timber beam: 200mm thick by 795mm long, spanning over 14m wide floor
 Aluminium cladding

Note: aggressive sunlight from the west can cause gairing, Hence integral blinds are needed

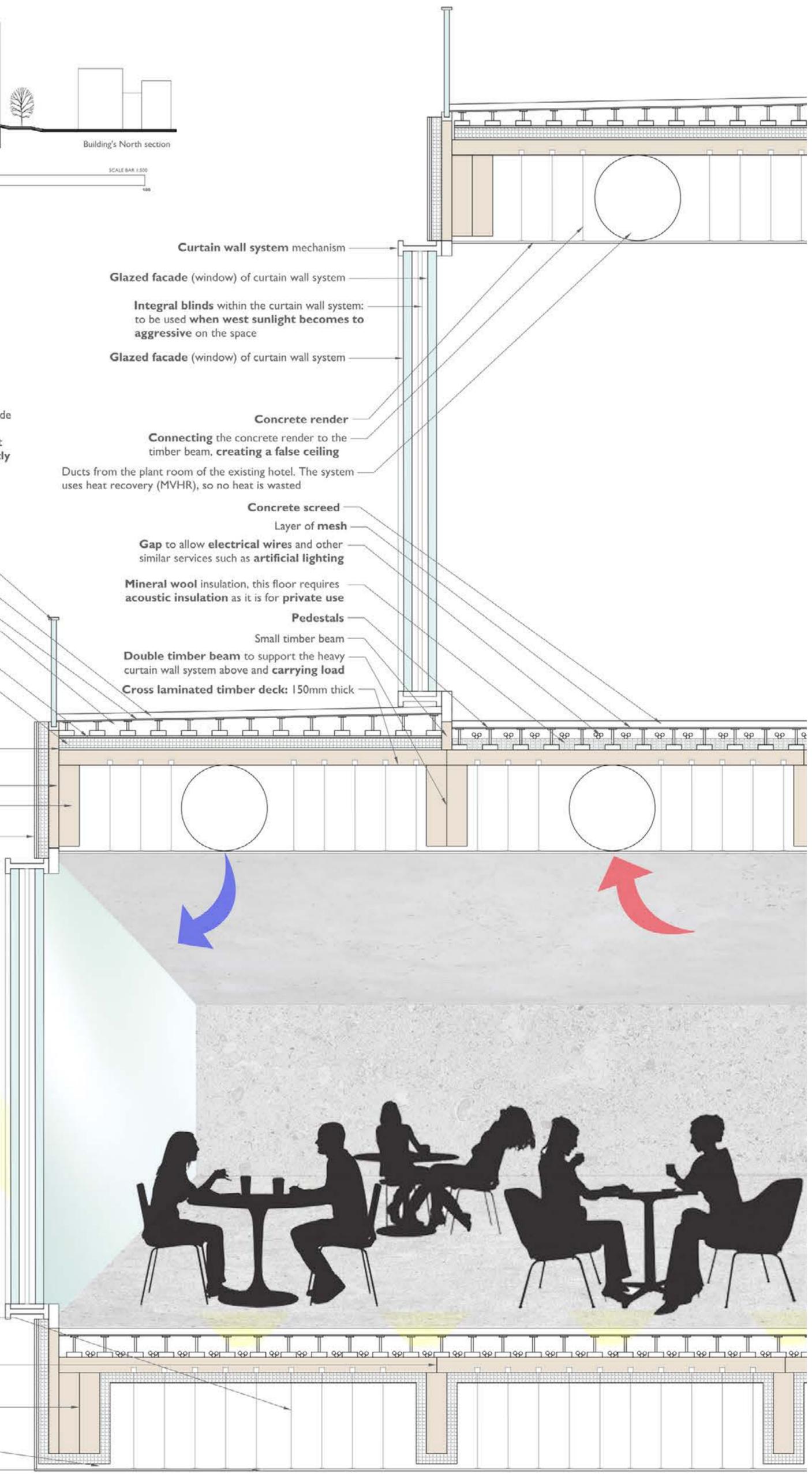
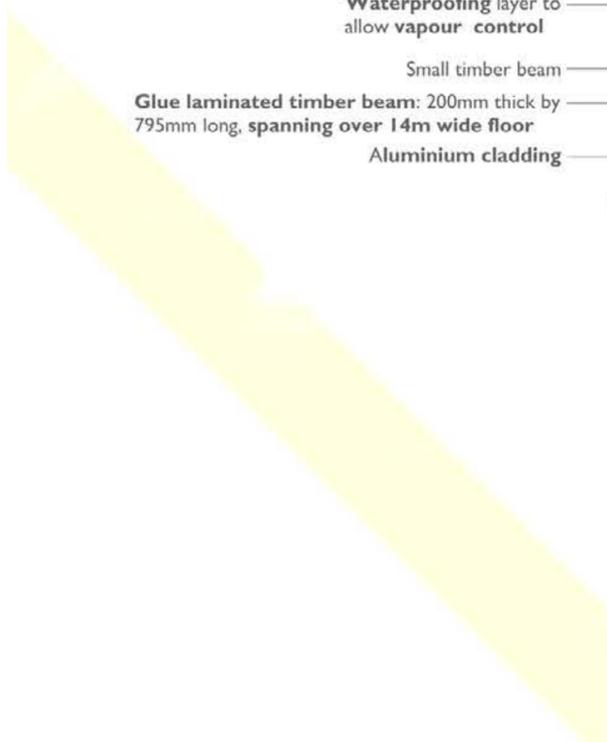
Note: yellow light on floor shows possible artificial lighting at night

