

Work Experience

Burwell Architects | Blue Collard

23/05/22 - 27/05/22



Burwell Architects
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Introduction

The Location



Design Brief

| Clients Brief

The client has asked for a small coffee shop to be placed in the courtyard outside of his offices. As well as a coffee shop the client has asked if the design could include a bike rack for the customers to use .

| Further Information

As the courtyard is situated between three tall buildings, containing six or more floors, the client has suggested that the coffee shop is situated below ground, or is not very tall, as he believes that a taller building will obstruct the view of the residents and workers around the area.

In addition, the client commented on the lack of seating in the area and therefore I could incorporate public seating that can be used for the locals.

| Initial Thoughts

We could design a single story building that uses alot of glass to try and keep the view as best we can. In addition we could use the uneven terrain to situate the building below ground, and use the terrain as an entrance for the customers.

As well as seating, due to the demographic of this location including young children, I could try and integrate fun playground like features that will allow children to enjoy the local area, as I will be removing the green space which they initially may have played on

The Site

| Location

The site is in Deptford and is a small piece of land in between three large buildings, and provides a green space for residents to enjoy. The site is near these landmarks:

- Deptford Bridge DLR station
- Travelodge
- Co-op and Tesco Express

| Further Information

The area is a junction that connects Deptford, Blackheath and Greenwich. Currently there are very few coffee shops for the local residents to enjoy, with the nearest, at the moment, being a five to ten minute walk away.

The area also lacks seating, bins, and fun activities for younger people (aged 12 and below). The location, however, does contain a park with a basketball court near by, meaning that the loss of greenery in this particular location will not be damaging for the residents.





Initial Ideas

| The Building Design

I want the building to use complex shapes and unique designs while trying to keep the theme of the area to show development and improve the area. To do this I could use these shapes:

- Cylinders
- Triangles / Prisms
- Polygons

| Materials

I would like to keep this project sustainable and therefore use environmentally friendly materials. My initial thoughts are: timbers, glass, re-claimed metals.

I want to try and use a heavy amount of glass, as this will allow for lots of natural light, resulting in less energy being used overall. I was also thinking of trying to use grass in my building (probably on the roof) so that the construction can almost blend in with the surrounding area.

| Colours

Currently the colour scheme for the building is quite dull. The surrounding constructions have used red, yellow, purple and white in their designs.

I was thinking of using the natural golden colour of the timber to keep a raw colour scheme for the building.

| Elevation

I am thinking of constructing most of this building below ground, rather than constructing a two story building. The reasons for this are:

- I won't obstruct anyone's view.

- There is a lot more space below ground.
- I will maintain the greenery.
- The surrounding buildings have basements making the construction process a lot easier.
- I will take up less space

| Targeted Audience

To begin with, I was targeting this building towards the middle aged people, that live in the area. However with the rise in younger people, and students, I may try to incorporate a youth side to the design, or a study section that students can use.

Depending on the scale of the youth children, I may look to target certain elements at them, potentially a swing set or slide that can be placed near my building, resulting in them convincing their parents to take them, and ultimately buying a coffee.

| Rotation

Due to the shape of the courtyard, my building could be orientated in a number of different ways. There is a path that runs through the area which I may be able to connect my building to, resulting in easy access from all the buildings around and the main road,

In addition, I will want to face my building in the direction where there is most light, as I am trying to use the sunlight rather than artificial lighting to light up the interior.

| Ideas to consider

The area currently contains sculptures, one at the front and one near the South building, which means that a decision will need to be made about whether these or stay.

