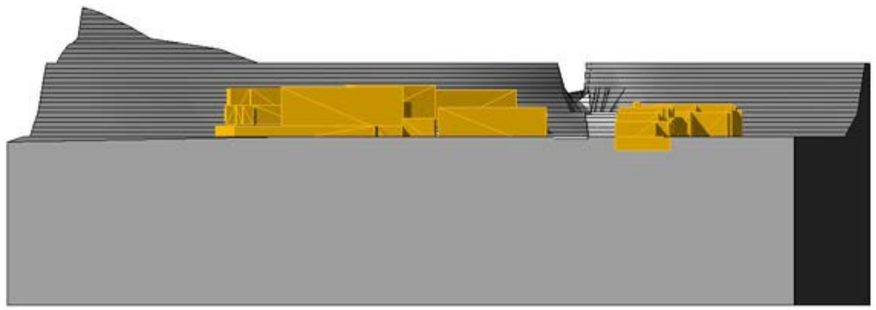
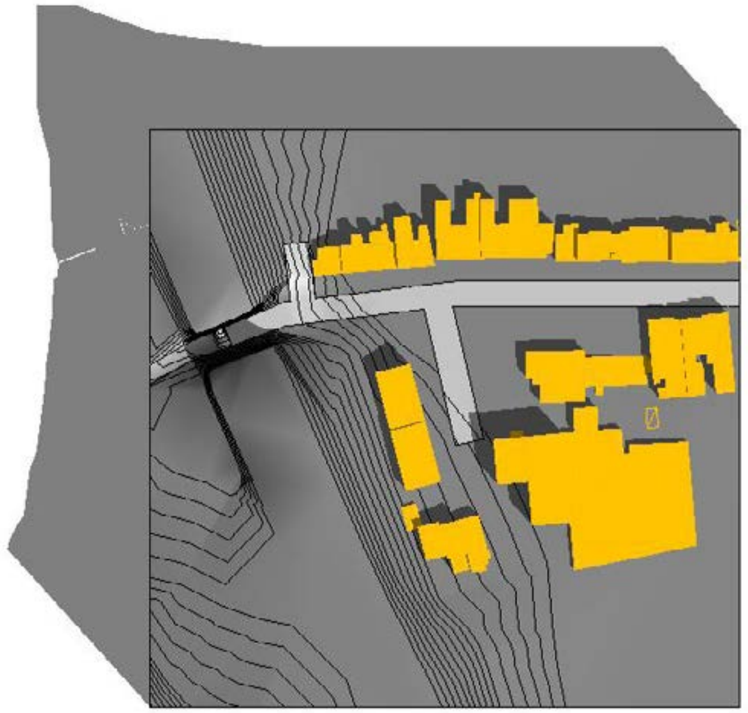
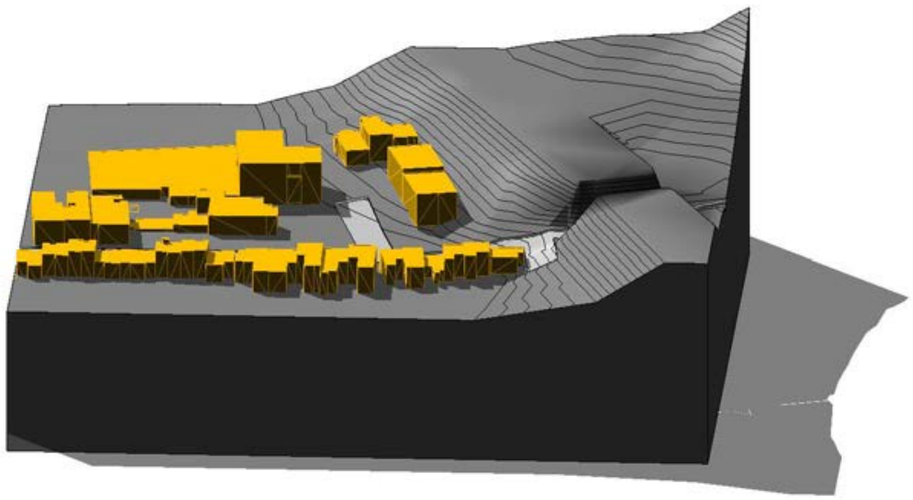