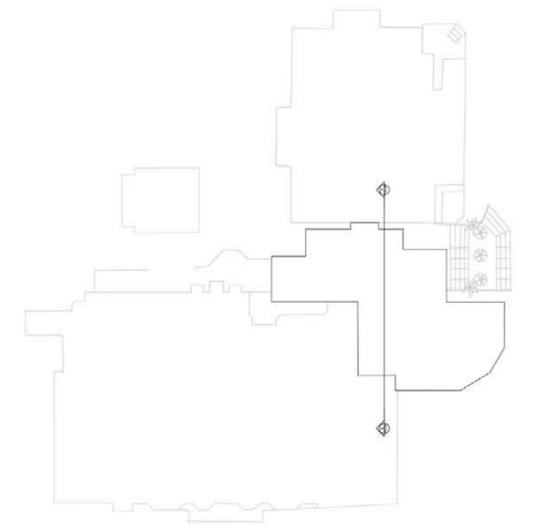
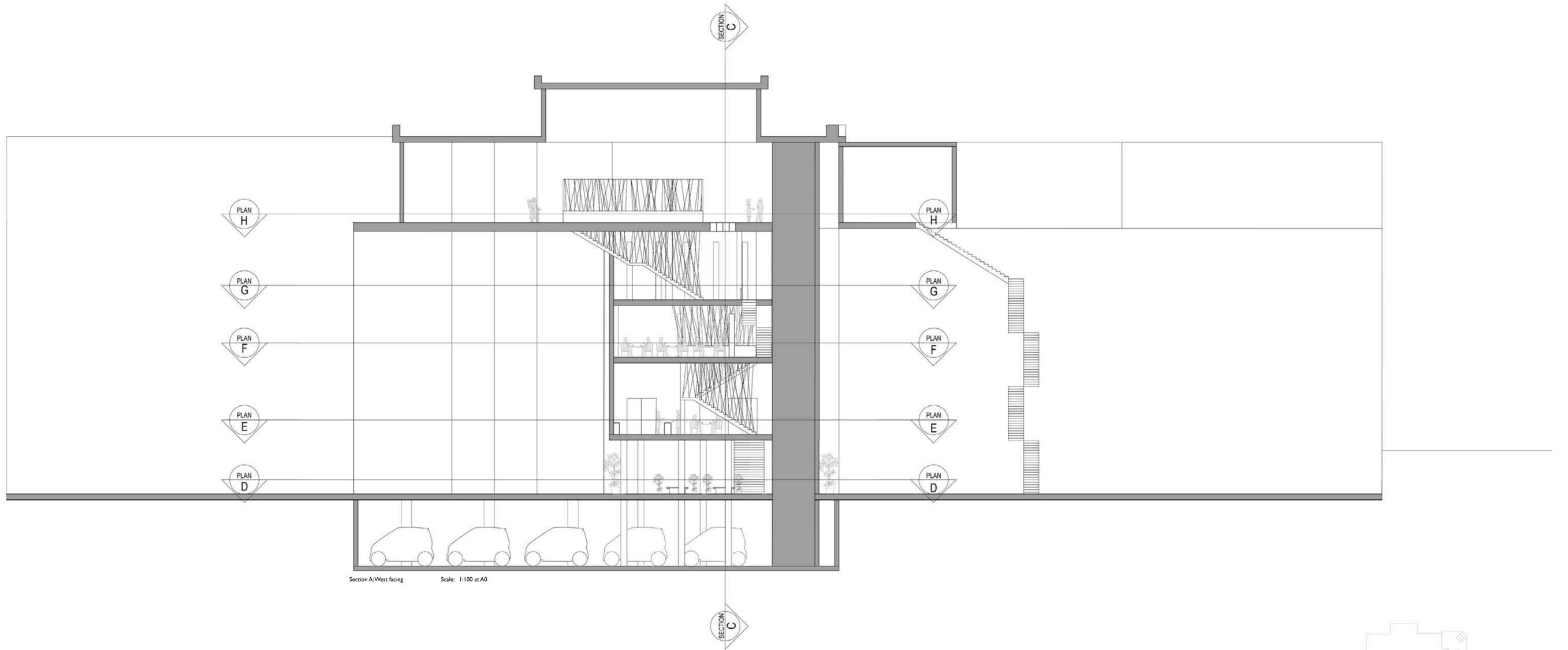
Connects aluminium cladding to the timber beam, no thermal conductivity so the structure's warmth is not effected

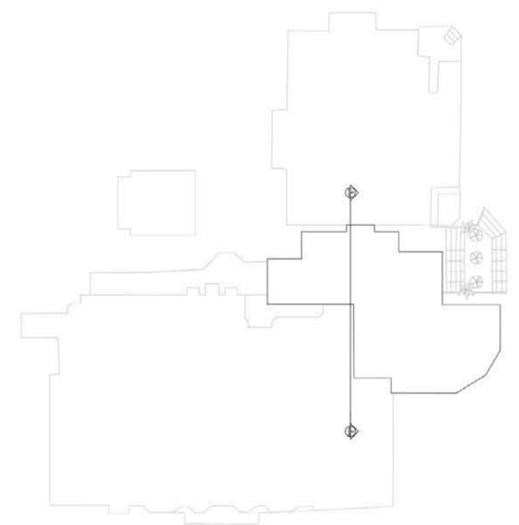
Joints of the timber deck happen where the beams exist

