

1. KNOWING + EXPERIENCING = LEARNING

There are plenty of the key concepts in education. And the most obvious and arguing one is the relationship between Theory and Practice. These two can't exist separately. They are co-existing. "Theories, in this and other areas do not grow like Topsy, but rather come from an attempt to understand various practices. And practices, whether the practitioner is conscious of this or not, is always at least partially embedded in theory; for instance, about the nature of human learning". The idea of bringing these two as close as possible has become a topic for decades in education. In the simpler way of understanding, it is about knowing the knowledge and using it into the specific learning environment. This trend is followed by many developed countries in the world to bring greater career opportunities in the future and to create creativity. However, education in Vietnam is still too intensively focuses on theory. Therefore, a learning forum is a necessary development in Vietnam. It is a combination of the research center, museum and forum like including the essential aspects of these three models from which it brings the value of knowing, experiencing and learning to visitors.

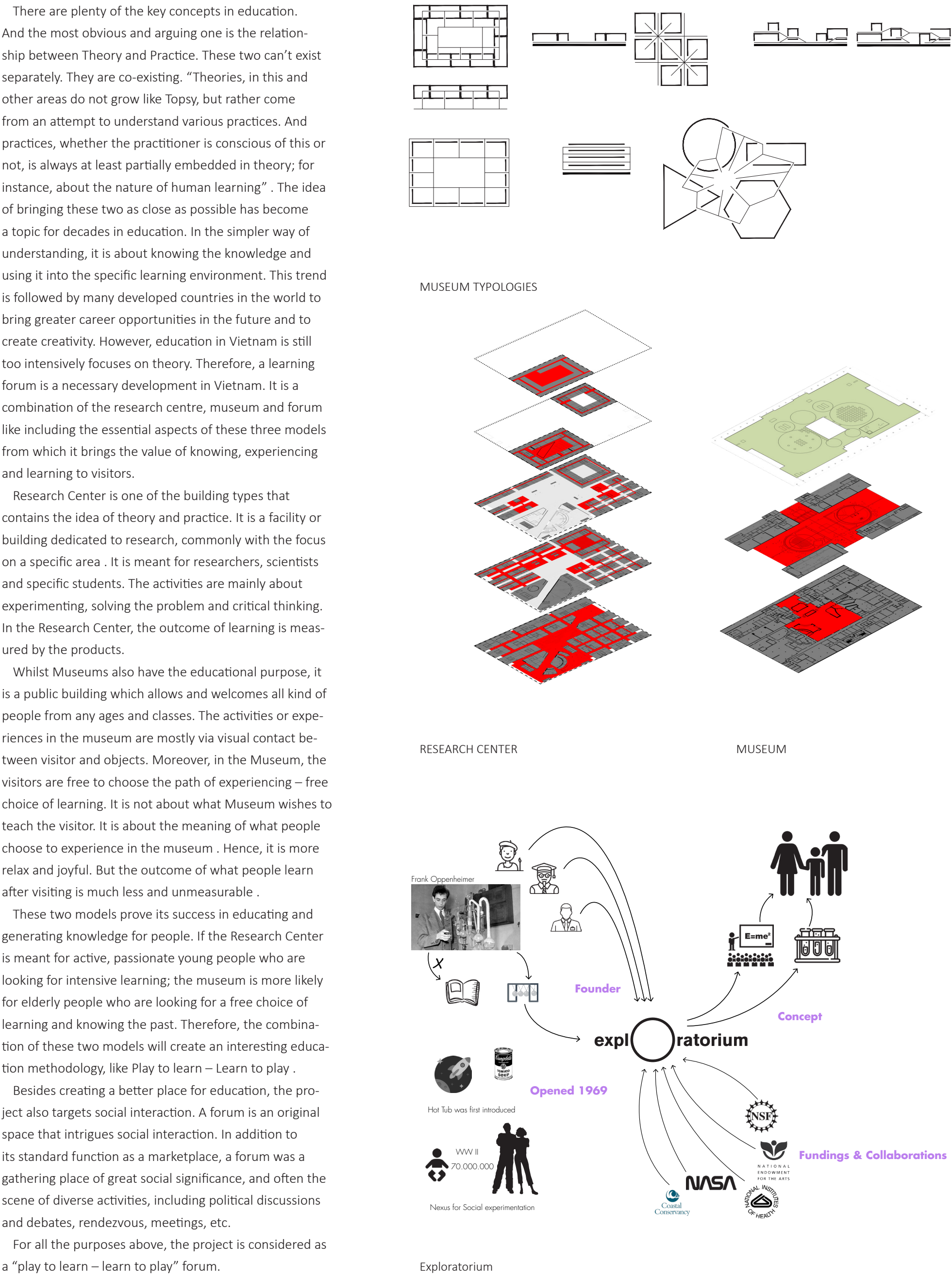
Research Center is one of the building types that contains the idea of theory and practice. It is a facility or building dedicated to research, commonly with the focus on a specific area. It is meant for researchers, scientists and specific students. The activities are mainly about experimenting, solving the problem and critical thinking. In the Research Center, the outcome of learning is measured by the products.

Whilst Museums also have the educational purpose, it is a public building which allows and welcomes all kind of people from any ages and classes. The activities or experiences in the museum are mostly via visual contact between visitor and objects. Moreover, in the Museum, the visitors are free to choose the path of experiencing – free choice of learning. It is not about what Museum wishes to teach the visitor. It is about the meaning of what people choose to experience in the museum. Hence, it is more relax and joyful. But the outcome of what people learn after visiting is much less and unmeasurable.

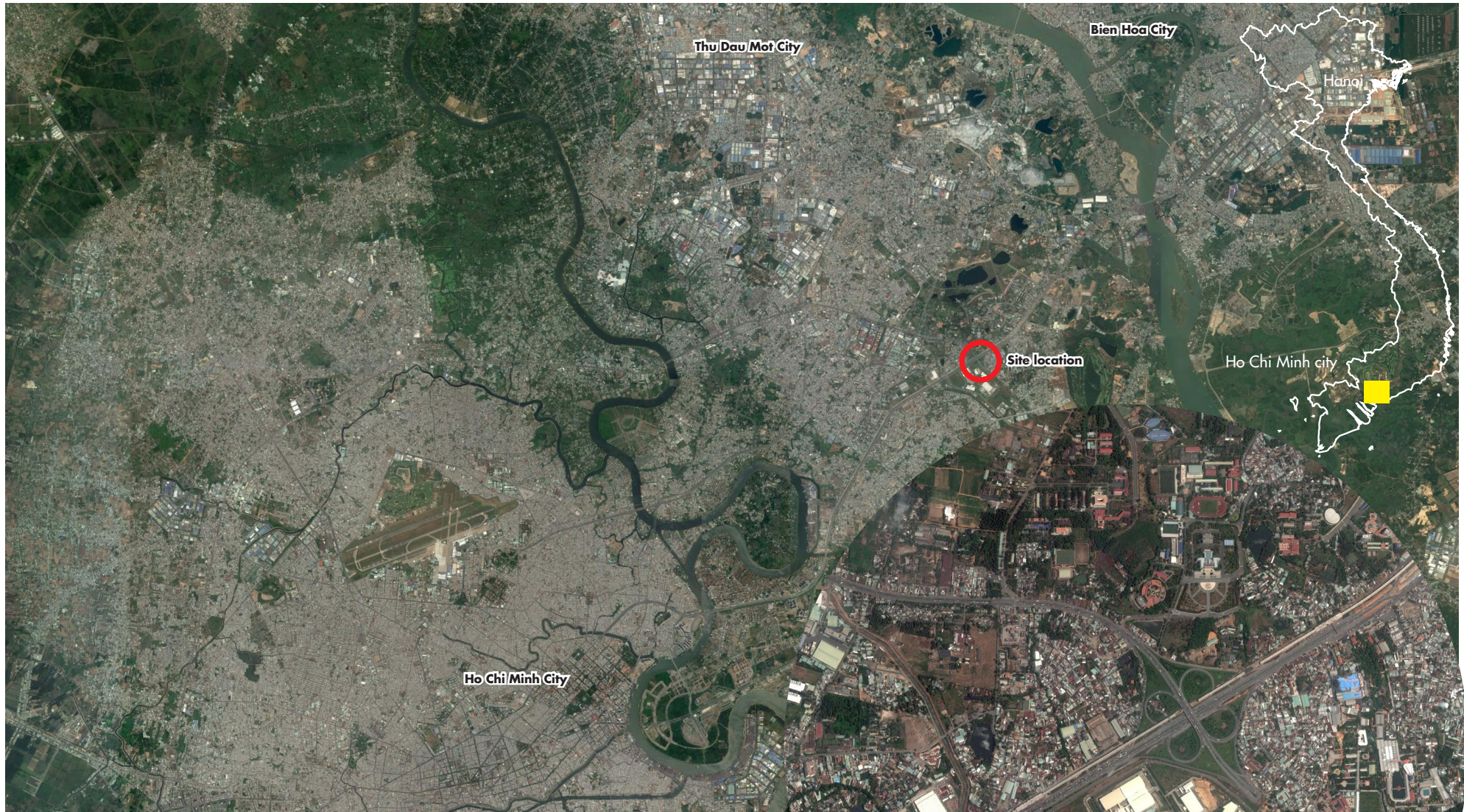
These two models prove its success in educating and generating knowledge for people. If the Research Center is meant for active, passionate young people who are looking for intensive learning, the museum is more likely for elderly people who are looking for a free choice of learning and knowing the past. Therefore, the combination of these two models will create an interesting education methodology, like Play to learn – Learn to play.

Besides creating a better place for education, the project also targets social interaction. A forum is an original space that intrigues social interaction. In addition to its standard function as a marketplace, a forum was a gathering place of great social significance, and often the scene of diverse activities, including political discussions and debates, rendezvous, meetings, etc.

For all the purposes above, the project is considered as a "play to learn – learn to play" forum.