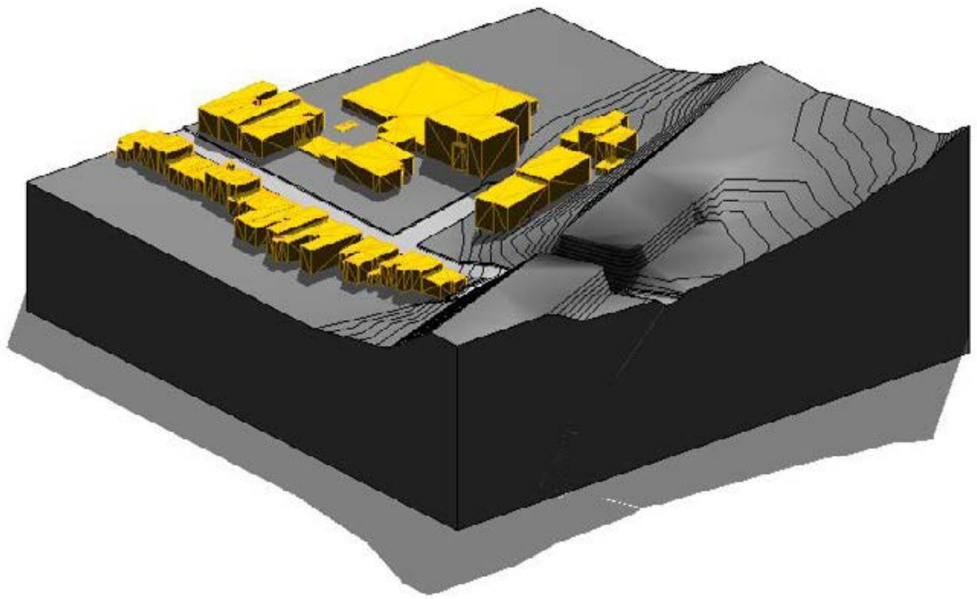
West Side View of Site



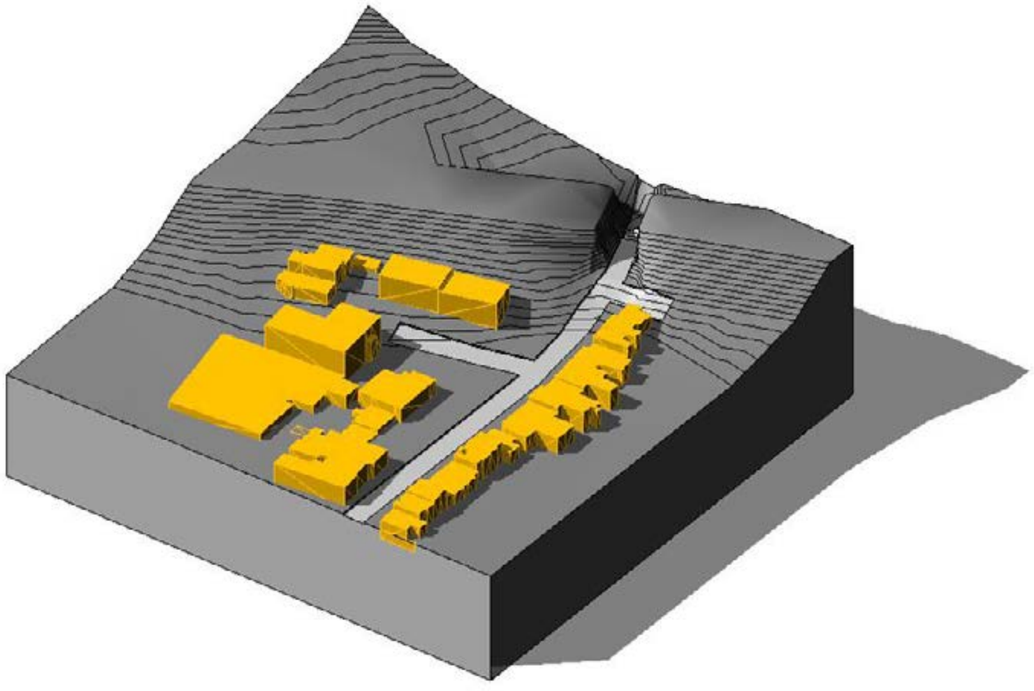
Top Side View of Site



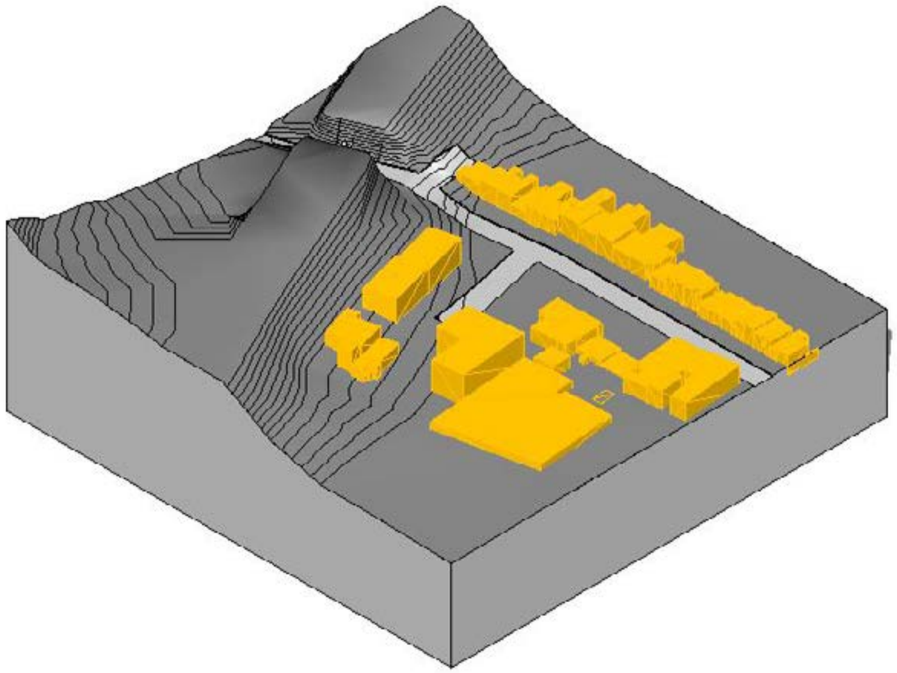
South Side View of Site



South East Side View of Site



South West View of Site



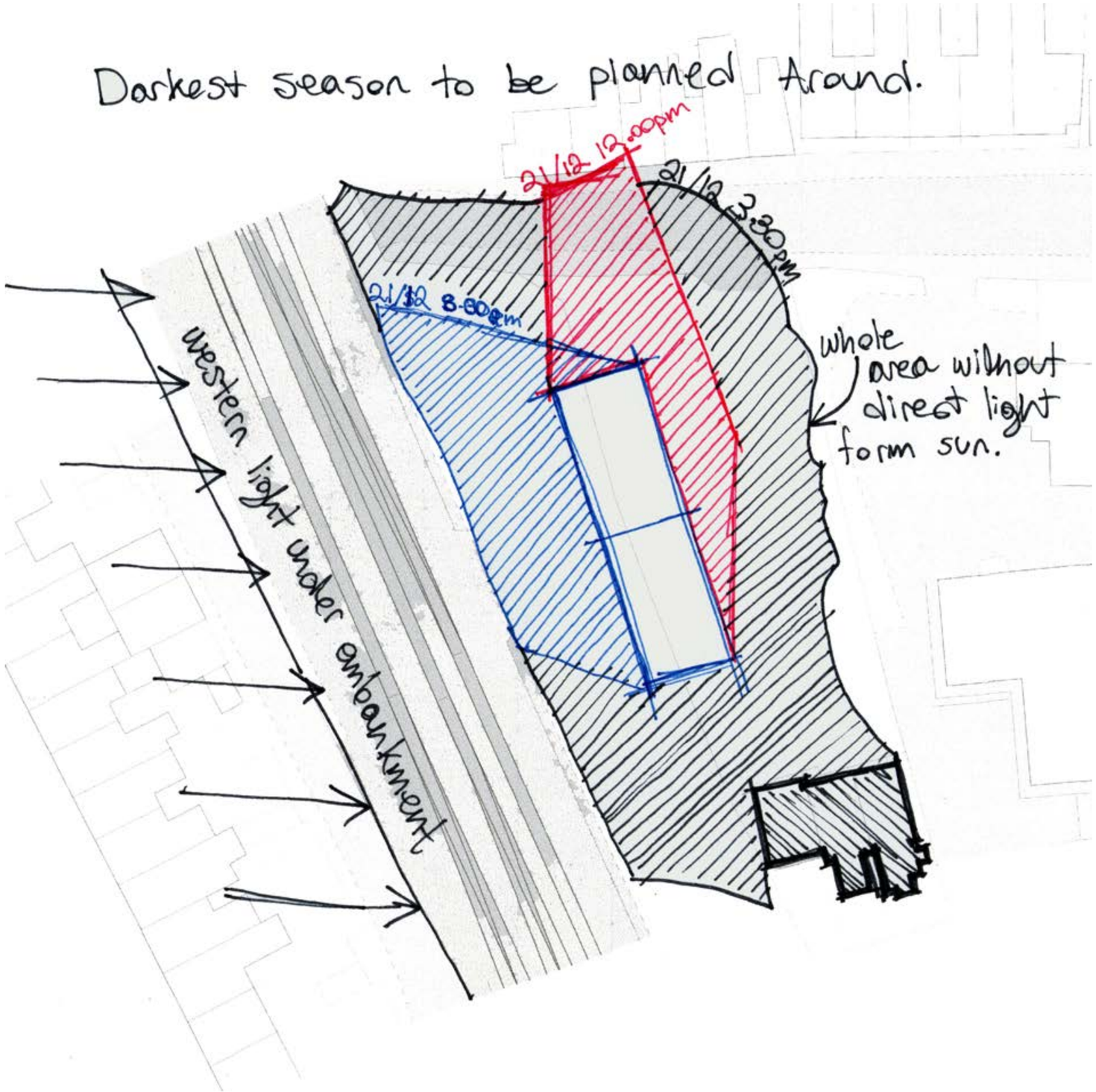
North East View of Site

Model of Site

The site si situated to the east of a large earth embankment, which serves as the foundation on which the line from Brighton Station to Preston Station sits. The site contains two houses and a driveway, which also connects houses further down it to the main road system. The Driveway, South Road Mews, is connected to southroad, which is the road that connects Preston rd. to the Tunnel beneath the rail line.

Around the site itself are various servicce areas and the back spaces which serve the buisnesses in the area. Situated between these and the rail line, there is potential for noise in the area, however this can be mitigated through proper insulation.

The site sites partially on an incline of a few degrees towards the east, and sharply rises up to the peak of the embankment 10m above. this creates the question of hwo the people from the train will see the building as they go by it on their routes.



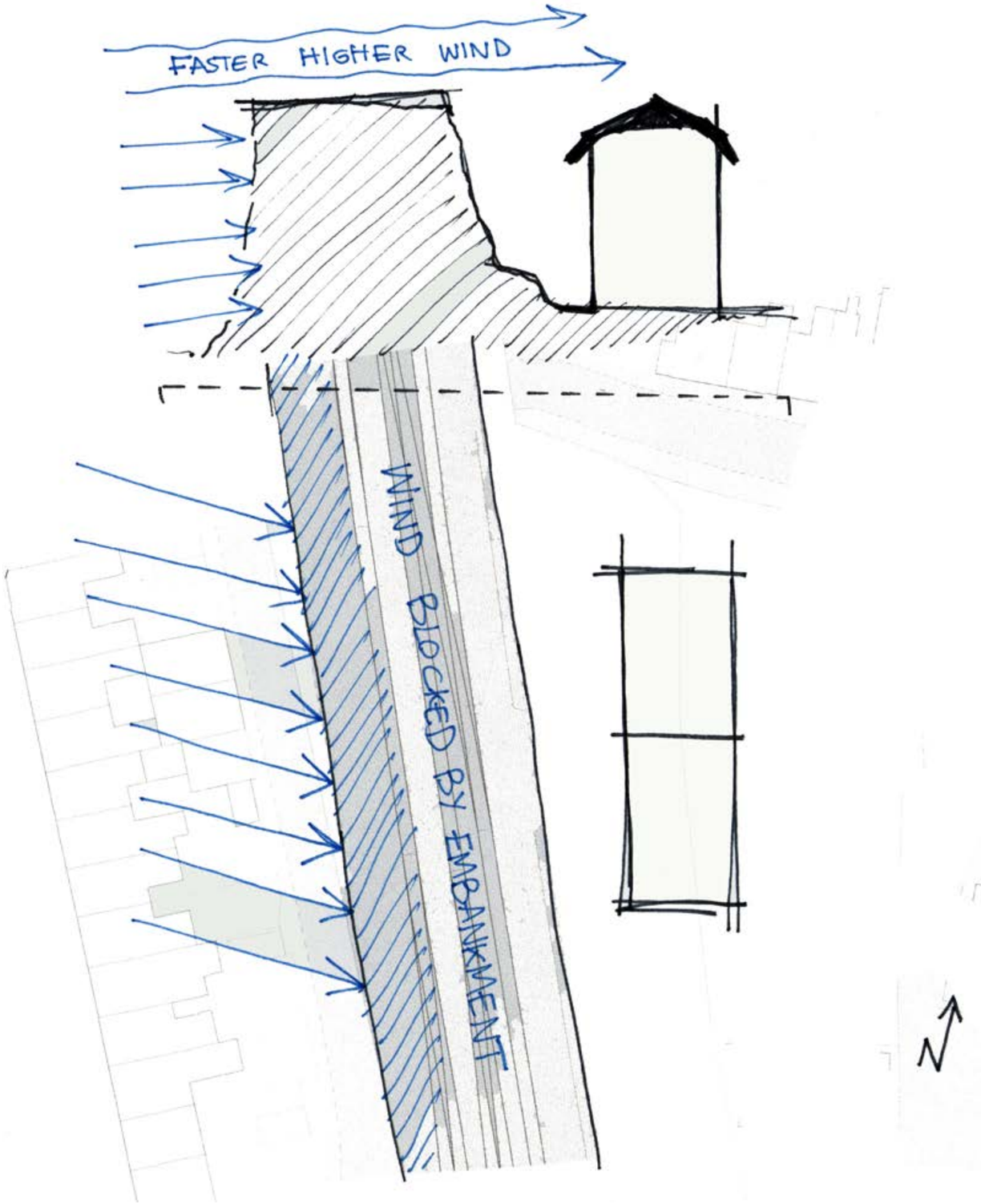
The Sun and Natural Lighting

As much as it can be employed, natural light should be a major contributor to lighting of the key processes when it is avaliable (i.e. during the day).

As such the directions that the sun shines from, and suring different times of th year are important, as they inform the placement of windows for lighting and insulation purposes. As well as for the purposes of a view, as if a window would provide little light and a mediocre view, it would be better to keep that wall closed so it can contribute to insulation.

That being said there are compications that cannot be avoided. The embankment blocks a majority of sunlight during the winter months, coming from the western direction. Additionally it nullfies any view in that western direction unless the windows are above the embankment.

For these reasons, the western side of the building will likel have few windows.



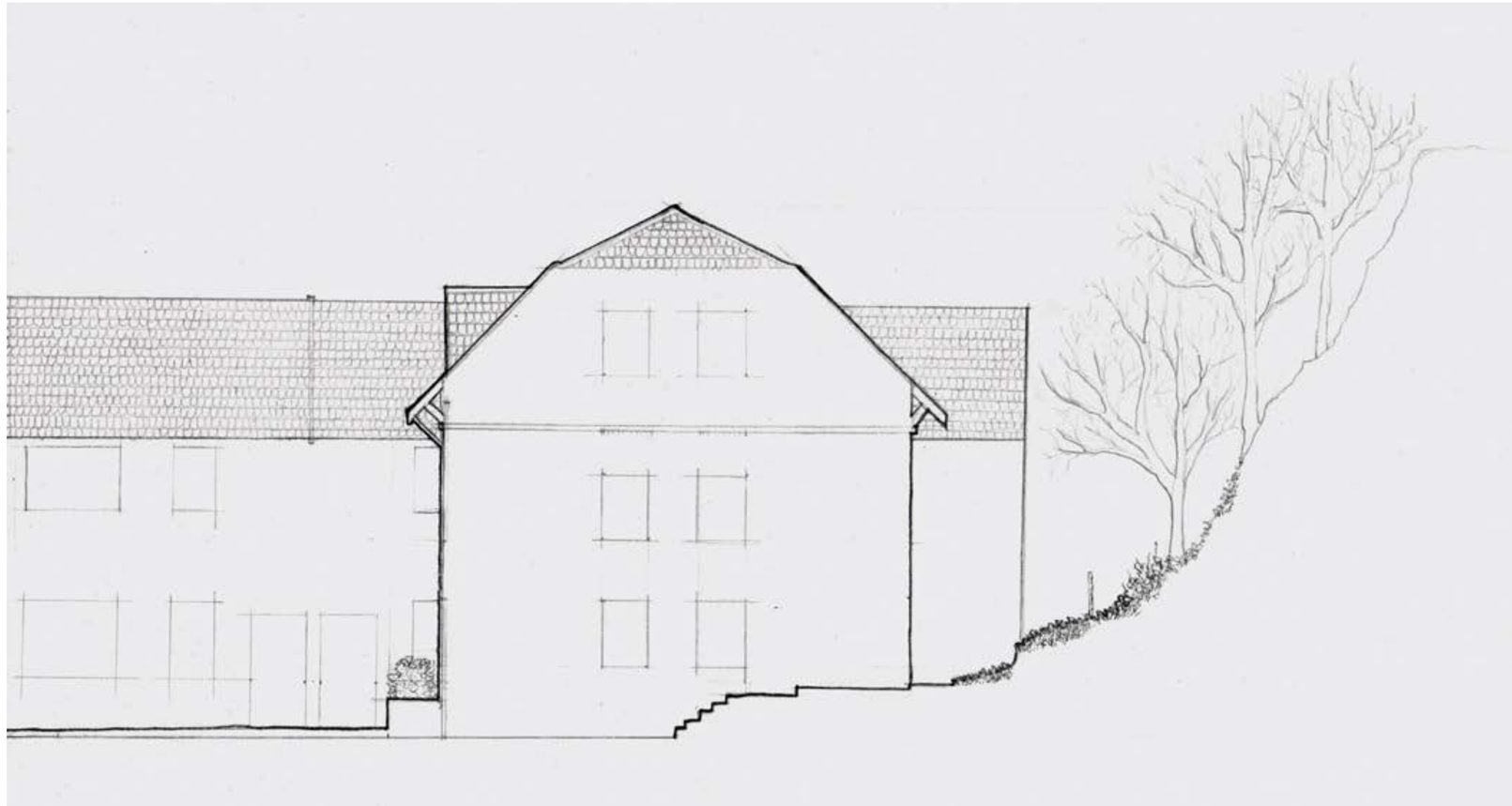
Wind, Wind Direction and Ventillation

The prevailing wind direction in Brighton is West to South Westerly, bringing strong winds in from the atlantic.

