

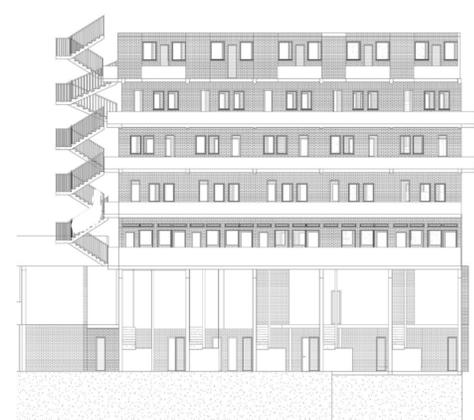
TOWER HAMLETS

MIDDLESEX STREET ESTATE

CITY OF LONDON



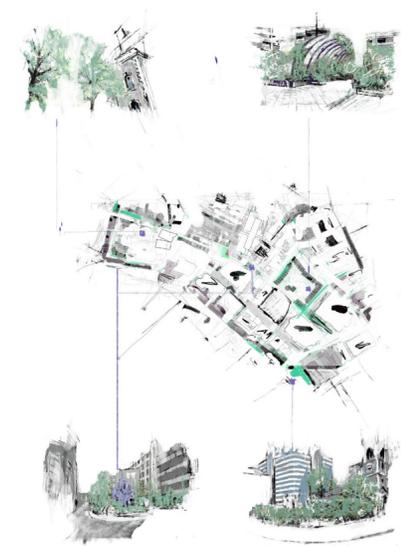
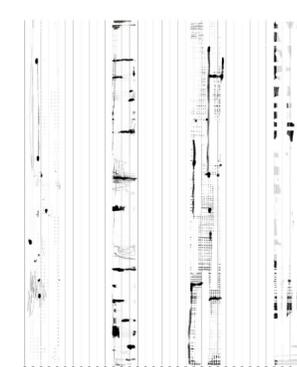
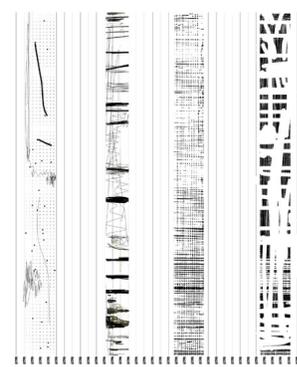
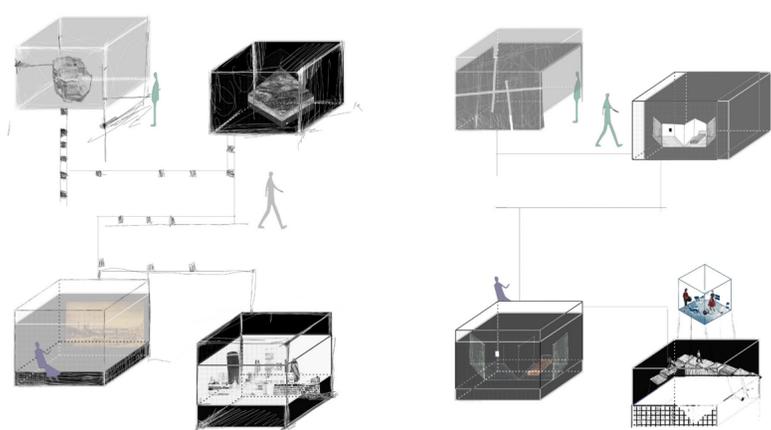
Existing facade for the units given in task for the design.



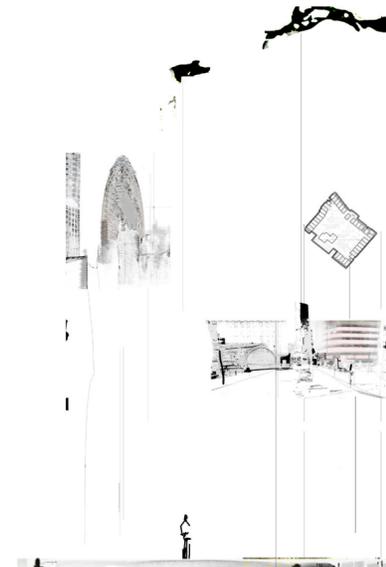
During the pandemic , advanced technology helped people to communicate from a distance. As a consequence, this action has drastically reduced emission and nature started to re-emerge.

However, the lack of city workers has affected many practices and small businesses. The pandemic has allowed businesses to assess their needs and their overheads and, as such, their location leaving many offices, shops, and factory units vacated and empty.

The brief asks to design a new workspace for new start-up businesses for a specific field of work.