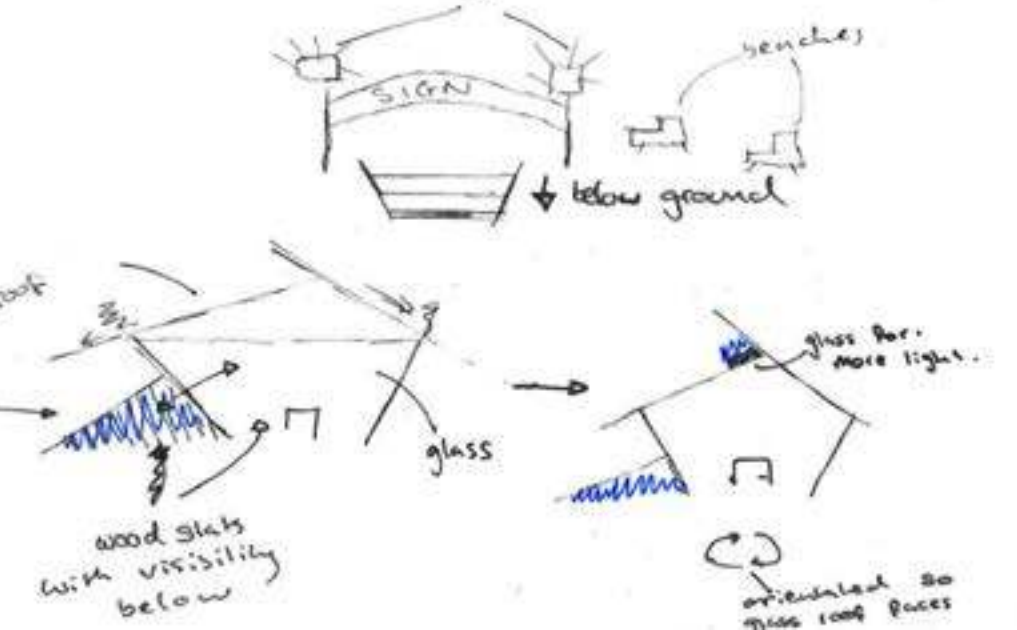
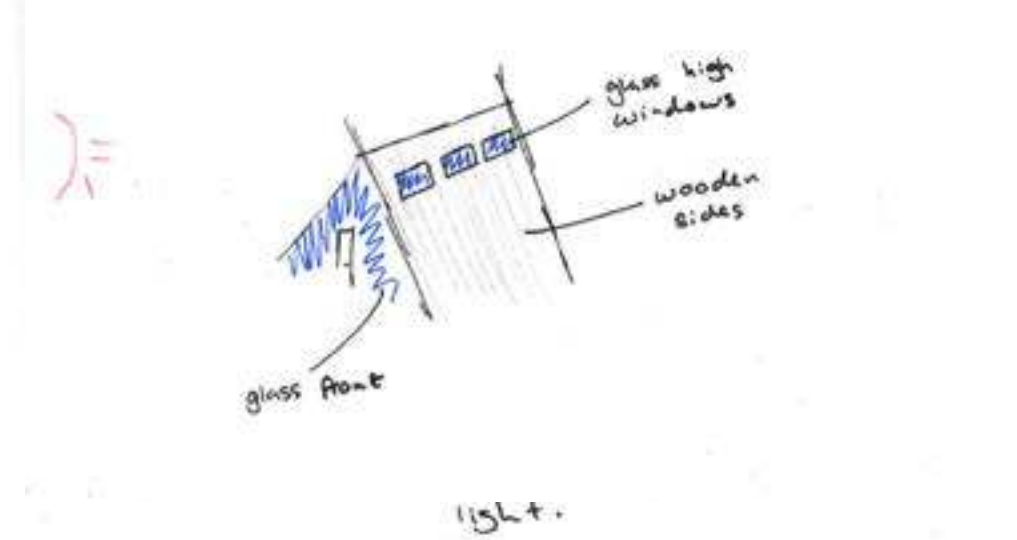
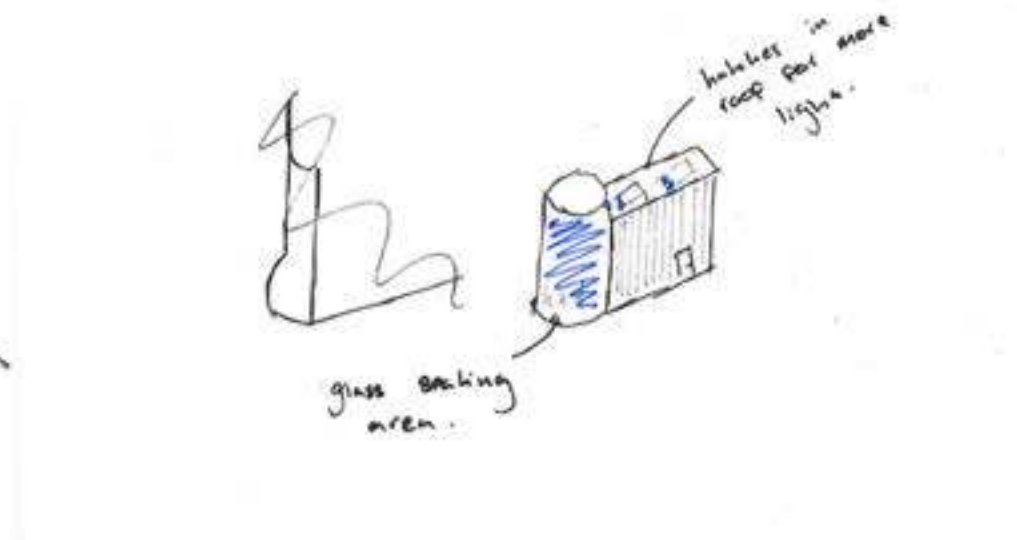
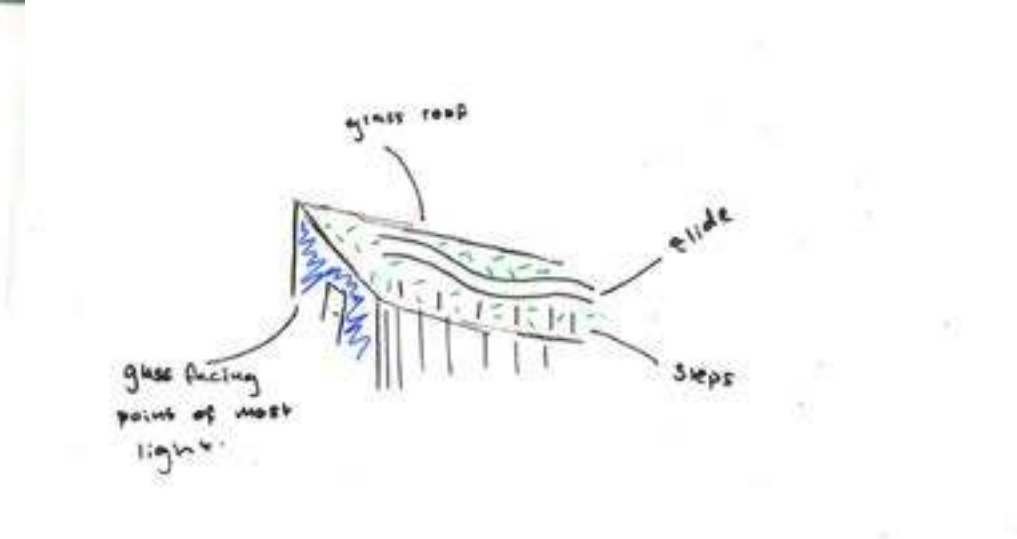
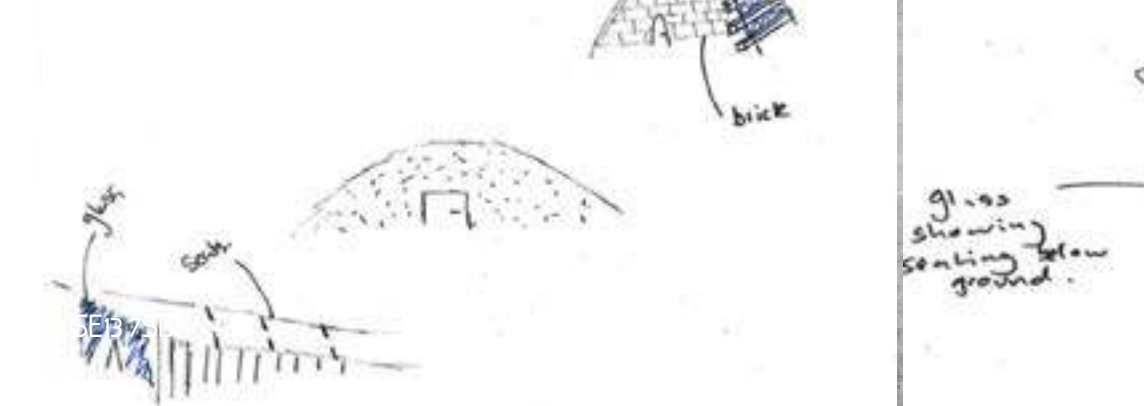
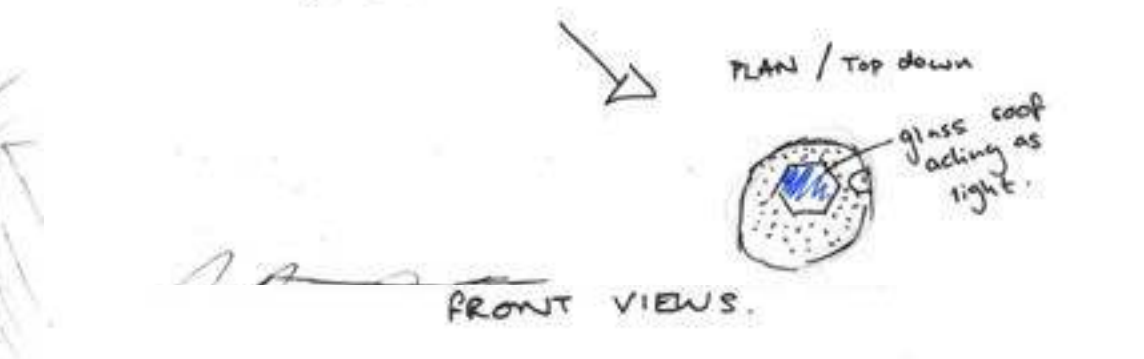
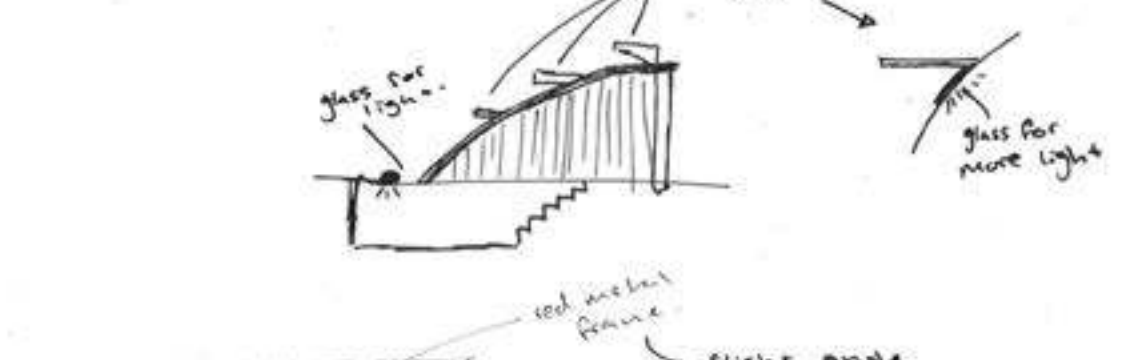
