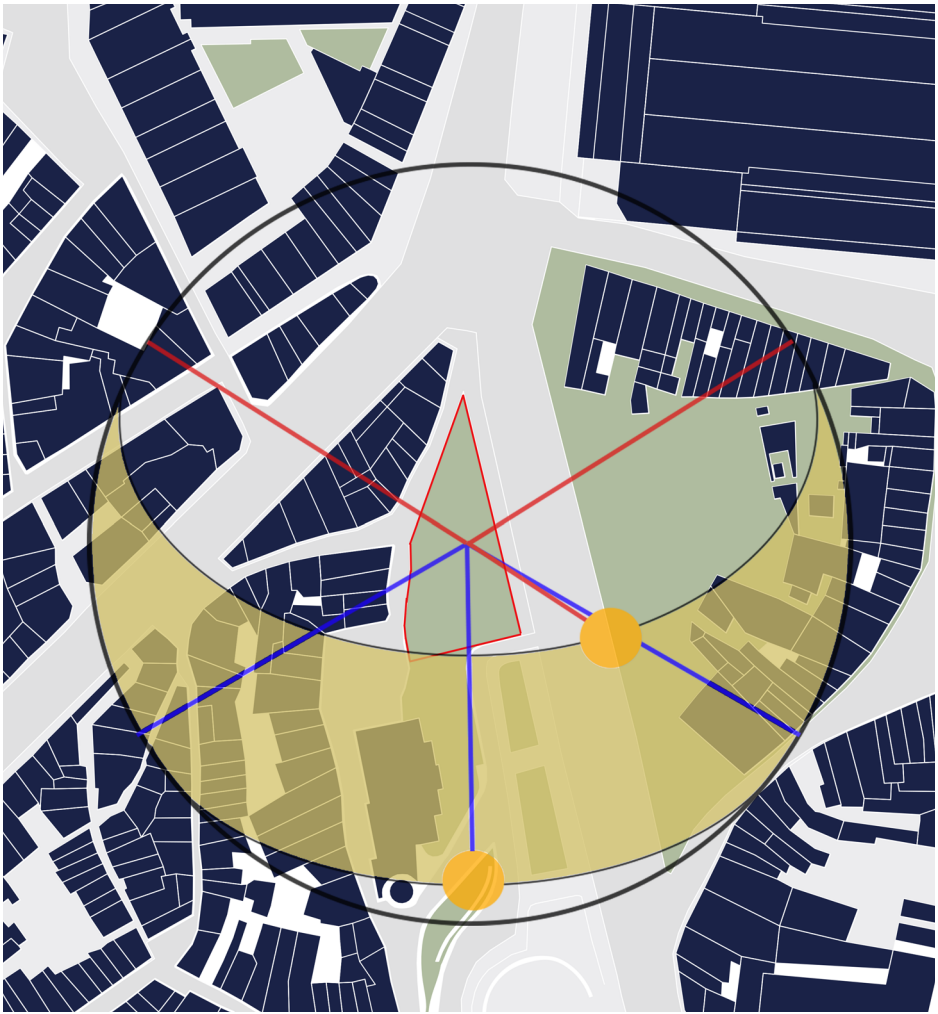


Site Analysis

Scale 1:1000

0mm 10m



Site analysis consists of a few major factors. Soa Bento train station, Porto's Cathedral and a street with public plenty of transport and popular restaurants surround site makes this area a popular tourist spot and highly contested. Designing a theatre in this area means sound insulation must block outside noise as well as controlling sound in side the auditorium.