Collage and sketch-people movements



Around AD 43, The Roman legions established a settlement known as "Londinium" on the current City of London, thanks to the bridge built over the River Thames. Nowadays, the district continues to have an important position notably the control of its police force.

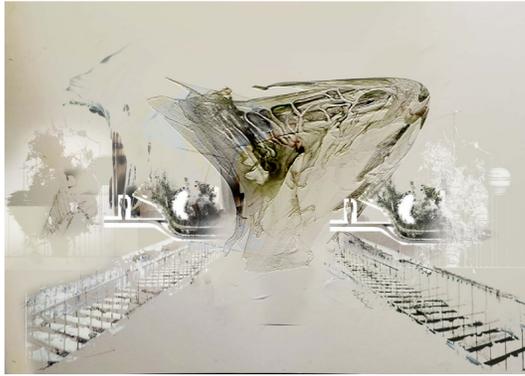
In 1880 the site was a complex of buildings and streets. In 1890 it started to change and be more organized: North Block, Prince's Block, Queen's Block, and King's Block. In 1965, the building, due to the post-war was transformed into a brutalism design. The characteristics of brutalism architecture, such as heavy-looking materials, straight lines, and the feeling that anything cannot enter inside, seem to reflect the sentiments of that period.

The analysis of sounds show how Middlesex Estate is a contrast and a transition at the same time between the two districts. Also the City of London demographic majority is white people, whilst in Tower Hamlets, Asians are in majority. This observation is crucial in the project because it shows that different societies influence the building.

The green areas near the community of Middlesex Street Estate and inside suggest that nature and people are trying to bond together. Considering that surroundings are characterized mainly by stark colors and materials, nature is not used at its high potential. Also, from the statistics, the health of both districts is different, and the benefits of nature should be to their advantage.

The movement of the people in the community is a complex system of lines and abstract shapes that interact with the architecture. The curviness of their actions in the space embodies a peculiar landscape. People seem to shape the lines and form new shapes.

