

SELECTED WORKS
FROM 2019 TO 2020

胡成駿

Live life, enjoy the moment!

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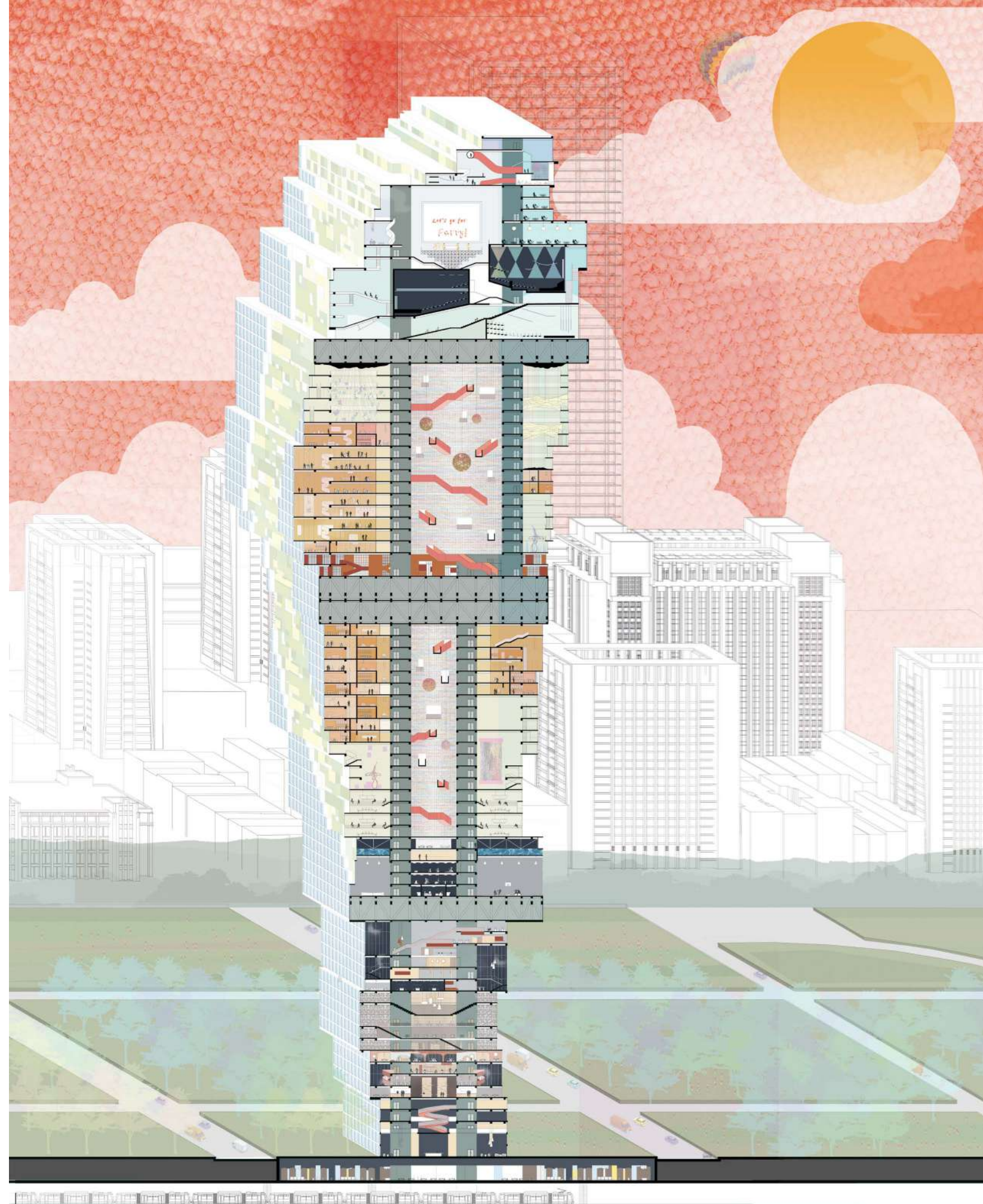