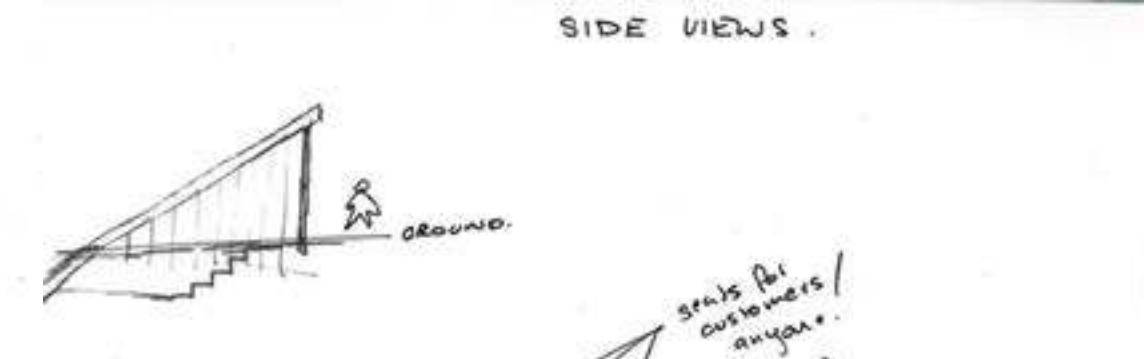
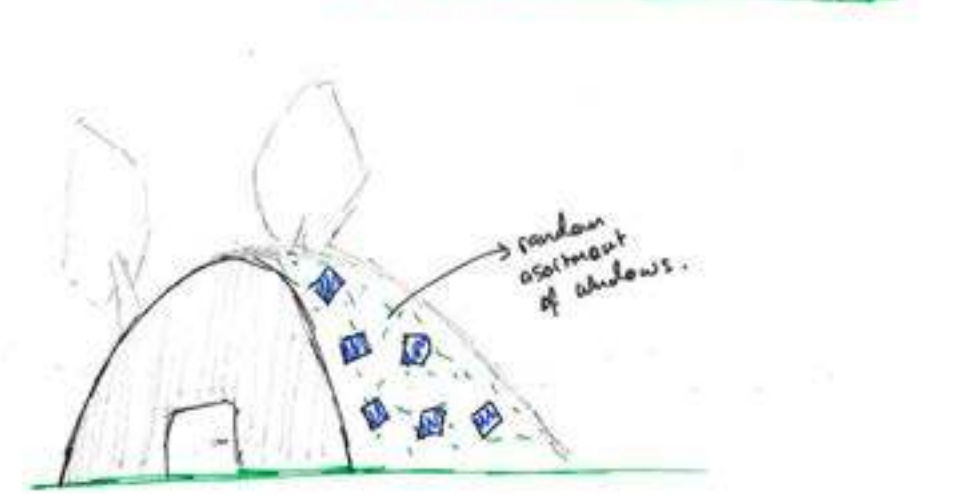
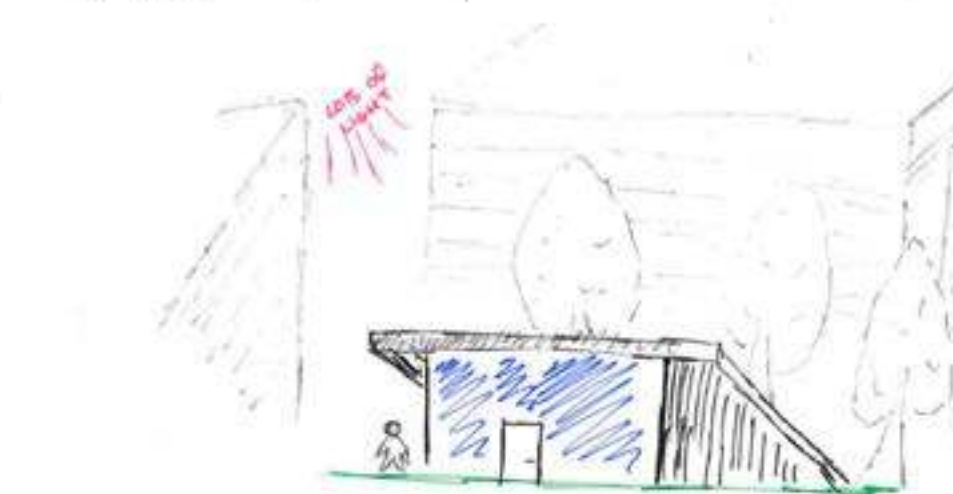
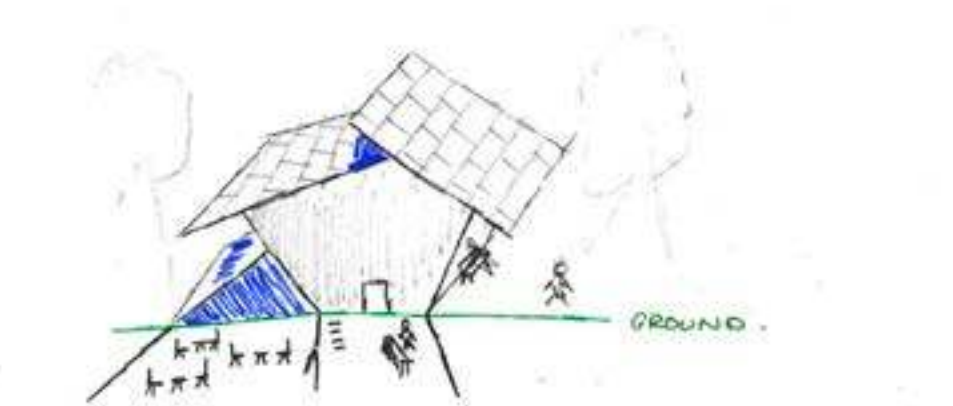
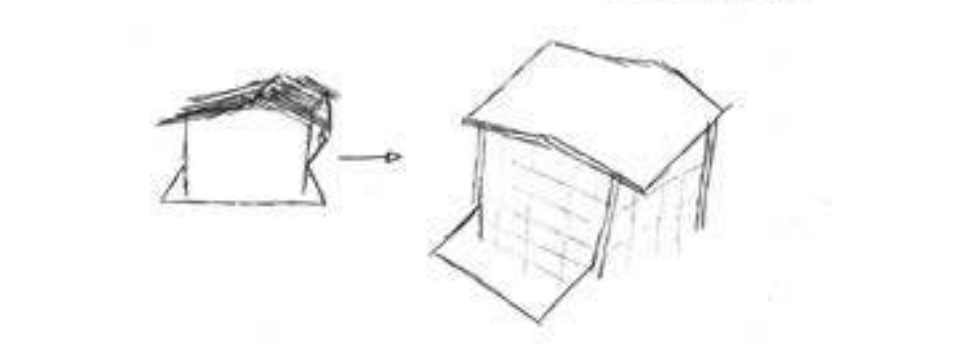
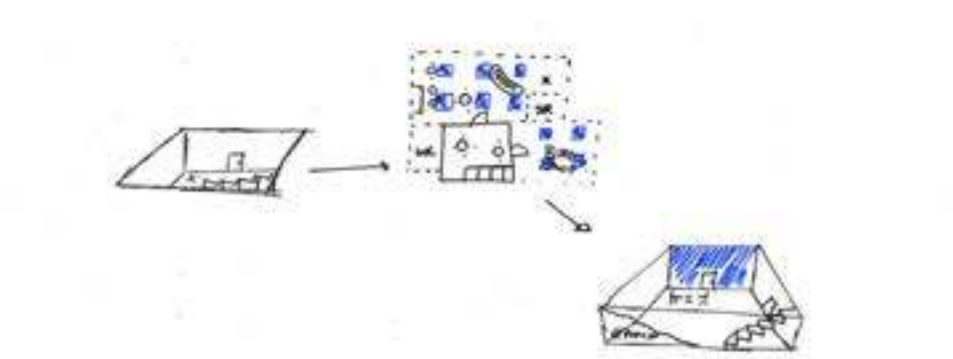
At the moment there are currently wooden beams within the