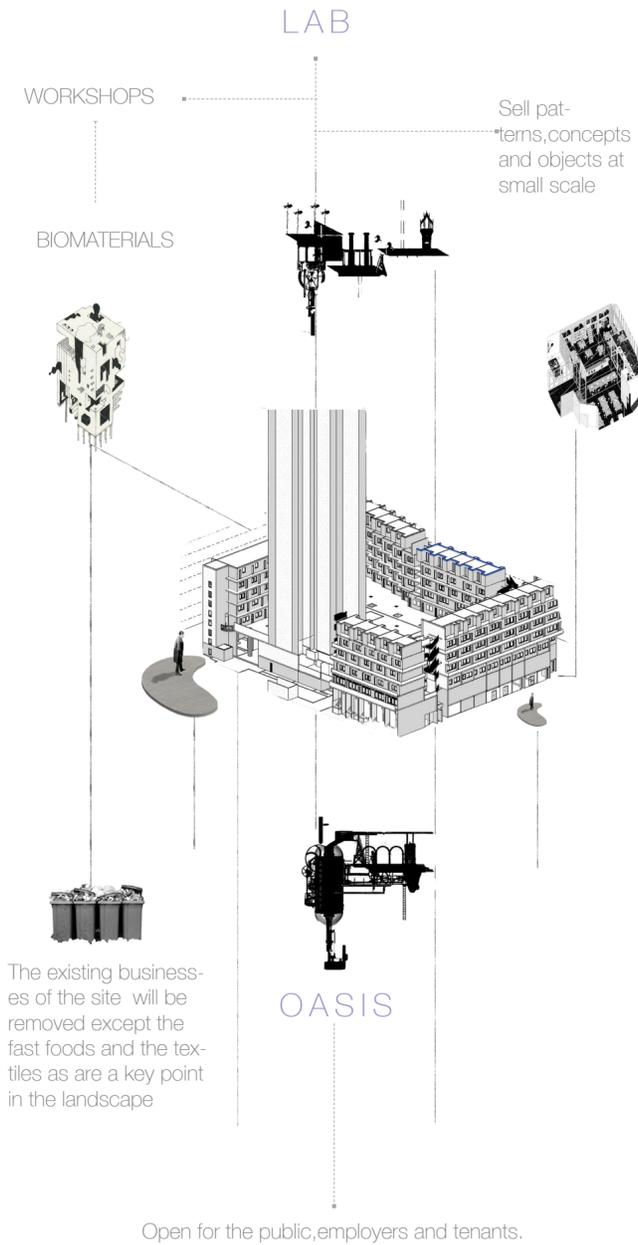
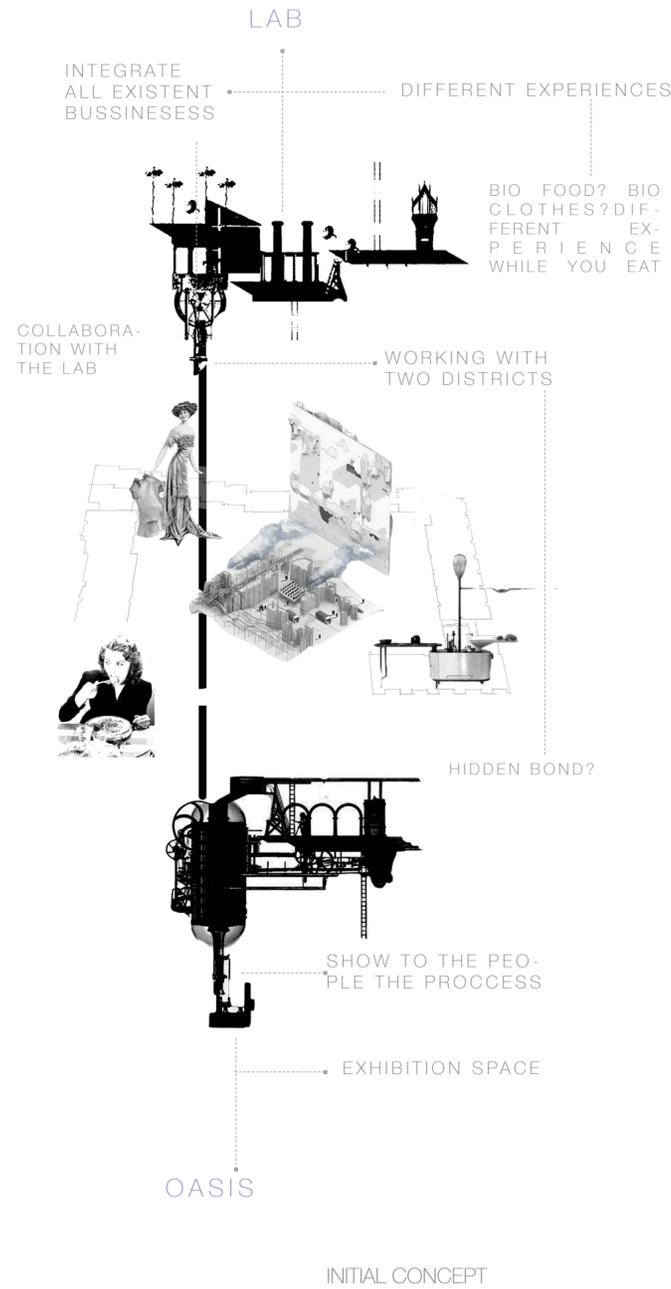
This mosaic came out as an exciting attraction where the Estate is sheltered. The contradiction is that the site is still integrated into the landscape even if it is not noticed as the other buildings. The curves of other buildings warm the rigid lines of the site. The design will be based on these kind of lines.