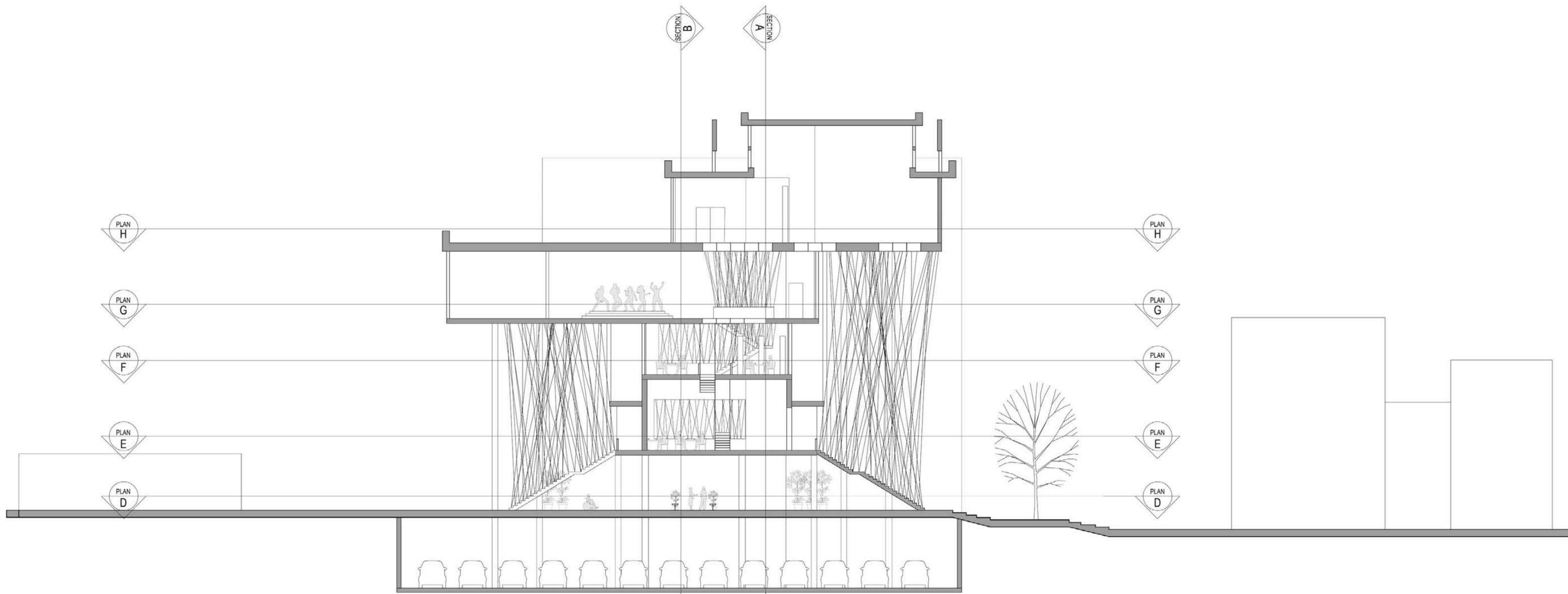
The double timber beam spans through the whole suspended floor, holding the floor up and carrying load

50mm air gap
 Aluminium cladding

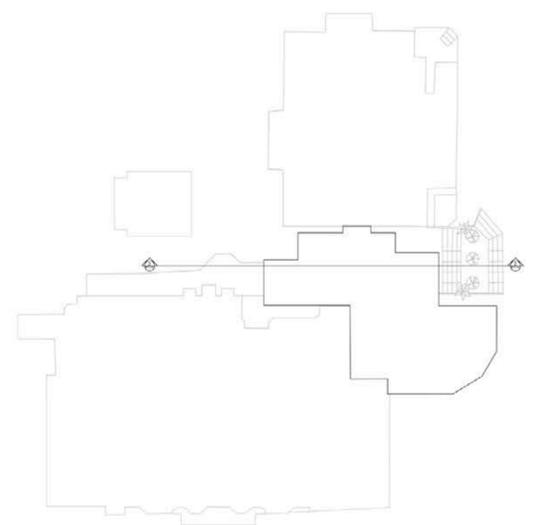








Section C: North facing Scale: 1:100 at A0



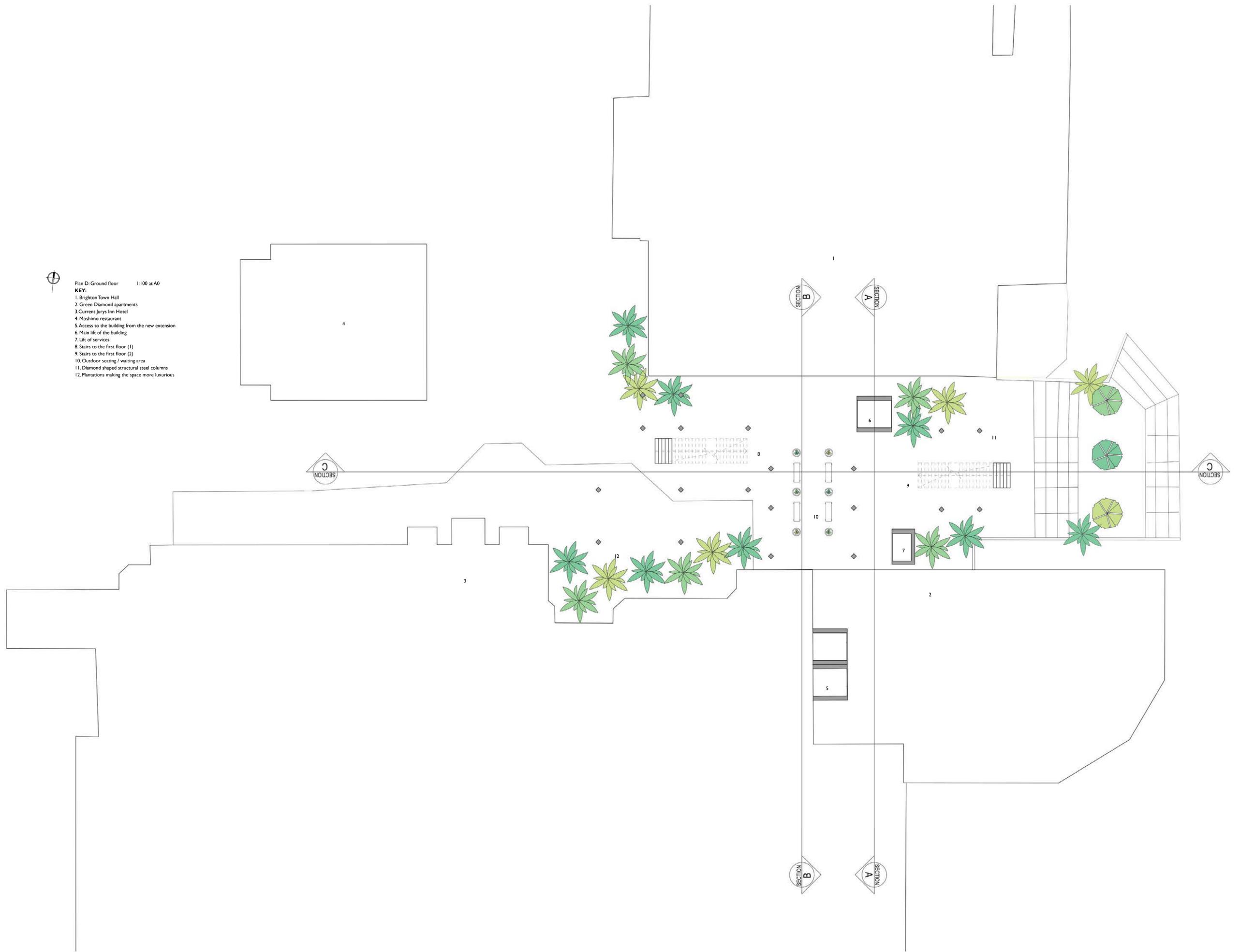
Location key Scale: 1:500 at A0



Plan D: Ground floor 1:100 at A0

KEY:

- 1. Brighton Town Hall
- 2. Green Diamond apartments
- 3. Current Jurys Inn Hotel
- 4. Moshimo restaurant
- 5. Access to the building from the new extension
- 6. Main lift of the building
- 7. Lift of services
- 8. Stairs to the first floor (1)
- 9. Stairs to the first floor (2)
- 10. Outdoor seating / waiting area
- 11. Diamond shaped structural steel columns
- 12. Plantations making the space more luxurious

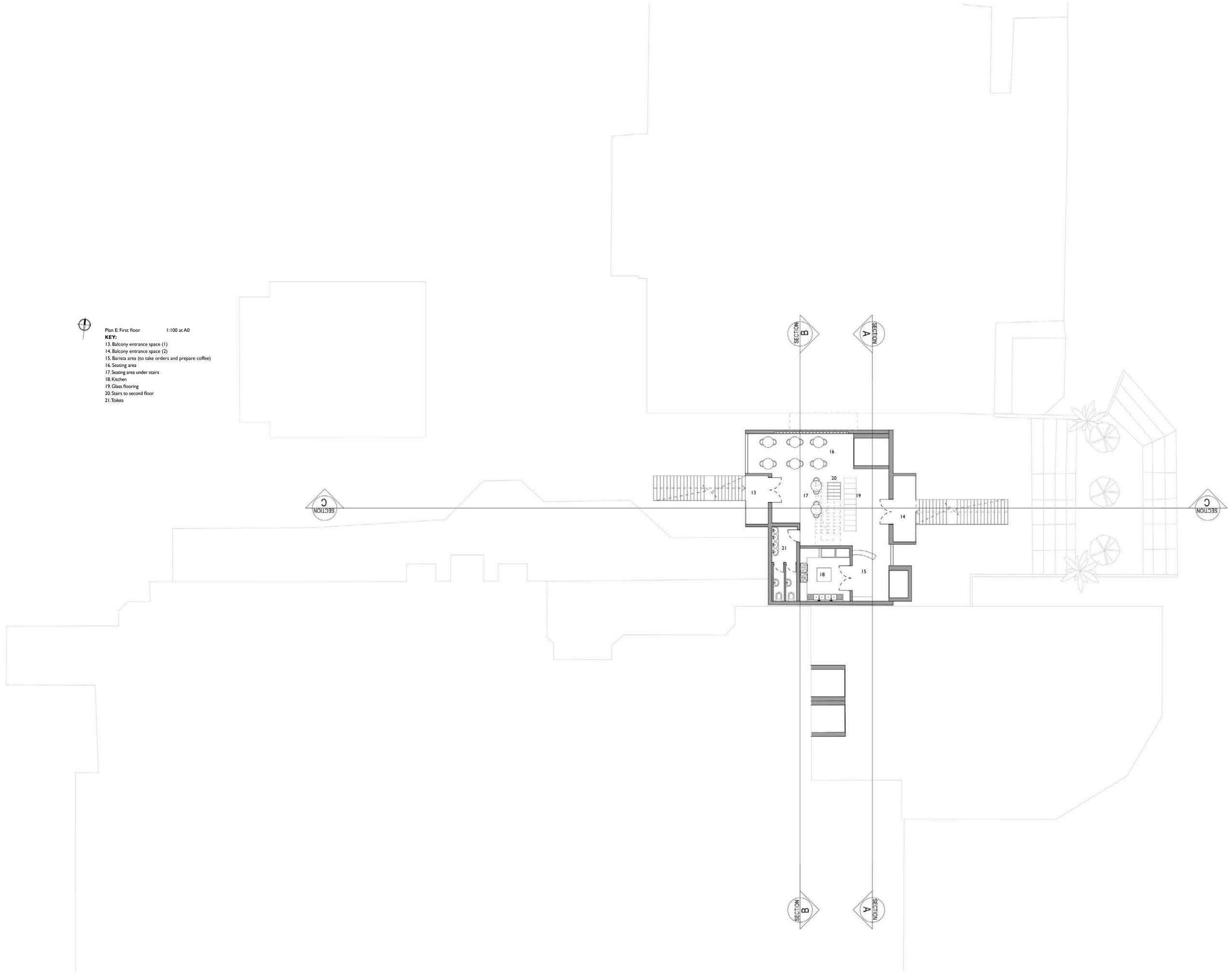




Plan E: First floor 1:100 at A0

KEY:

- 13. Balcony entrance space (1)
- 14. Balcony entrance space (2)
- 15. Barista area (to take orders and prepare coffee)
- 16. Seating area
- 17. Seating area under stairs
- 18. Kitchen
- 19. Glass flooring
- 20. Stairs to second floor
- 21. Toilets