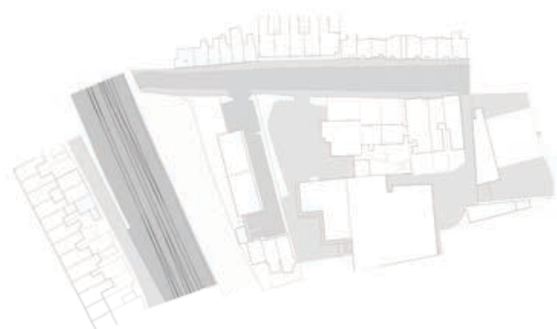
Whereas the embankment was a problem for sunlighting, it appears as though it is a good solution for winds that would leech heat off the building. This is because the building sits in the wind shadow of the embankment, much of the western wind blocked by it.

However the wind from the Southwest is not, but as the weather is unpredicatble it is best to work with the pervailing direction.

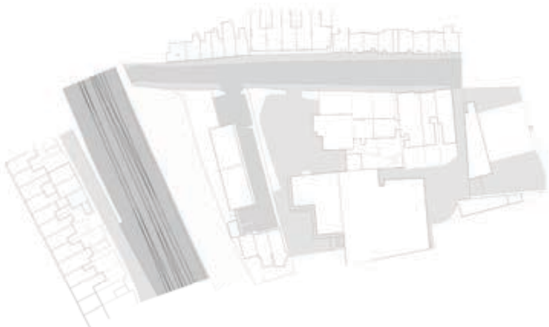
This does mean, however, that the wind cannot be used for ventilation purposes, without extending the building up over the embankment.