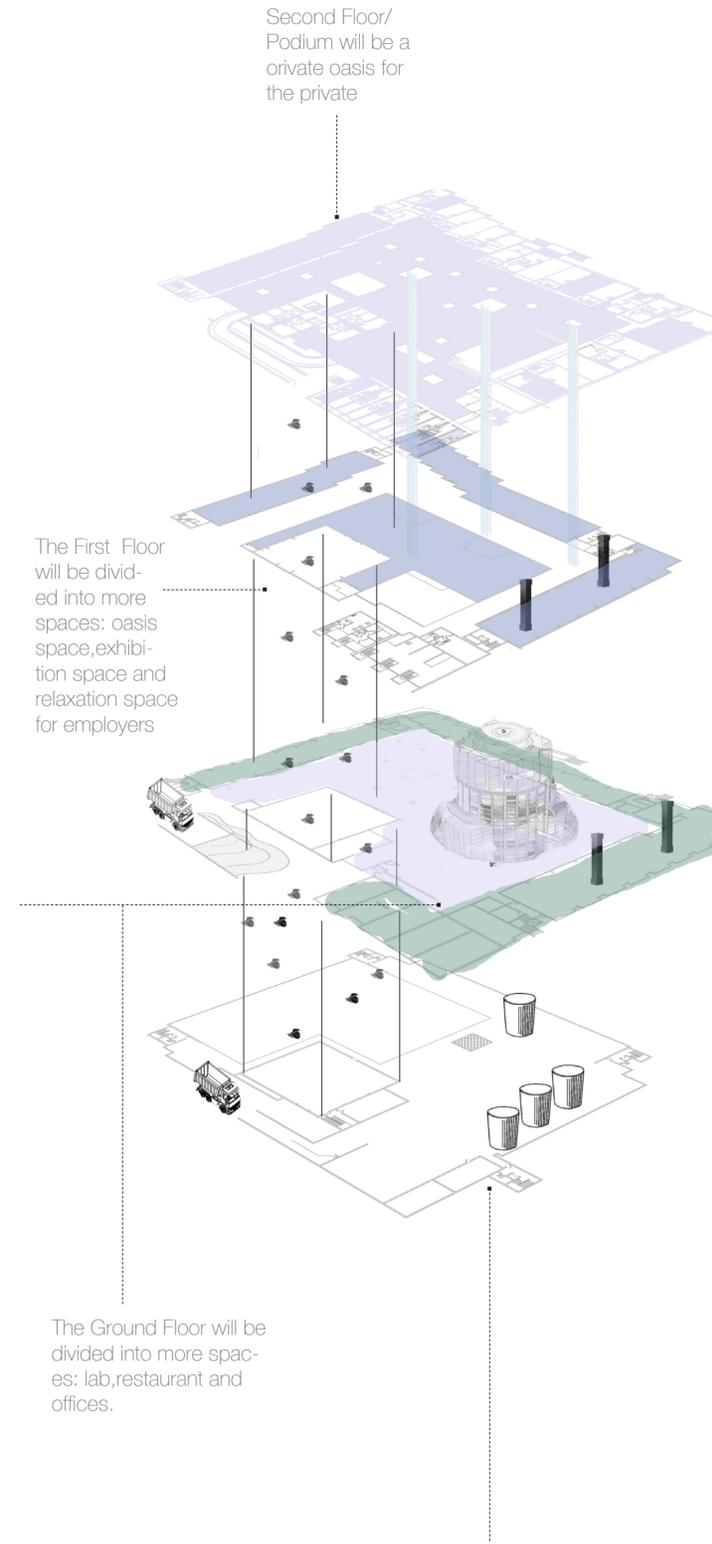
The research about green spaces, the materiality of the place, sounds, and the reflection illustrate that Middlesex Estate is a transition/contrast between two districts, and it should be a critical point in the project design. The concept is based on the creation of a lab because this represents the mixture between different beings and technology. It is an analogy regarding the mix of ethnicities found in the community of the two districts. The materiality of the place reconfigures the existing frontier, and people can experiment with the most innovative biomaterials. This biomaterials represents the collaboration between the two districts.



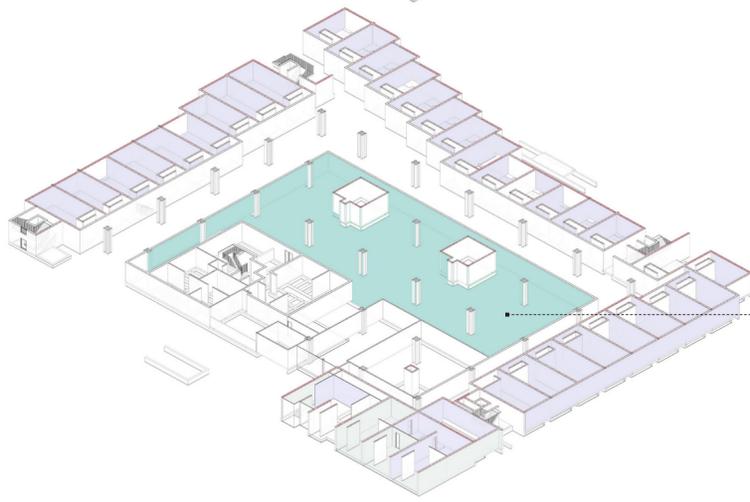
The approach to creating an oasis space suggests a mindless and physical process with the materials and community. The lab is creating the concepts and the materials necessary for the unique experiences that people will have. In this way, Middlesex Estate becomes an oasis space due to the experiments from the lab.



The materials for the outcomes (biomaterials) will be provided by the tenants' waste of Middlesex Estate and the businesses nearby of the two districts. This waste includes food, waste constructions, clothes, plants waste, and recycle. The outcomes from the lab will be displayed in relaxation rooms. In addition, there will be rooms only for relaxation and experiencing the innovations. Other rooms will be designed as an exhibition space where people can learn and purchase products



The basement will be used as a collection point for the waste. The cars will go down through the existing tunnel to drop the waste in an organized space with special containers. The ventilation will use the existing, and new system to eradicate any waste smells.