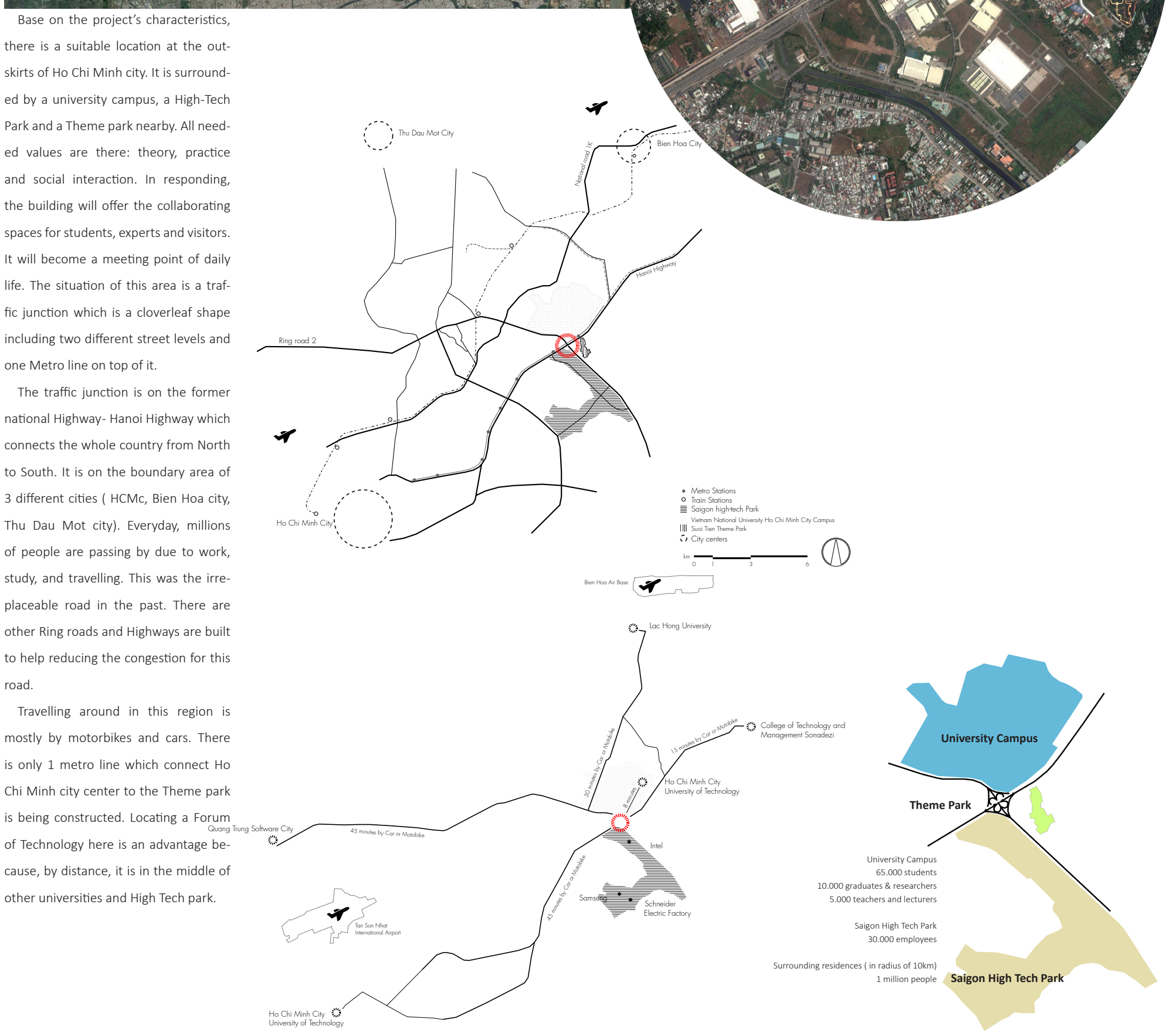
3.1. LOCATION



Based on the project's characteristics, there is a suitable location at the outskirts of Ho Chi Minh city. It is surrounded by a university campus, a High Tech Park and a Theme park nearby. All needed values are there: theory, practice and social interaction. In responding, the building will offer the collaborating spaces for students, experts and visitors. It will become a meeting point of daily life. The situation of this area is a traffic junction which is a cloverleaf shape including two different street levels and one Metro line on top of it.

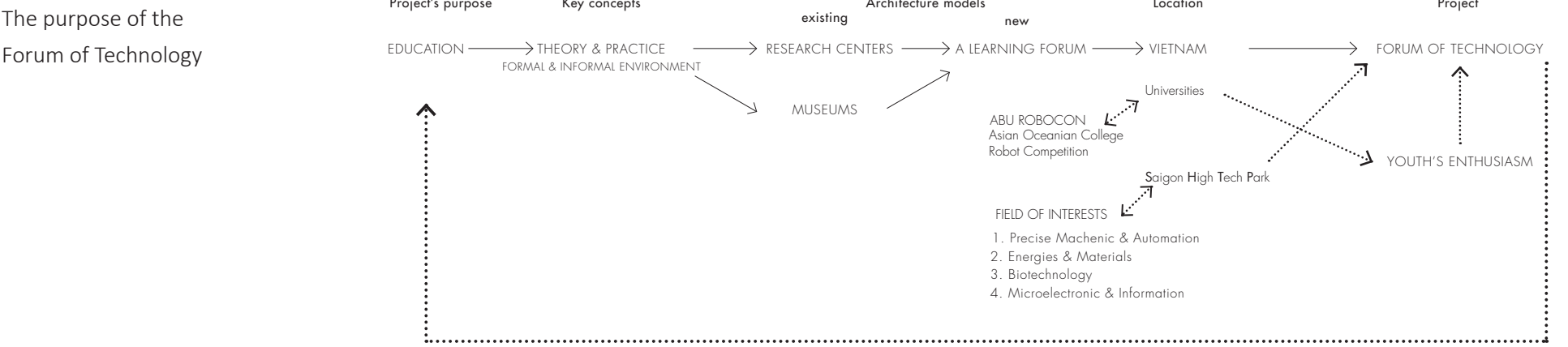
The traffic junction is on the former national Highway - Hanoi Highway which connects the whole country from North to South. It is on the boundary area of 3 different cities (HCMC, Bien Hoa city, Thu Dau Mot city). Everyday, millions of people are passing by due to work, study, and travelling. This was the irreplaceable road in the past. There are other Ring roads and Highways are built to help reducing the congestion for this road.

Travelling around in this region is mostly by motorbikes and cars. There is only 1 metro line which connect Ho Chi Minh city center to the Theme park is being constructed. Locating a Forum of Technology here is an advantage because, by distance, it is in the middle of other universities and High Tech park.