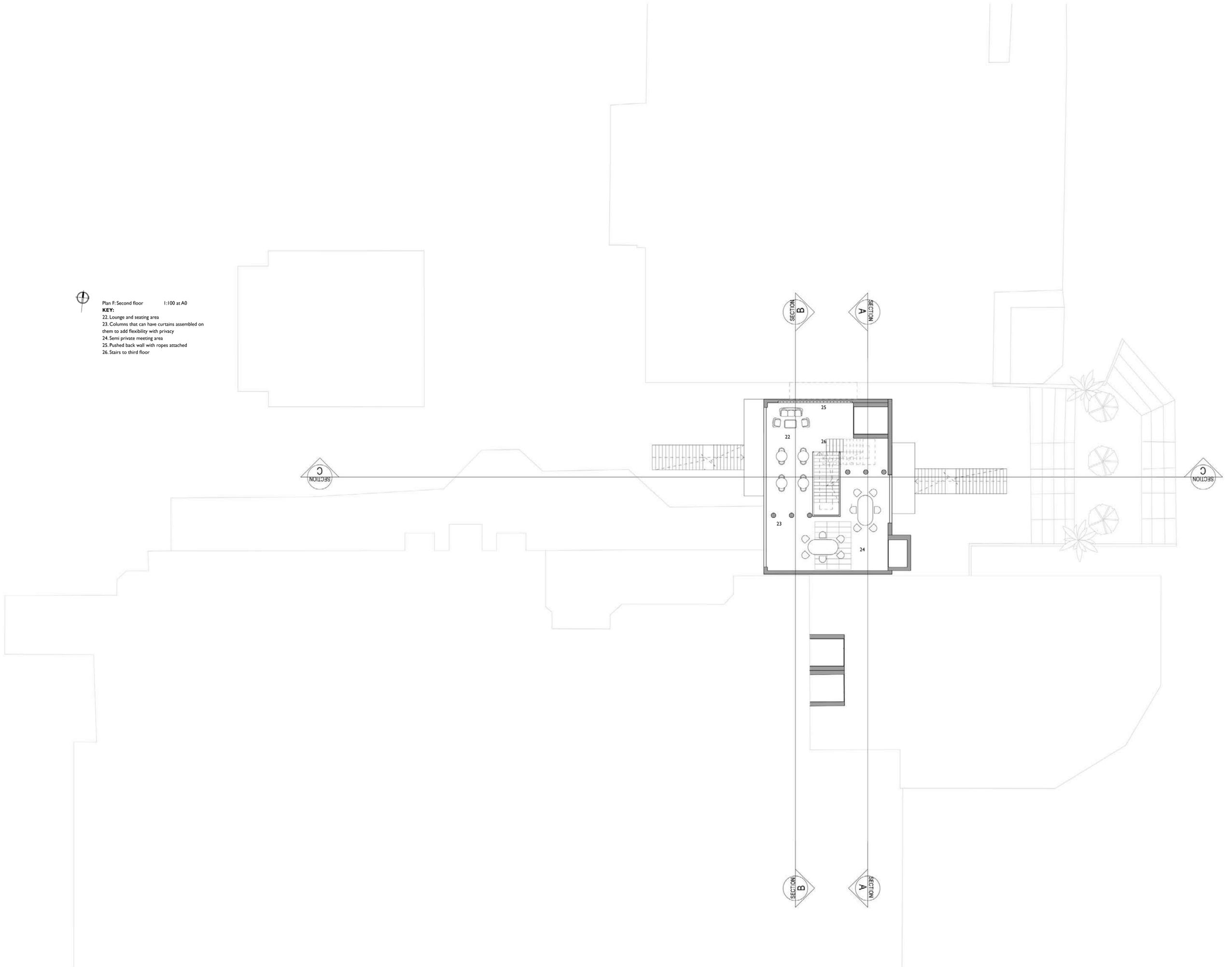




Plan F, Second floor 1:100 at A0

KEY:

- 22. Lounge and seating area
- 23. Columns that can have curtains assembled on them to add flexibility with privacy
- 24. Semi private meeting area
- 25. Pushed back wall with ropes attached
- 26. Stairs to third floor





Plan G: Third floor 1:100 at A0
KEY:
27. Main venue space, primarily for weddings
28. Stage
29. Space for serving food and drinks
30. Transition space
31. Small storage space
32. Stairs to top floor
33. Toilets