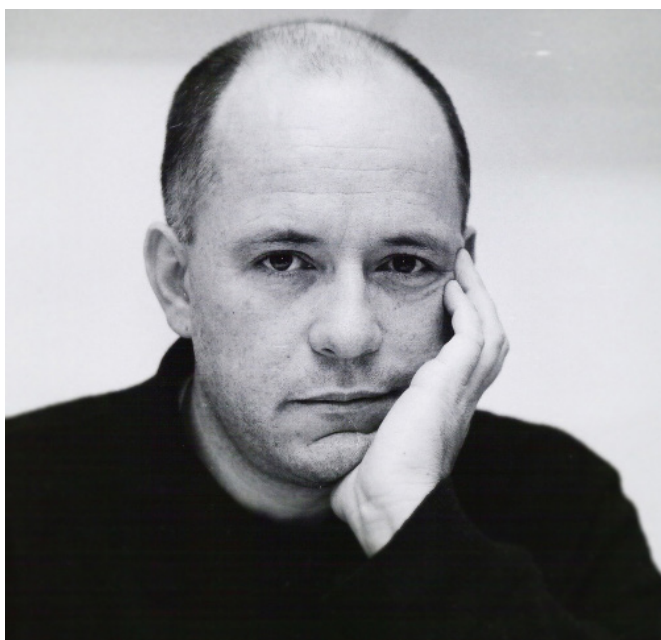
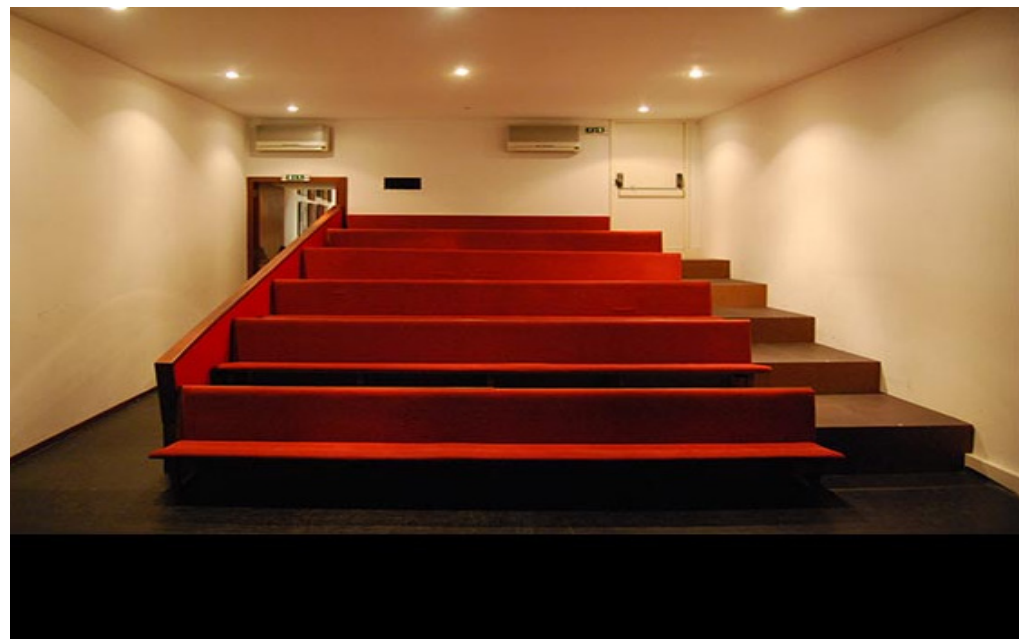
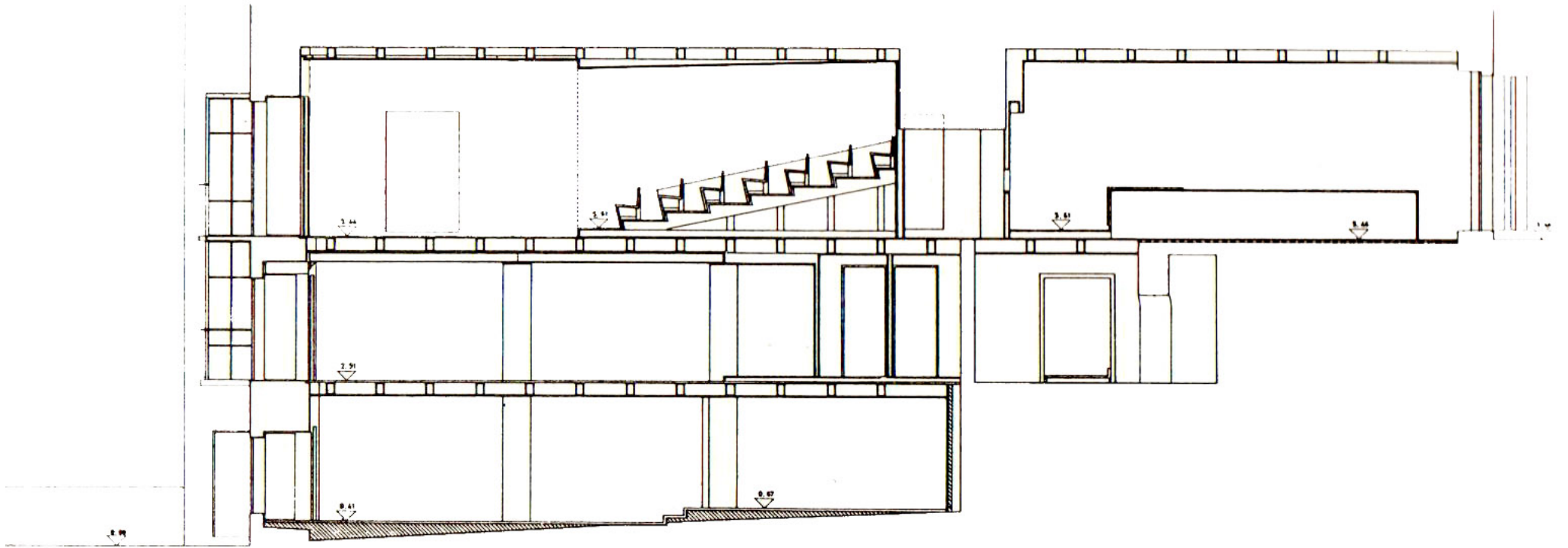
Brief Narrative



After research on the type of performances that were popular in Porto I can cross Marionettes, the most popular puppet who have stopped showing and the focus is on the preservation of them in museums. However, due to the lack of live performances in the area, (as it more focused on Fado and other forms of live singing) I wanted to build a shape for performers. My space will focus on the acting and performance while also bring back traditional puppetry.

Taking forward inspiration from my city poster which explores the loss of traditional practices as societies change, this collage explores late histories of Marionetas and Puppetry and its significance to theatres. Teatro de Marionetas do Porto (Portos Puppet Theater) was formed in September 1988. Traditional Portuguese puppets were inherited by João Paulo Seara from a puppet master António Dias who was the last representative of the Itinerant puppeteers generation in 1980. The first show was inspired by popular tales and rituals from north Portugal. The debut of puppet shows like "Miséria" in 1991 was well received and represents the first financial support they received from the state. For a while, shows didn't do as well, but after trial and error "3ª Estação" ("3rd Season" - a co-production with Balletatro Companhia) which combines puppetry with dance re-ignited popularity. Marionetas evolved to include music, dances, video and visual arts. After 25 years of Marionetas do Porto, the live performances ended and the Marionetas are in a museum. My brief is to create a tribute theater which holds puppet performances and teaches history behind it.