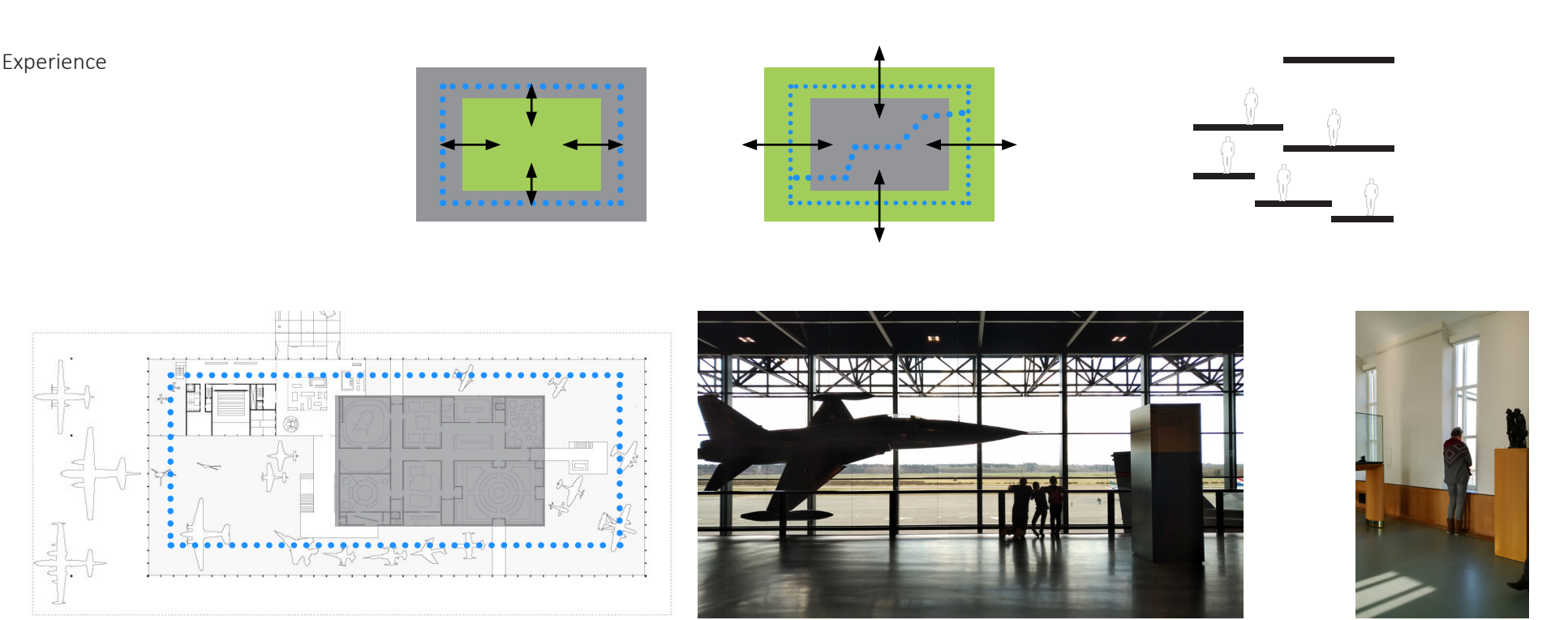


2. FORUM OF TECHNOLOGY

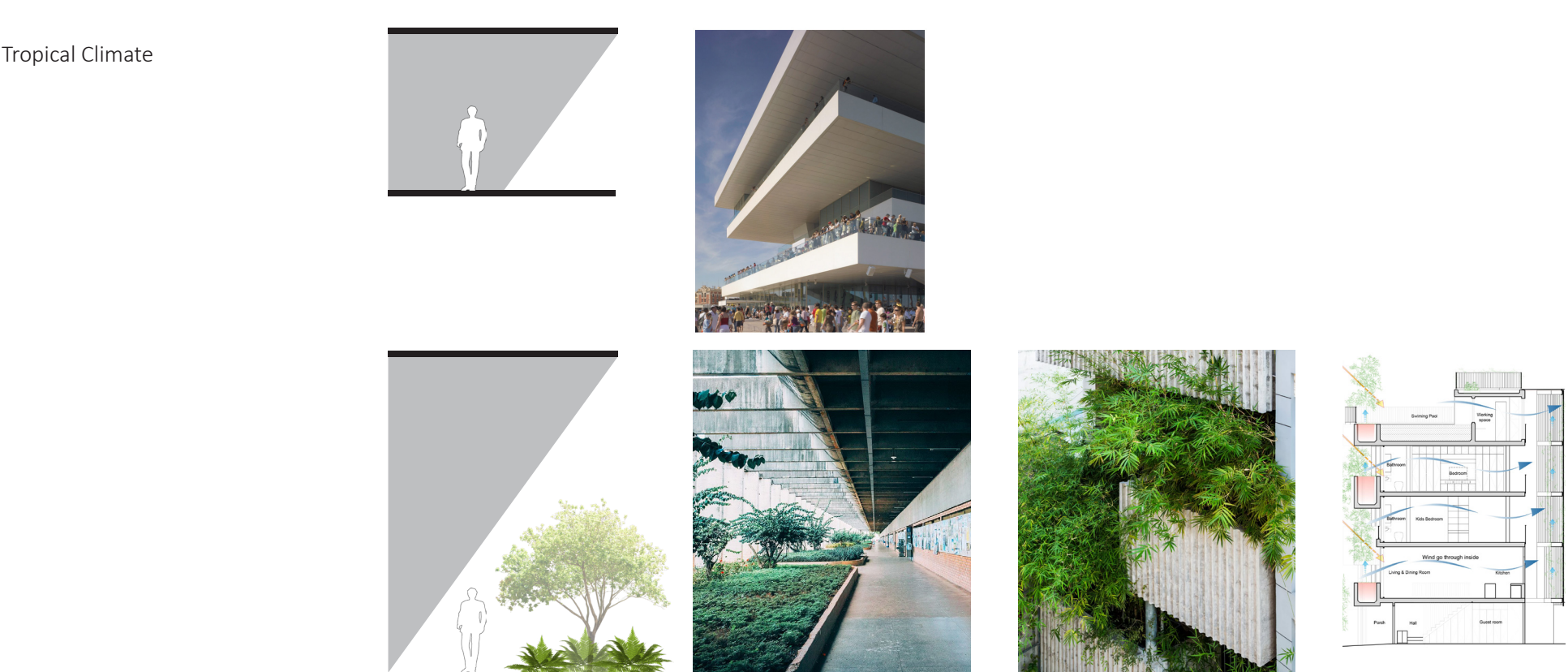
The purpose of the Forum of Technology



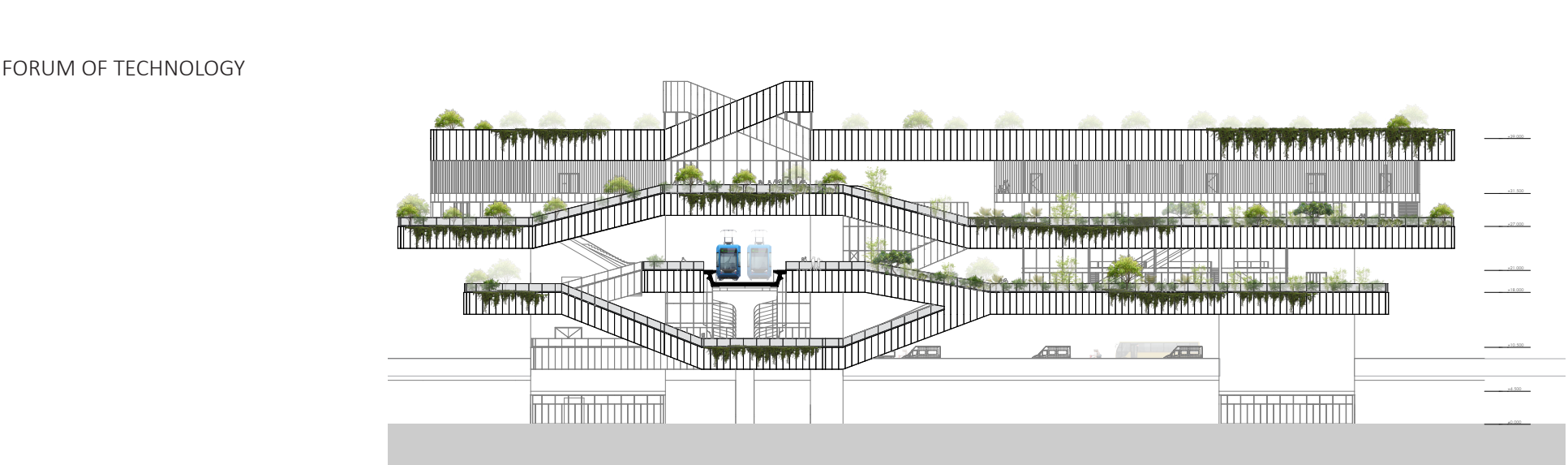
Experience



Tropical Climate



FORUM OF TECHNOLOGY

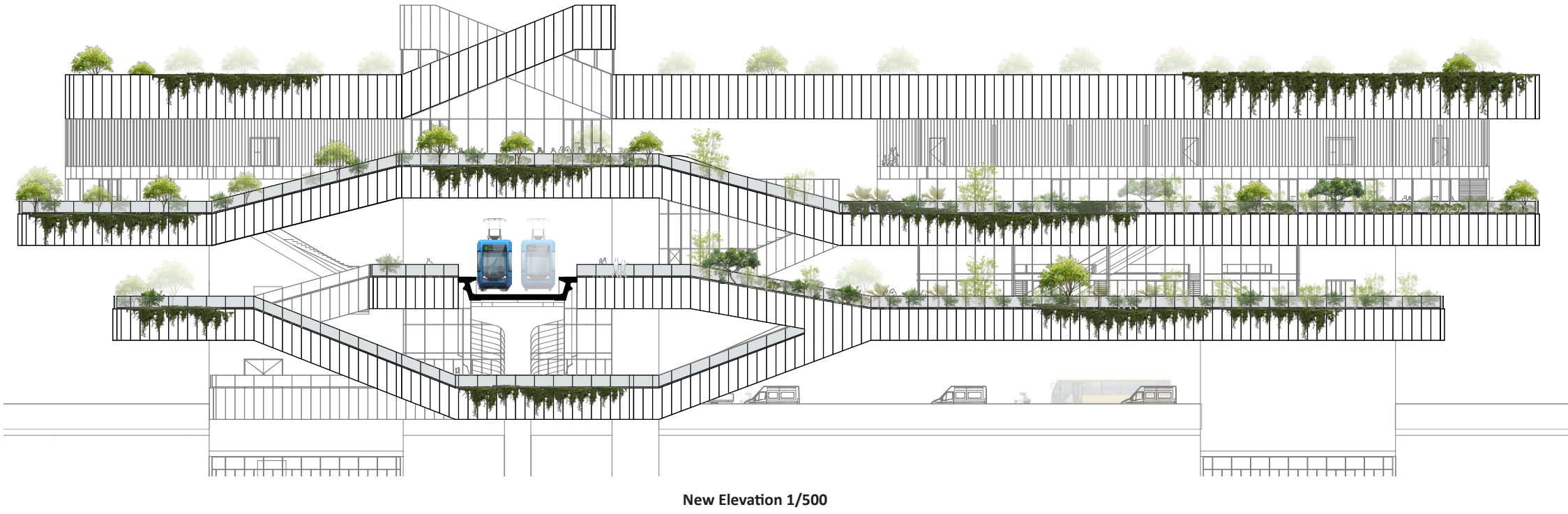


3.3. NEW SITUATION



Introducing the Forum of Technology is not only about giving the possibility for education development, incorporation between Academic and Business, but also a statement of multifunctional public building.

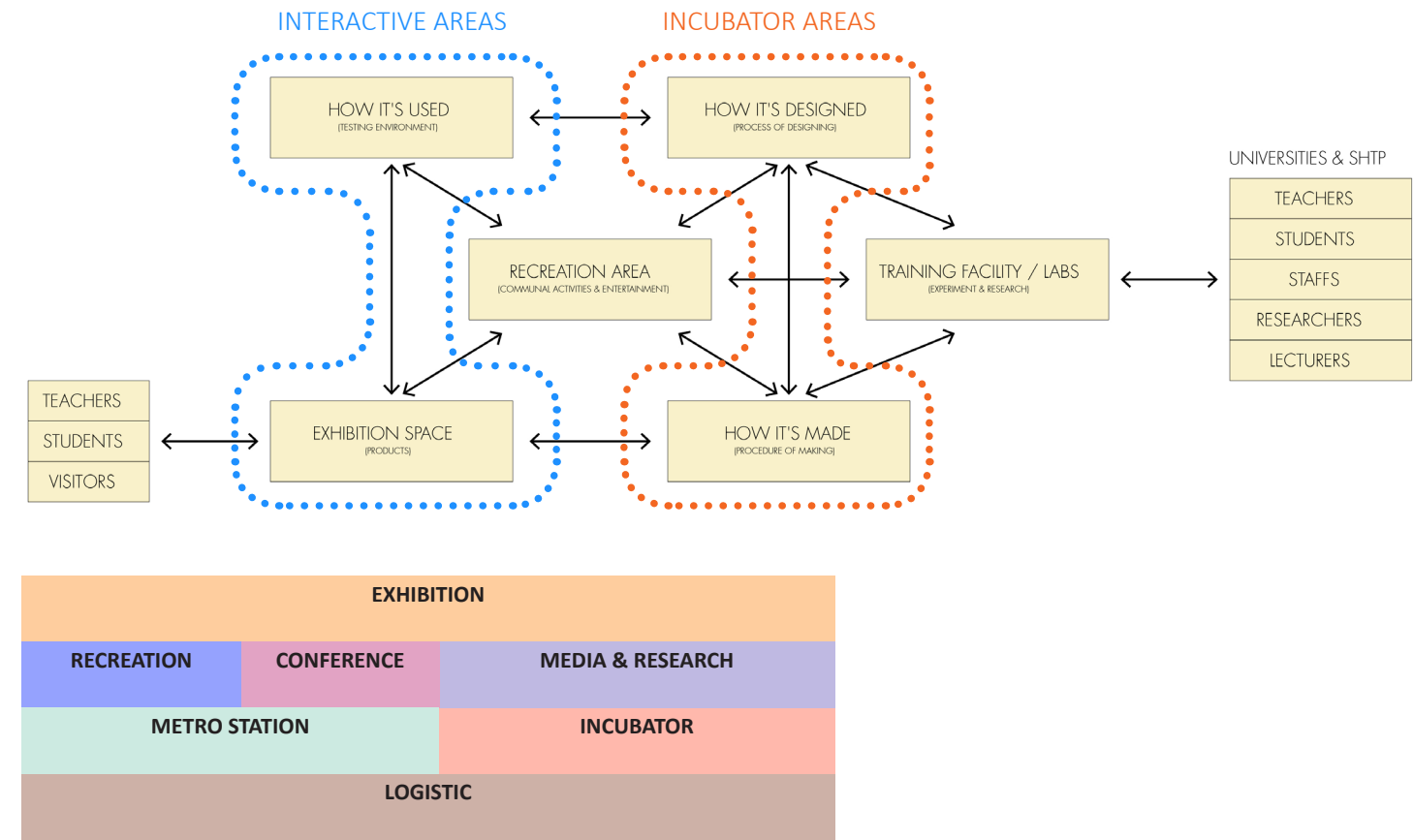
The site plan shows the possibility of connection. The building is not only reached by cars or motorbikes and metro, but also in the future, it can be reached by pedestrian and cycling.



4. USAGE & USERS

EXPERIENCING & LEARNING

As a production line, the Forum brings this experience to the visitors and the users. This schematic diagram shows the experience that the people can have when visit the building.