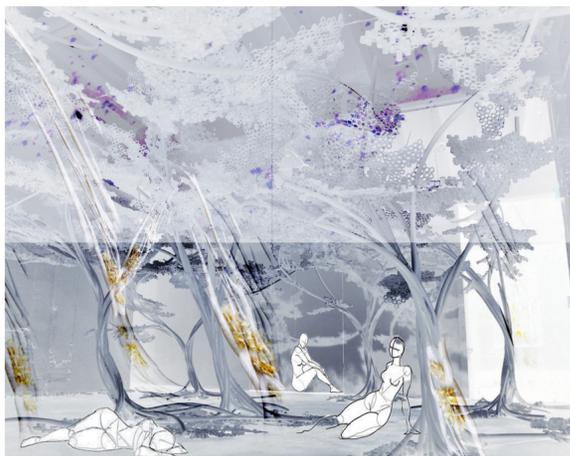
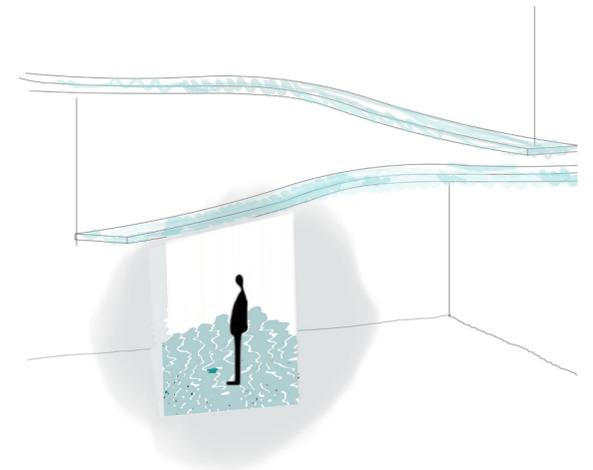
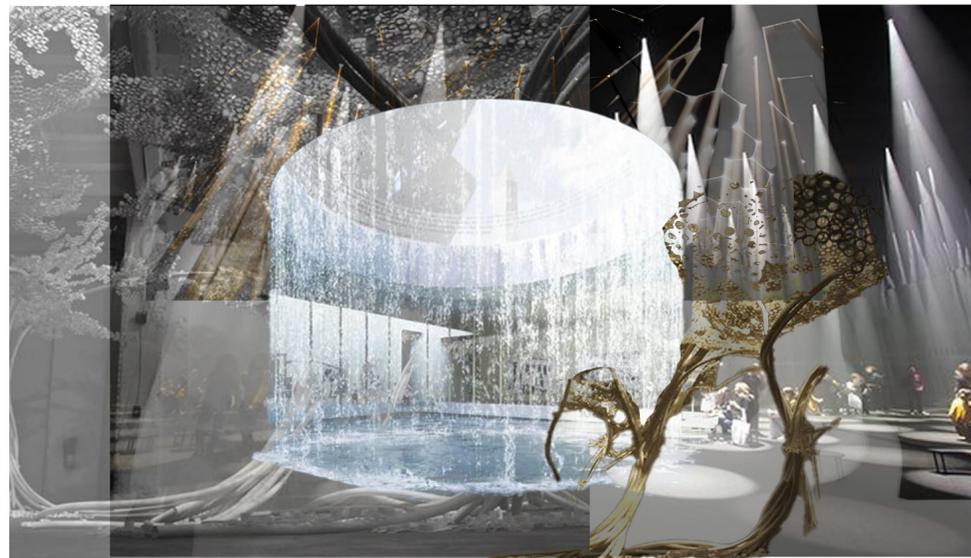