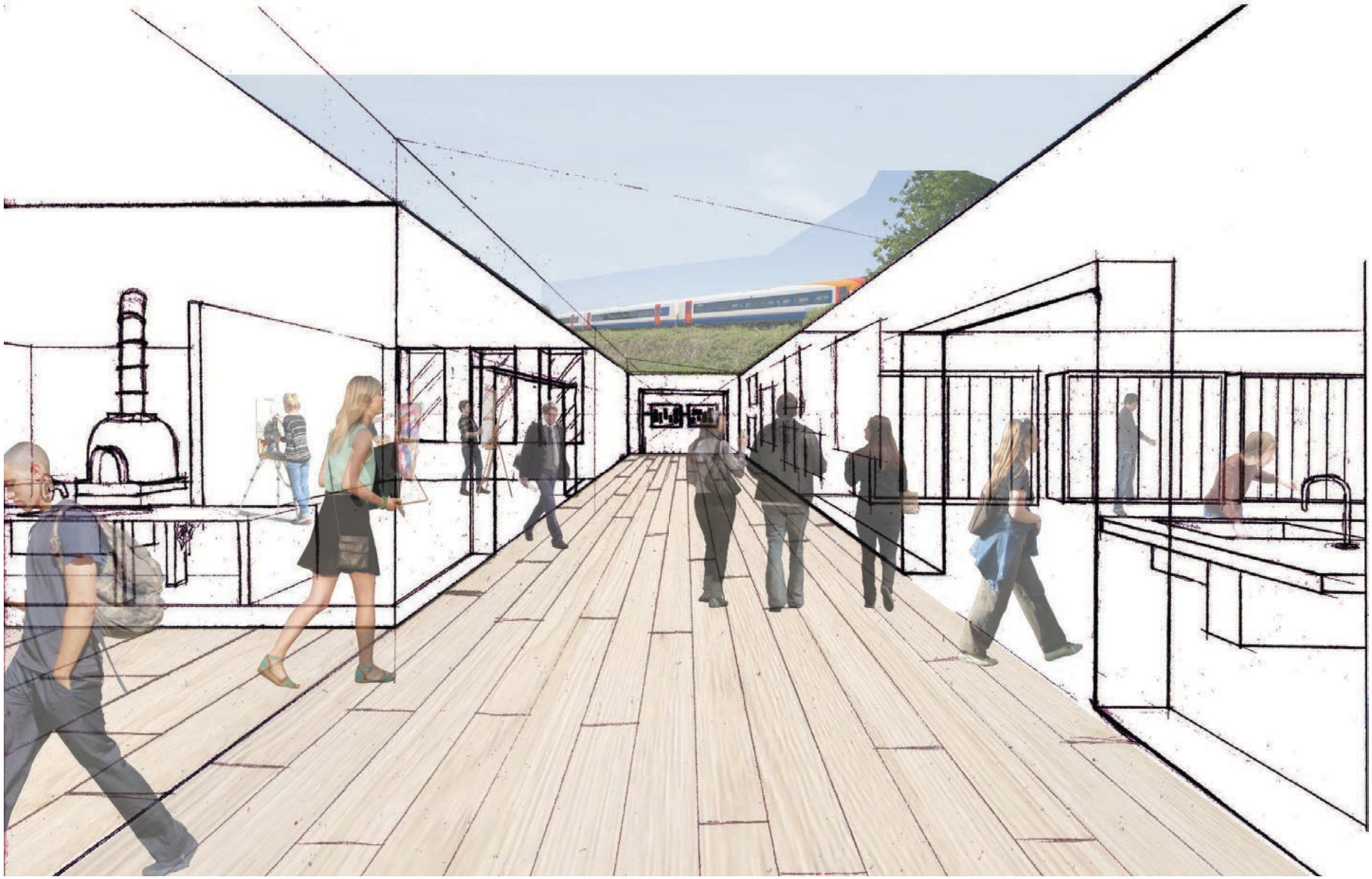


South Road Mews South Elevation
1:75

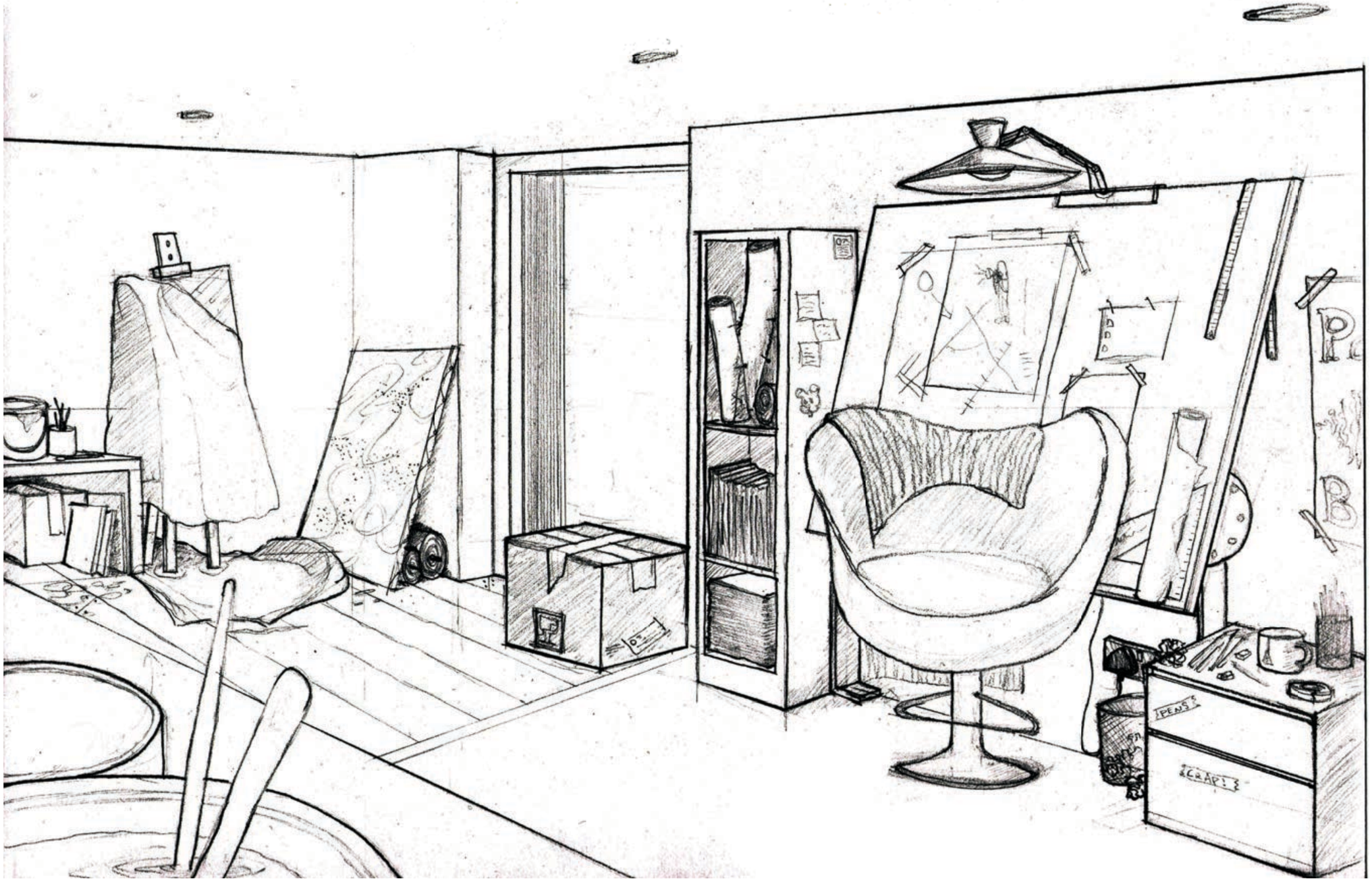


South Road Mews East Elevation
1:75

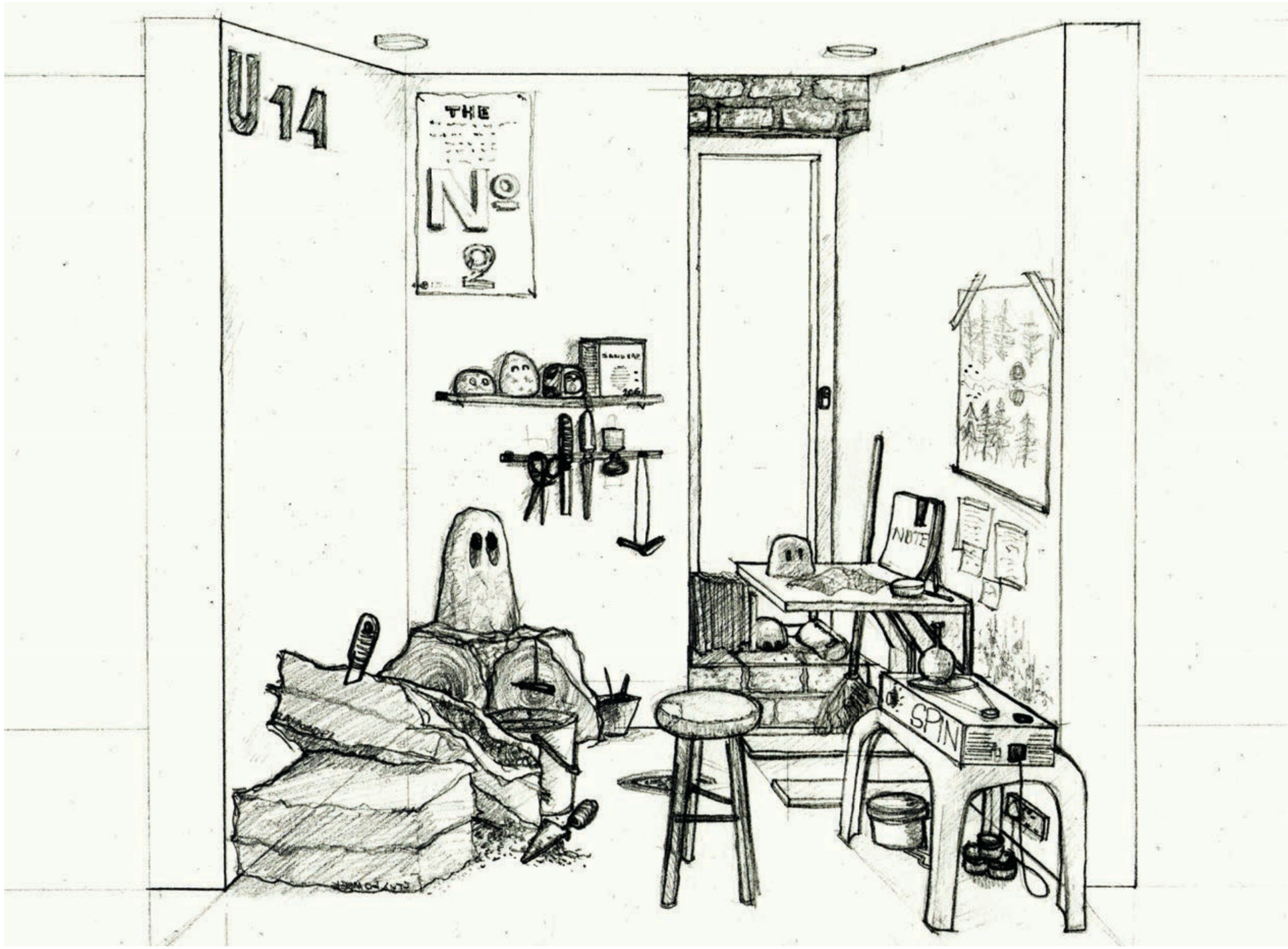




Collage of People within proposed space
on Site



Drawing of interior for inspirstion 1



Drawing of interior for inspirstion 2

Elavation Southern View Concept 1
1-50

Section Southern View Concept 1
1-50

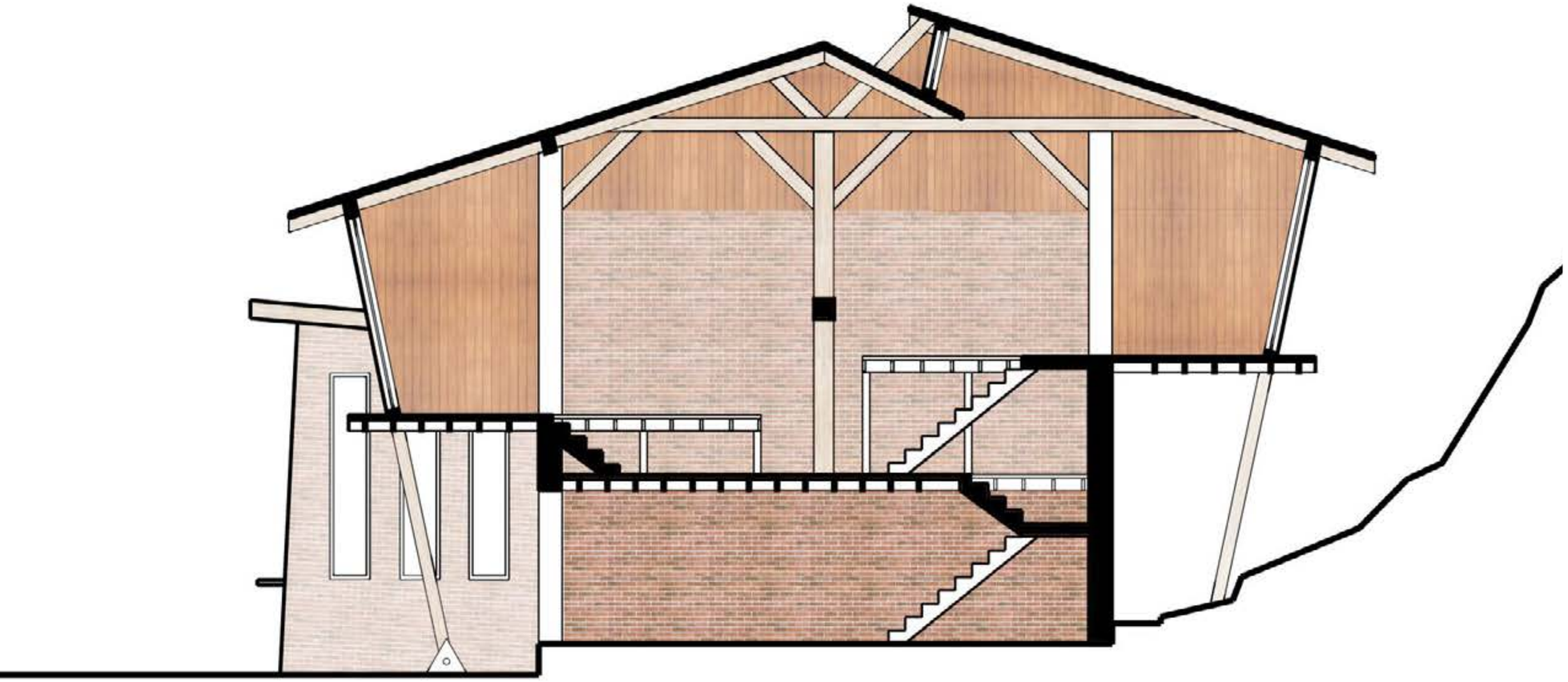
Extension from Original Building

Extending the building from the sides is a method to increase the workable size of the building without tearing it down and starting new.

The benefits of this are that not much changes need to be done to the building, other than creating holes in the facade which lead off to the new extensions.

However on the site exensions are difficult as there is not much room surrounding to extend into, as the path to the east needs to remain open for access to other houses, the west has the railroad embankment, and the spaces to the north and south are confined.

The down sides to extensions are that they create a risk for air tightness, as new openings in the surface of the orginal building might not be fully sealed after construction. Additionally, the point where they connect needs to be structurally sound.



Section Southern View Concept 4
1-50

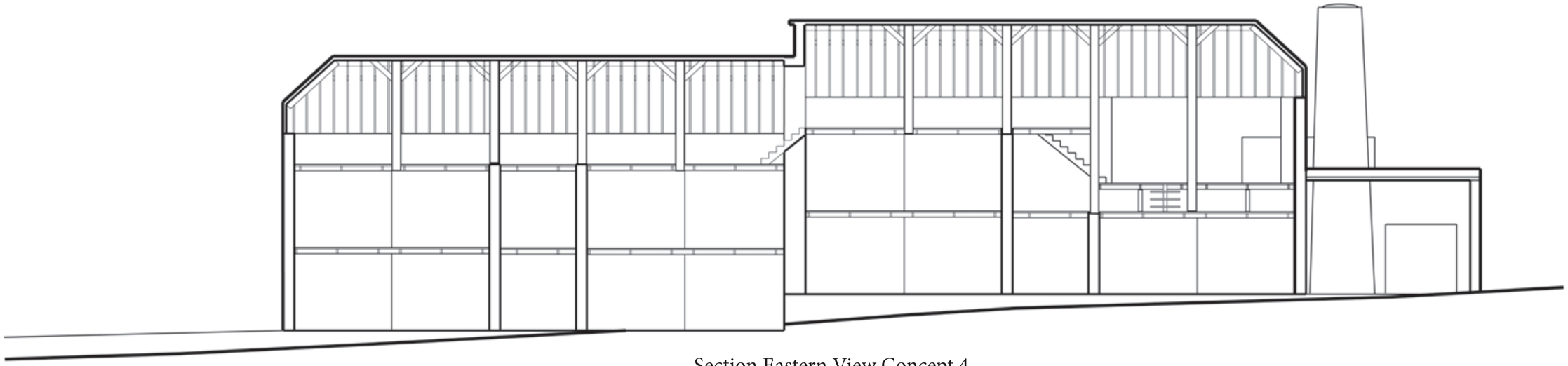
Removing Floors to create new Volumes

Removing floors within the building to create new taller spaces, is one way to achieve the sapces which are required for art. As many of the processes require a lot of hear room.

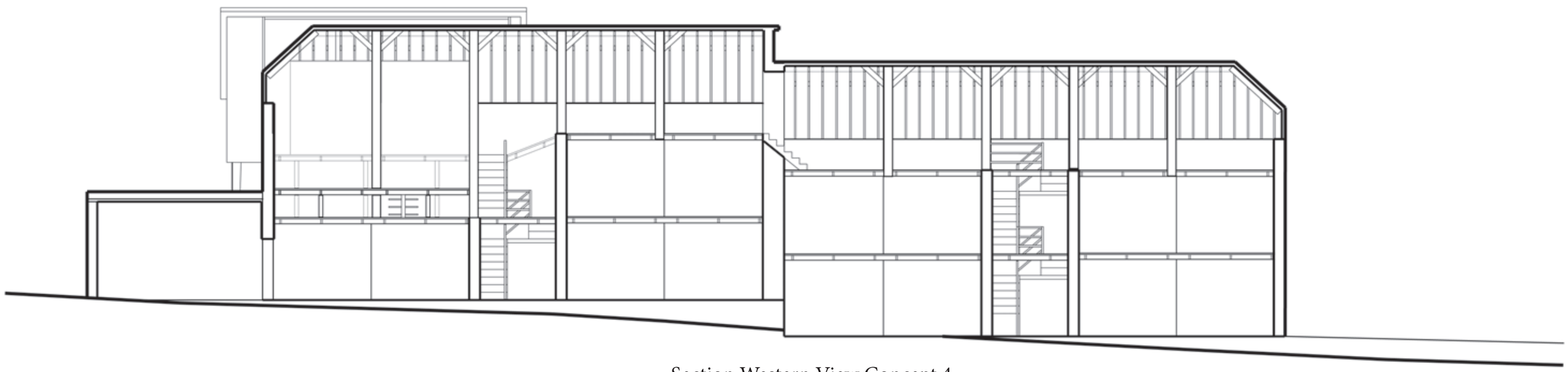
The benefit of doing this is that taller spaces can be created without needing to incorporate additional floors to the structure. Additionally, it allows the use of the original skin. and keeps the amount of newly created construction down.

However there are issues with this, as by removing the floors structure is being exposed, and is very difficult to augment. Additionally, the joists which run between walls in a timber floor help give the building stability. By removing them, considerations need to be made about new ways to reinforce the structure.

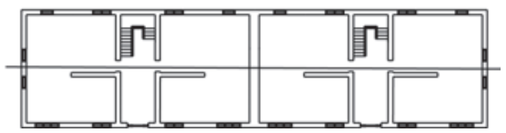
However, having spaces in the building which have variable hieghts can be an advantage. Especially for the painting and large workds of sculpture.