INCUBATOR AREA

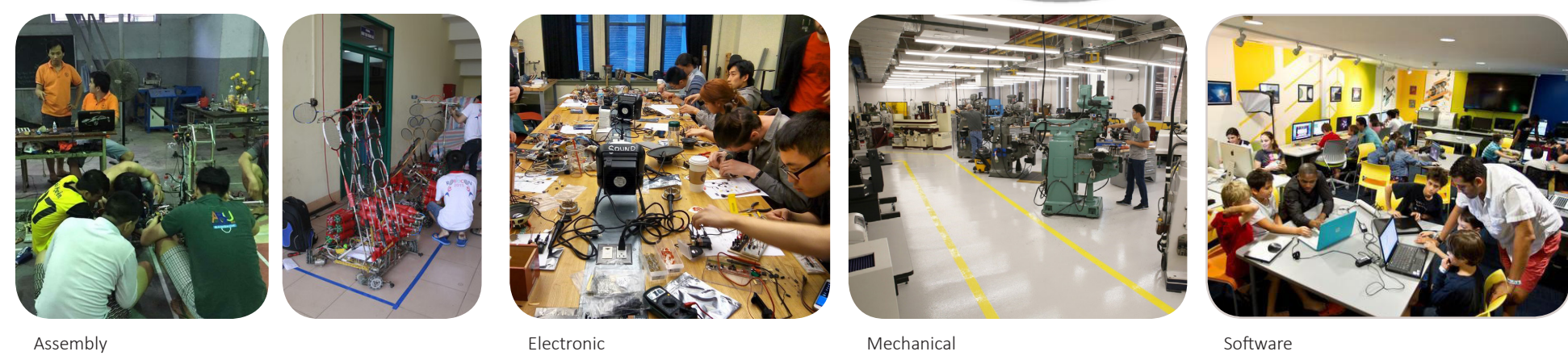
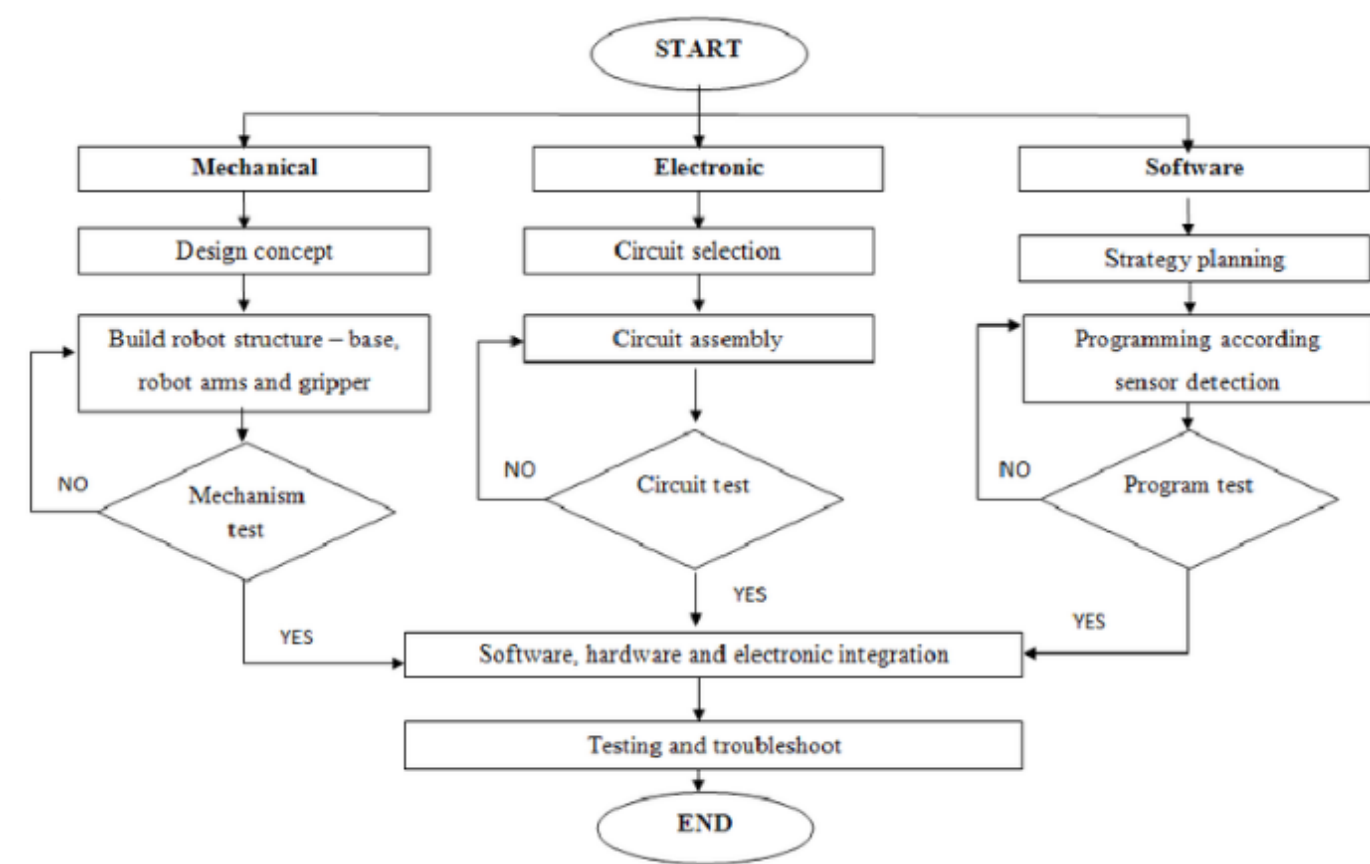
Focusing on the generic field of University Campus and High Tech park is sharing. This diagram is about the making process of a machine or a robot.

Therefore, the Incubator area is divided into 3 segments:

1. Mechanical space
2. Electronic design space
3. Software design space
4. Assembly space

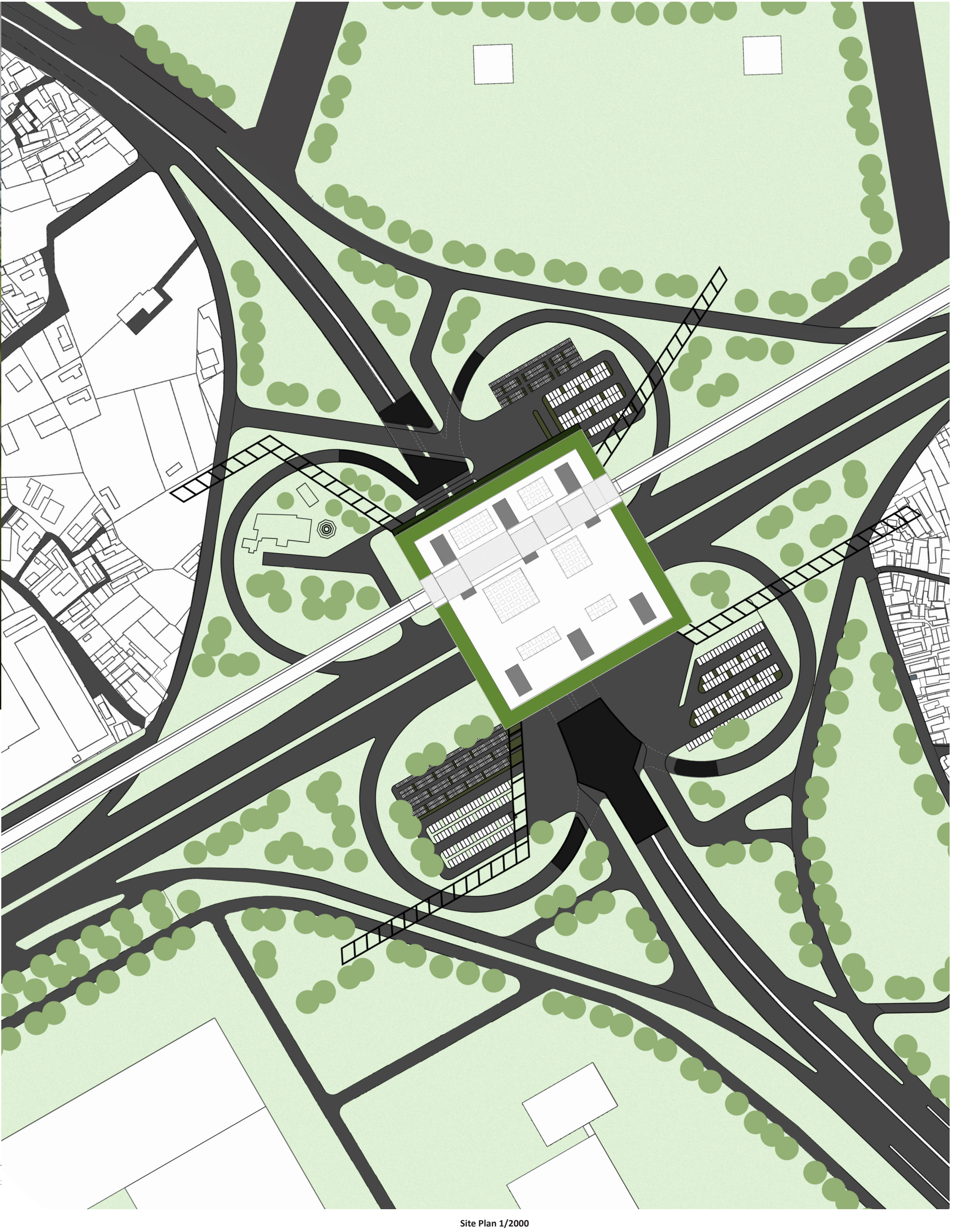
The idea of having Incubator area is to promote startup company, encourage professional offices to establish their business and share their knowledge with visitors.

Images below are about the activities in each space



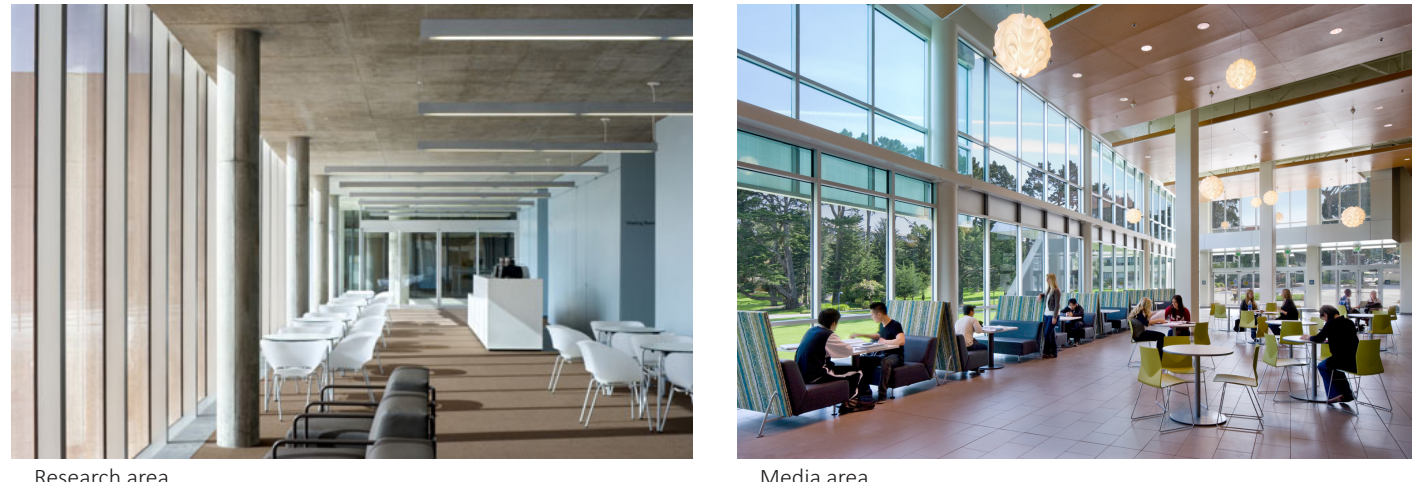
INTERACTIVE AREA

This is the space where people can share and introduce their knowledge and products. It is like a space of Technology Fair.



MEDIA & RESEARCH AREAS

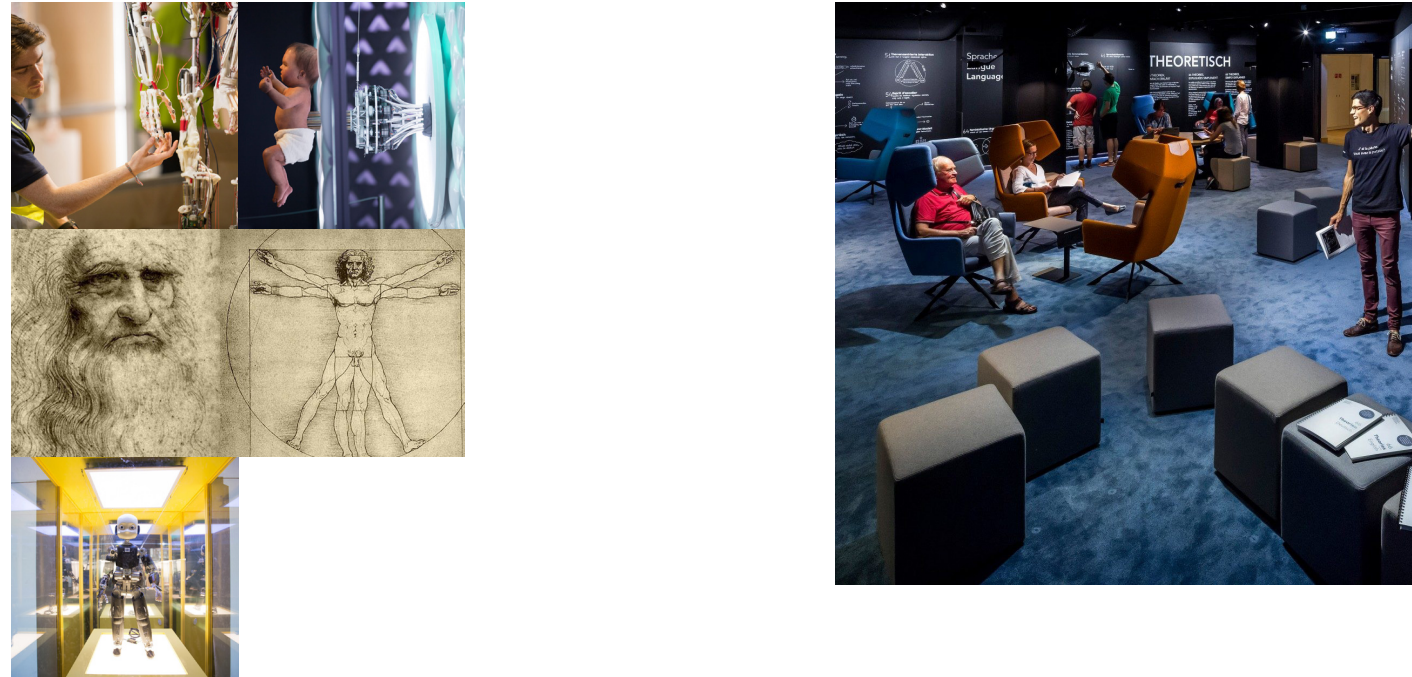
Providing the source of knowledge for concentrating researchers or students and open-relax space for group discussion.