Initial Thoughts

ground which are being used for seating, however, they are uncomfortable, meaning that if I tackle the issue of seating, I will need to improve on the current methods that are in place.

There are also a line of trees which follow the path, and they will need to be taken into consideration when deciding on the orientation of the building, as they will obstruct some of the light coming through.





Reflection on Initial Ideas

| Concepts I like

From my initial ideas, I have realised that I like the idea of constructing this project below ground. In addition, I am a fan of the unusual and unique shapes for my project.

After experimenting with the uses of windows to allow as much light in as possible, I believe that this is a great idea to try and work with my final idea.

| Concepts I dislike

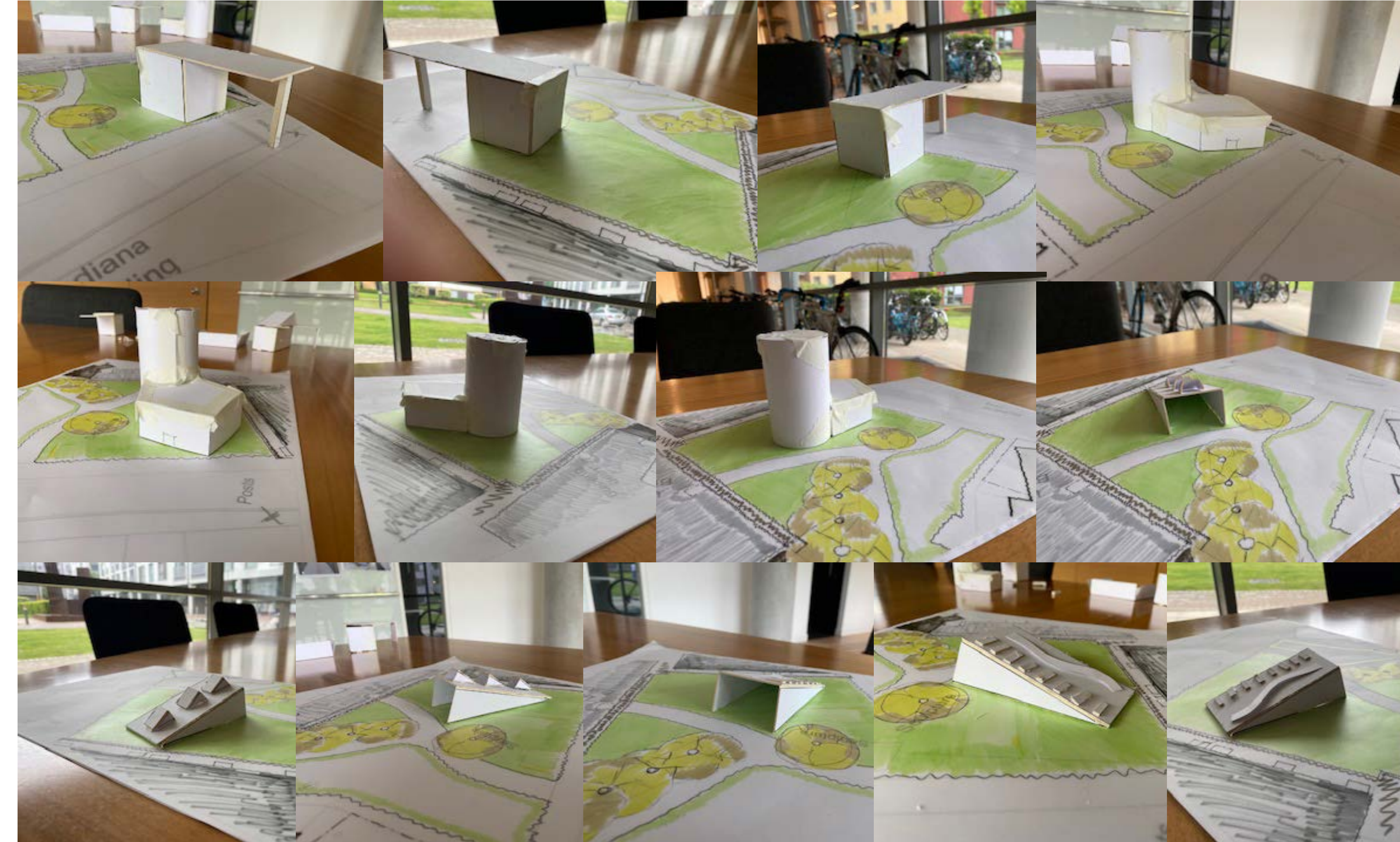
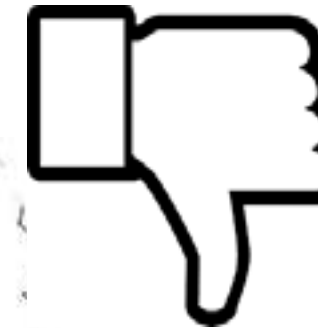
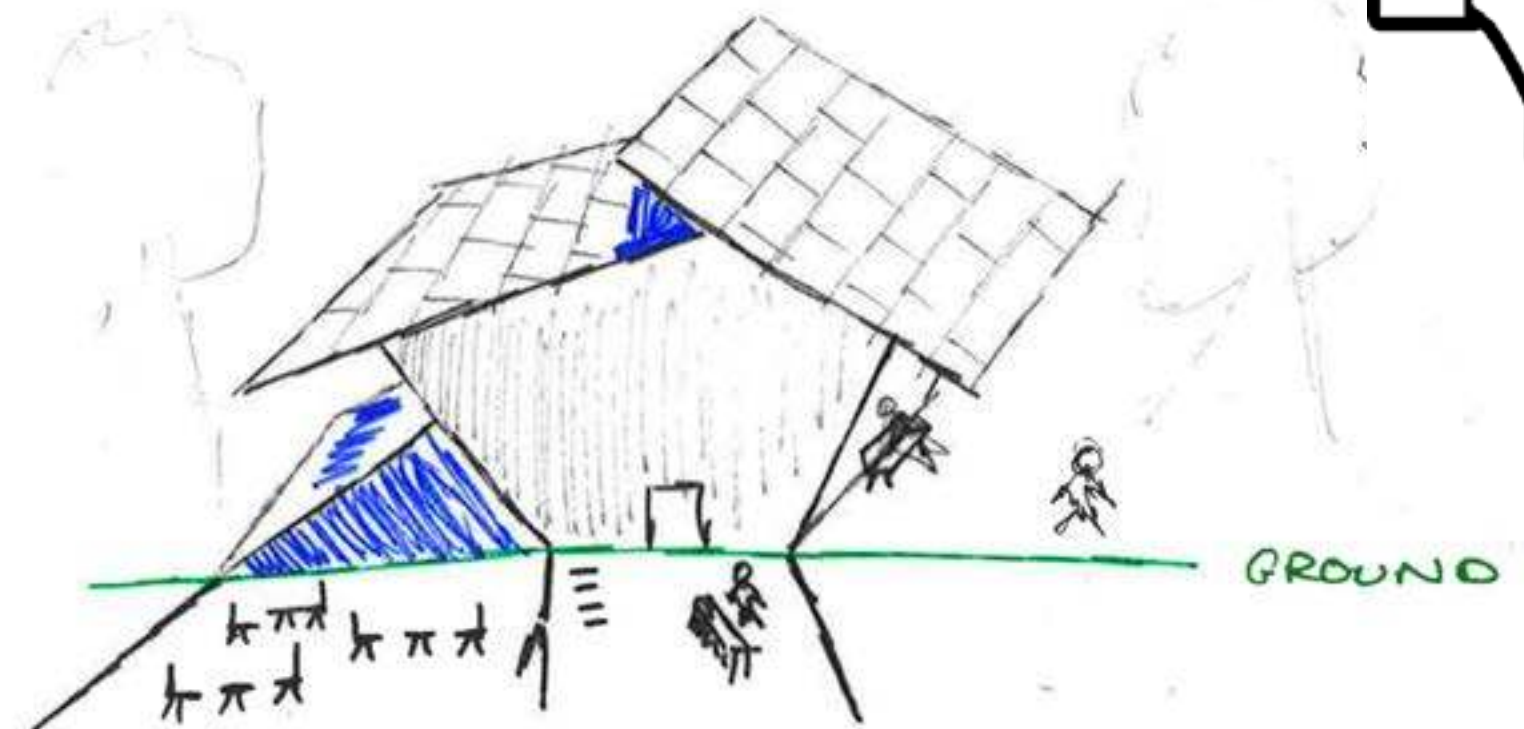
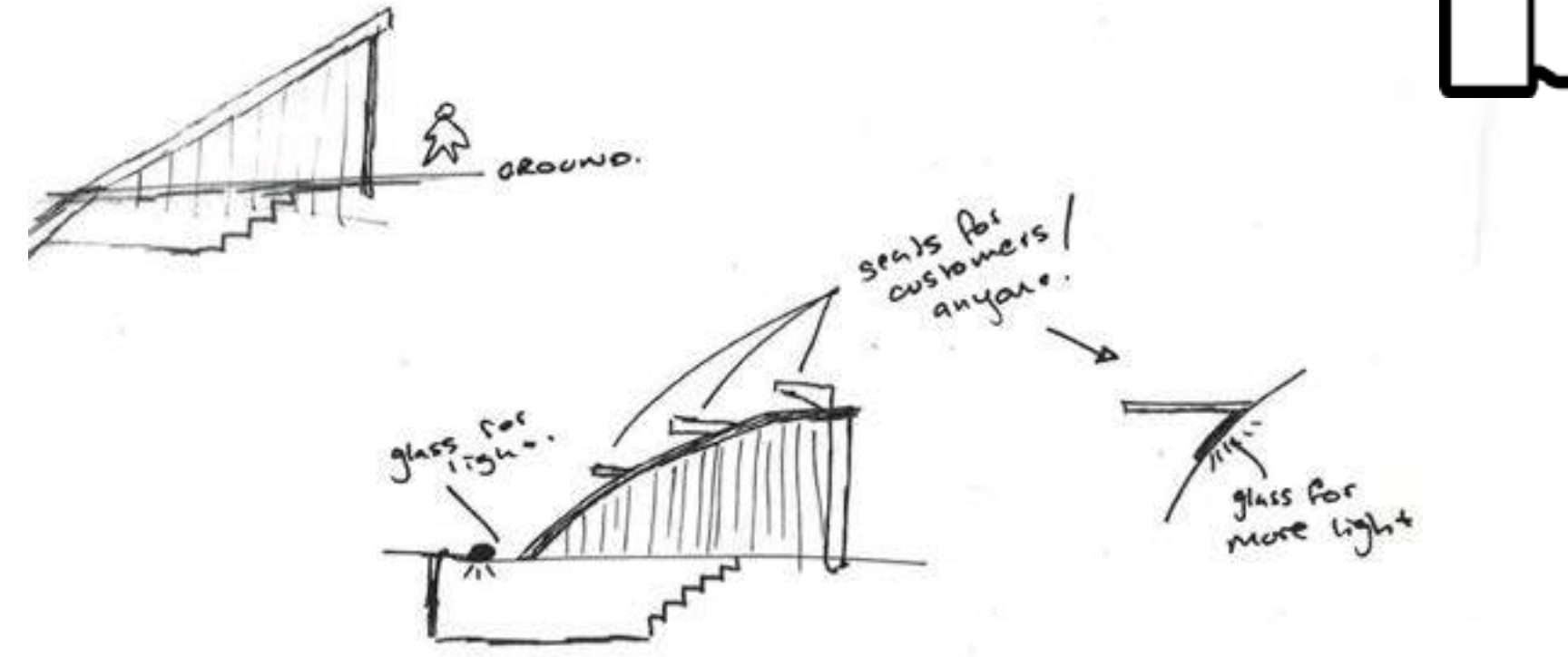
I believe that constructing a large building above ground will not work with the surroundings, and will obstruct the views of the residents. In addition, a larger building will take up a lot of space and ruin the greenery which is currently there.

I also dislike the random windows that are placed on the ground. Despite this, I do want to experiment further to see if I can make this idea work with my final idea, as the function of these windows is still valuable.