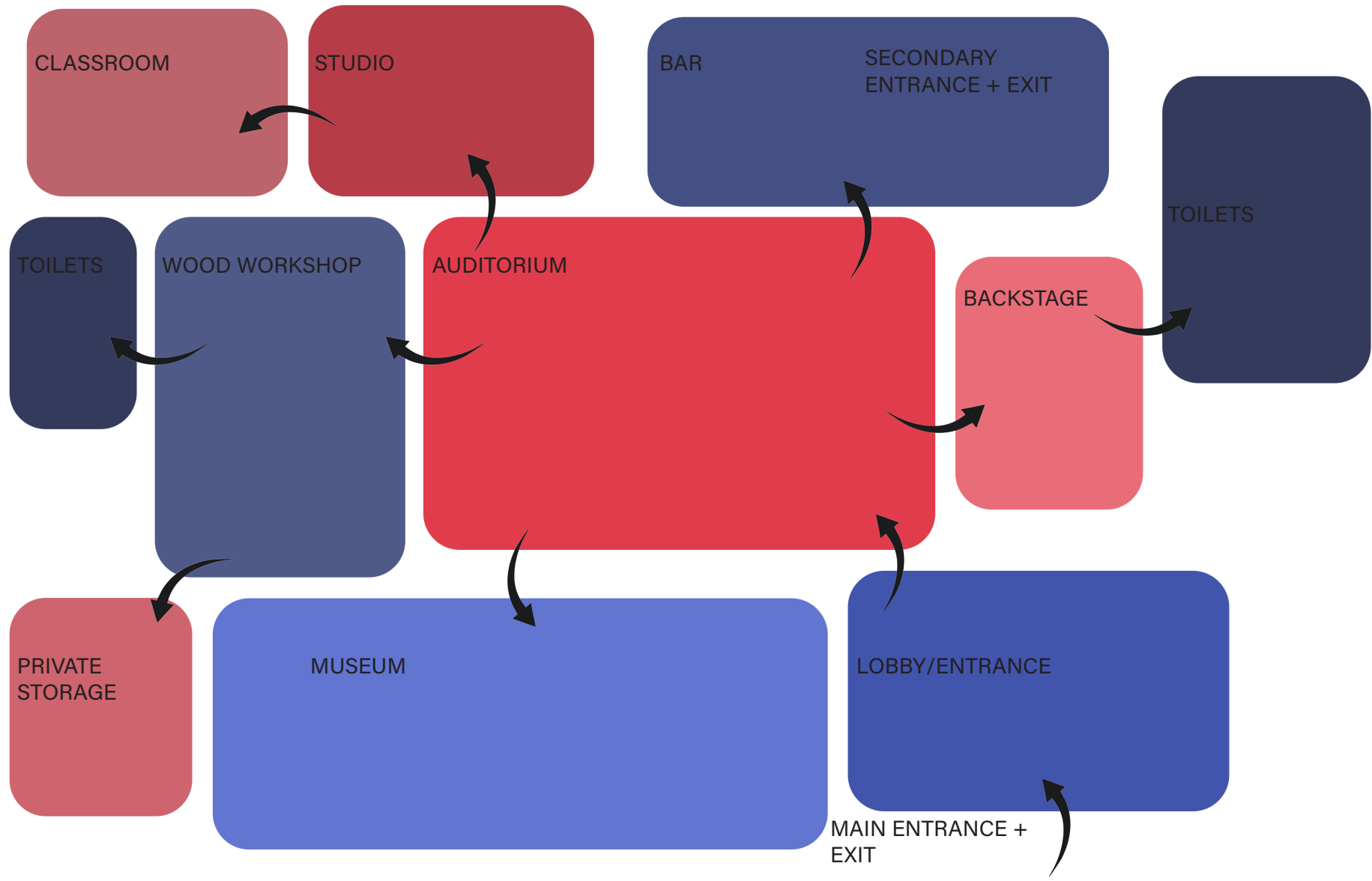
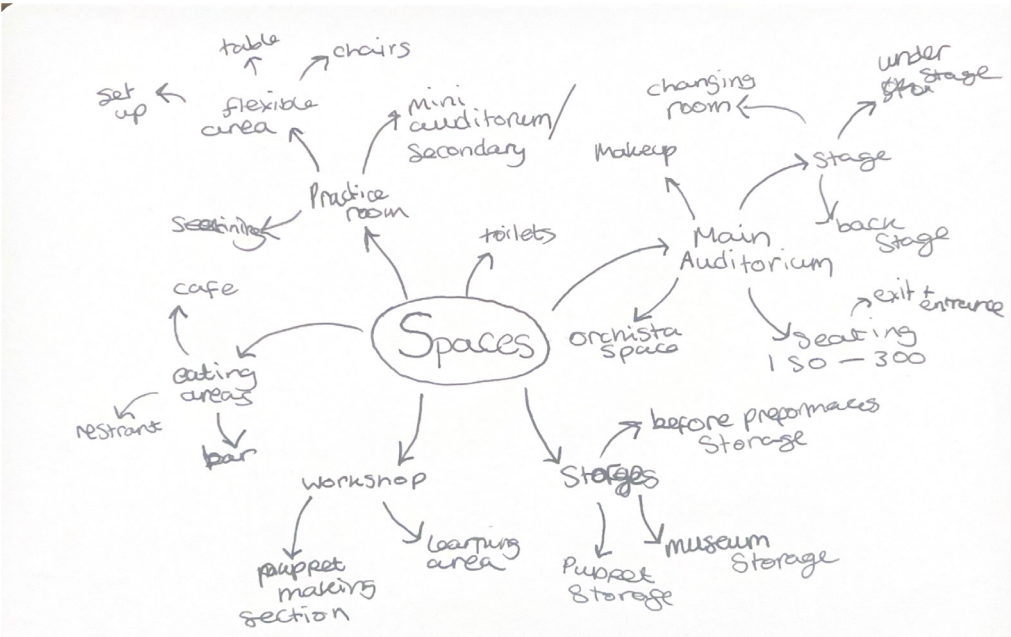
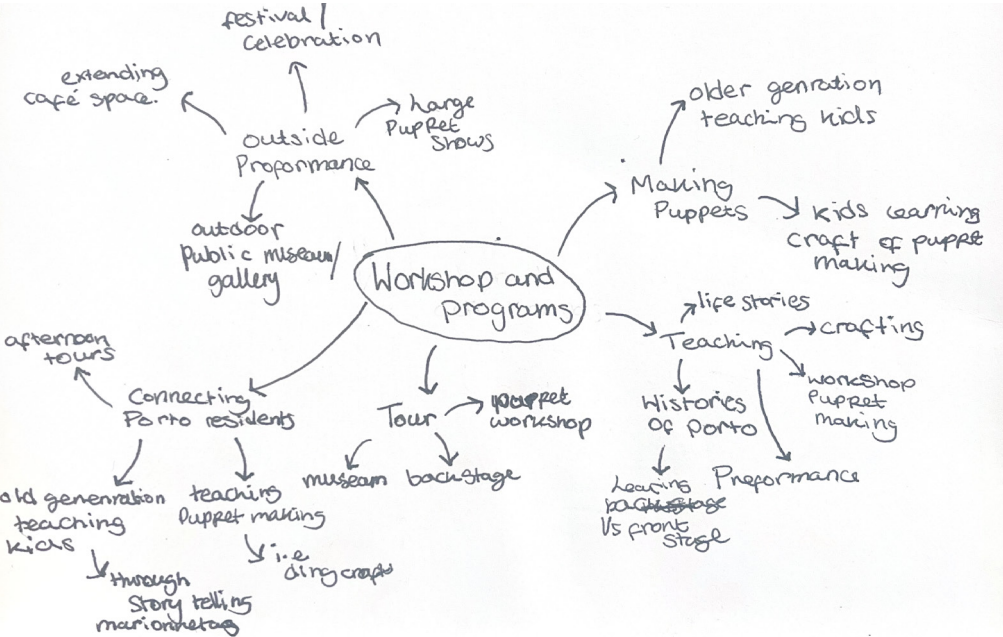
Brief History