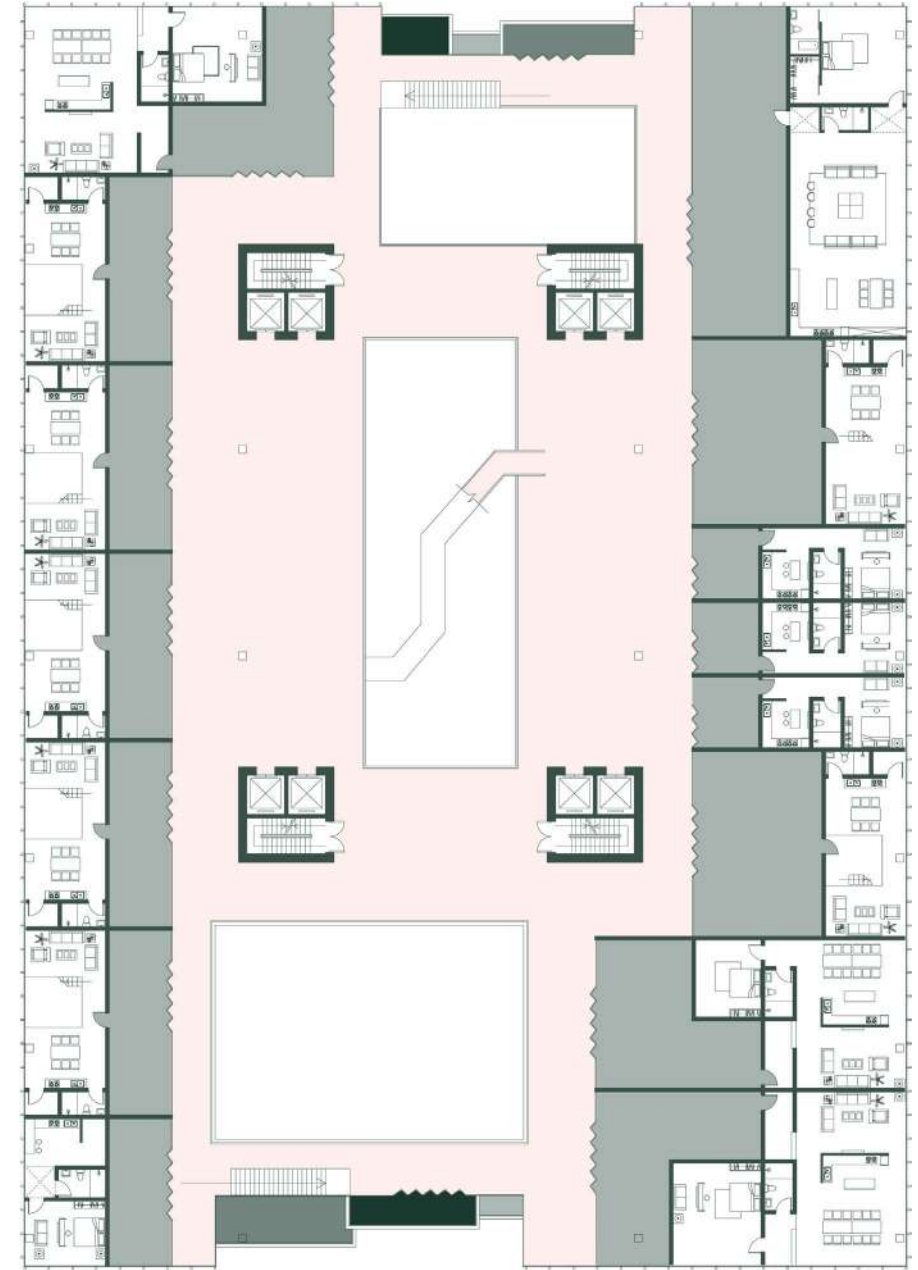
01
GOING UP!
Skyscraper in Delirious New York