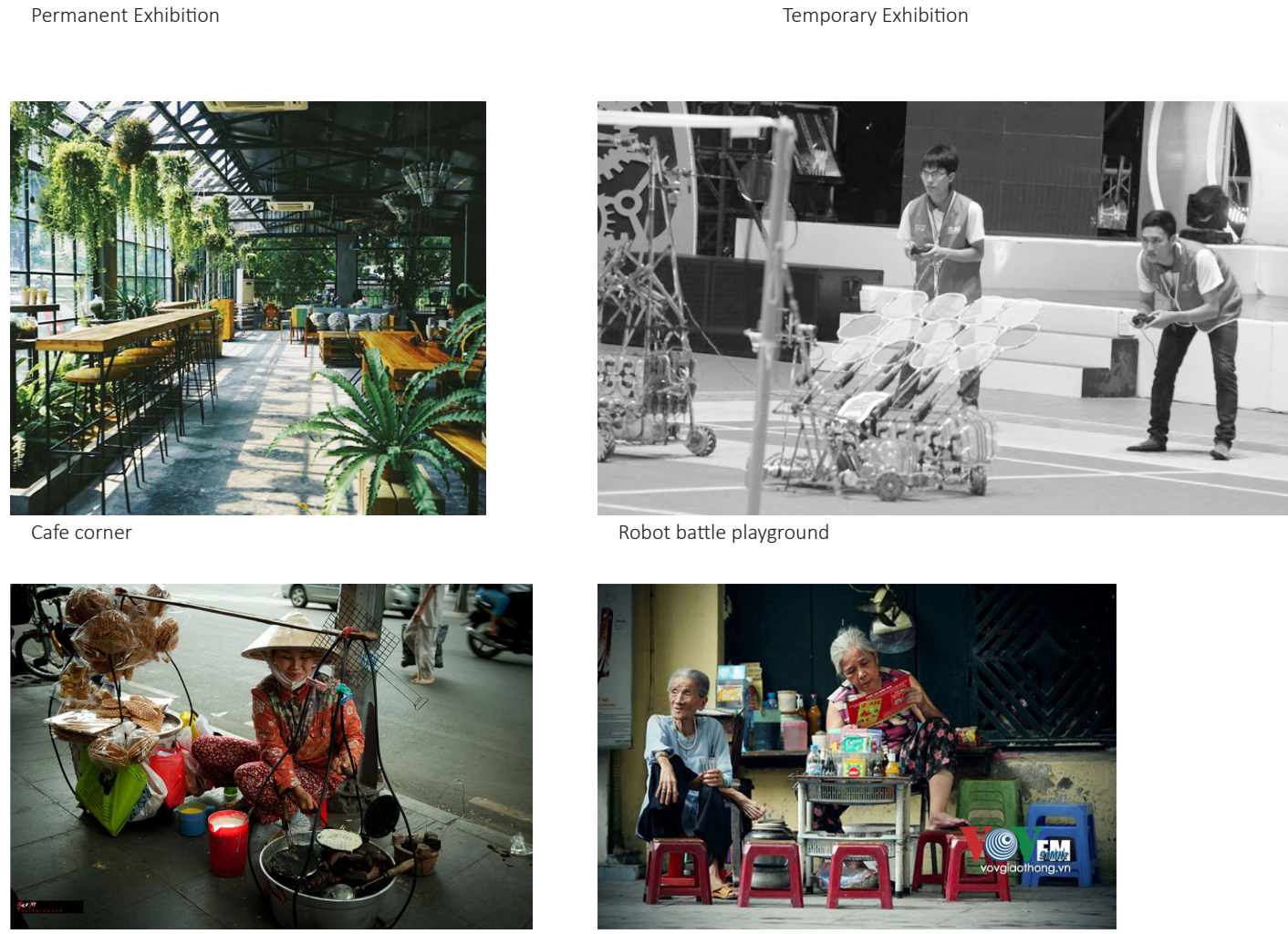
EXHIBITION AREAS

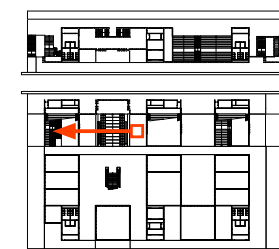
There are two separated areas with permanent exhibition and temporary exhibition.

1. Permanent Exhibition: History of Technology Inventors. Exhibit robotic/machines products from universities and other companies that involved in robotic development.
2. Temporary Exhibition: These are flexible spaces. It can be used for graduation presentation of the students or rented out to experts or professional parties. It could also be meeting spaces for events.



RECREATION

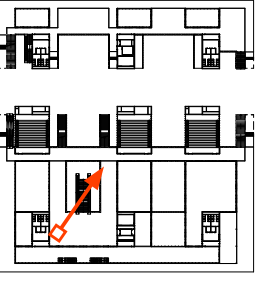
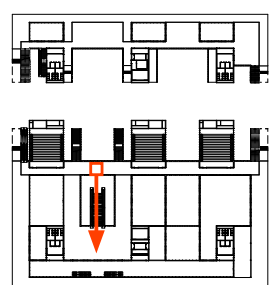




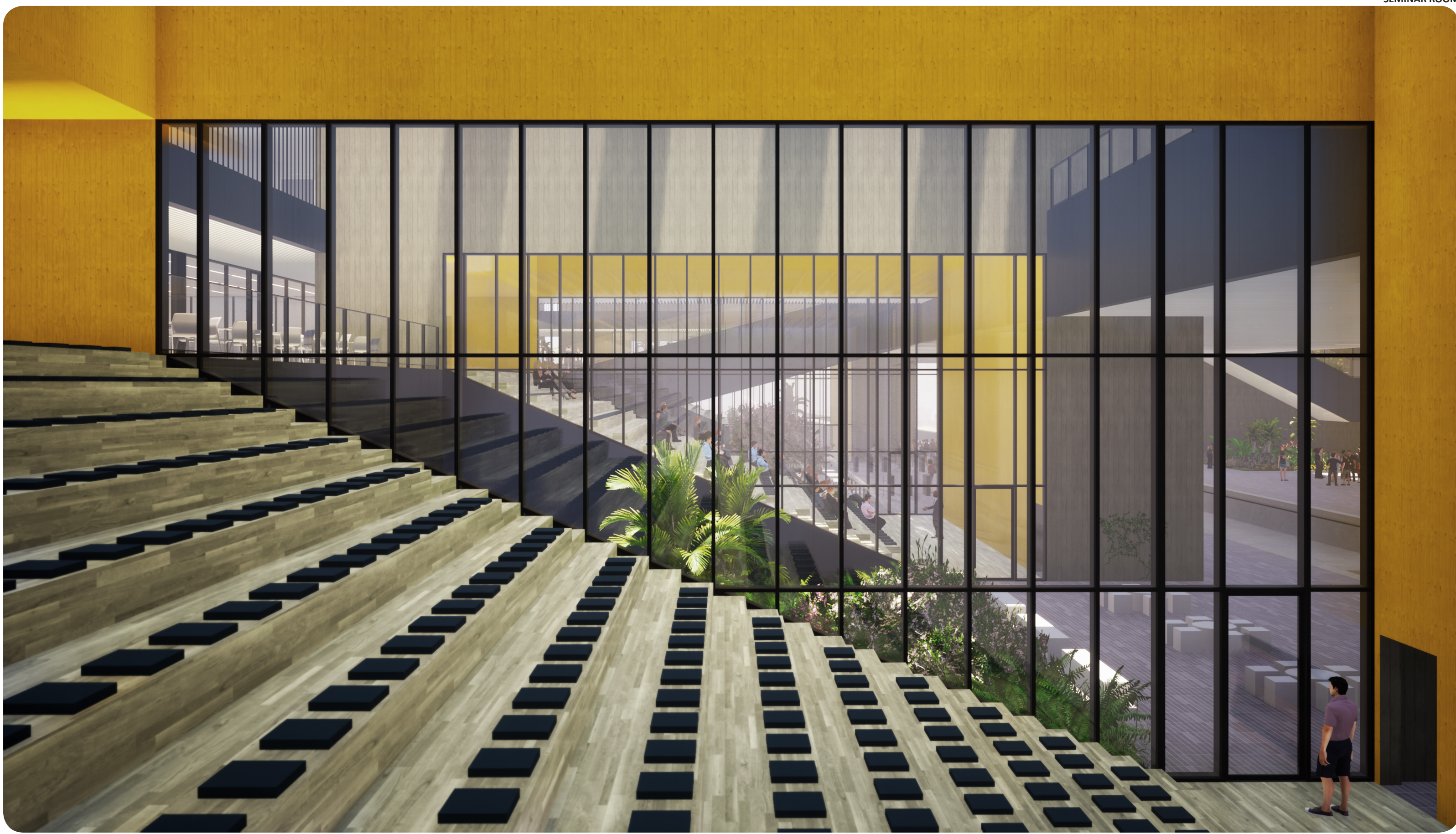
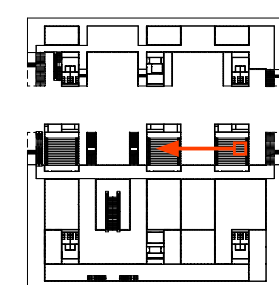


EXHIBITION HALL

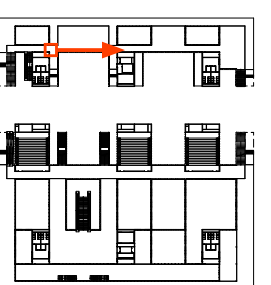
After the incubator area, the visitors go up to exhibition hall. But the actual exhibition spaces are up stair. This space is as an entrance for exhibition areas. However, in this level, the visitors can see or participate working spaces, research spaces and media spaces