JOHN PAUL SEARA CARDOSO (1956-2010)

John trained in Socio-Cultural animalisation and puppetry. He attended circuses at the institute National D'Education Populaire and the Institute Interantioal De La Marionnette. He dedicated himself to researching and restoring the Teatro Dom Roberto (Theater of Roberto), Portuguese folk puppets. He performed around 1500 performances in Teatro Dom Roberto. Once the theatre closed down and John died in 2010 his legacy was moved to a building to the SW of site down R. de. Bolomonte. Now the museum is comprised of 2 floors and has a 41 seating theatre. It holds some meoreies of John Pauls legacy.

Brief Areas



LIST OF ADJACENCY

SPACES	SIZE REQUIRED (Meters Squared)
Lobby/Entrance	30 - 50
Auditorium	100 - 130
Bar	60 - 70
Black Box	40 - 50
Backstage	30 - 40
Wood Workshop	70 - 80
Professional Studio	50 - 60
Classroom	35 - 40
Toilets	40 - 50
Private Storage	25 - 30
Museum/Open Storage	80 - 100

Room schedule centres the auditorium, with other rooms surrounding. The theatres have two entrances and exists. One main entrance gives direct accessible access to the auditorium, the secondary entrances will allow access to other rooms and also act as a exist on the other side of site. The duel level entrances and exit will allow for better flow of people.

Technical Precedents

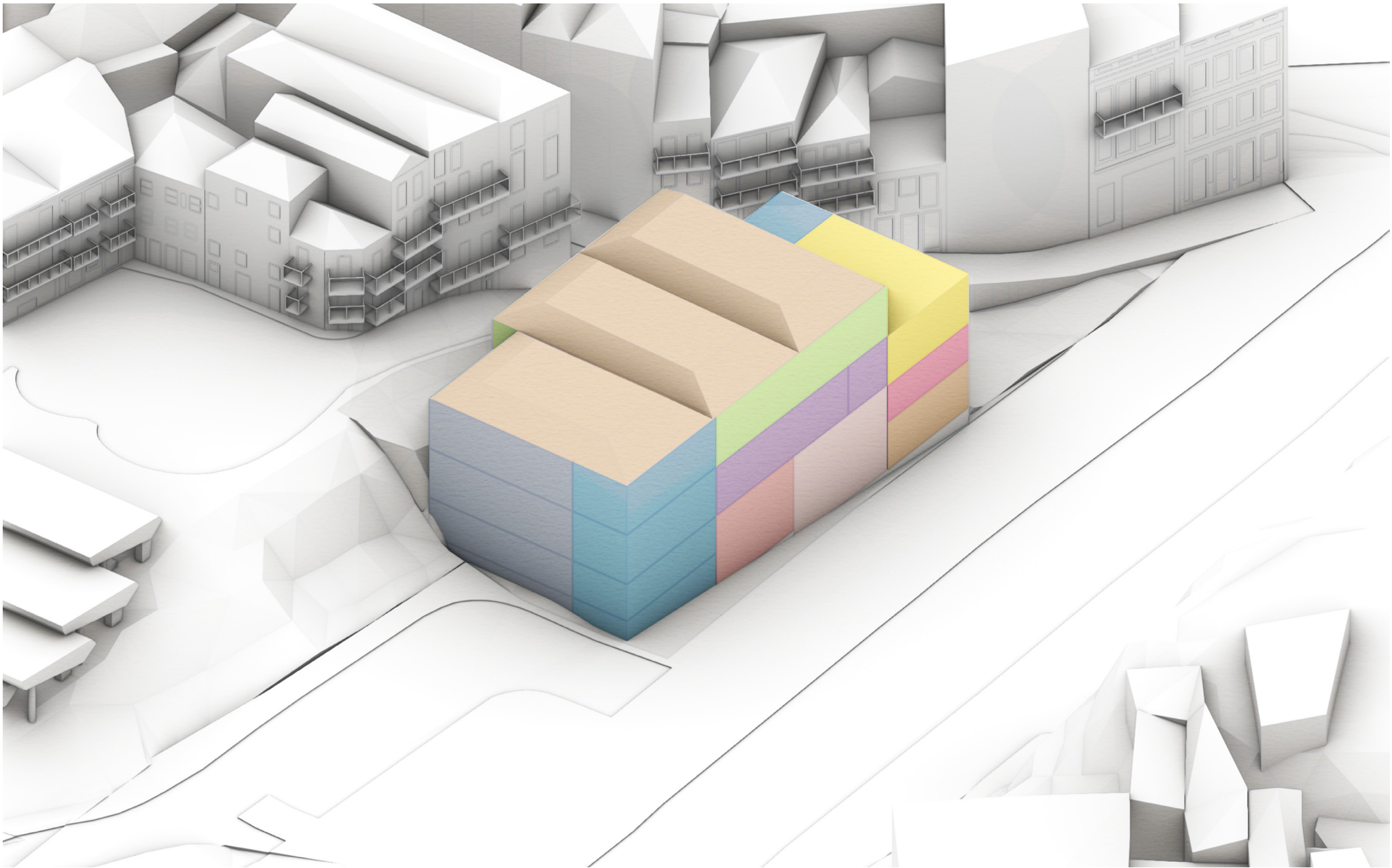
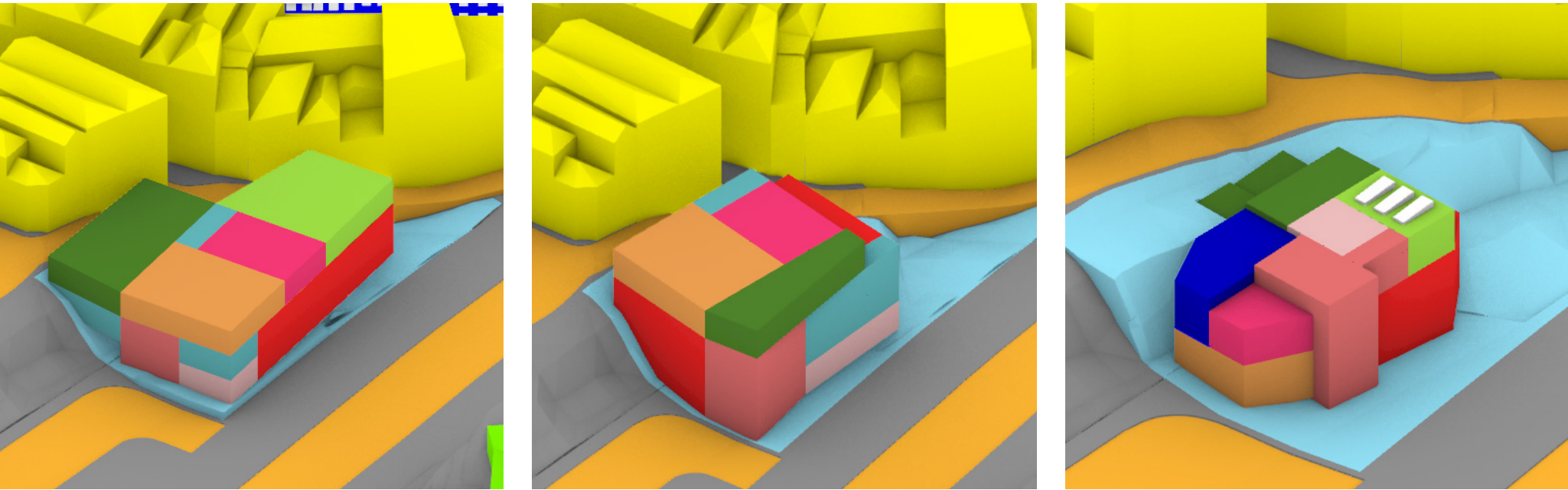
SCALE OF PLY / NOJI ARCHITECTS