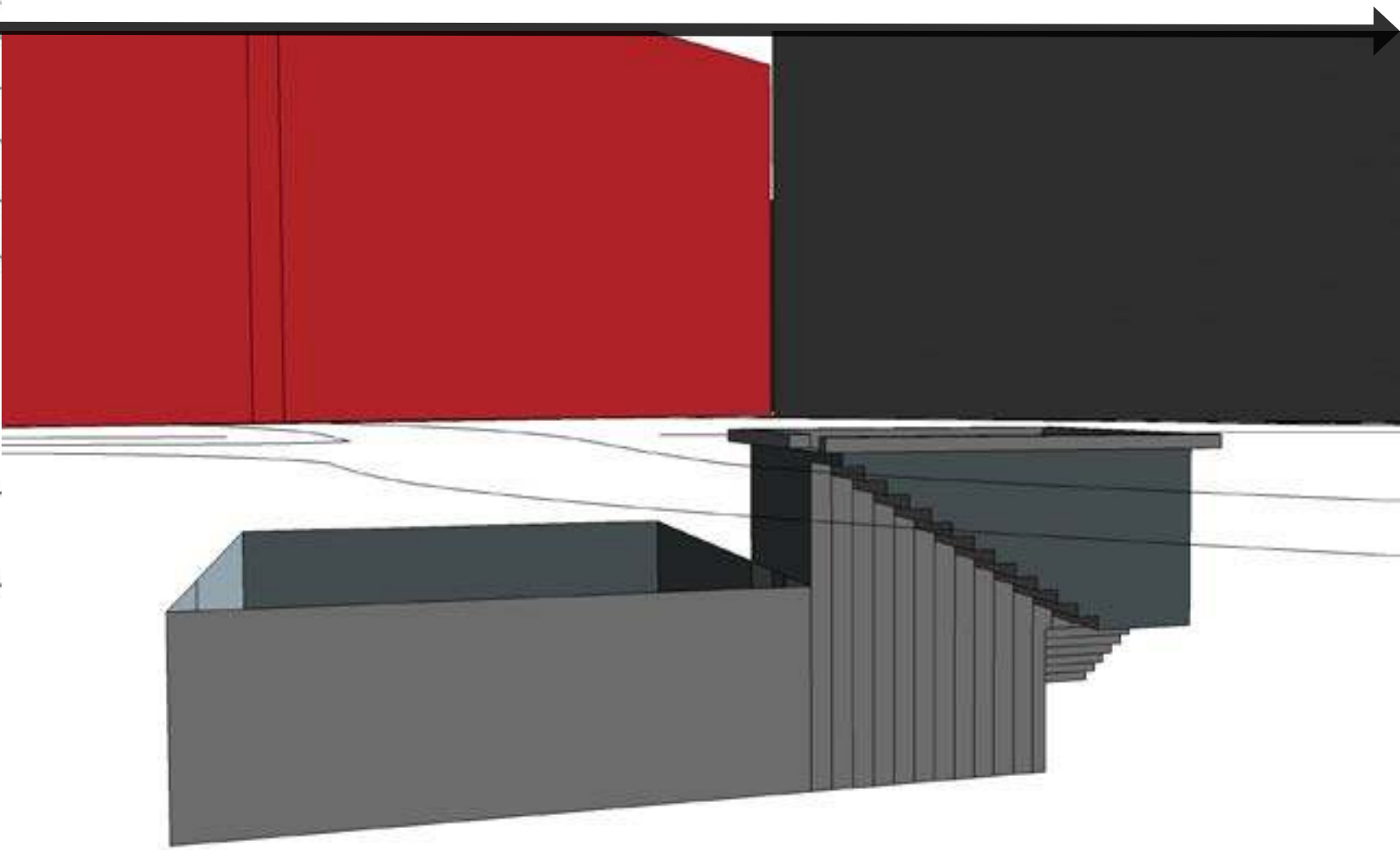
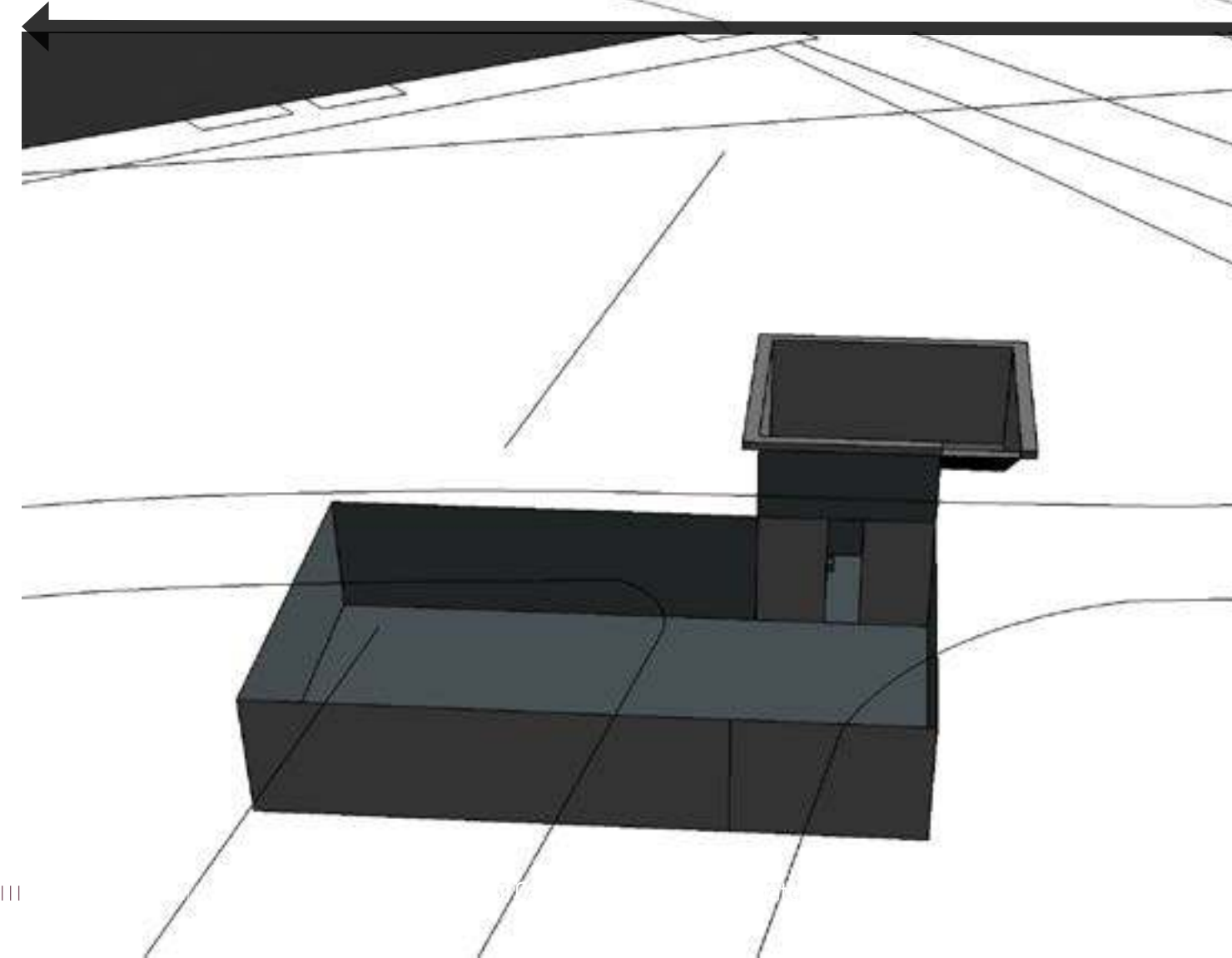
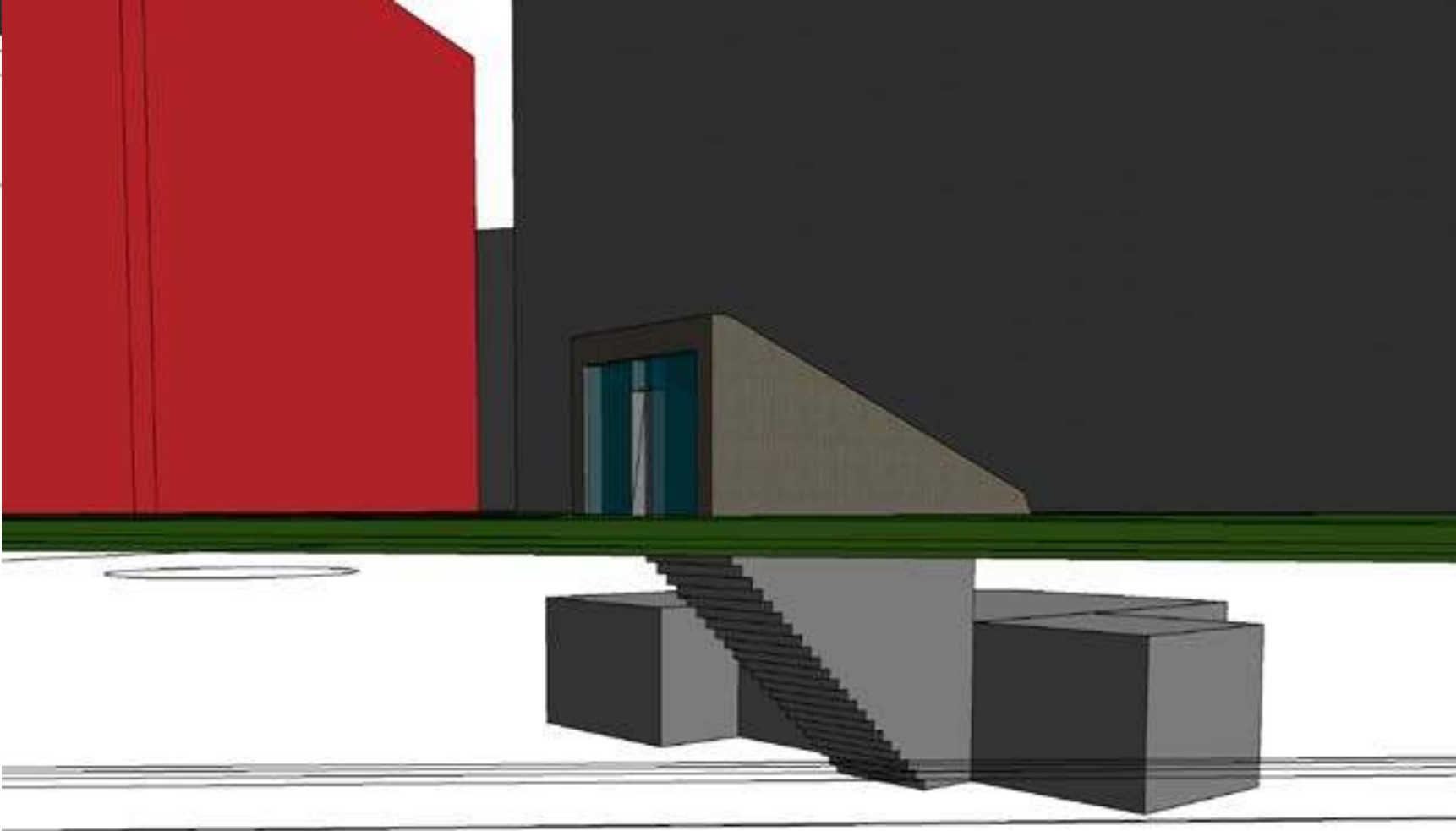
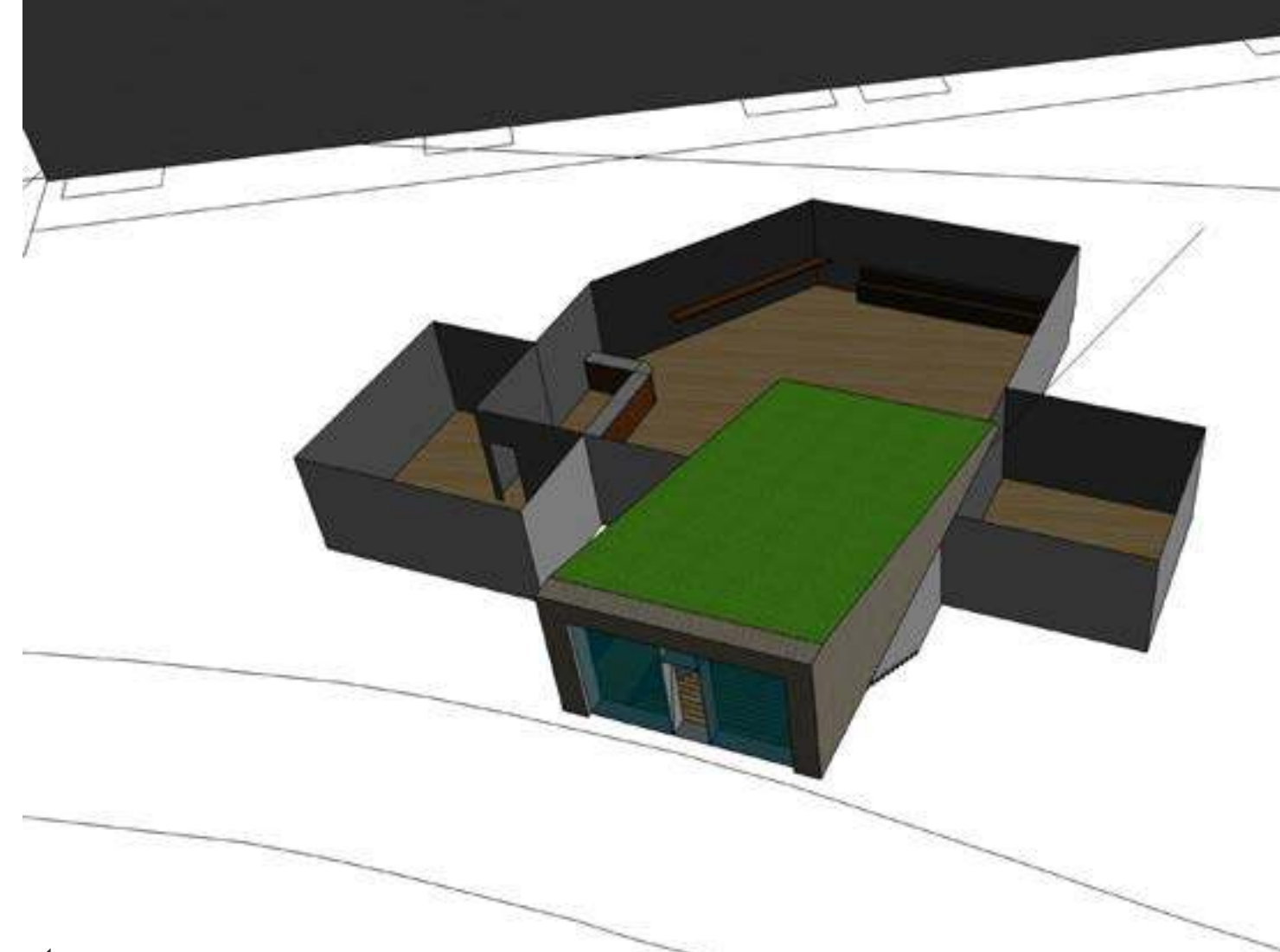
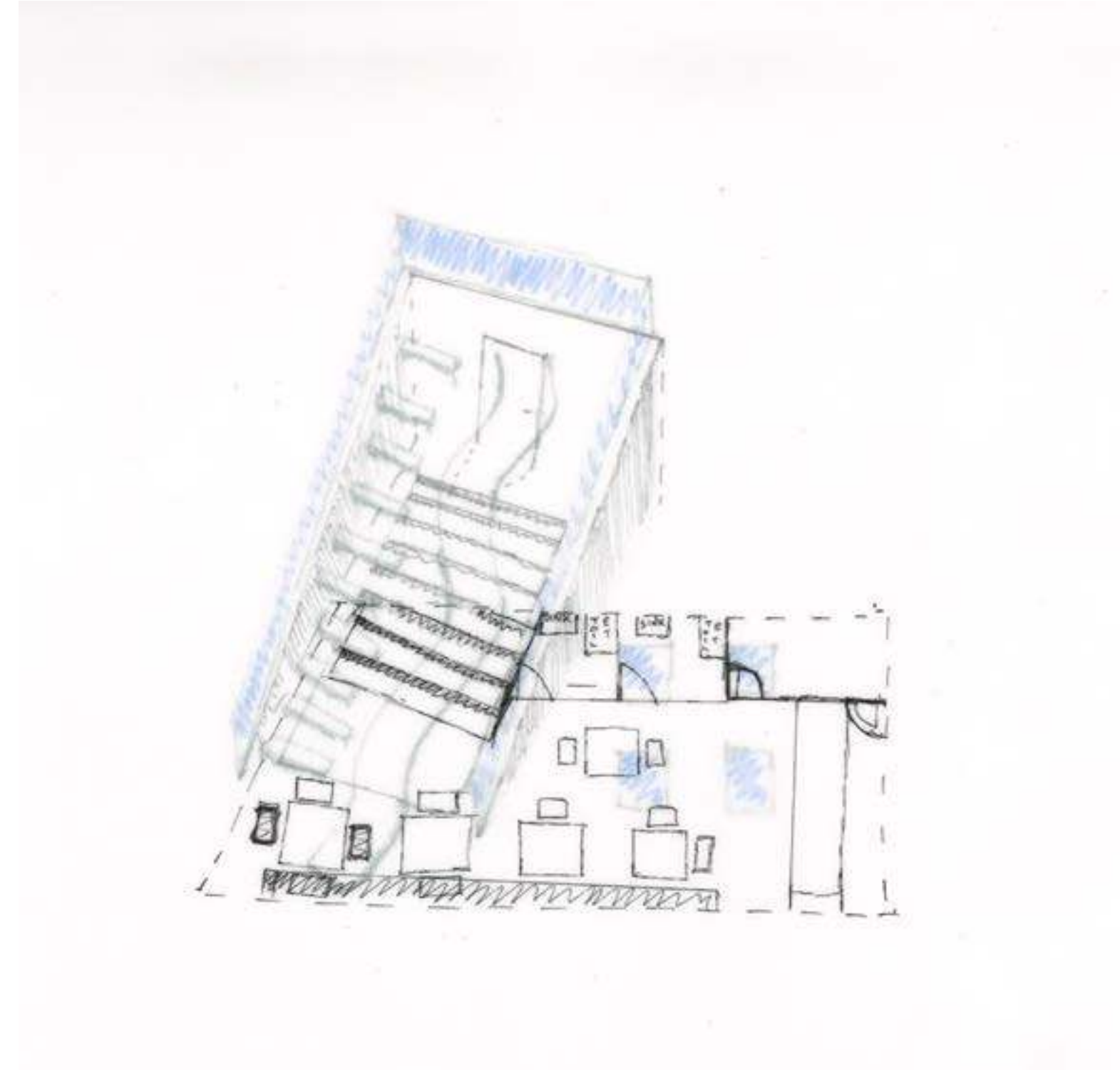
| Conclusion of Ideas for the Final Project