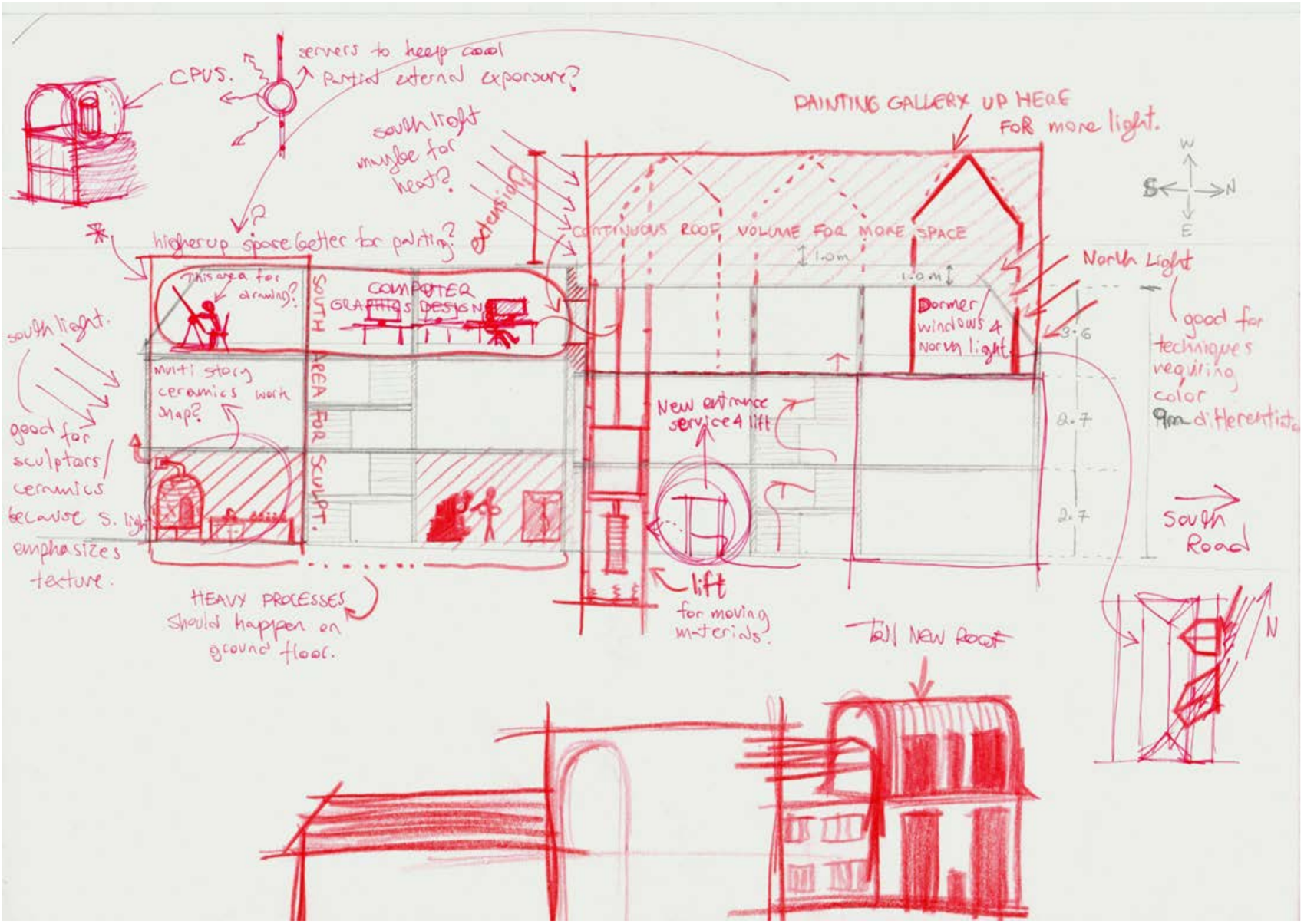


Section Eastern View Concept 4



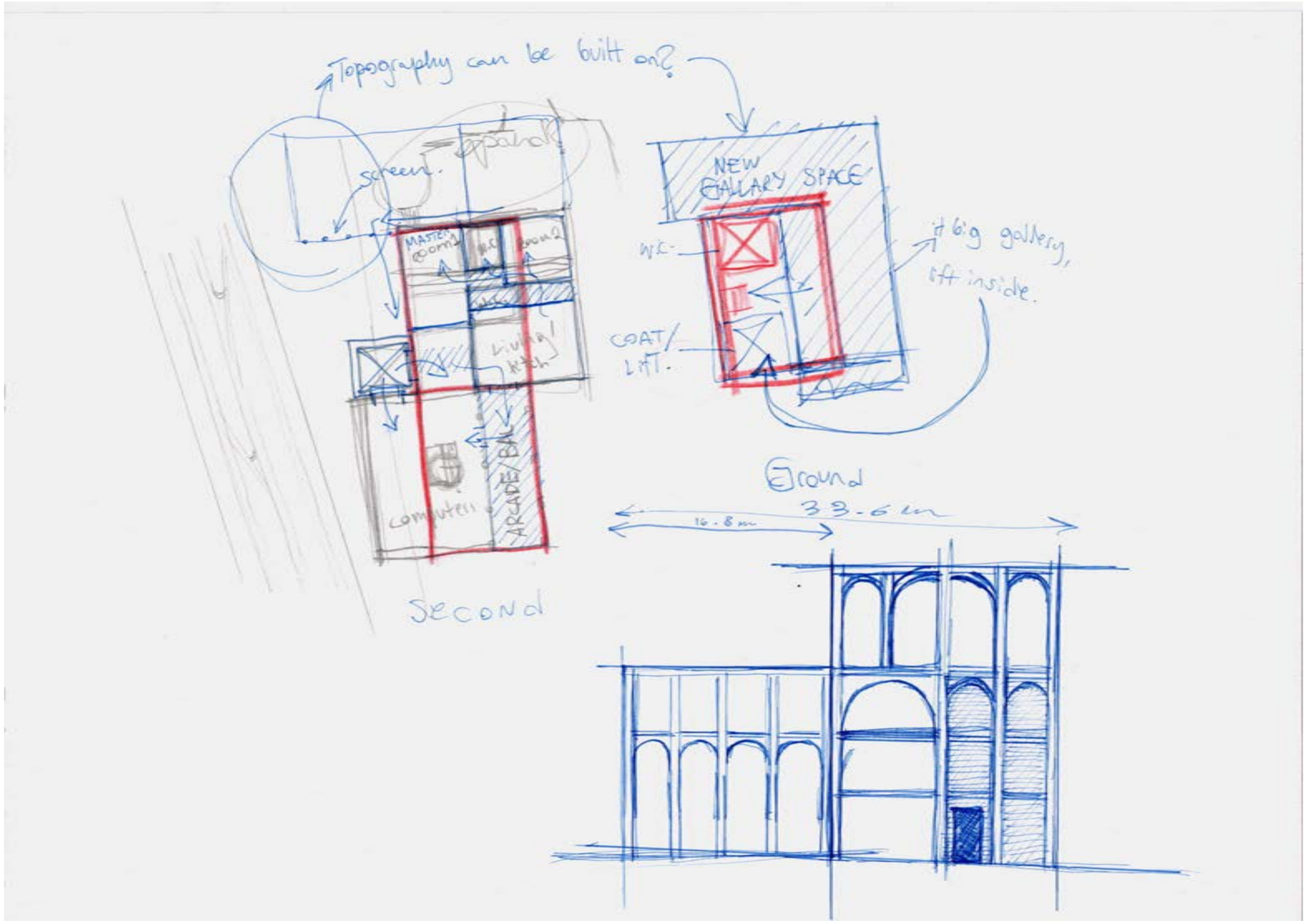
Section Western View Concept 4
1-100





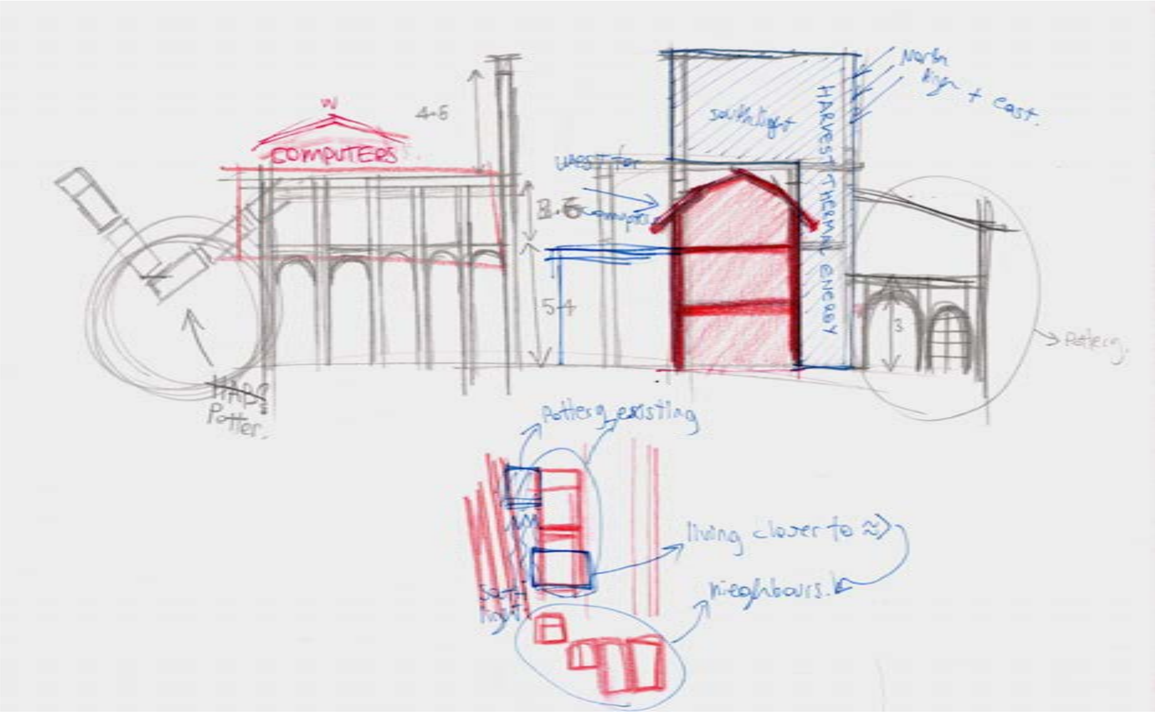
Exploring additional Floor

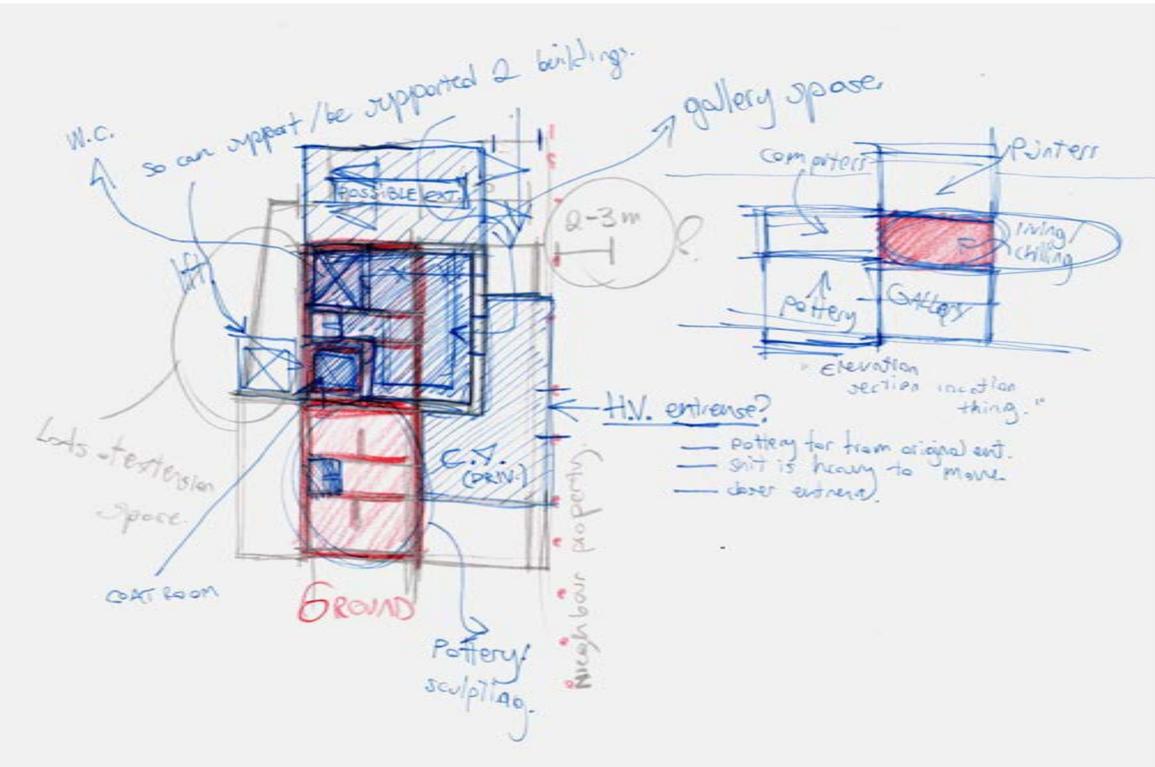
In this series of sketches the idea of an additional floor is explored, This Provides the beneift of giving more floor area without expanding horizontally, which is good as the site is restrective when it comes to ground area. The extra floor area would likely be allocated to the painting galleries.