Mixed-use Level 1/500



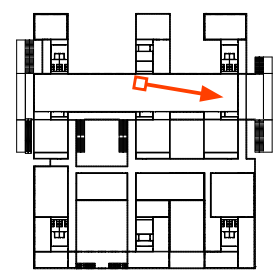
SEMINAR ROOM



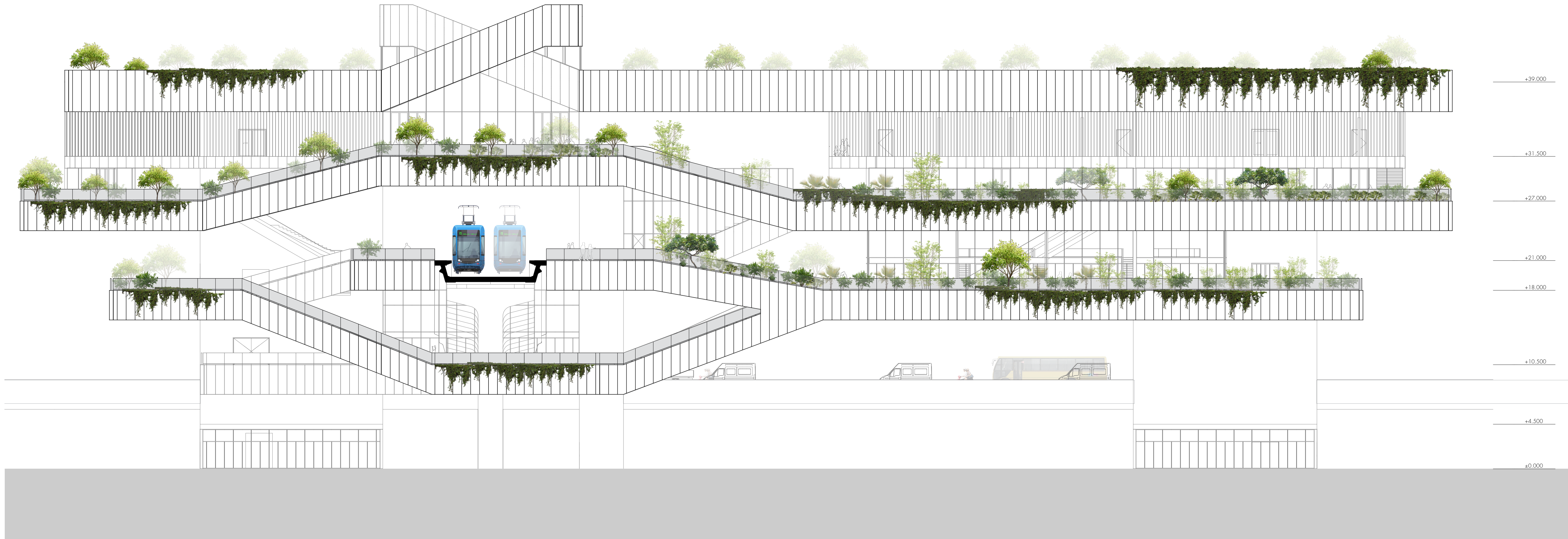
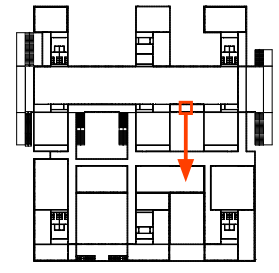
COMMERCIAL - TERRACE