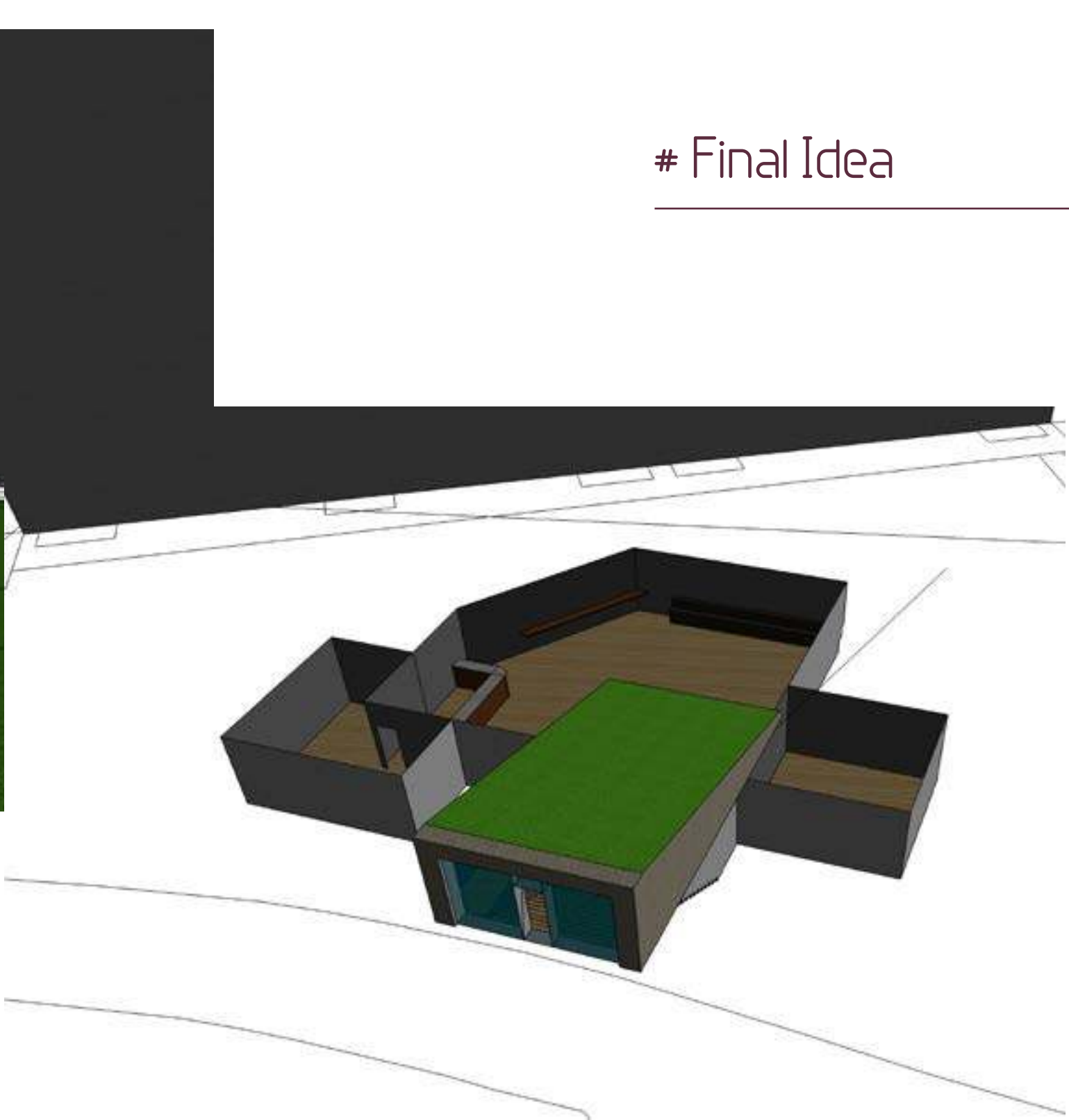
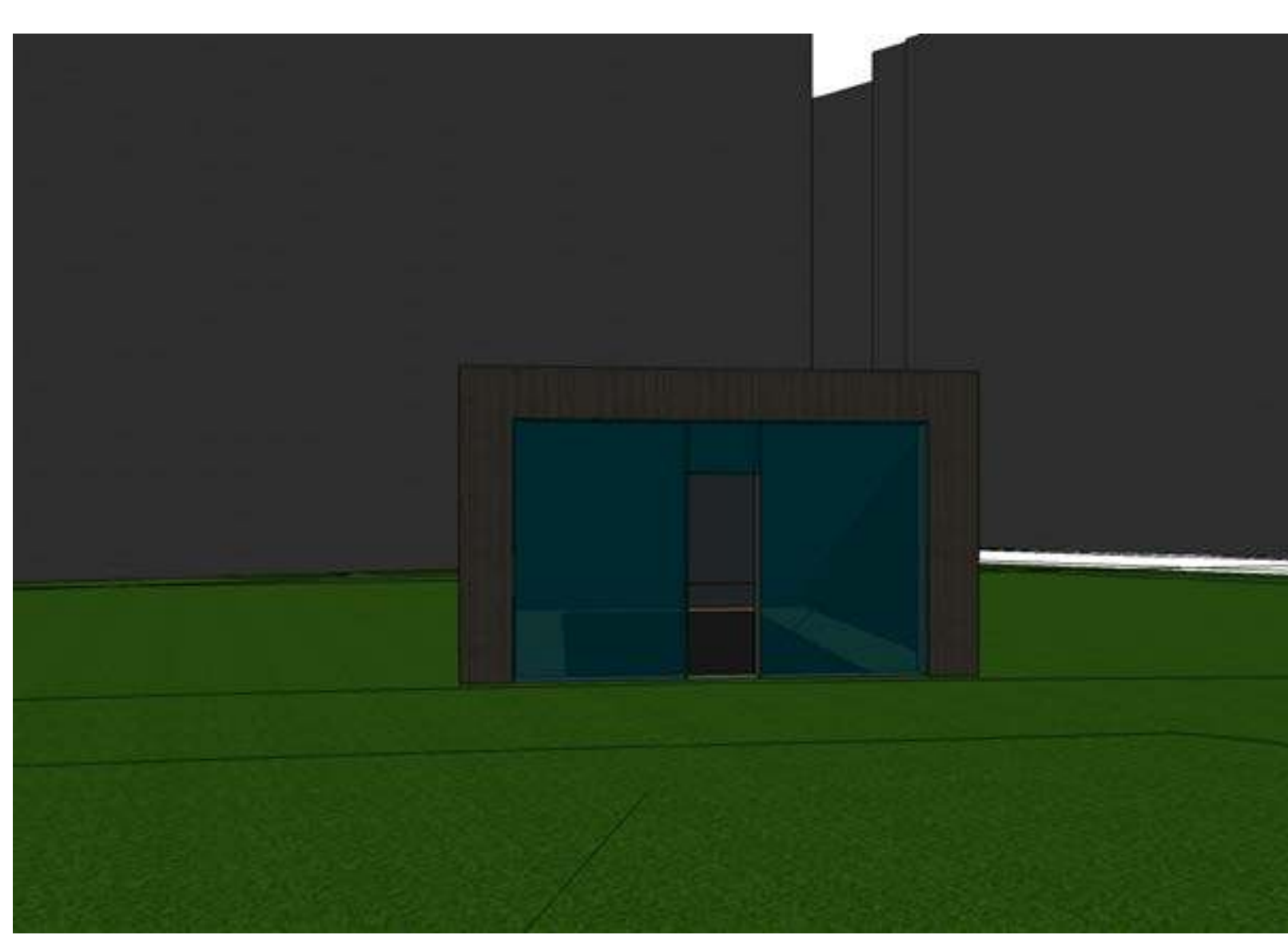
For my final idea, I am going to use the below ground structures, and experiment with different possibilities for how this design will look and function. Furthermore, I will test the lighting, to see if enough natural light will leak into the cafe below ground.