Additional Concepting

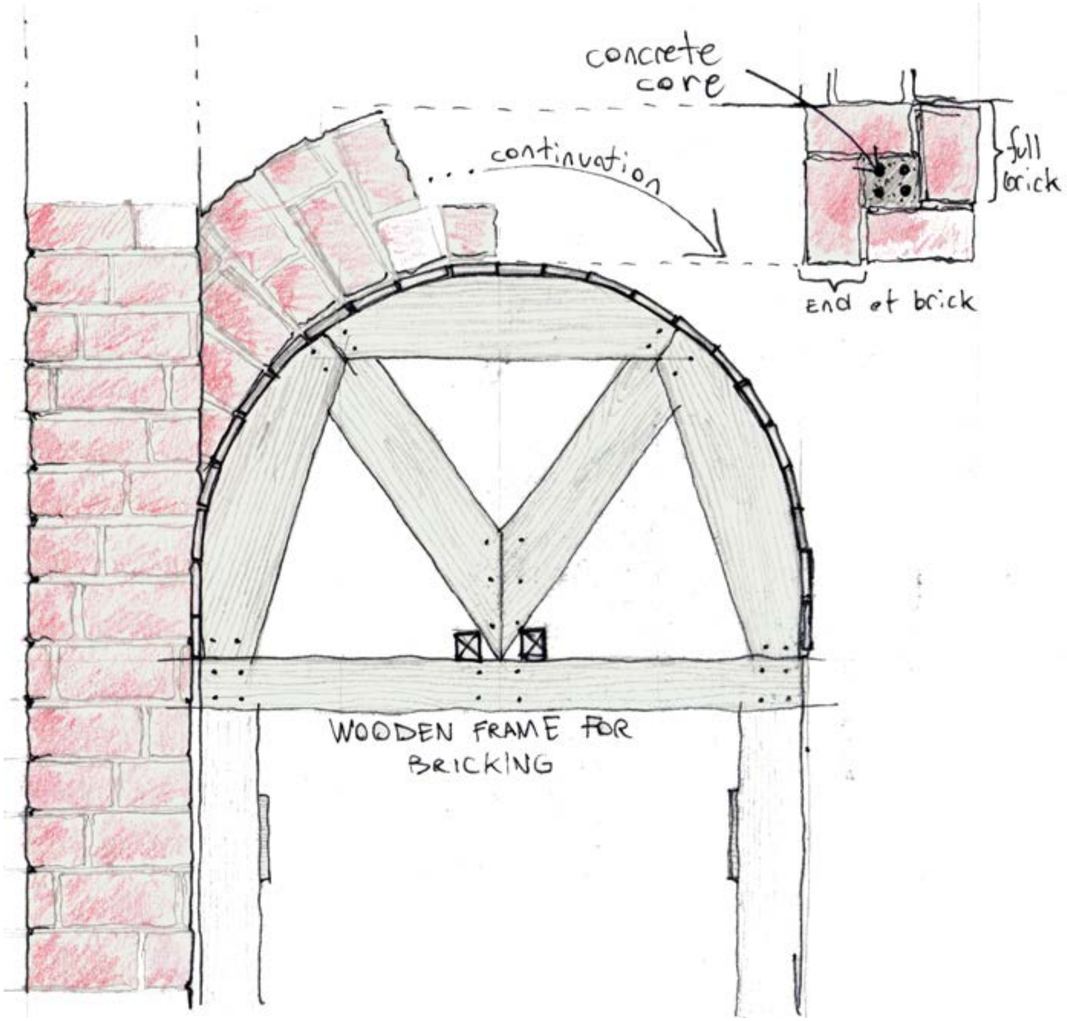
Original building
footprint shown in red

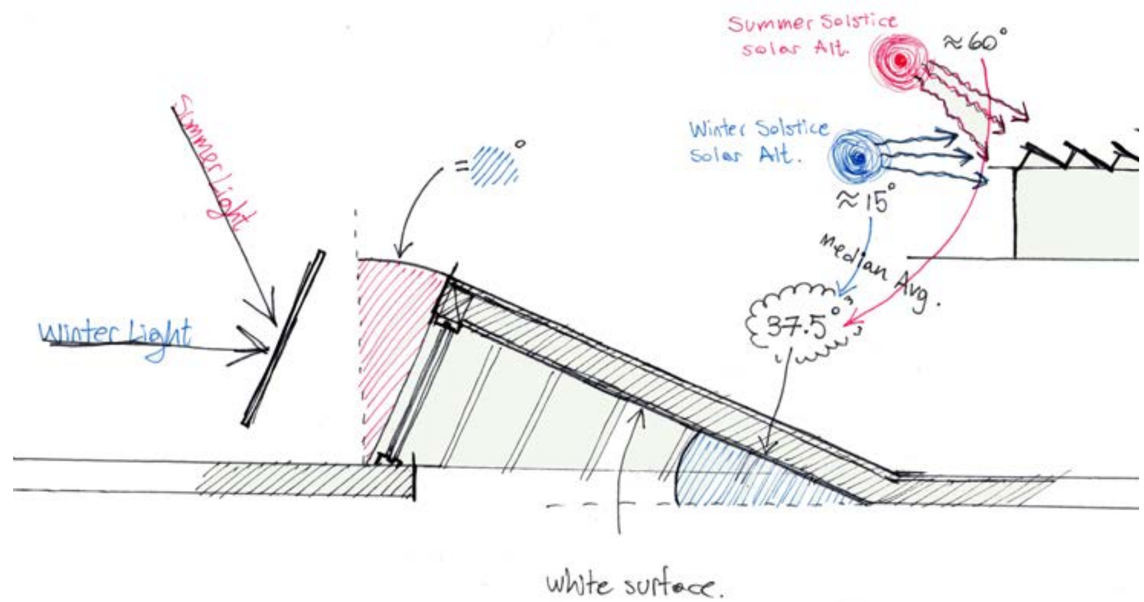




Allocating Functions

In this series of sketches the functions of the building are layed out, and their locations decided. Heavier processes, or processes with lots of traffic are placed on the ground floor, like the pottery/ sculpture studio, which uses heavy materials and equiptment. Additionally, the gallery will start on the ground floor, so as to give a hardy surface for lots of motion.