The First Floor -Car park transformed in an oasis space

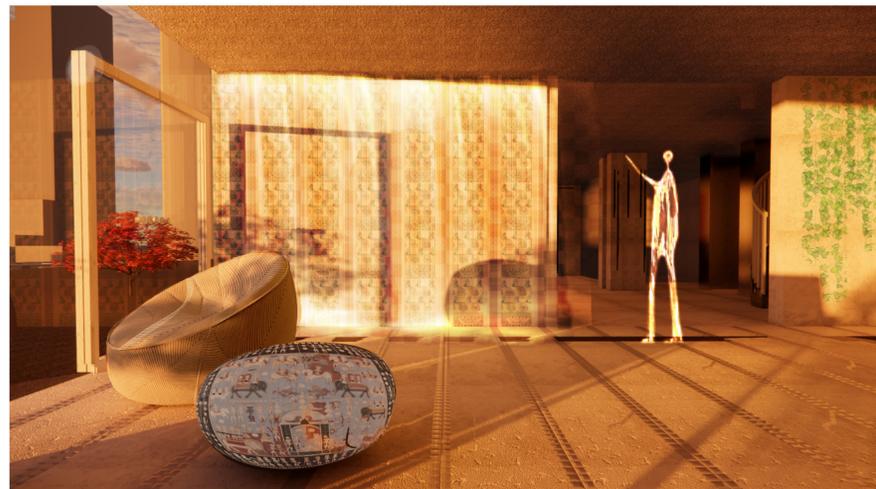
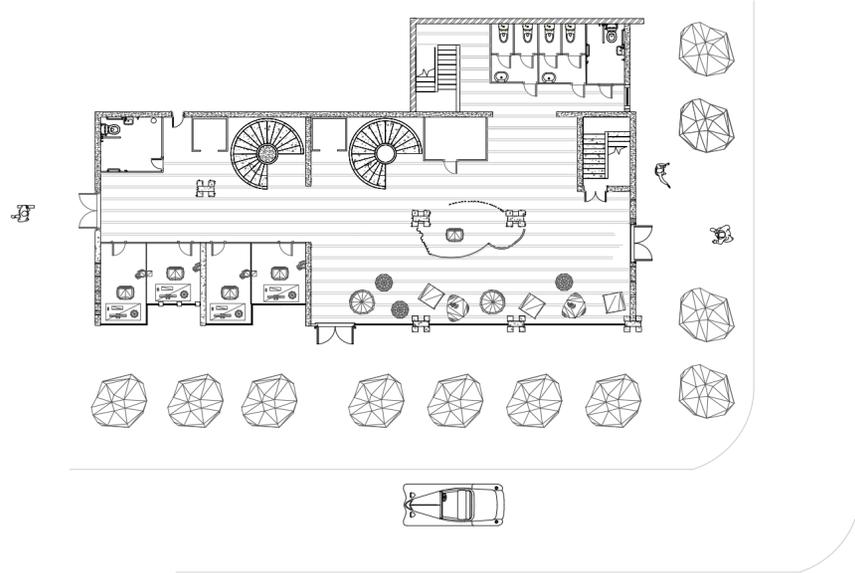
The approach to creating an oasis space suggests a mindless and physical process with the materials and community. The idea of an oasis in the project can be integrated into the site as it is connected to the lab. The lab is creating the concepts and the materials necessary for the unique experiences that people will have. In this way, Middlesex Estate becomes an oasis space due to the experiments from the lab.



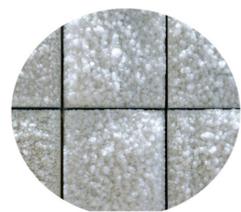
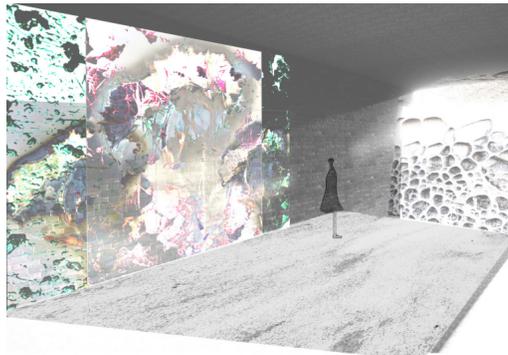
Sketch and collage -exercise relaxing area with lights and materials. Jungle made with mycelium



The waterfall is based on the fact that the water is running through the floor of the second floor. The pipes will be like skylights where people can see the water while the light falls in the water making a rain of shapes. The water is from the rain and is recycled for the waterfall. There will be three waterfalls: a sizable one with curved lines and another two at the entrance of the oasis. The last two will be small because before, there were skylights and will remain in rectangle form.