This Victorian house in Ireland was renovated and extended using a series of interconnecting triangular plains. These plains are positioned to allow light deep into the plan as the sun moves across the house during the day. The plains are supported on a prefabricated plywood lattice structure supported off a glulam beam.

The plywood glulam beams support the first floor and are in turn supported using a cruxiform steel column as the only structural steel used in the build. The junction between the two glulam beams was created using a simple lap joint between the beams with long screw connections.

Design Development



KEY

	Atrium/Lobby		Classroom
	Auditorium		Bar/Restaurant
	Workshop		Museum
	Studio		Other spaces

Massing started with taking the largest size my spaces could be and building it up on site. This created larger rectangular or square boxes which took up a large mass on site. Next, I conceded the mass on site to its smallest while carving more shape into the design by following the structure of what seating could look like internally.

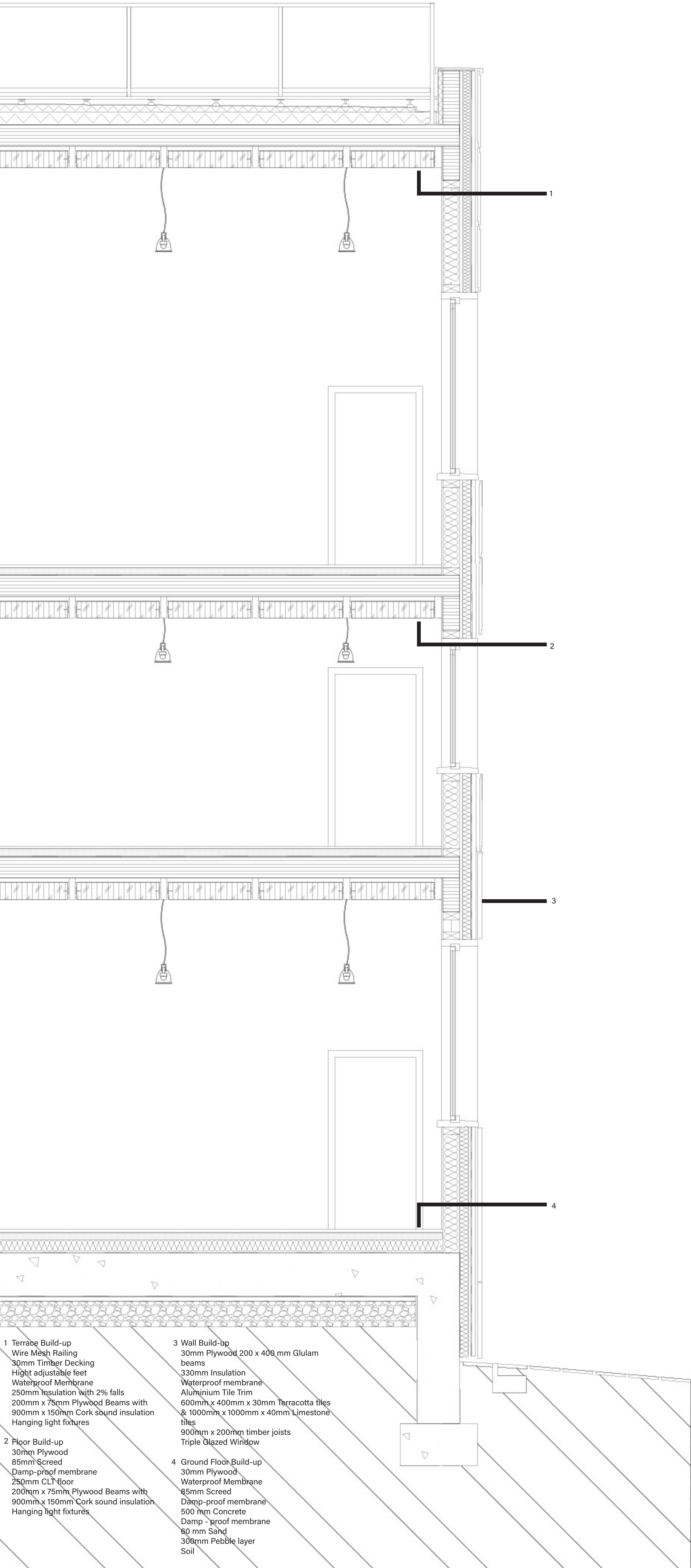
The spaces were placed according to the sites climate and accessibility. The auditorium is placed on the bottom of massing and sits slightly into the ground. The atrium was pulled out the massing to create more floor spaces and allows of down the sign of the building. To add this will allows for a larger welcoming entrance.