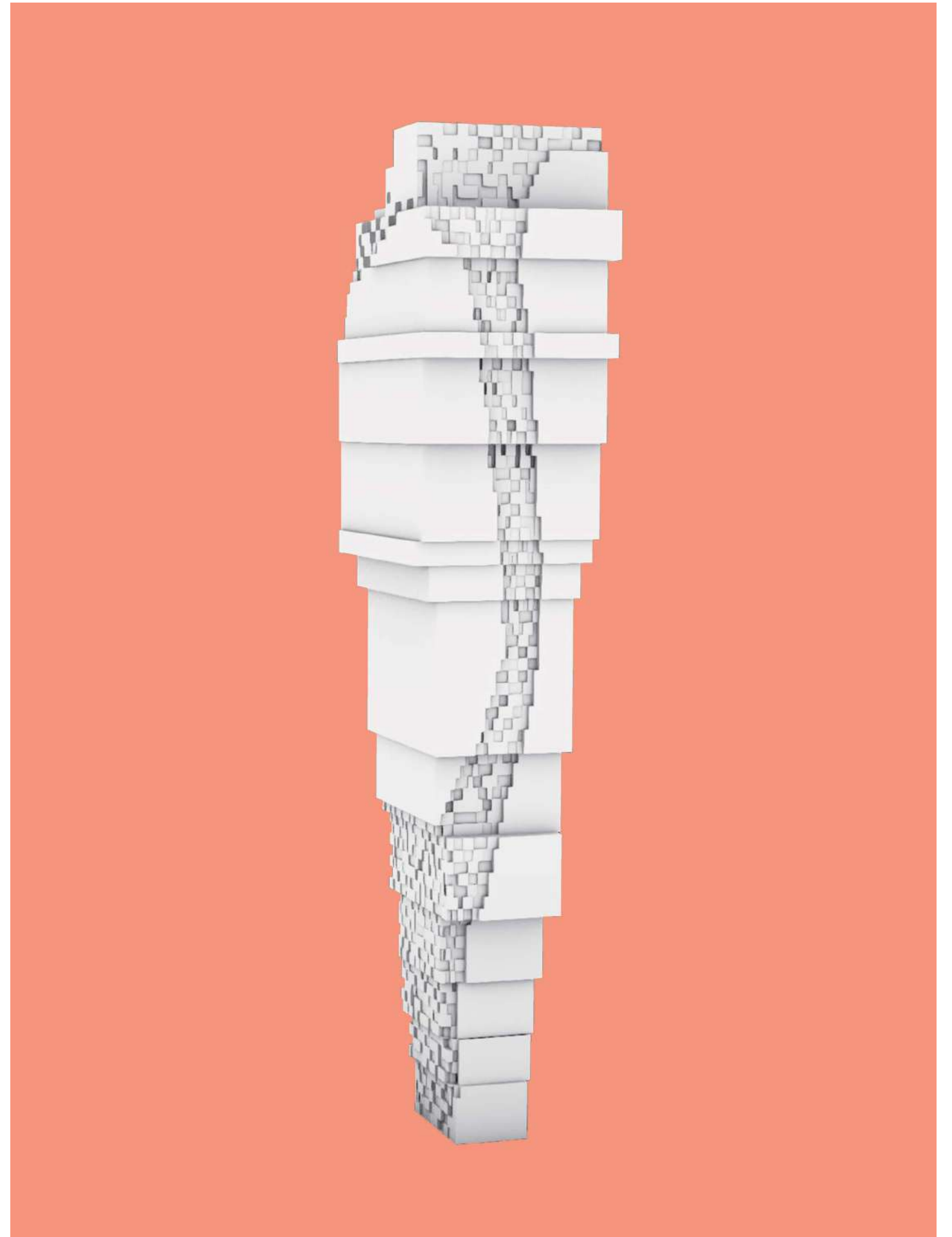
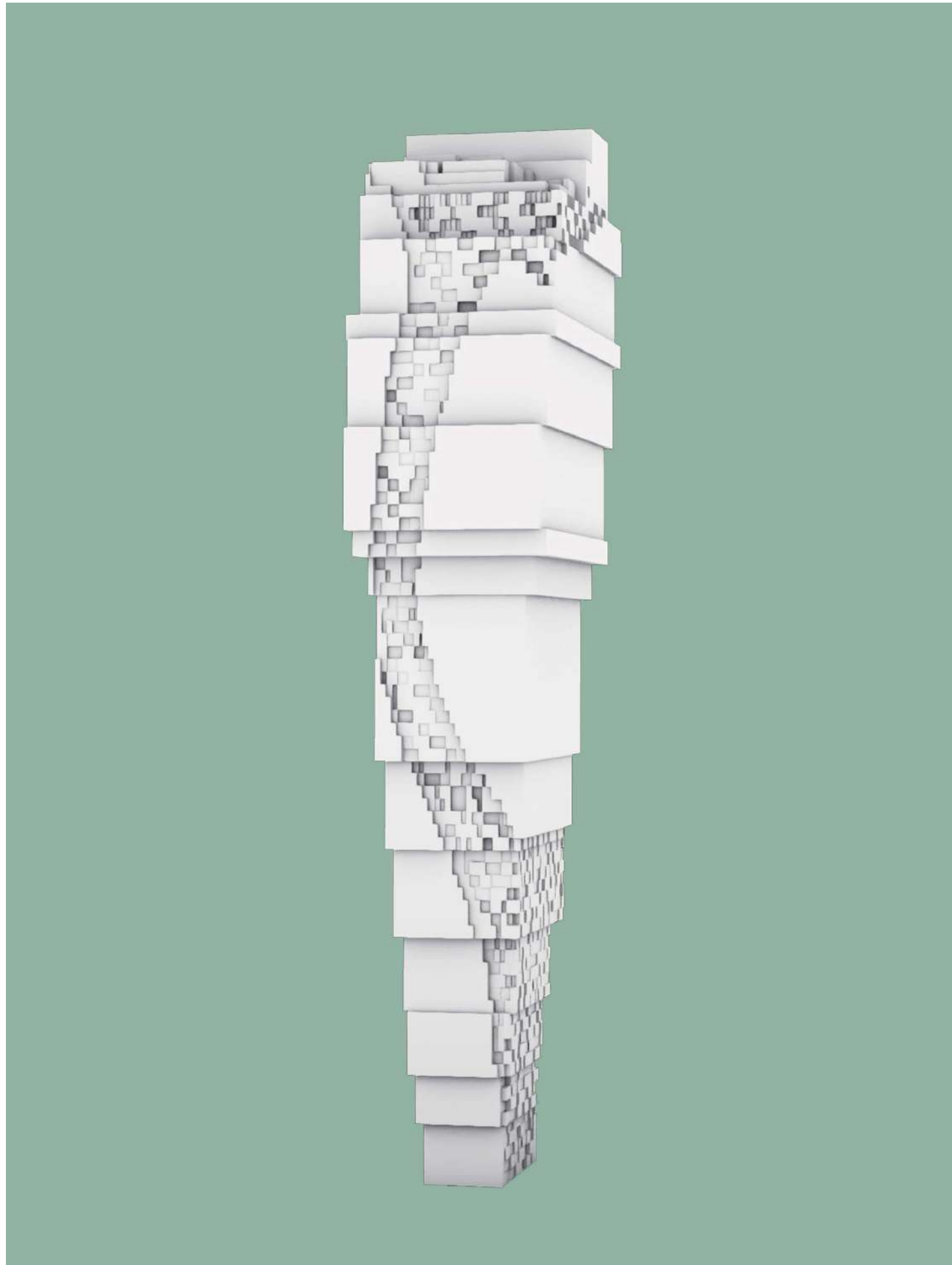
Inverted Laputa
Studio work in Summer 2019
Instructor: Dan Wood, Maurizio Bianchi Mattioli
Individual Work