I will also use complex and unique shapes to create a modern look, as well as hopefully obstruct a smaller amount of space, and view.

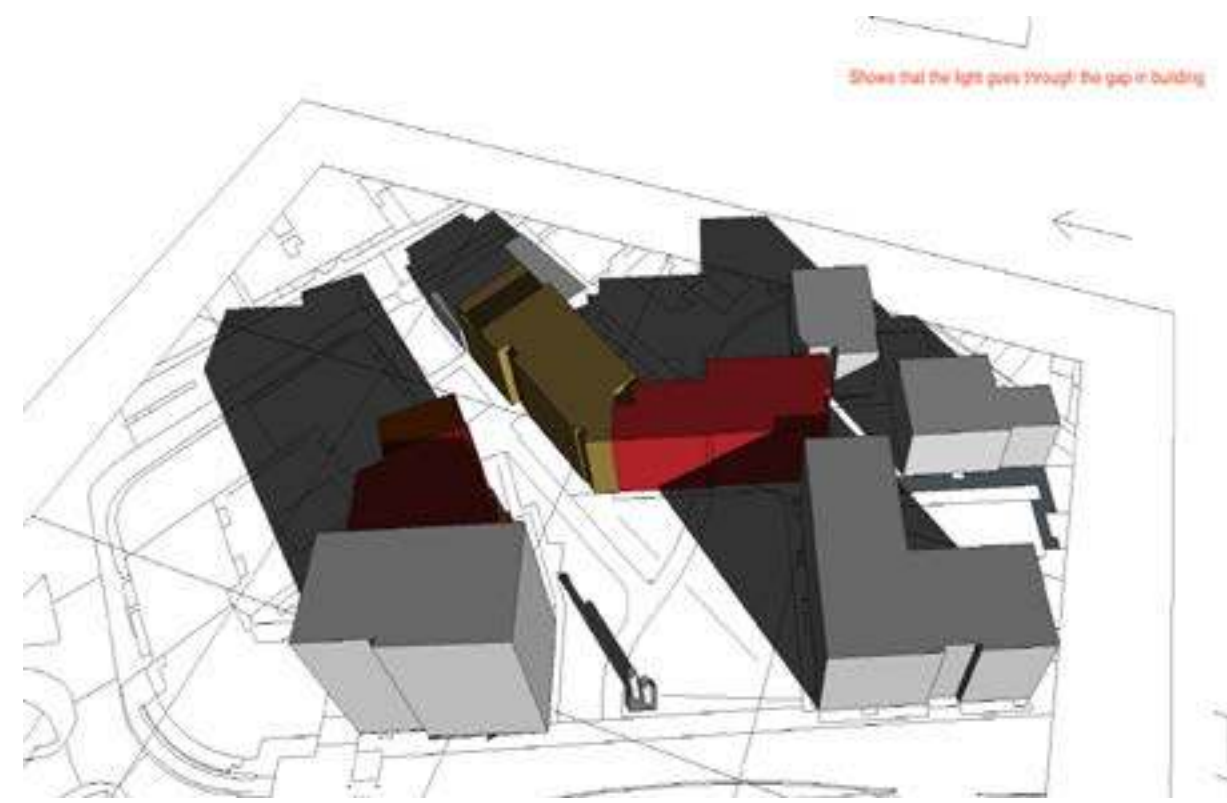


Developed Ideas





Final Idea



Thoughts for Final Idea

| Final Idea Conclusion

I will place my building to the North of the most Southern building, facing towards Burwell Architects. I will connect the front of the building to the path allowing easy access for everyone..

The building will be made out of glass and timber slats that will allow plenty of light into the coffee shop. To allow for the most light I will orientate the slats so that they face towards the gap between the Northern building and Eastern building as this is where there is the highest concentration and longest hours of light.

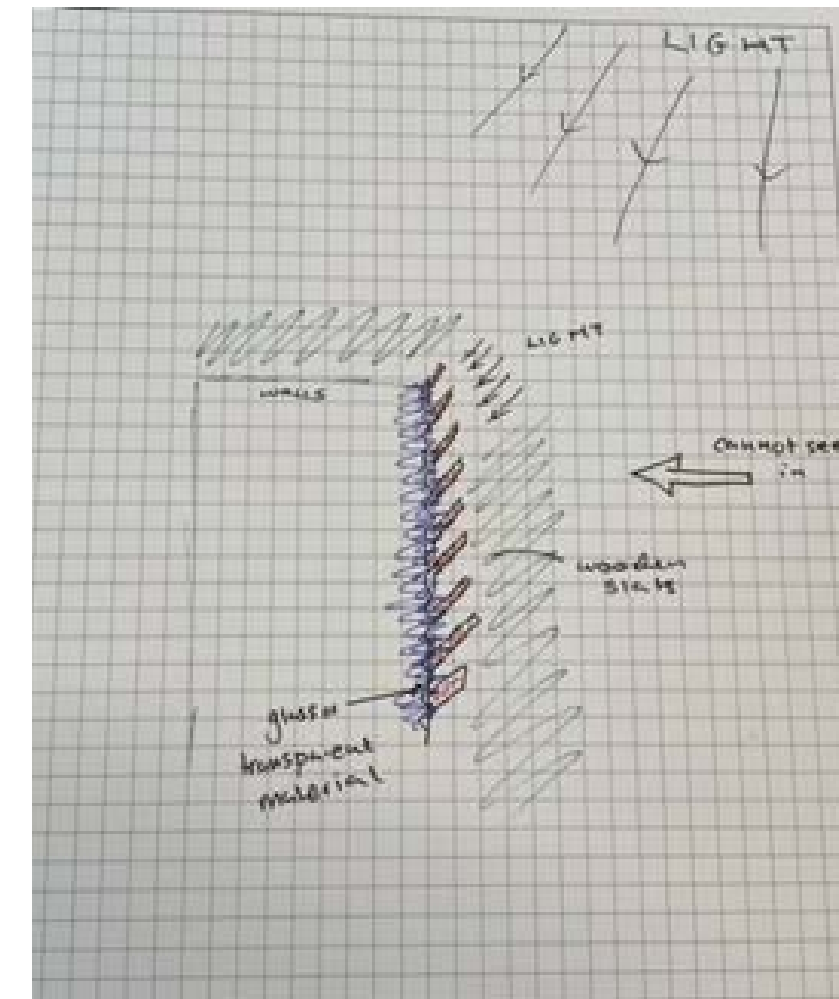
I tested this by using solidworks shadow feature, to see which area was effected by shadows the least.