Contextual Areal View



Bay Study

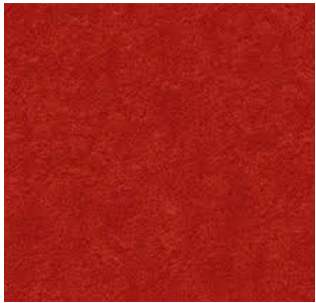
Scale 1:25





Environmental & Material Strategy

Scale 1:200



In this Projected I ensure that the materials uses were local sourced and is the best choice for my biding. For sound insulation I used Cork instead of other conventional sound insulators. This material is hight produced in Porto.

Another locally sourced material I used is pink/ tan limestone. This highly reduces the carbon that would be used importing materials form other countries by plane or boat.

Other materials used in my building include timber and fabrics for the interior.

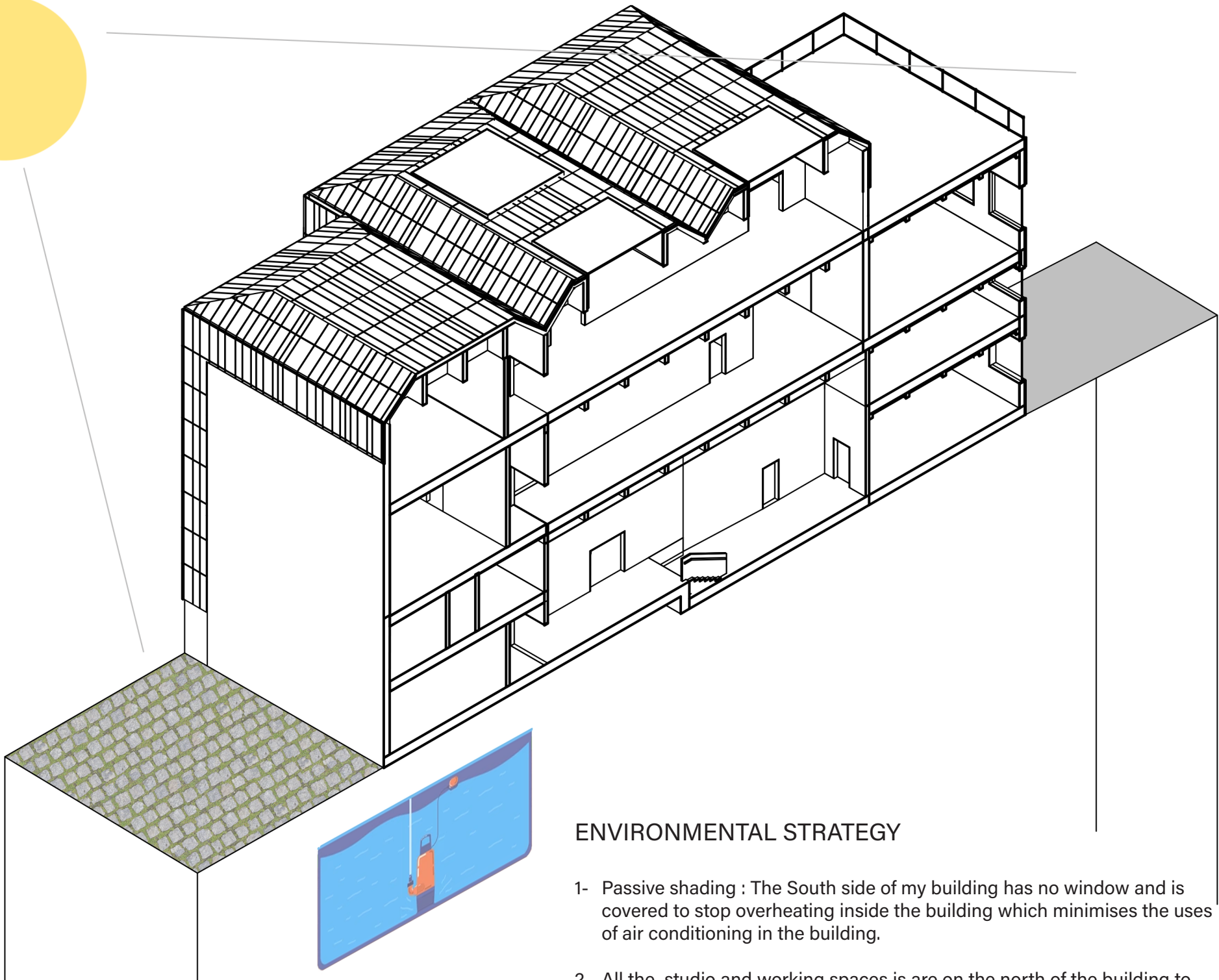
CARBON CALCULATION

One tile = 64.428 cubic cm
One cubic meter = 1552.12

LIMESTONE VS. GRANITE

One cubic of tile made from granite produced 839714 of embodied carbon
VS.
One cubic of tile made from Limestone produced 272579of embodied carbon