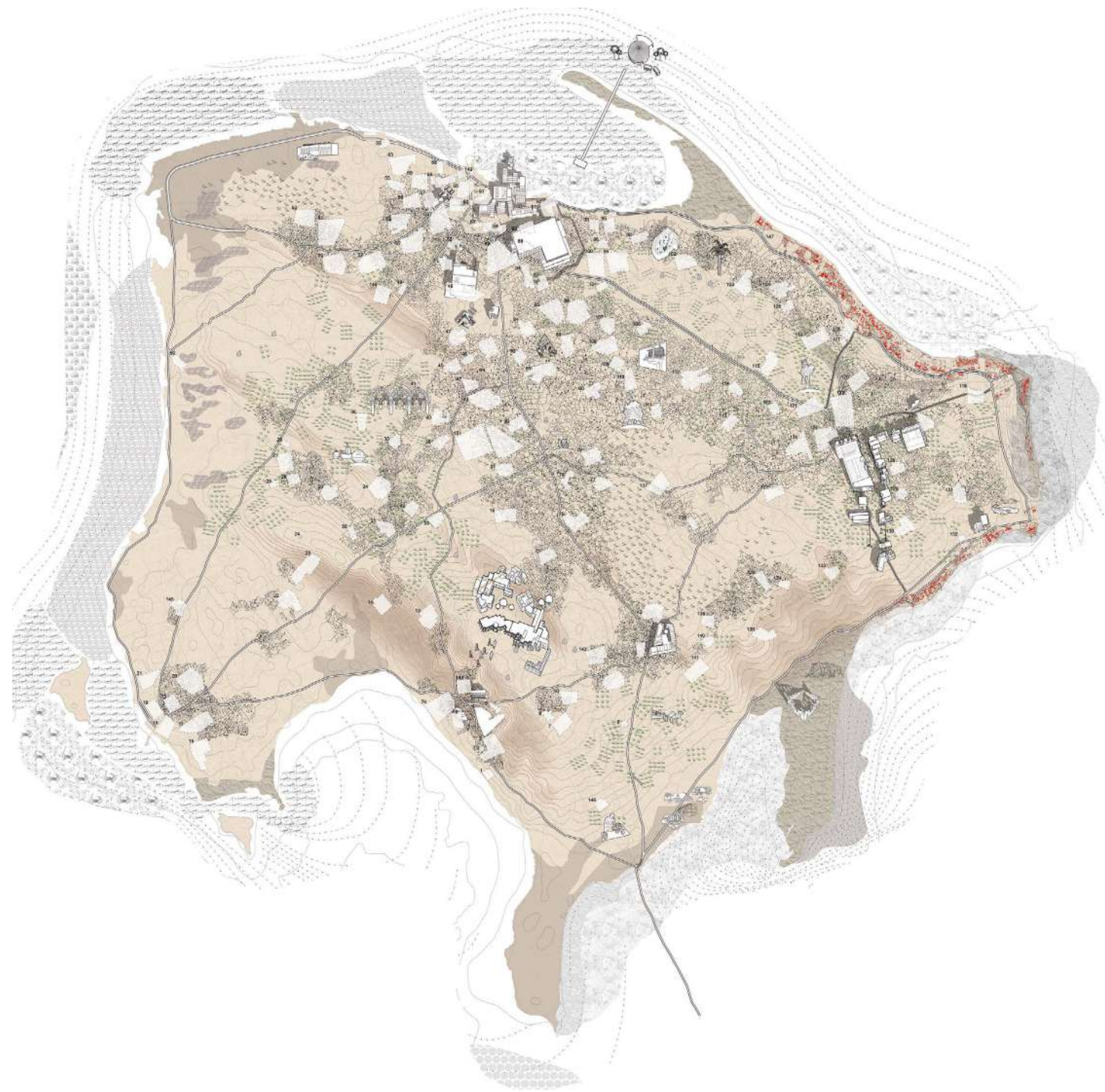
This project is an inverted skyscraper located in Hudson Yard, which is thin at bottom to give land back to the city and goes bigger while growing taller to offer diverse programs inside the building.