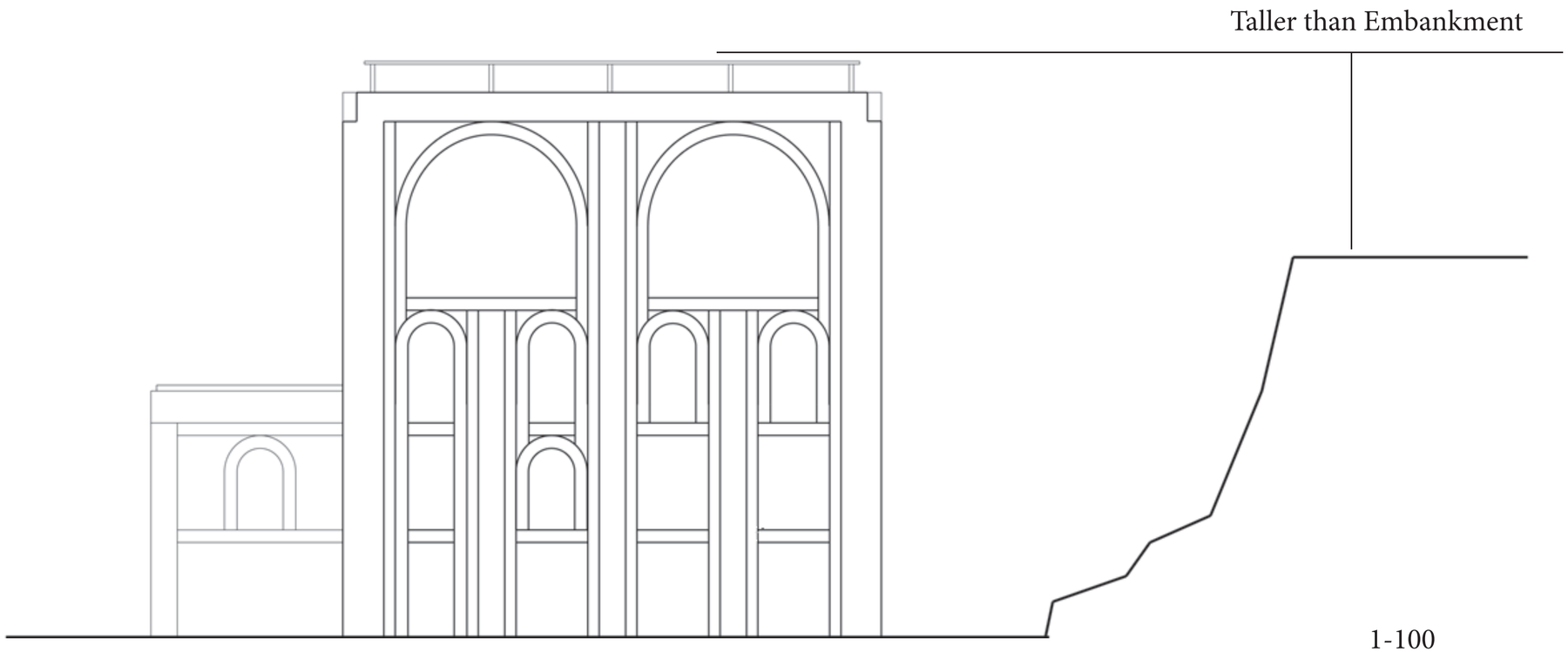




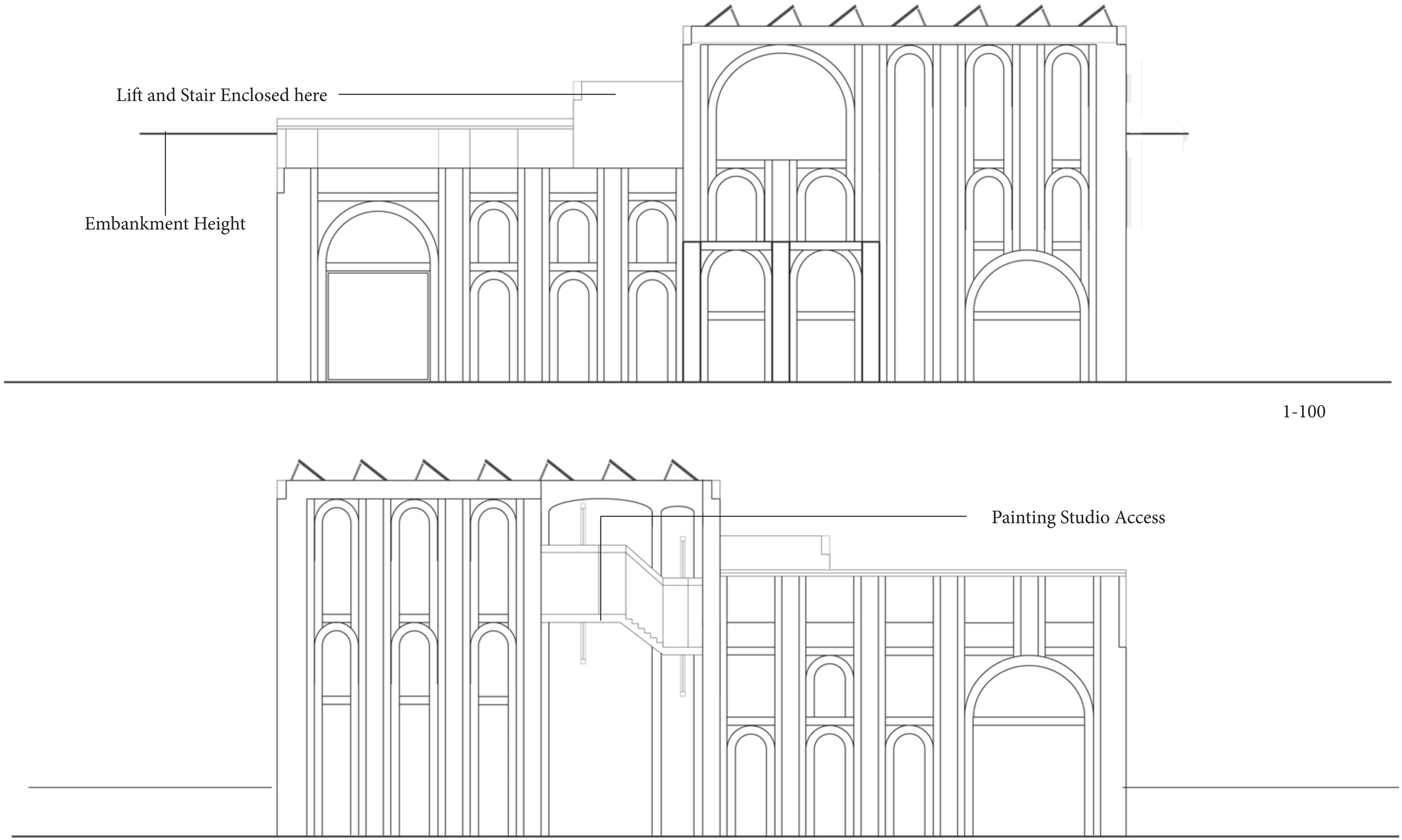
Detailed Sketches

Up: Using brick arches to redistribute new loads across the facade, this drawing shows an arch and its forms during construction.

Dwn: A section of a portion of sawtooth roof, showing the angles of the components, which have been calculated based off of the angles of the sun, to provide best lighting throughtout the year.



Final Concept North Elevation



Final Concept West Elevation

1-100

Final Design

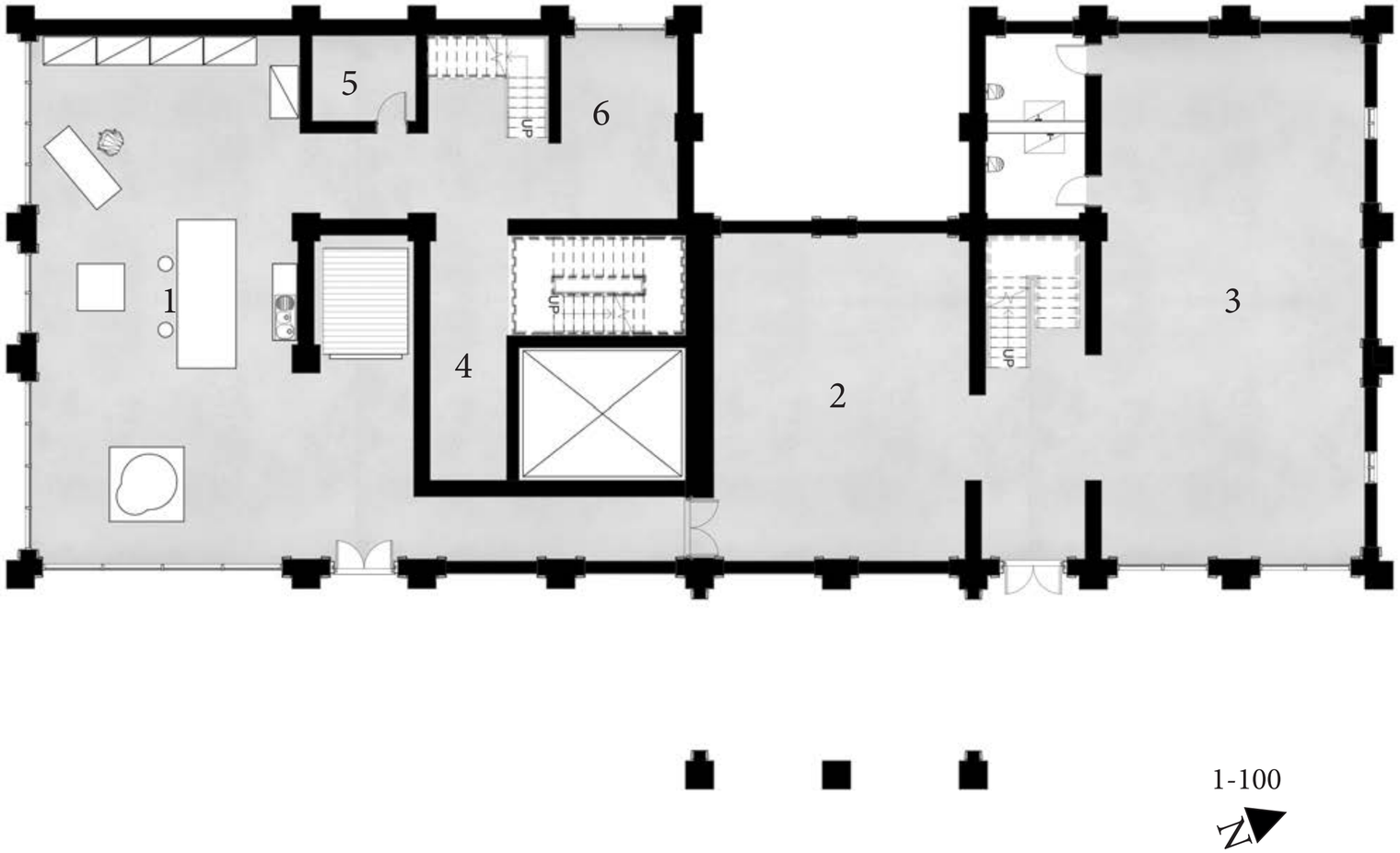
1-500

Site Plan

The final design encorporates many aspects of the previous exploration and iterations, using what I learned through that process to inform the final design. I have taken elements from many of them, including additional floors, the use of columns to support upper structures,as well as creating double height spaces appropriate for certain functions like sculpting and painting. I worked within the constraints of the site, maintaining access to the houses sharing South Road Mews, and not encroaching on the land of the embankment. Additionally the layout of where functions are have been set out based on logical constraints, like weight, acessess to light and keeping circulation of the artists and visitors seperate.

Final Design Ground Floor
On Site

1-500



Final Design Ground Floor

** Note: Visitor access is restricted to the galleries and attatched bathrooms.

Key:

1- Sculpture Workshop
2- Gallery B**
3- Gallery A**
4- Lift/Stairwell
5- Workshop Toilet
6- Storage Area

Final Design First Floor

Key:

1- Offices
2- Lift/Stairwell
3- Gallery C**
4- Gallery D**

Final Design Second Floor

Key:

1- Graphic Design Studio
2- Balconey for Studio
3- Open Air Gallery**
4- Print Room
5- Photo Dark Room
6- Lift/Stairwell

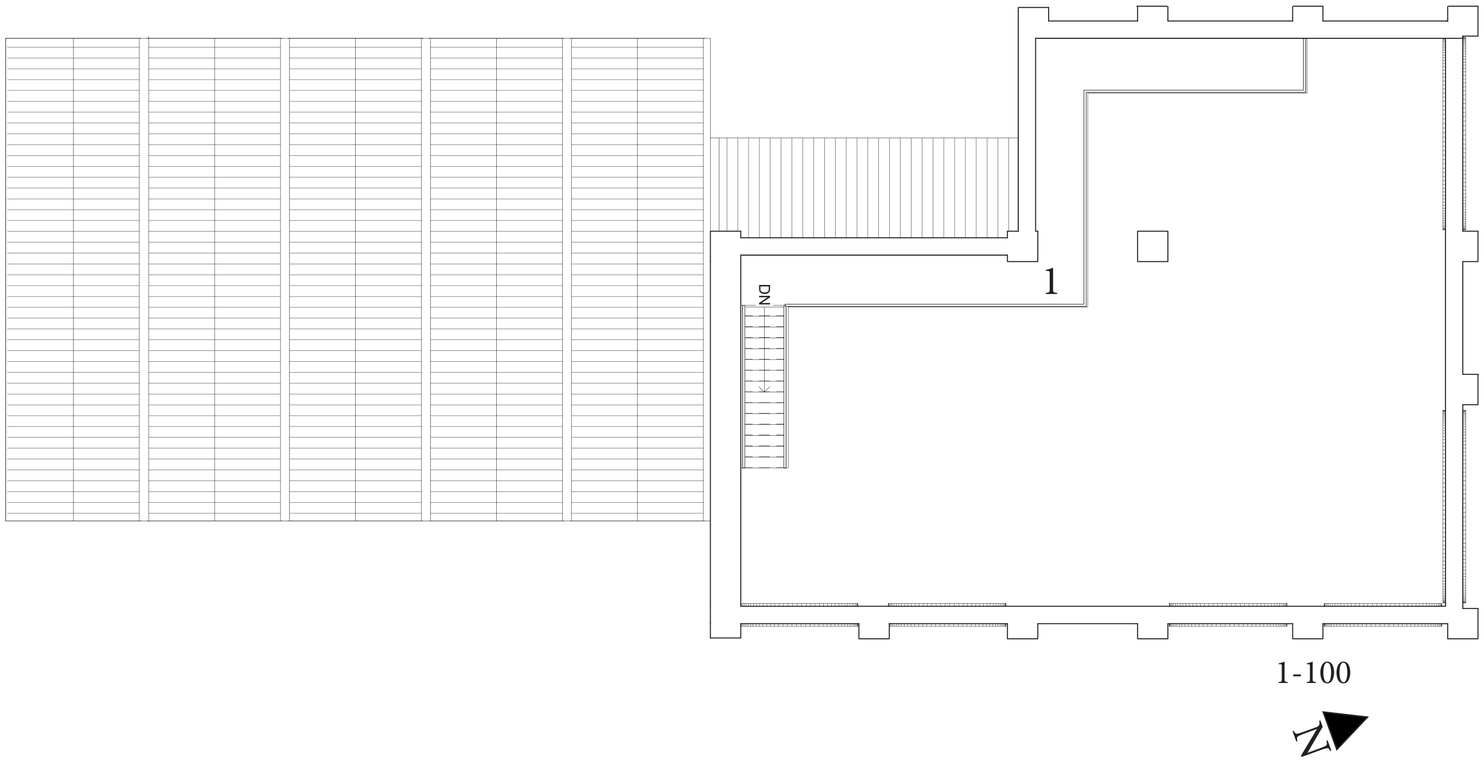
1-100

N

Final Design Third Floor

Key:

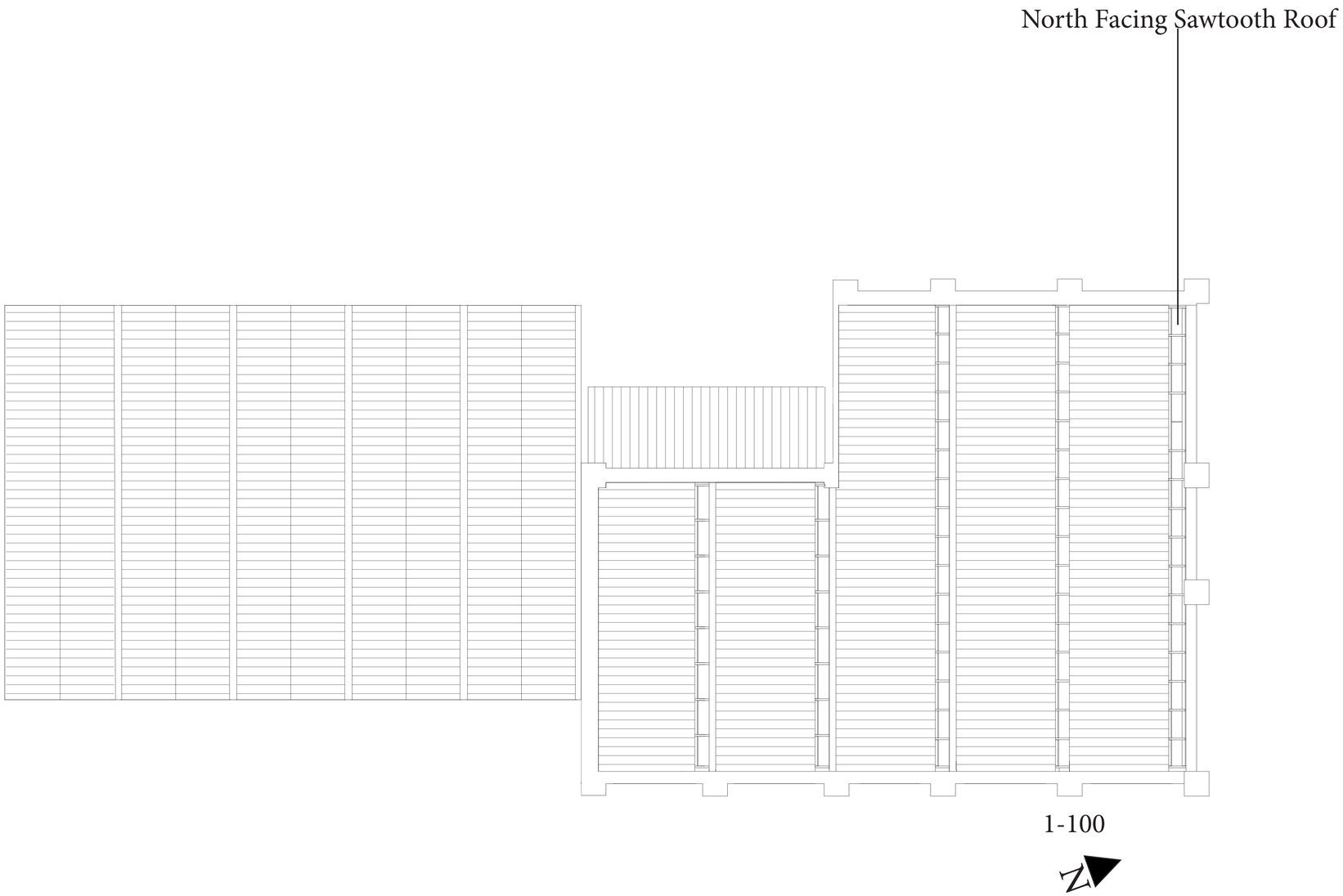
1- Painting Studio
2- Entrance Hall
3- Master Bedroom
4- Baby Bedroom
5- Bathroom
6- Living/Dining/Kit.
7- Terrace/Balconey
8- Lift/Stairwell
9- Access to Painting St.



Final Design Fourth Floor

Key:

1- Painting Studio
Upper Gantry



Final Design Roof Plan

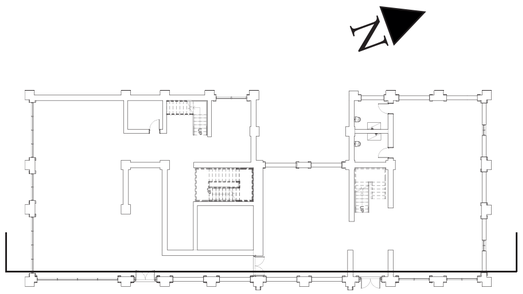
1-100

Final Design East Elevaion

1-100

West Facing Section

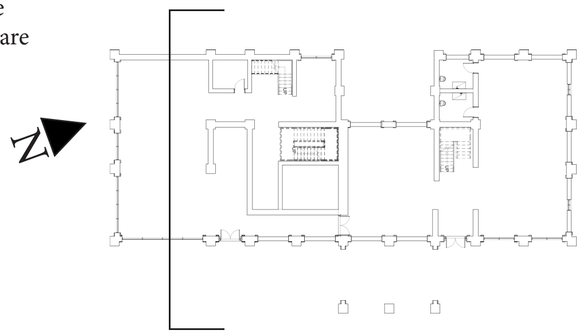
This sectoin helps to illustrate the different modes of circulation within the design, and those are Internal spaces which are dedicated spaces for the artists; the next type of space is the space that is the gallery, which is accessable for the artists as well as visitors via a seperate door. Additionally, there are areas of external circulation which are within the bounds of the building, these are the balconey for the use of the graphics designers, and the open air gallery, which forms the second floor of the northern half of the building. Also it exposes the variation in heights within the building, with large open spaces like the painting and sculpture studios overlooked by gantries and offices independantly. Creating new ways to view and inspect the art.



1-100

North Facing Section

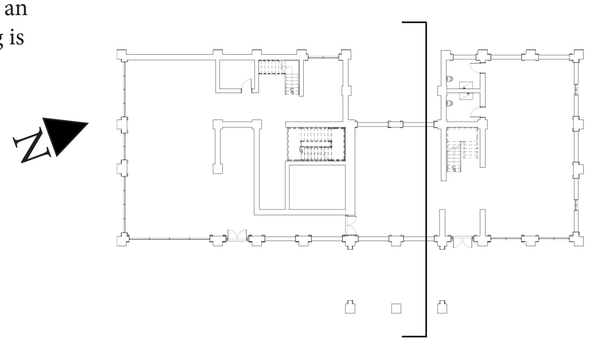
From the ground floor to the top, this section shows the pottery and sculpture studio, cutting through the kiln, also cutting through the offices above. The Second floor is where the graphic design studio, is, cutting through the external section as well. Finally, the apartments are cut through on the top floor, with kitchen and terrace vut through.



1-100

South Facing Section

From the ground floor to the top, the section shows the two floors of galleries, cutting through the overhanging extension. Above that is an open air portion, where sculptures are displayed. The top floor is the painting studio. In the background the southern part of the builing is seen.

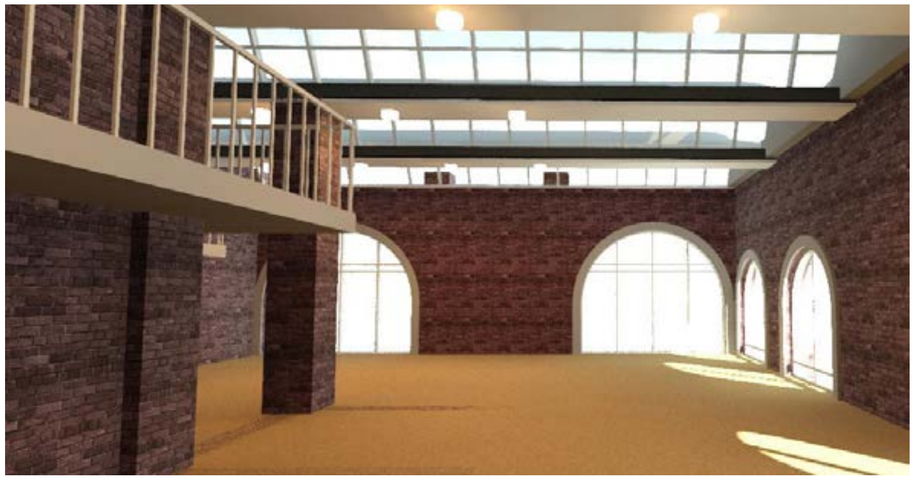


Final Design Internal Views

Top L: View of the offices from the ground floor of the sculpture studio.
Top R: View from inside the office.
Bttm L: View of the kitchen in the apartment
Bttm Right: View of Livingroom in the Apartment

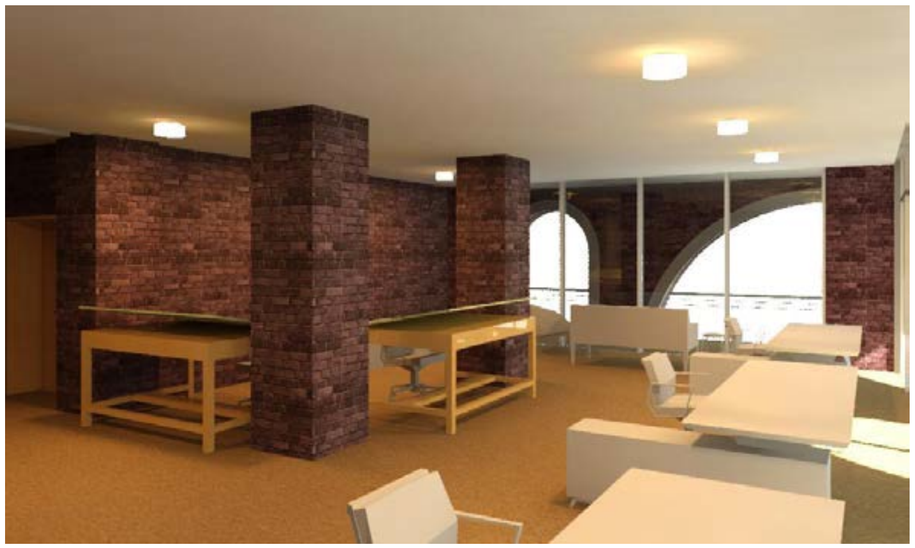
Interior View of Sculpture Stu.

Large south facing windows help provide light which differentiate texture well, a property that is very useful for sculpting and pottery. The windows can be opened to transport large pieces of art or material from it. Additionally, the vertical volume has been used, by creating an office above the space.



Interior View of Painting Stu.

The painting studio is at the top of the building so that it has unobstructed light from any shadows. The windows facing the north are large and allow a lot of soft light in, the windows on the eastern side to provide additional lighting in he morning hours. An upper gantry is in place for viewing pieces from different angles or completing larger pieces.



Internal View of Graphics Stu.

The graphics studio is set away from the windows by a balconey on its north east and south sides. This helps reduce the space that requires heating and cooling, as well as reducing the glare inside which would be bad for screen work. The ceiling here is not double height, so as to bring the lights closer to the work surfaces.