THIS MAKES USING LIMESTONE 3.08 TIME LESS EMBODIED CARBON

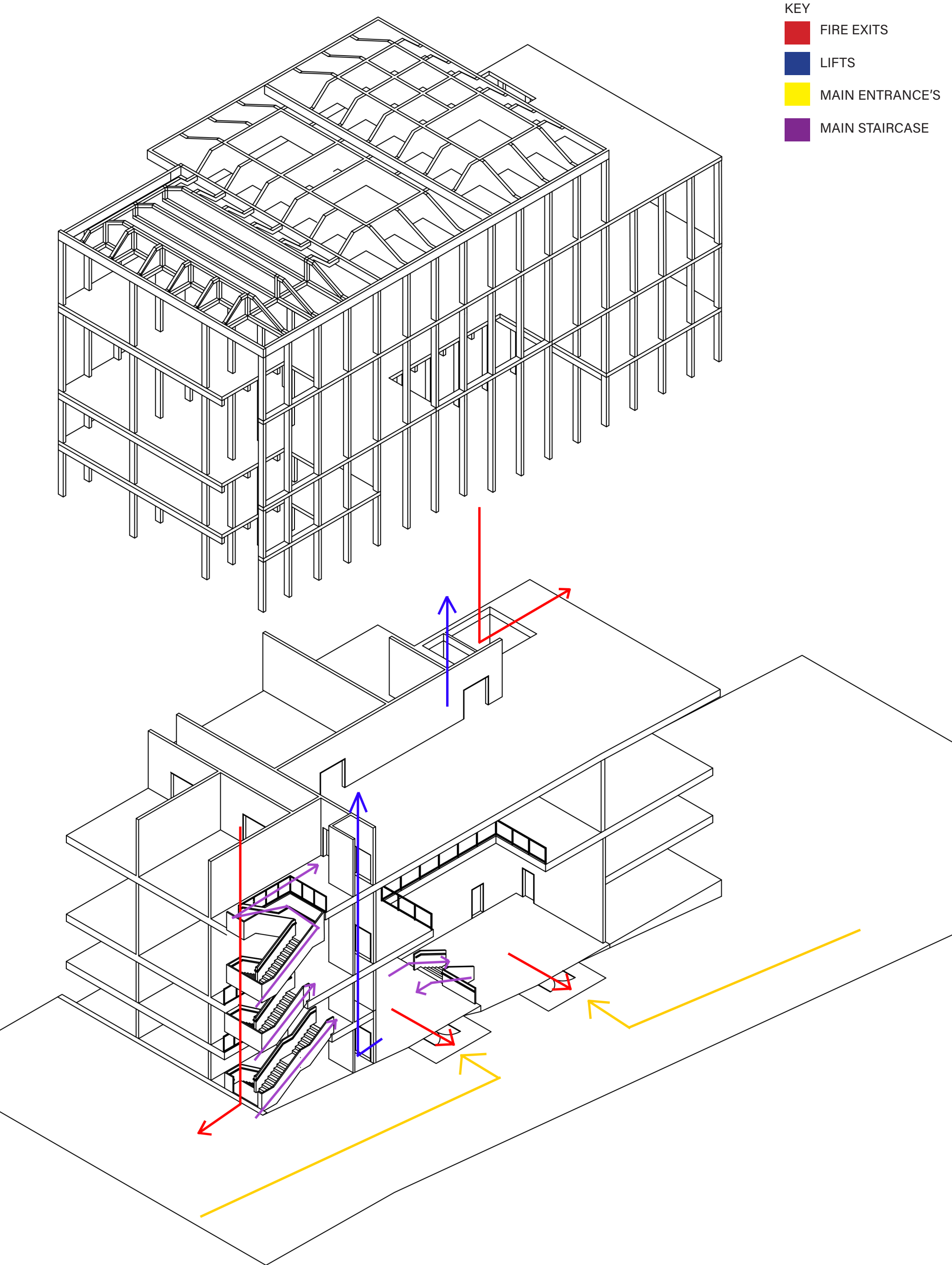


ENVIRONMENTAL STRATEGY

- 1- Passive shading : The South side of my building has no window and is covered to stop overheating inside the building which minimises the uses of air conditioning in the building.
- 2- All the studio and working spaces is are on the north of the building to make the most use of North light.
- 3- Permeable paving is used to control the flow of rain water into the ground
- 4- Rain water that cannot be consumed is stored in tanks and used as toilet water and irrigation.
- 5- The uses of cork instead of other manufactured sound insulation as cork is renewable material and is local to Porto.

Structure & Accesses Strategy

Scale 1:200



Ground Floor Plan

Scale 1:200

0mm 2m

KEY

- 1- Fire Stairs A
- 2- Workshop
- 3- Backstage
- 4- Cafe
- 5- Auditorium A
- 6- Atrium
- 7- Toilets
- 8- Fire Stairs B