This skyscraper can be divided into three parts: the part at bottom and on the top are open to the public where people can go shopping, eating, reading, working, exercising and having fun. The part in the middle with the largest floor size is residential use for artists. Here, apartments are arranged at outer ring with an corridor next to the inner side where people can walk through and have a look at the artists' working studios. Three atriums are arrange here: the two at the edge move on every floor with the balconies on the facade while the one in the middle stay still. The atrium allows light to come in the public space and also allow people to enjoy the art pieces exhibited here by those artists.









02

DE-FENCING THE MOSQUE

Investigation into Rural Religious Edifices and Settlements of Djerba Island

*Towards a New Djerba
Through Jaddah Manipulation and Resources Sharing*

Studio work in Fall 2019

Instructor: Ziad Jamaledine

Group Work with HU Yuxin

Djerba is an island in Tunisia. This project looks at the territorial potentials of the Jaddah (dirt road) typology and proposes the revival of Djerbean agricultural landscape and its deserted Menzels, through Tabias (natural fences) manipulation and resource sharing among multiple stakeholders.

We arranged the whole process into four phases. In phase one, the major task is to get the agreement to manipulate Jaddah (dirt road) and the deserted menzel components among landowners. Phase two is to redesign the deserted menzel components, including well, storage house and houch, to help farmers to share agriculture resources to collaborate on farming. In phase three, we designed two new building typology where landowners can process their agriculture products and sell them to visitors. The major task of phase four is to populate those buildings and lifestyle to other areas on this island. Thus, a new Djerbian landscape is created.