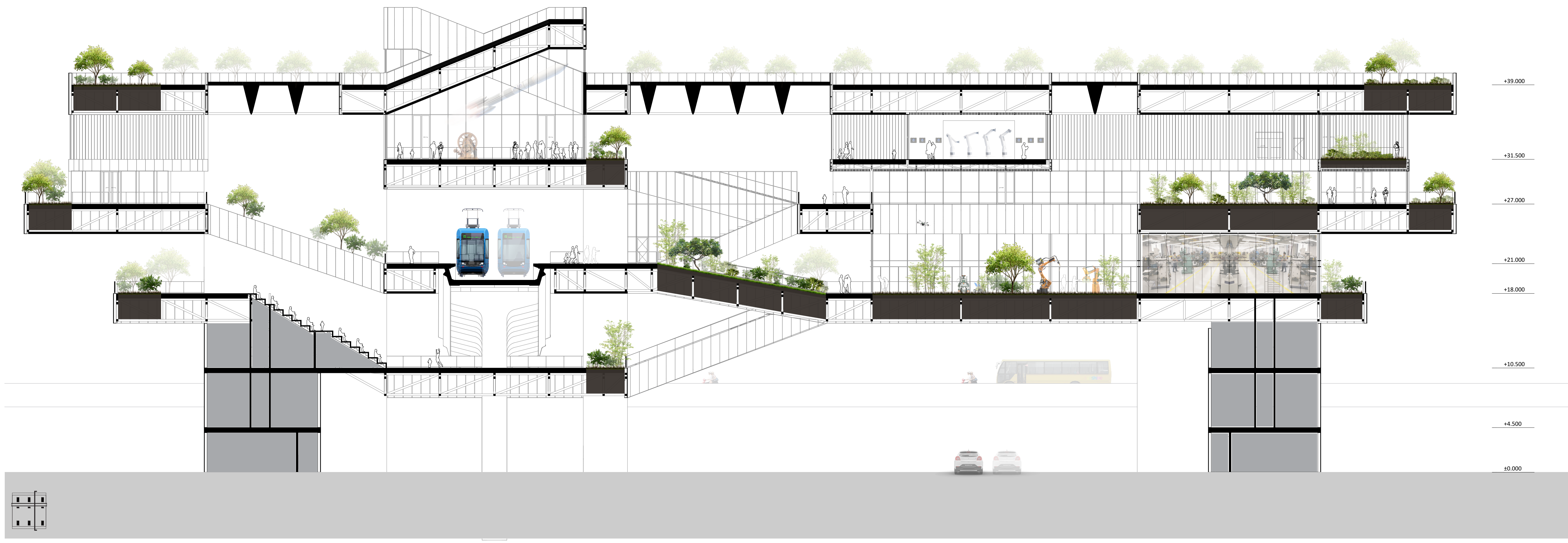
PERMANENT EXHIBITION



FROM PERMANENT EXHIBITION TO TEMPORARY EXHIBITION

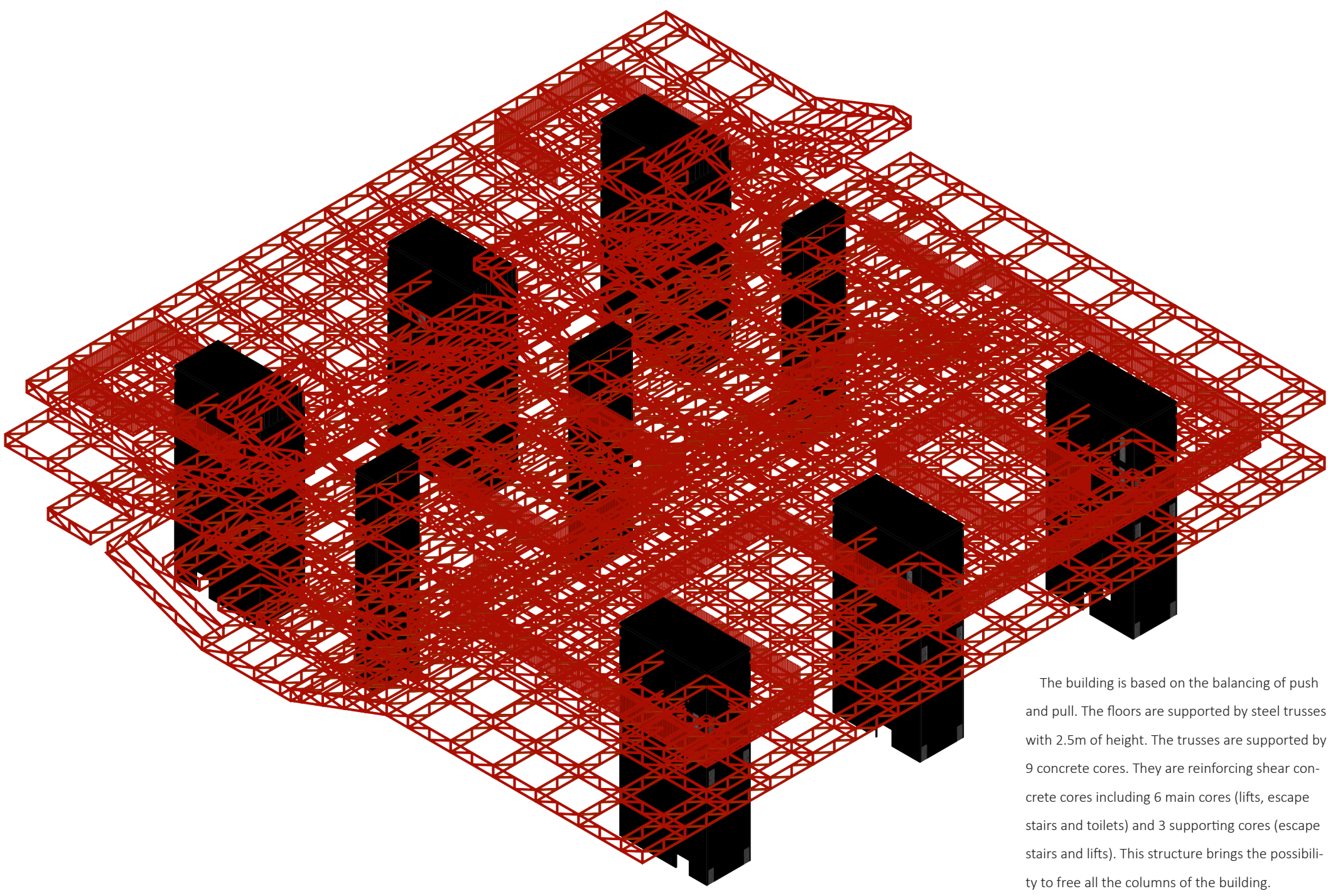


WEST ELEVATION 1/200

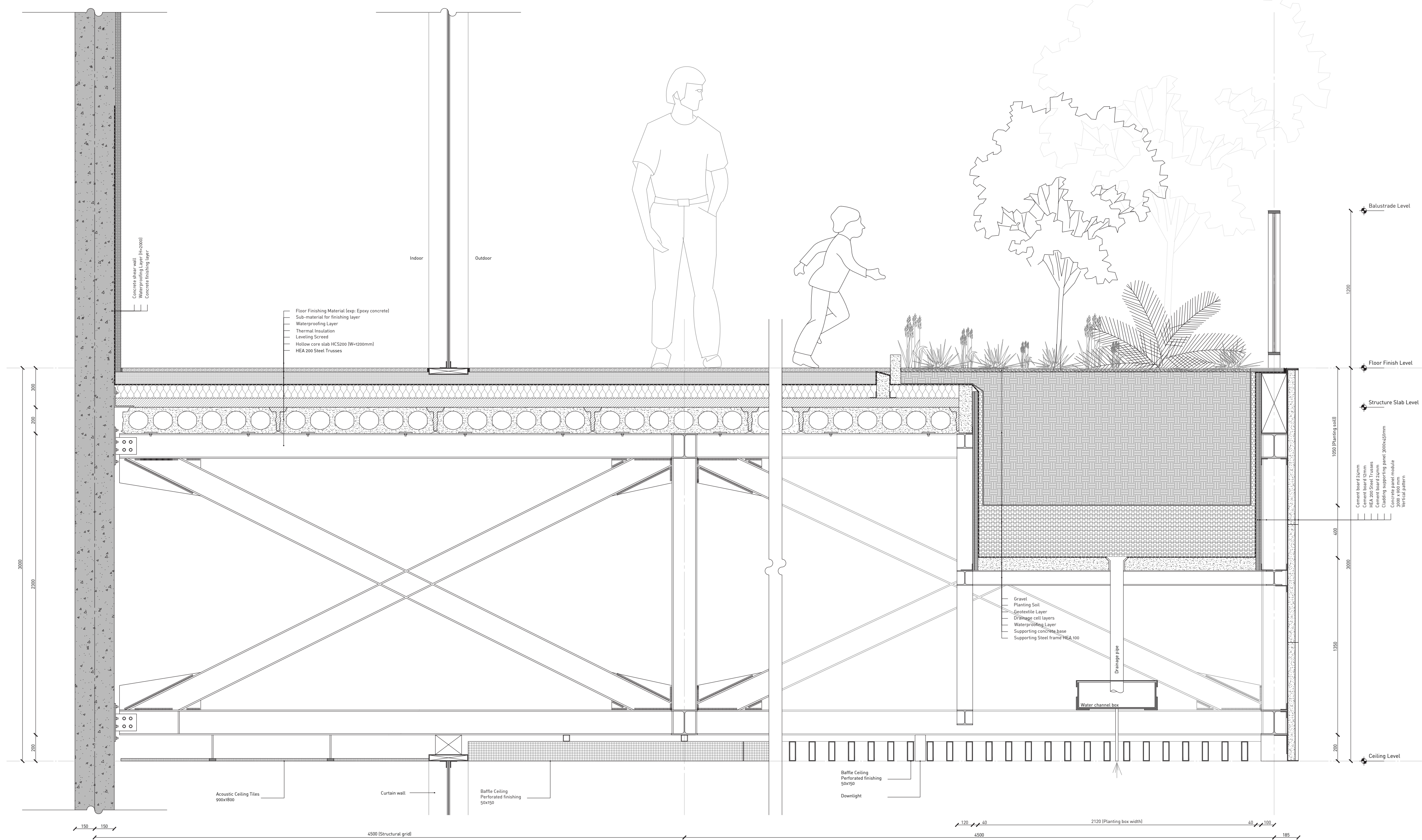


SECTION 1/200

7. STRUCTURE & DETAILS



The building is based on the balancing of push and pull. The floors are supported by steel trusses with 2.5m of height. The trusses are supported by 9 concrete cores. They are reinforcing shear concrete cores including 6 main cores (lifts, escape stairs and toilets) and 3 supporting cores (escape stairs and lifts). This structure brings the possibility to free all the columns of the building.

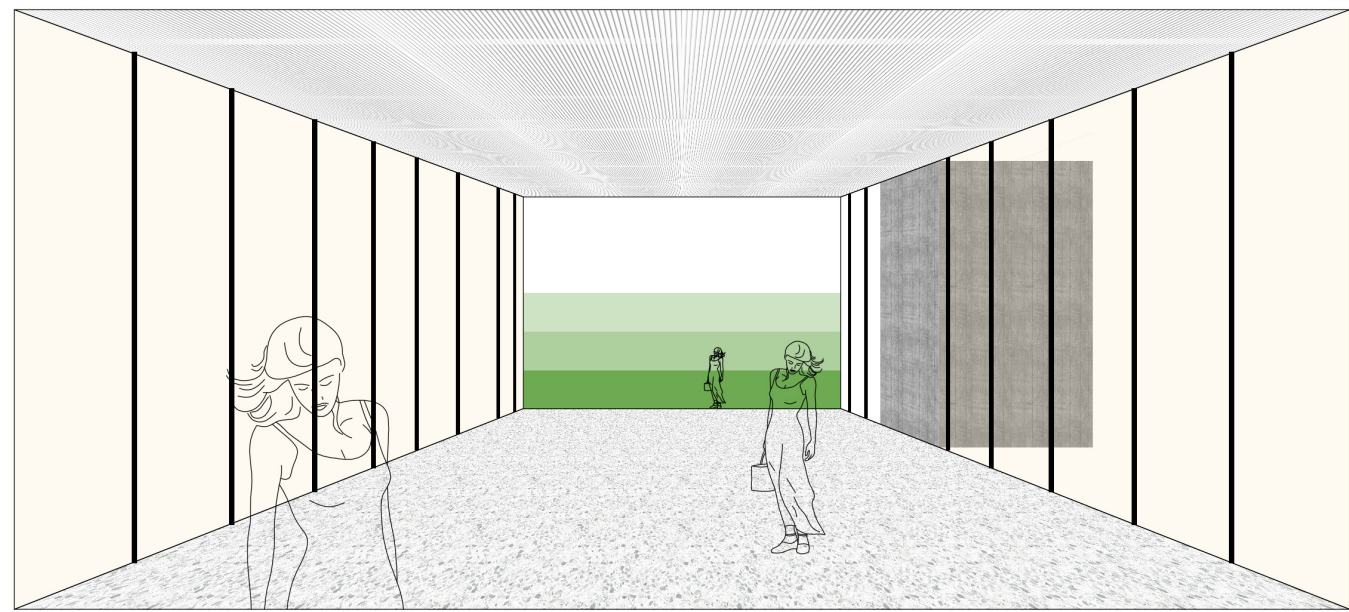


Typical detail 1/20

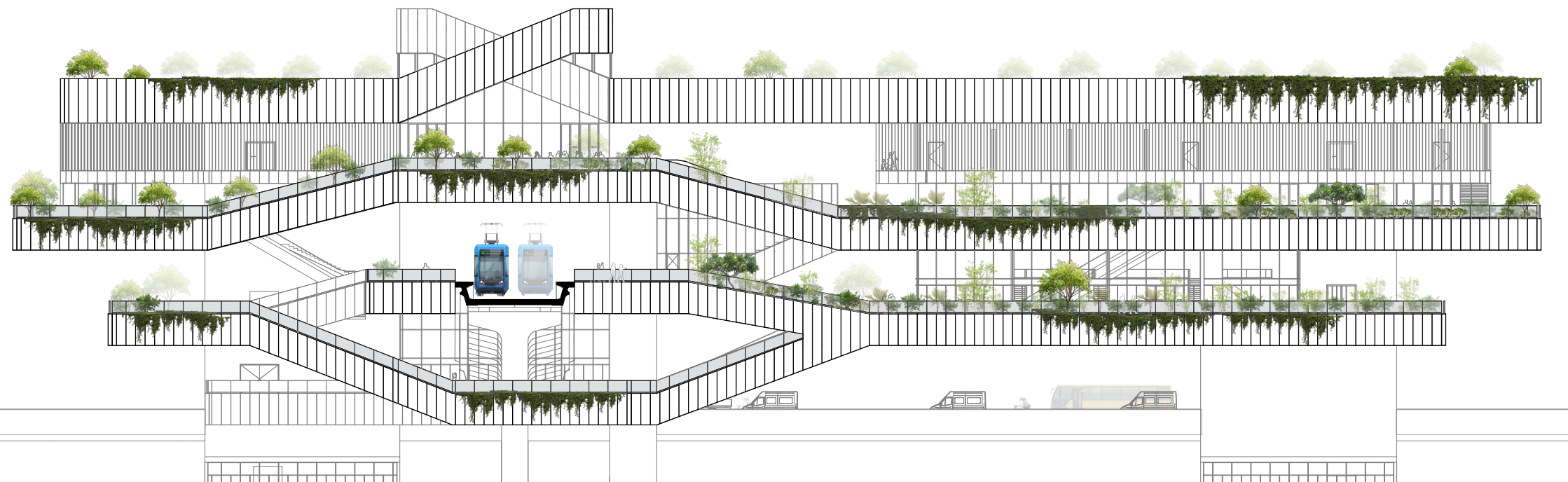
8. MATERIALS

COLOR SCHEME FOR INTERIOR SPACE

- There are 3 scheme for the inner look of the building.
1. The horizontality: flooring and ceiling.
 2. The verticality: curtain wall with transparency and repetition.
 3. The structural cores: it is solid so that creates recognizable position.
- And an extra one is greenery which emphasizes the end of the scene



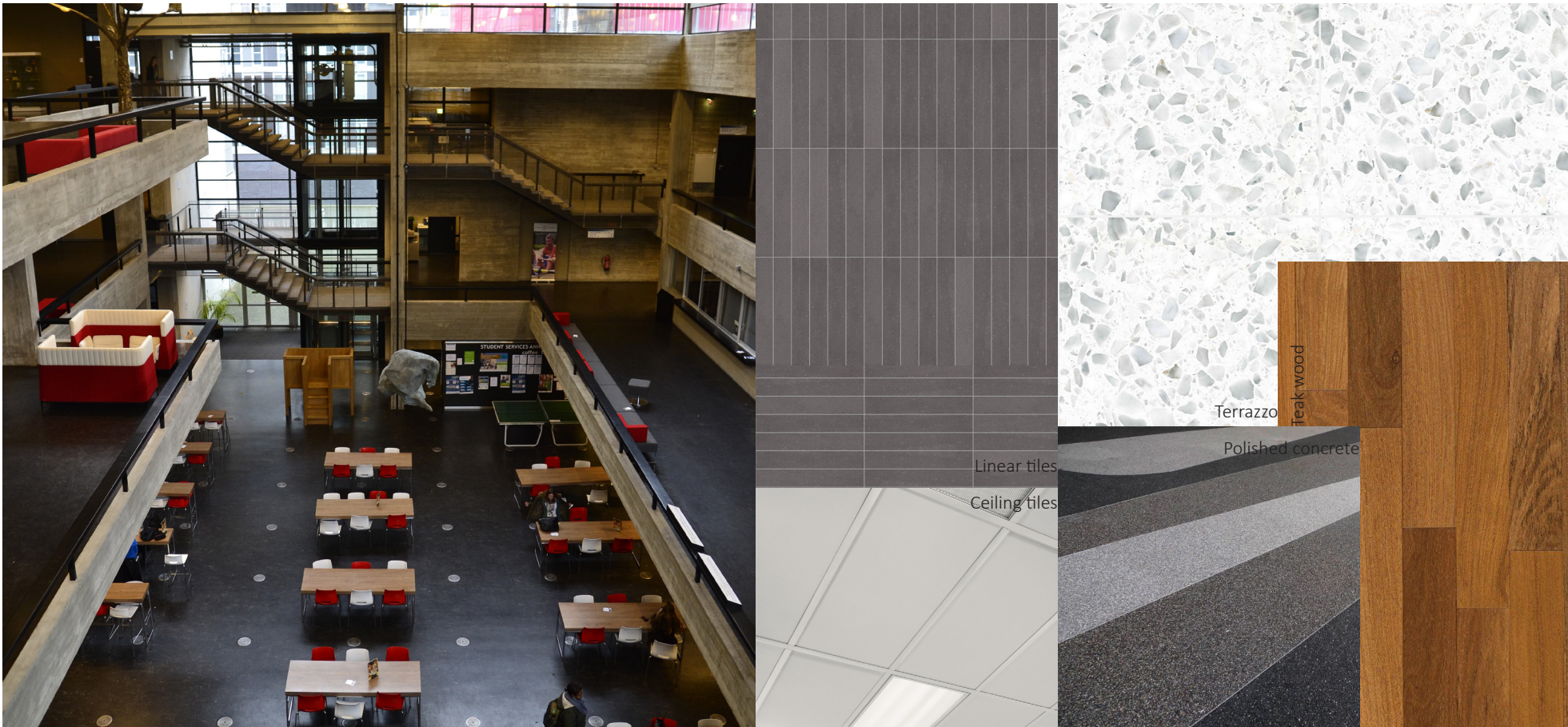
Interior
Smooth
Order (grid)
Refined



Exterior
Rough
Spontaneous
Rigid

FACADE

The exterior or the facade has to be appealed as part of the surrounding which is nature or existing living environment. The situation of the junction is about green, asphalt (street), concrete (metro track). Therefore, the building uses concrete and green in order to blend into its context