| Why I chose the Design

I chose my design as it combines features above and below ground. The large window at the front allows plenty of light into the cafe, and if this is not enough, roof slats can be added which direct the light into the main coffee shop which is situated below ground.

I prefer this design, as it shows a clear structure which will help guide people into the shop. The design also allows for either:

- Seating on the slanted roof
- Slidie for children
- Slats to allow more light in



Explanation for Final Idea

| Coffee Shop

When deciding where to put the coffee shop it only made sense for it to be in the large room below. In addition to just the counter and seating area, I have included a staff room and restroom to make sure the staff and customers are happy. Furthermore, I have added a sofa which should allow for a more enjoyable seating while eating or drinking. For students, I hope to add charging ports to the wall, in convenient spaces, to allow them to charge their phone and laptop, to allow them to study for as long as needed. I chose to set back the counter towards the furthest wall to allow space for queuing and it meant that I had enough room to place a decent sized staff room.

Looking at the plans it looks like there is enough space for:

- Over 20 customers
- 10 charging spaces
- Up to 30 seats

In addition, there will hopefully be two unisex toilets, and there is space (if desired) to increase the bike storage.

| Bike Storage

As my focus was heavily weighted towards the cafe, I will include metal bike racks which will go on the western wall of the building. This should allow for 35 bikes at one time. Initially, the bikes were to be stored downstairs, in a room next to the toilet, however, this would eliminate space and also result in a ramp being included alongside the staircase.

| Negatives to the Design

Unfortunately, there is no step-free access to the cafe. In addition, the storage for the bikes is extremely basic, and not very secure.

| Materials Used

When choosing my materials, I had the idea of a cheap and sustainable material, which I could adjust to allow plenty of light to flood the cafe.

I knew all along, that I wanted to include lots of glass into my design. Therefore, I've chosen to construct the whole of the above ground structure out of glass.

On the East and West sides, I will protect/ reinforce the glass by placing wooden slants at a specific angle, which will allow plenty of light in, and will also allow for some privacy from residents looking in.

For the flooring, I have kept up the wooden theme, and I have chosen to use laminates, which will allow for a solid base, while matching the colour of the design.

For the walls, I was inspired by 'Tadao Ando', and to keep in theme with the raw look, I will leave the walls as bare concrete. I believe that the light coloured floor, and grey wall will contrast with each other nicely, and will keep the cafe nice and bright.

For the ceiling, I will use plaster and paint the ceiling white, which again keeps the room bright, and allows the area to be well lit. To make the ceiling more unique, the slants used on the outside of the building will be replicated, and they will hide the air conditioning, and air units used in the design. The angle of the slants, will allow air to flow, but the view to be obstructed.

The furniture will be made from a darker mahogany, which will balance out the light walls, ceilings and floor, and this will be given a glossy finish so the surfaces shine.

| Operation

The lighting will be cylindrical lights, which hang down from the ceiling. These will have various modes, to allow the manager to adjust the light accordingly.

To maintain a warm temperature, ceiling to floor radiators will be used, and hidden by false walls to not disrupt the minimalist theme. To cool down the cafe, during summer time, an air conditioning unit will be fitted, and will be ejected from the ceiling, through the slants they will be fitted to the ceiling.

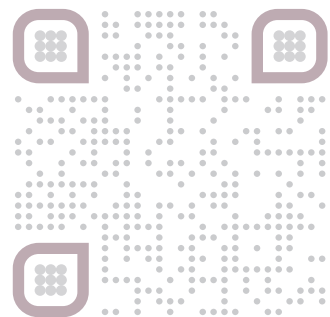
When the coffee shop is closed, the front door leading from the outside to the inside will be locked via two key holes, which allows double the protection. Furthermore, the door at the base of the stairs will also be locked in case the glass exterior is smashed.

Fitted to the roof both externally and internally will be cameras with night time modes, that will operate 24/7. The glass will be fitted with alarms, so that if it is broken, the police are contacted immediately.

| Roofing

The roof is made out of synthetic grass, and therefore does not need to be watered / maintained. Within the roof, slots will be included and hidden, so that the preferred use can be installed.

As the building is not very tall, I did not believe that safety railings were necessary, however, signage signifying the risks of falling off of the roof will be strongly advised. Furthermore, A barrier at the front of the roof may be necessary to stop teenagers, or any other demographic jumping from the highest point of the roof for fun, as this may lead to serious injuries





Site Visits

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24/05/22 | 26/05/22

1st Visit

| Condition of the site

The site has just begun construction, and is in the first stage. While I was there, the construction team were clearing the area and levelling out the ground, while also analysing the pipework and infrastructure below the ground.

| Reason for Site Visit

The lead architect of the project had to meet up with the contractor to discuss the safety measures that will be put in place to protect our building, as well as Stratford International station which is next door.

These discussions included, the positioning of bollards in front of buildings, evacuation routes for buses, parking capacity for emergency services in the event of a terrorist attack.

| Challenges of the Visit

The building which will be constructed is located right next to a power station room which powers the HS2 railways and the local residents and station. Therefore, the building must keep this station protected and must plan for the event of a terrorist attack or failures.

| What I learnt

This visit showed me how much there is to think about when designing and constructing a building which I previously would not have thought of. This became apparent when the architect, consultant and project manager discussed how lights would work for over 10 minutes, and discussing how they would turn off and on in the event of an attack.



2nd Visit

| Condition of the Site

When visiting the site, the building was almost complete. The project was an apartment block being completed near King's Cross St Pancras tube station.

Most of the apartments had already been sold, and most were almost finished, and the project is expected to finish by September (the latest)

| Reason for visit

This visit gave the lead architect a chance to look around and make sure that everything was correct. In addition, they would pick up on small inaccuracies and make suggestions to the construction team while finishing the building.

These visits are regular, and are used to make sure the construction process is running smoothly, and that they have no questions concerning the plan.

| What I learnt

I understood the finishing processes involved in completing the building - i.e. watching the sub contractors add the finishing details to a room. It also showed light to the incredibly long process which is involved when building a building, as this small project has been under construction for over two years.



3rd Site Visit

| Condition of the Site

The site was in the "concrete phase". This meant that the construction team were building the solid frame for the building, by using concrete.

At the time of my visit, about 5 floors had been completed and they were working on escalating the project another two floors.

| Reason for Visit

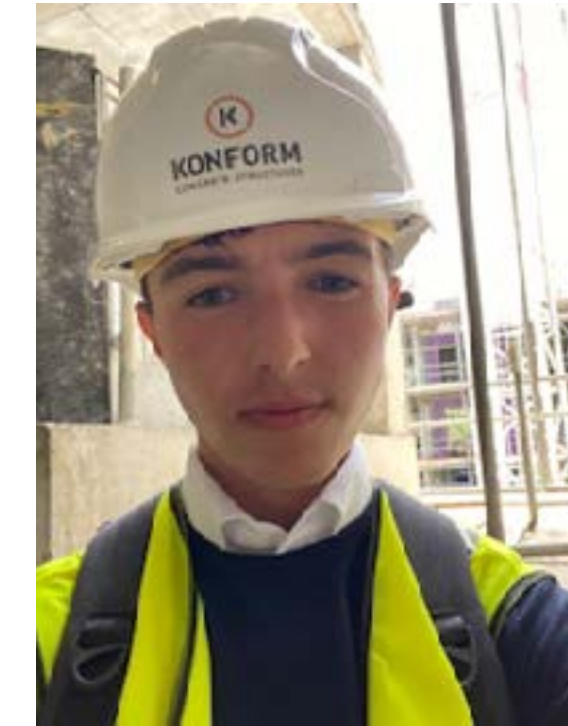
This was another weekly check up, to analyse the process and make sure everything is running smoothly. Furthermore, it gave one of the new architects on the project a chance to see his creation.

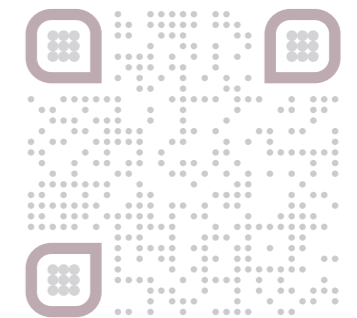
| What I learnt

This visit opened my eyes to the beginning stages of the construction process. It also taught me how buildings are put together.

We watched a staircase being filled with concrete, and I was told how steel frames are used to prevent the concrete bending in the centre.

This was my most favoured visit of the three, as it taught me the most, and it made me feel engaged in the building process.





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