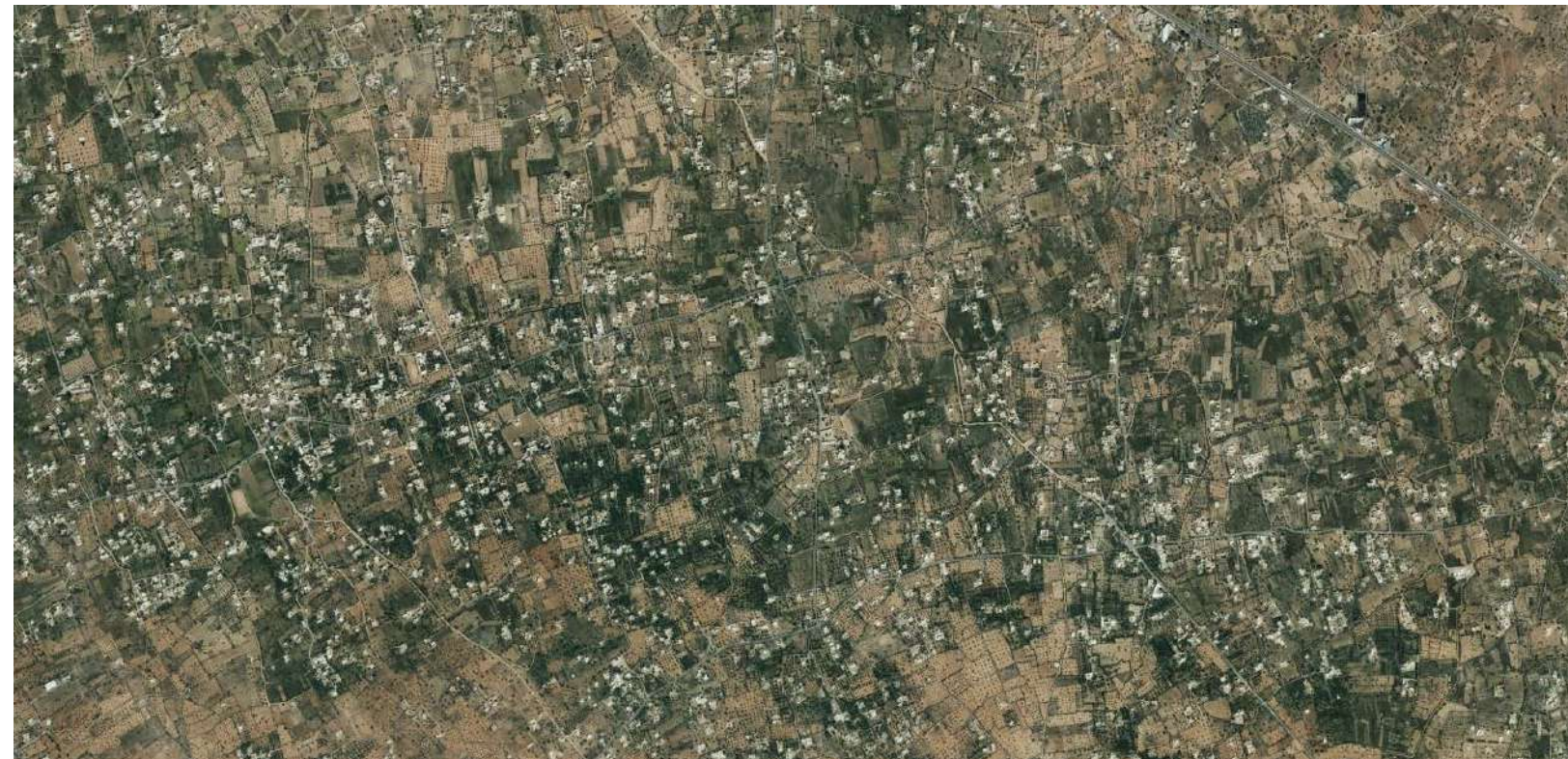
Djerba is an island in Tunisia with thousands years of history. It has an unique landscape between urban and suburban composed by Menzl. This research-based project is focused on menzel, which is a unique agriculture-based living unit that only exists in Djerba.

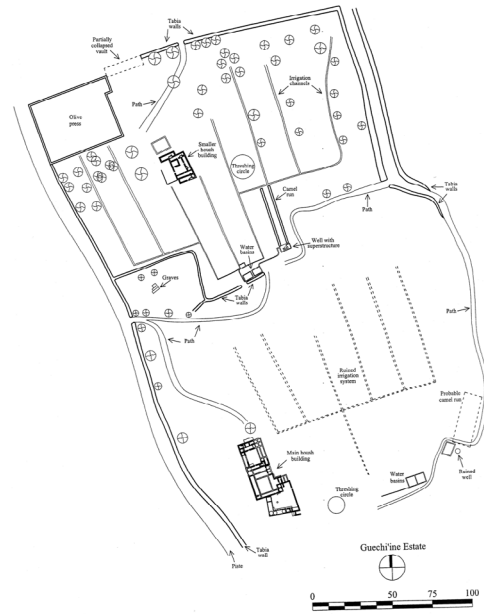
The distribution of the menzel is related to multiple factors. Water and soil are two major factors that determine its distribution. Based on water quality, the menzel developed into two categories: Irrigation farming menzels and dry farming menzels. Irrigation farming menzel is located at sweet water region where water is less salty and has lower concentration of nitrate. These menzels have a less compact plan and tend to form larger clusters. Dry farming menzel is at other part of the island with worse water quality. They have a more dense plan.

A lot of them are in bad condition after decades of weathering. For cultural reasons, landowners won't demolish their old menzels or sell them even if they move abroad, which left many deserted menzels and menzel components.

During the field trip, we also found some foreign visitors exploring these deserted menzel region through jemma on ATV (all-terrain vehicle). It proves the potential value of the Djerbean landscape.

At the same time, UNESCO is processing a world heritage proposal developed by Djerbean architects and submitted by Tunisia Ministry of Culture. A goal of the proposal is protecting the menzel as well as the Djerbean agricultural landscape.





The boundary of the menzel is defined by a unique ecological barrier called Tabias.