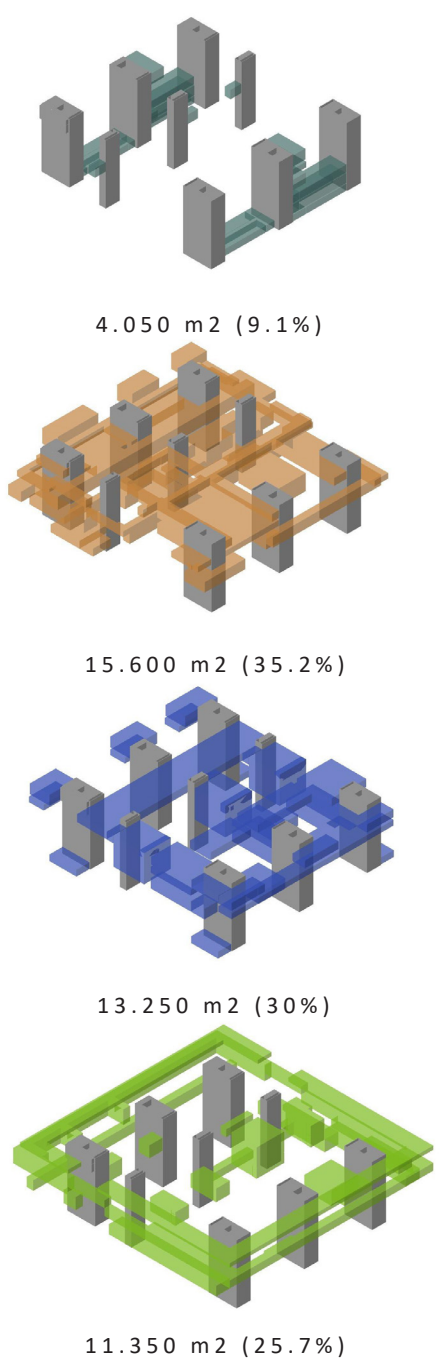
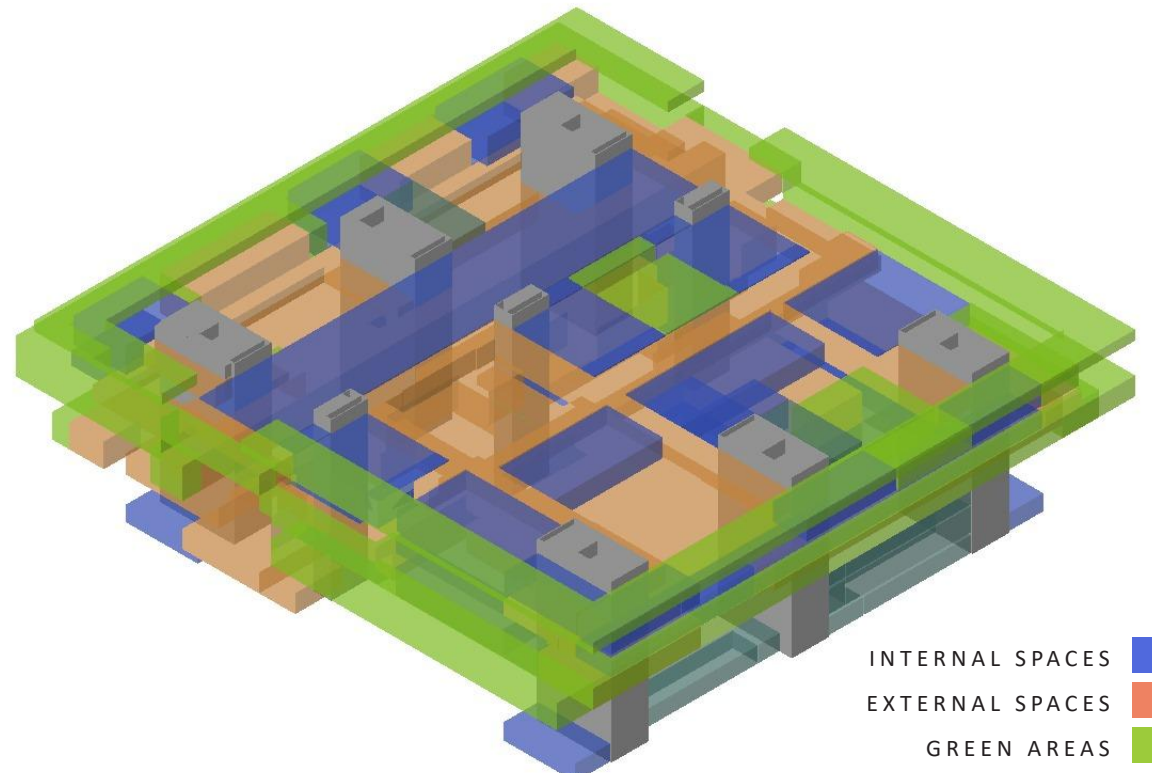
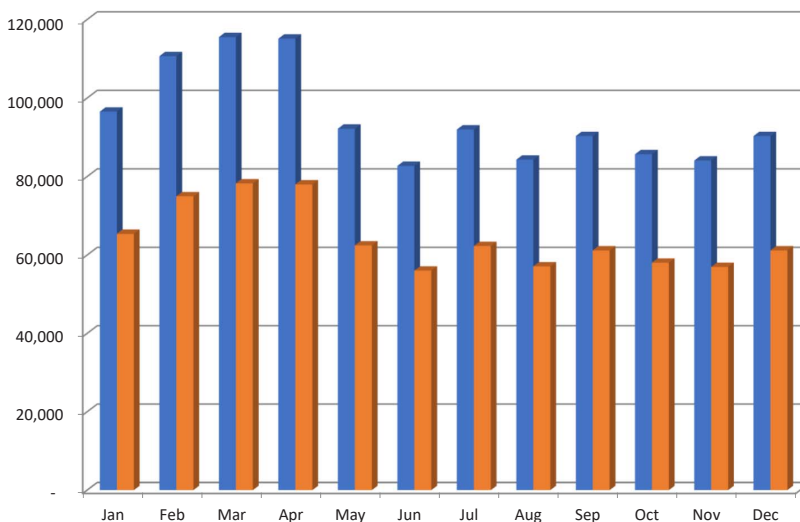


9. BUILDING ENVIRONMENT

The environment of the building focuses on air quality, noise and intensity of sun ray. Therefore, grass and trees are the most suitable solution for filtering the air, reducing noise and giving shade.

The building is using passive ventilation. However, HVAC system is needed for enclosed space.

With the calculation of green usage, the building receives less 1/3 of heat radiation. The maximum temperature in this location is 36-39 Celsius degrees. With the green belt, the outer spaces will receive only 24-26 Celsius degrees in general or it is always below 30 Celsius degree. The inner spaces still need to use ventilation system for different purposes.

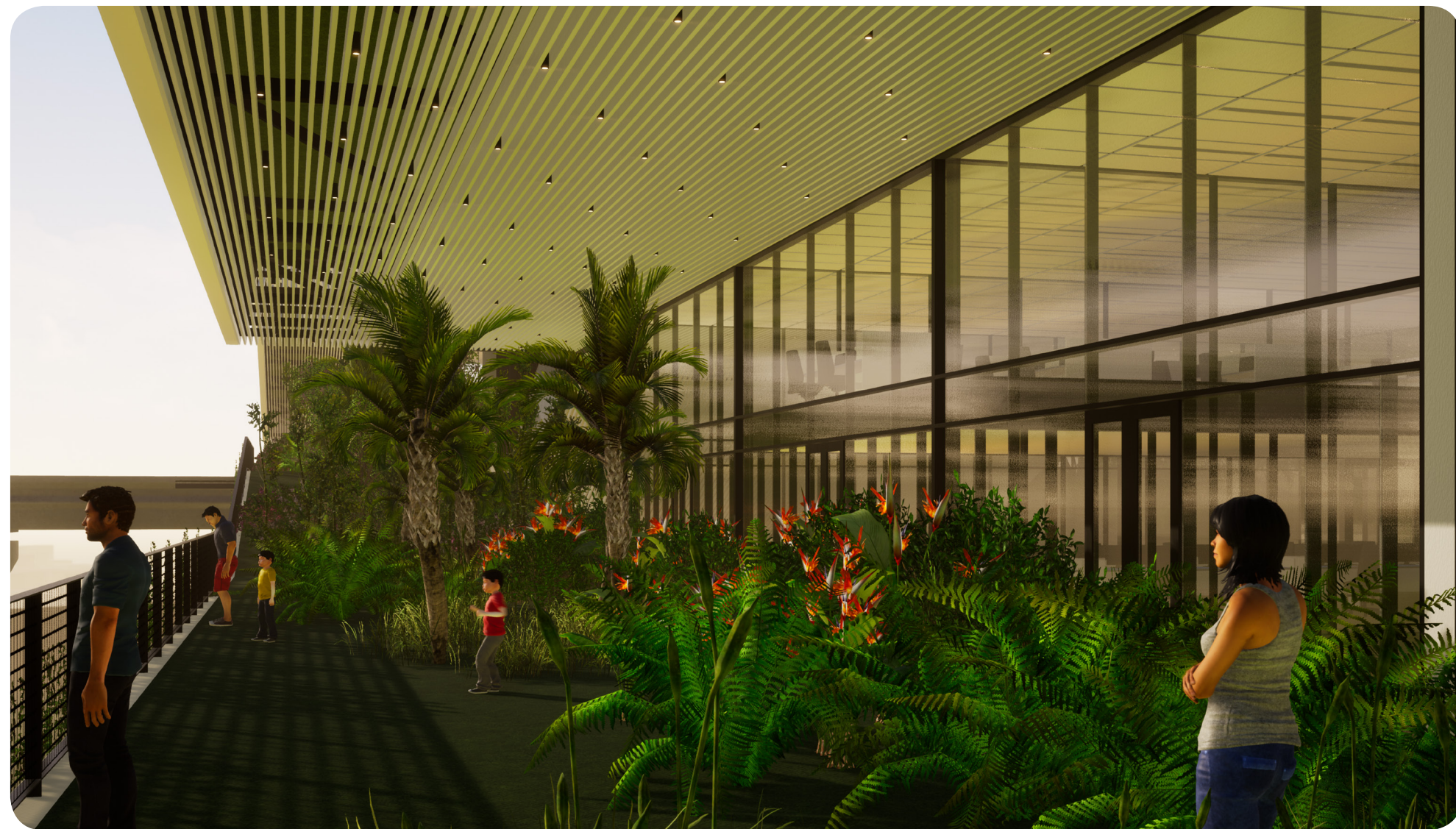


10. EXPERIENCE AS A PARK



GREEN BELT

The green belt introduces only for environmental aspect but also for contemplation for the visitors.



PLANTING REFERENCES



CÂY CÚC TẦN ÁN ĐỎ
Pluthea indica
TRÚC CÁN CẦU
Bambusa multiplex
CÂY PHONG BÀ
Heliotropium foertherianum



HÒA TƯỜNG VÌ
Crepe Myrtle
CÂY HOA SỨ
Plumeria rubra
ĐỎ QUỲN
Azalea



CÂY DƯƠNG XÍ
Fern
DÂY THƯƠNG XUYÊN
Hedera (Ivy)
DỪA KIỂNG
Palm tree