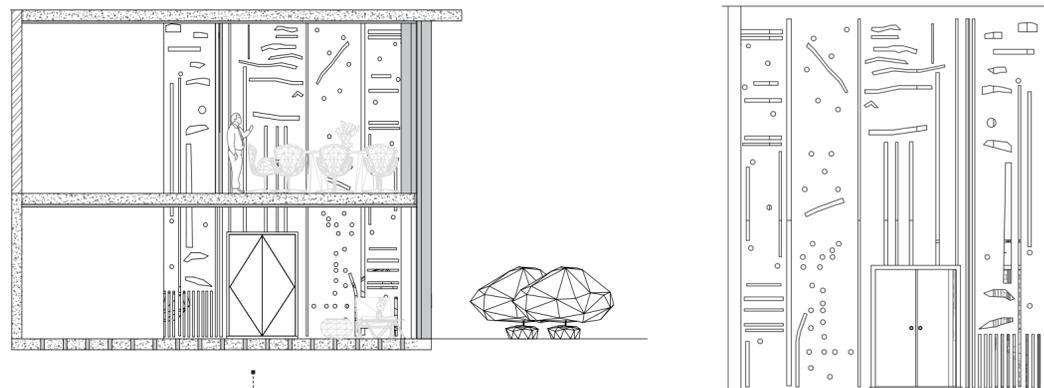
Ideas offices



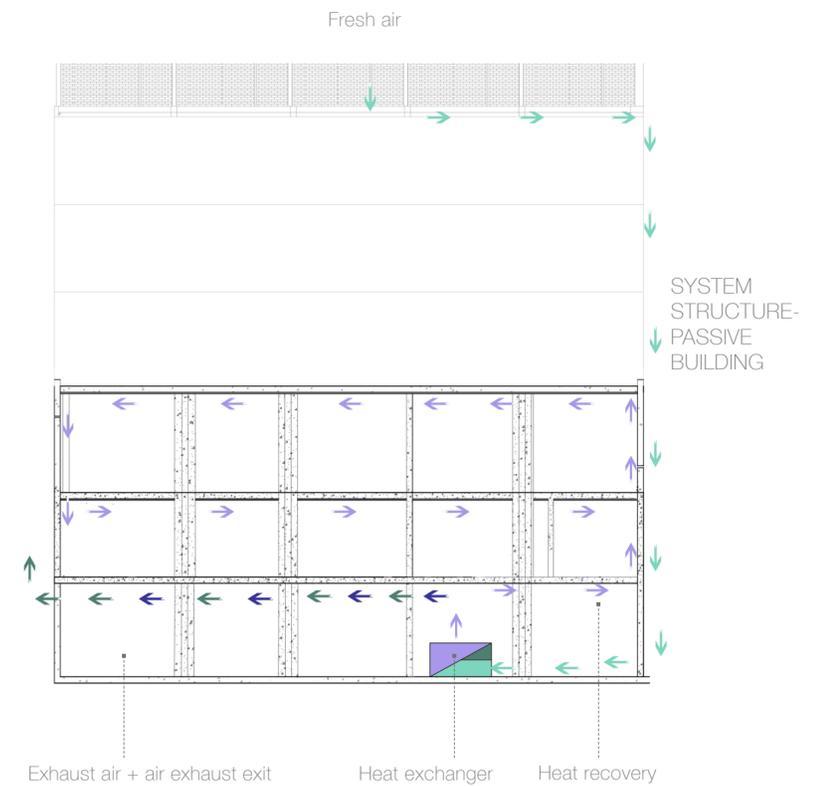
Panels of salt installed on ceilings for a better air quality

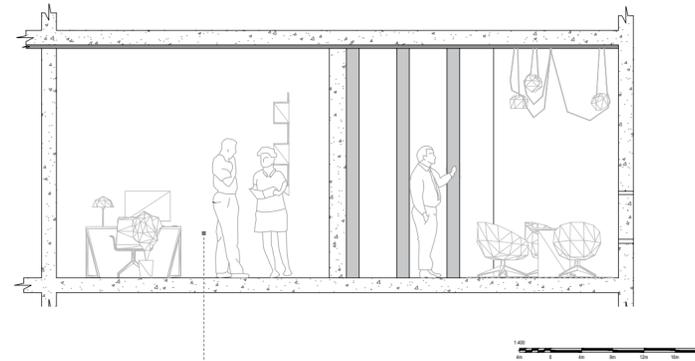
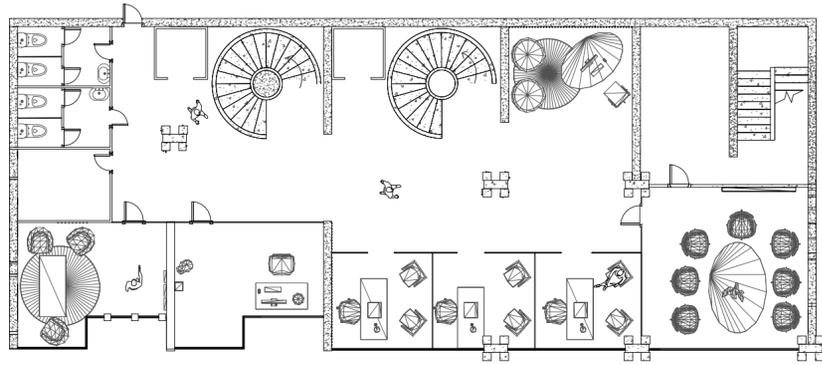