Tabias is basically mixed rubble and mud overplanted with cactus, aloe and tequila. It is flexible and can be constructed without heavy machinery. Two tabias form a dirt path called jedda, which is also flexible to manipulate.

Most of the Menzels are composed of a houch, a well, a storage room, an animal shelter and a guset house.

Our project looks at the territorial potentials of Jaddah (dirt road) typology and proposes the revival of Djerbean agricultural landscape and its deserted Menzels, through Tabias (natural fences) manipulation and resource sharing among multiple stakeholders.



El Bir

A well giving access to the underground water pulling by an animal like donkey or camel



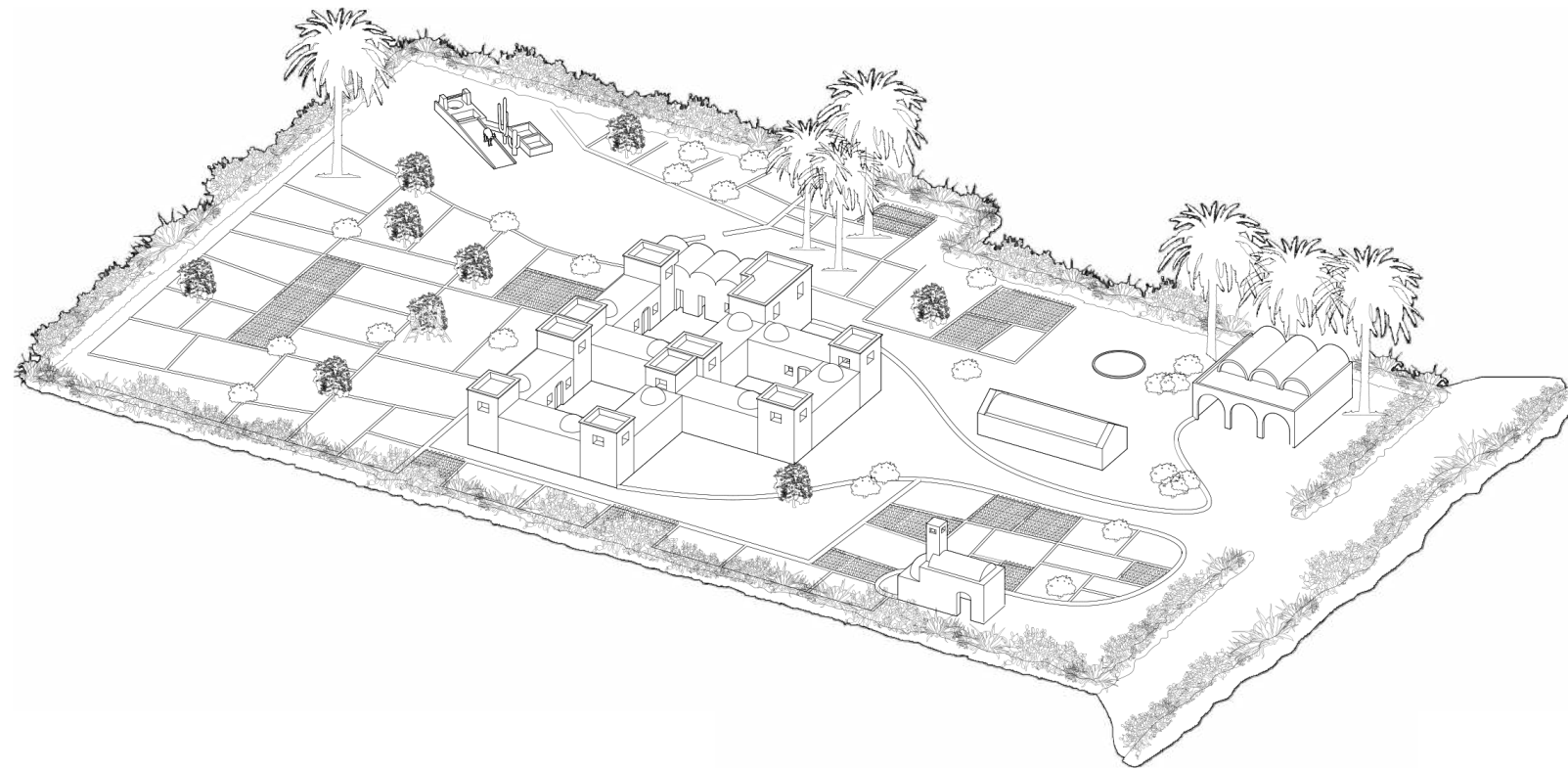
Houch

Boundary fence consists of mixed rubble and mud overplanted with tequila, aloe and cactus