SECTION B

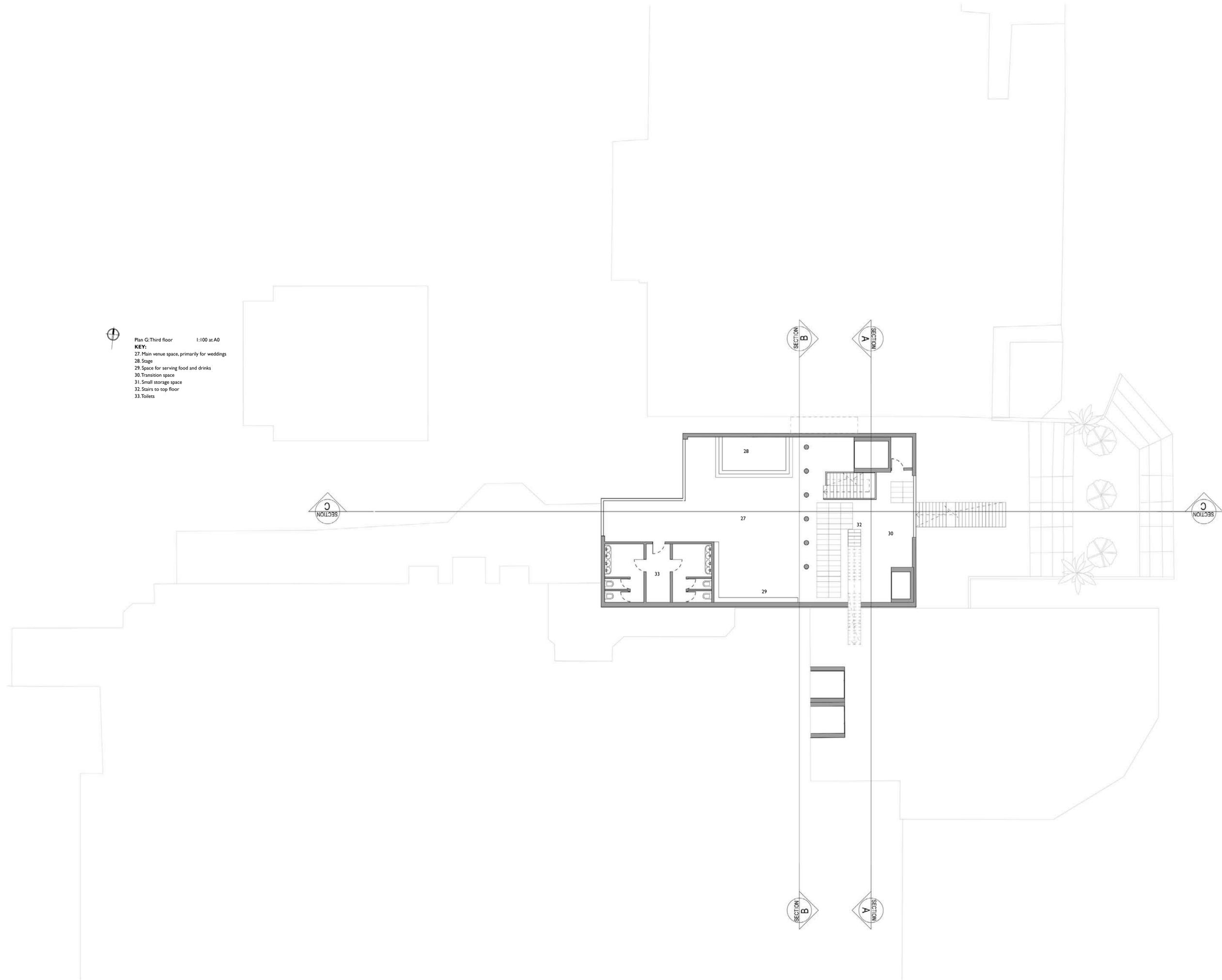
SECTION A

SECTION C

SECTION C

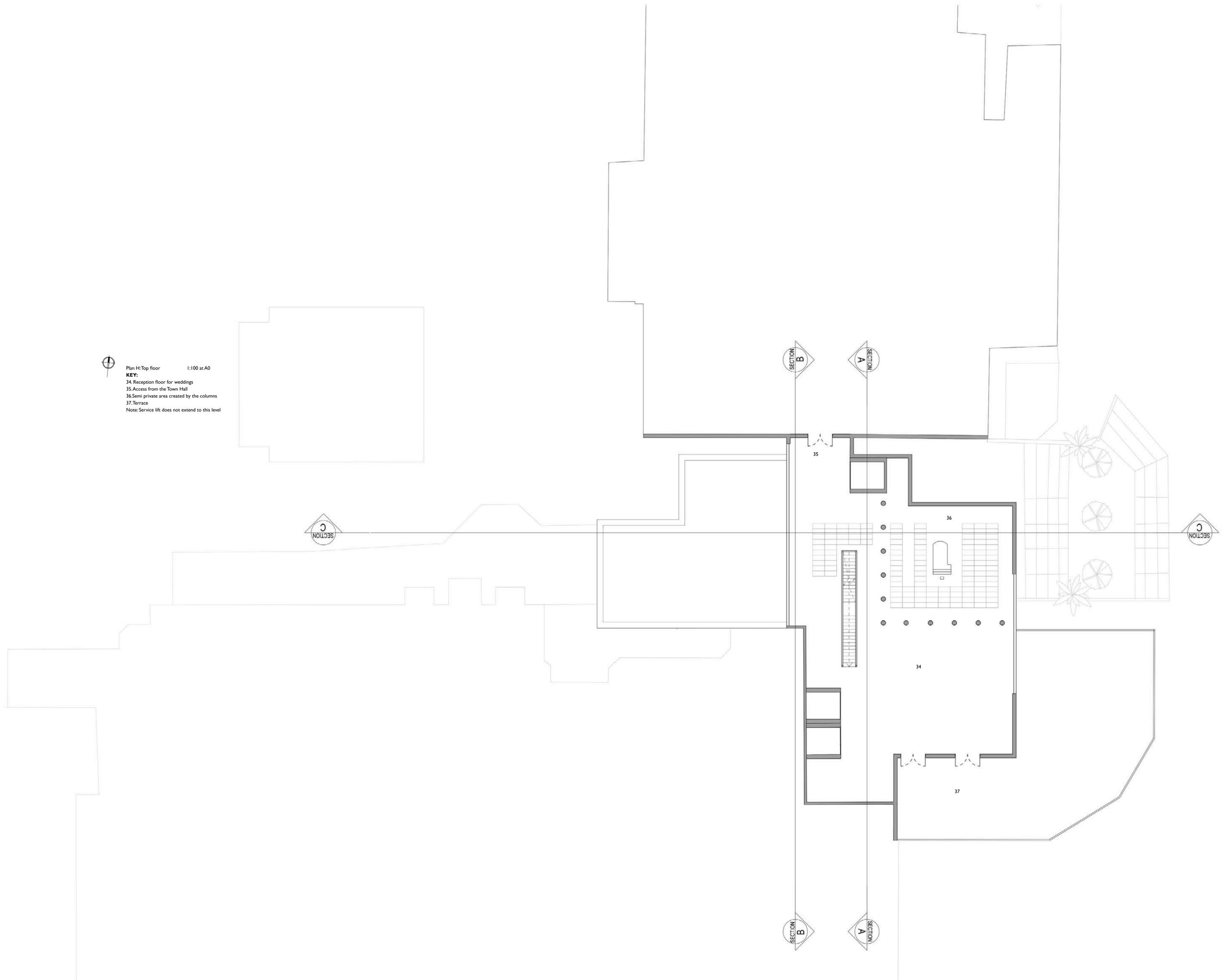
SECTION B

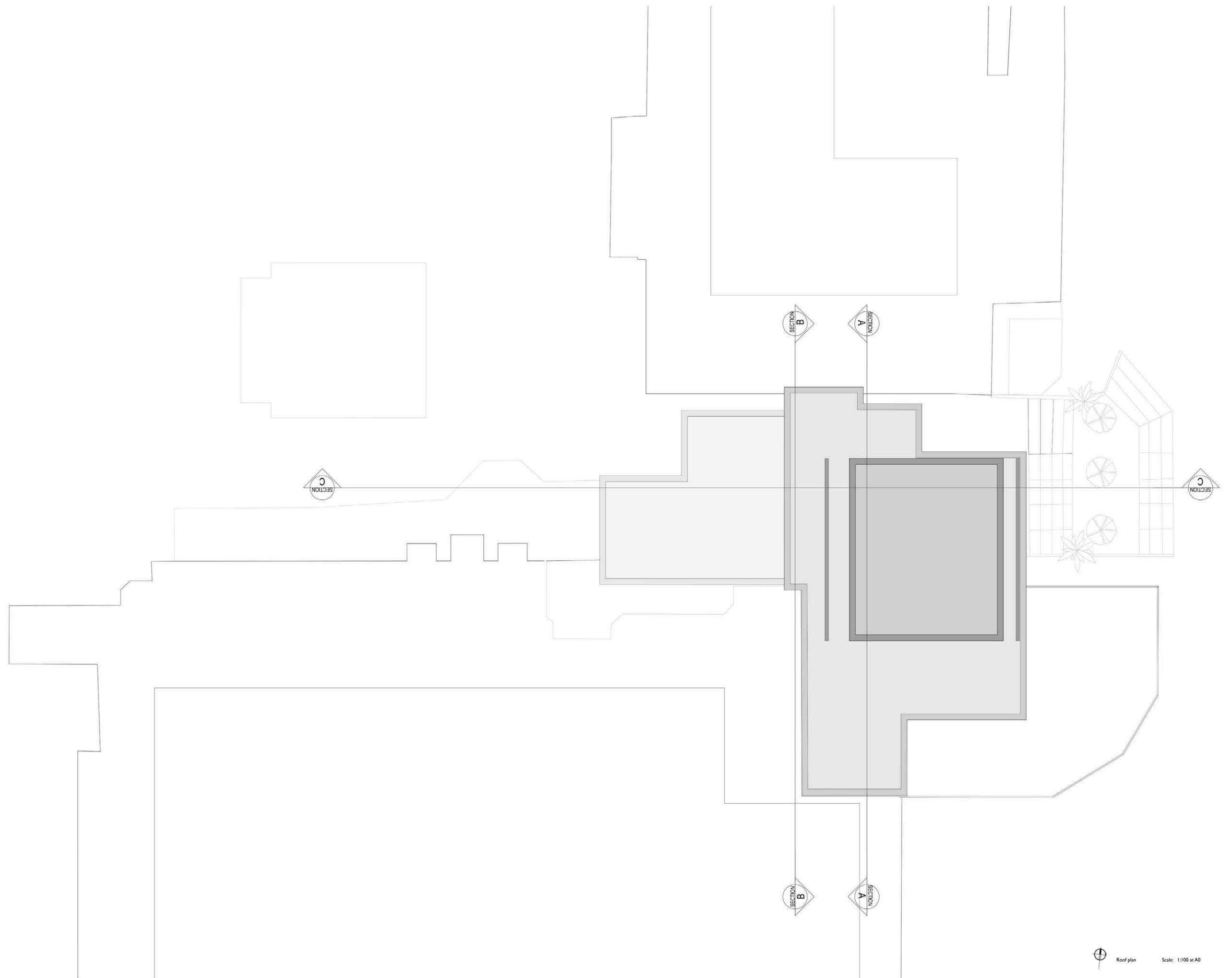
SECTION A

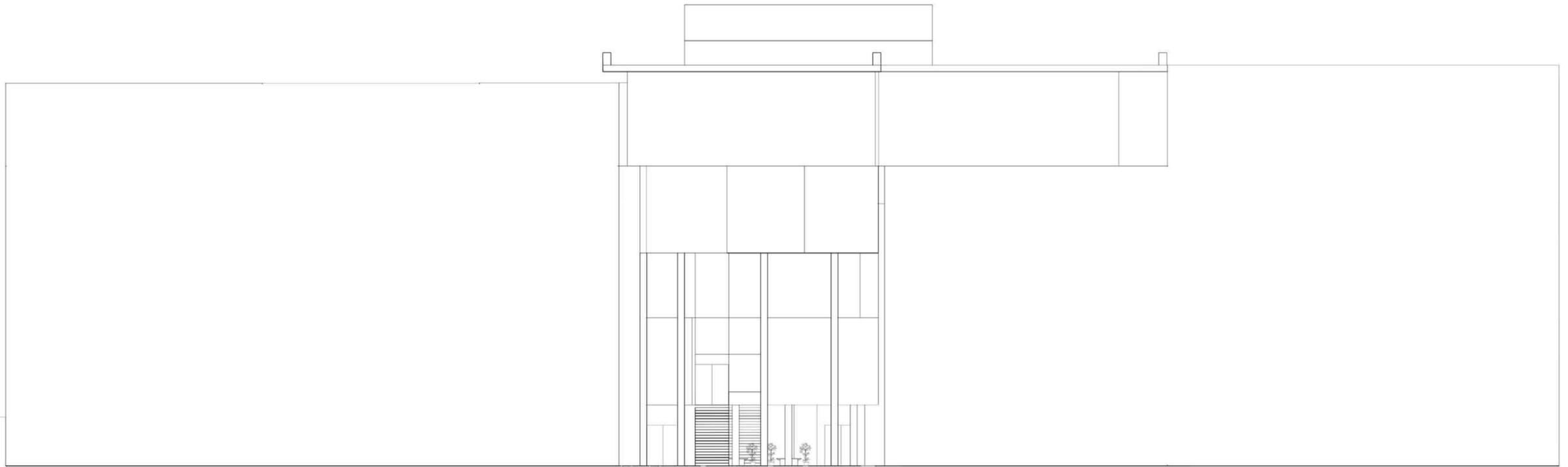