First Floor Plan

Scale 1:200



KEY

- 1- Classroom
- 2- Balcony
- 3- Control Room



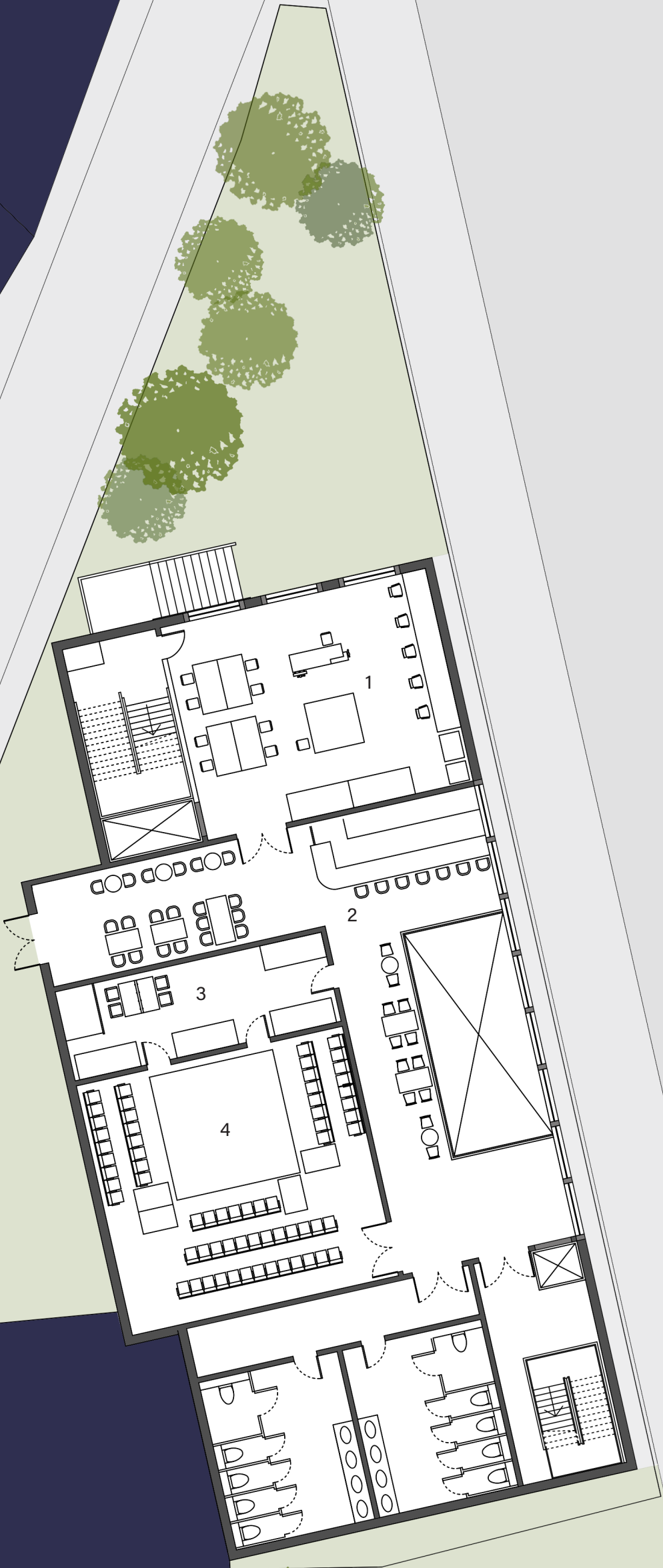
Second Floor Plan

Scale 1:200



KEY

- 1- Professional Studio
- 2- Bar
- 3- Backstage
- 4- Auditorium B



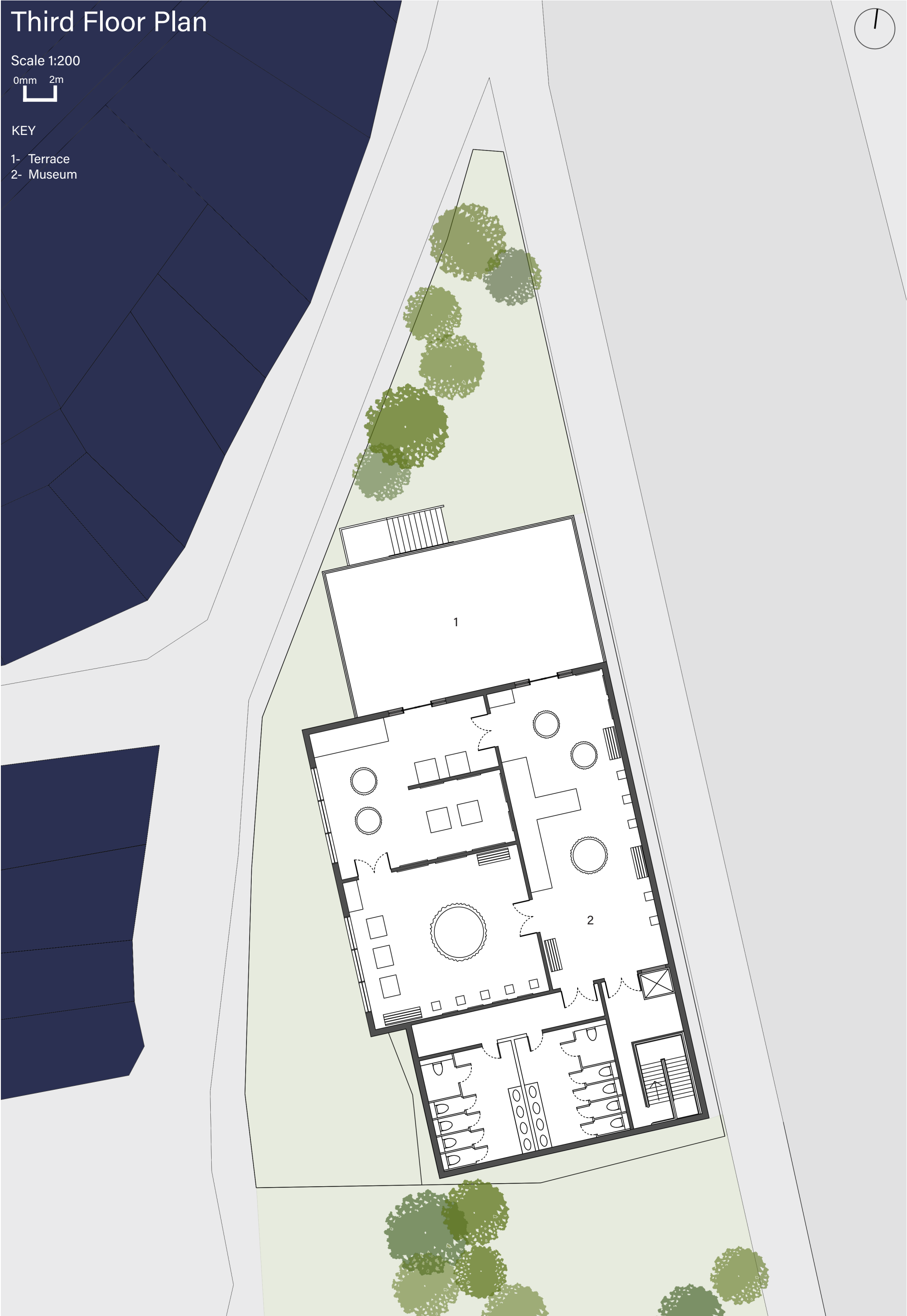
Third Floor Plan

Scale 1:200

0mm 2m

KEY

- 1- Terrace
- 2- Museum



Section

Scale 1:200

0mm 2m



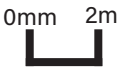
Short Section

Scale 1:200



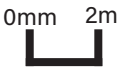
Elevation

Scale 1:200



Elevation

Scale 1:200



Interior View



Interior View



External View