White bioconcrete the whole structure of the ground and first floor where parts of the bacteria will be seen and other no

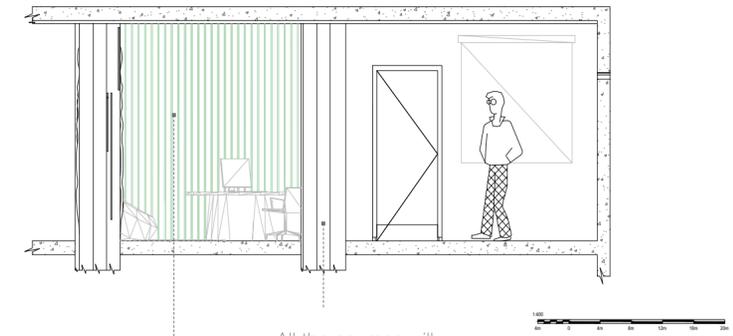


The decorative wall (250 mm)-entrance is made of bioconcrete and the decorations with clear triple glass





Acoustic glass for the offices



MOS IN THE WALLS

All the columns will have waterfall except this one at the first floor as is a main structure near a point of fire exit.

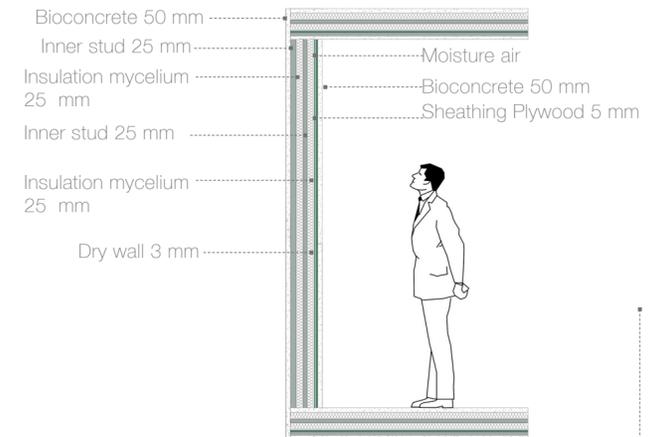


Visual office first floor



Concept outside during the night

The project studies the genetic creation of bioluminescent trees for urban and domestic use by introducing in the plants the gene responsible for the GFP (Green Fluorescent Protein), obtained from the *Aequorea victoria* jellyfish

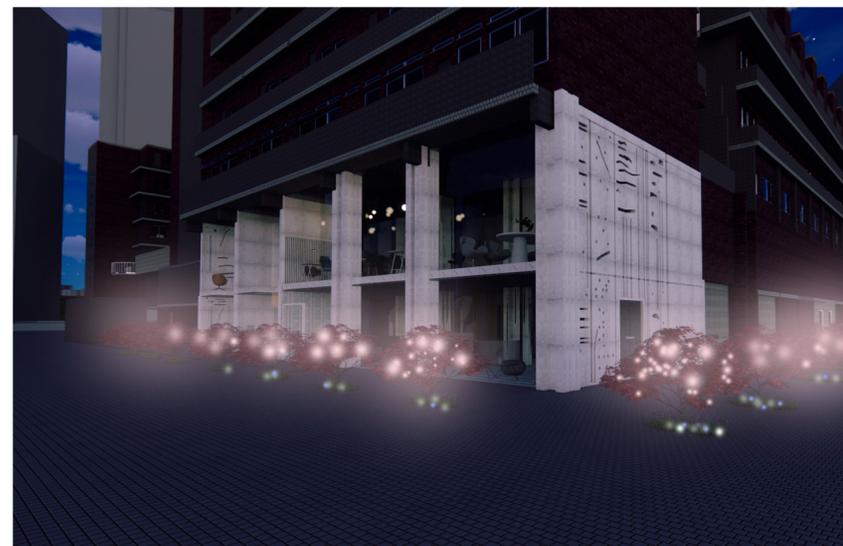


Details thermal insulation passive building office
The skin of the building – walls, windows, and the roof – moderates the effect of the climate. Selection of building envelope with appropriate thermal mass, insulation, and color based on climate and functional requirements can reduce the number of hours when heating or cooling is required to maintain comfort.

Using evaporative cooling through water bodies and evaporative coolers can further reduce the requirement for air conditioning, especially during the hot and dry periods. It is now possible to seamlessly integrate evaporative cooling with conventional air conditioning systems.



Visual Exterior office



Concept outside during the night