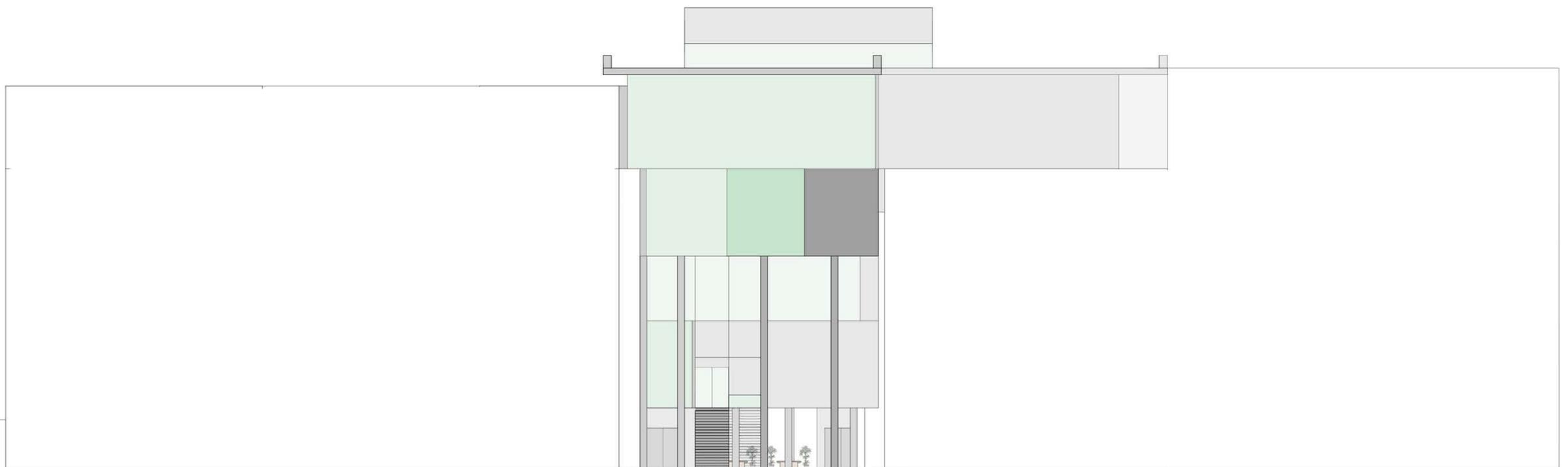
Plan H: Top floor 1:100 at A0
KEY:
34. Reception floor for weddings
35. Access from the Town Hall
36. Semi private area created by the columns
37. Terrace
Note: Service lift does not extend to this level



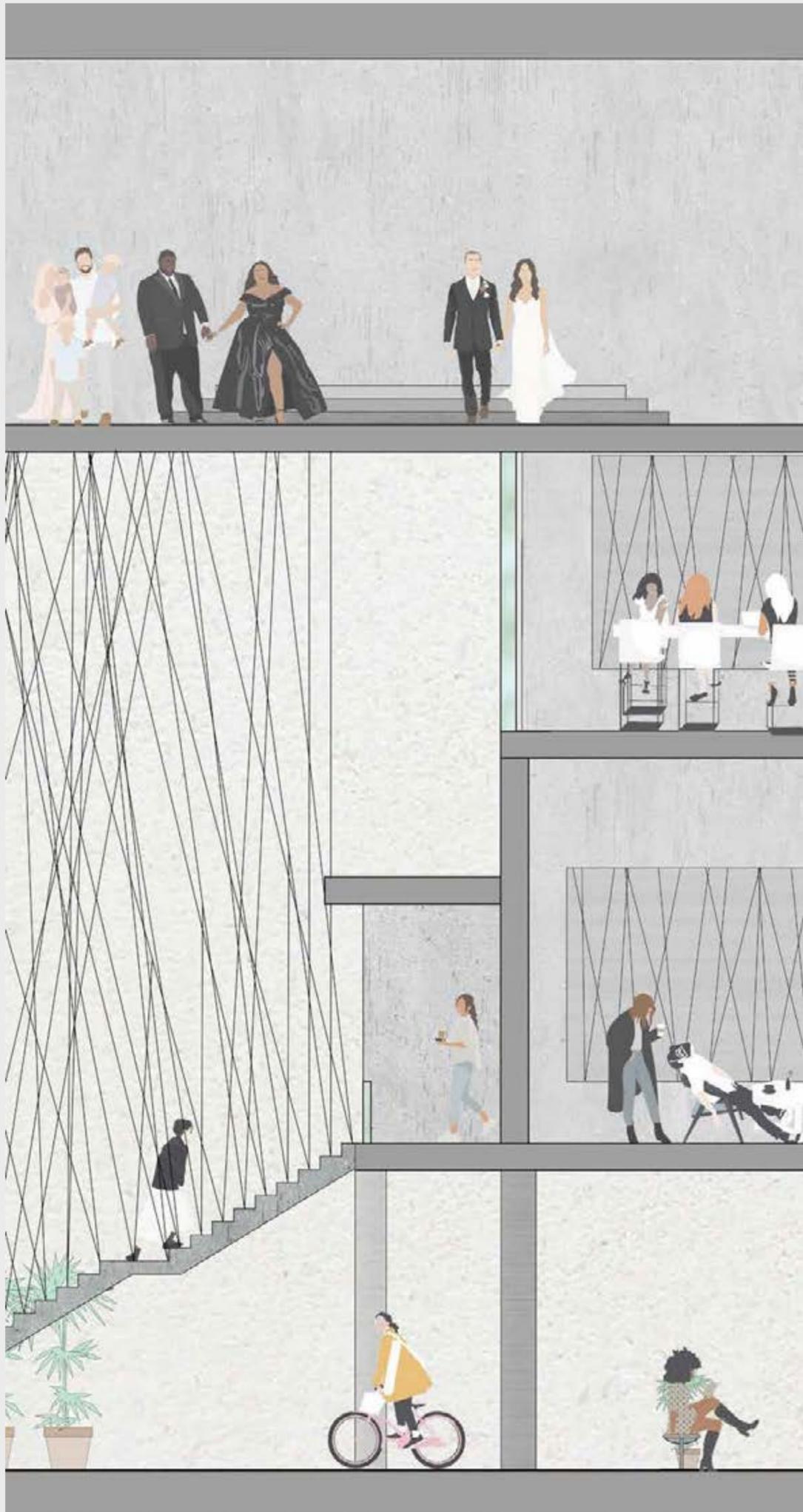




East facing elevation Scale: 1:100 at A0



Showing the facade and colour scheme of the proposal in East facing elevation



1:50 (AT A2) NORTH SECTION ATMOSPHERIC COLLAGE