Makhzen Edhief

The place reserved for guests and is located away from the main house



Tabias

Boundary fence consists of mixed rubble and mud overplanted with tequila, aloe and cactus



Makhzen Ett'ben

A small building used to store food for the family and animals of property



Jaddah

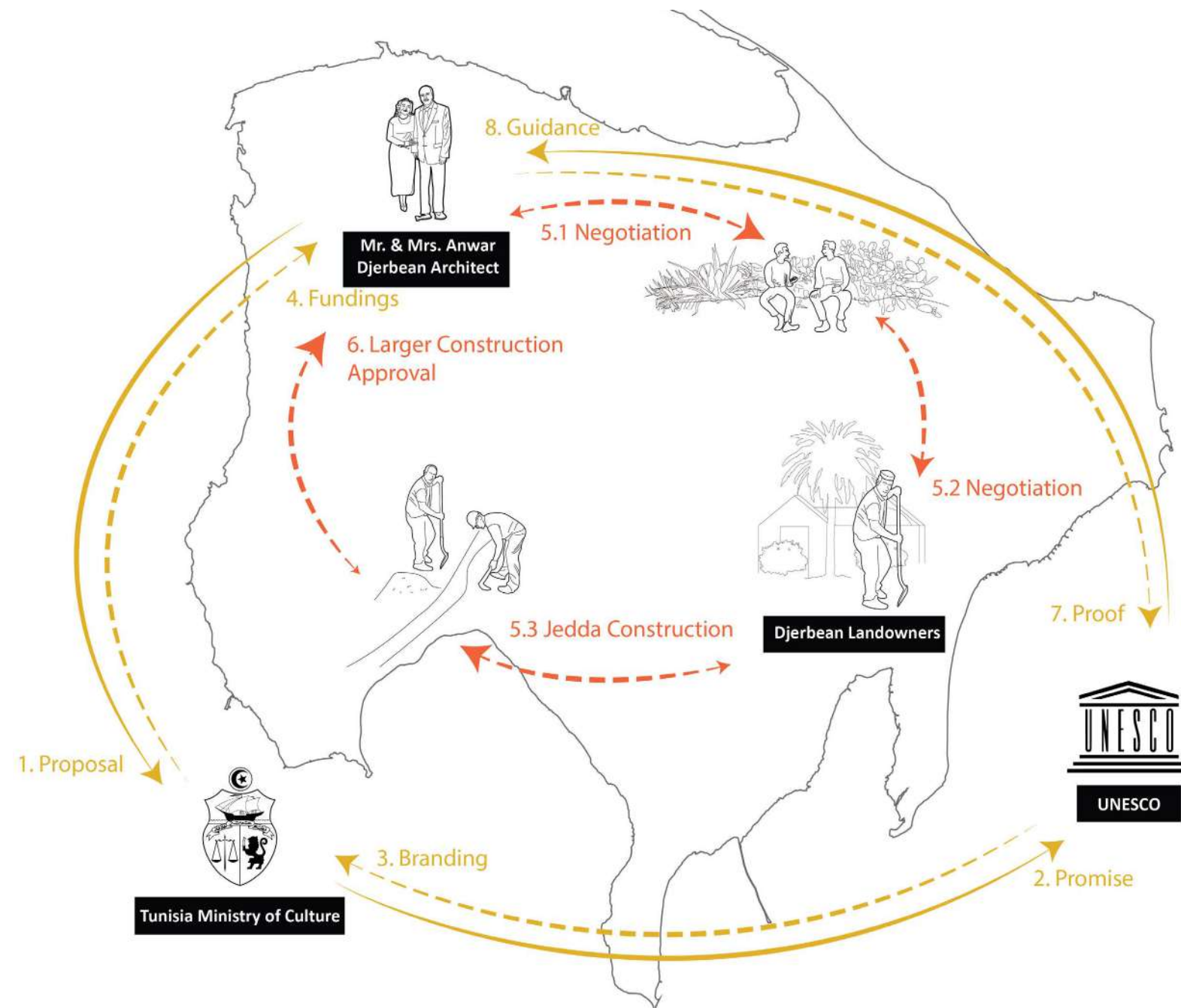
A dirt path between two Tabias which usually leads to a trail to a menzel

Through our research and site visits, we found several stakeholders influencing Djerba. Within which, the most active one is the Djerbean architect. They have an ongoing project, which is a world heritage proposal supported by Tunisia Ministry of Culture. Once this proposal is approved by UNESCO, the world heritage title will definitely reshape the island again just like what hotels did in the 1960s.

In the current relationship, we found it problematic because Djerbean landowners are not actively involved under the strong influence of government planning, capital operation and tourism. The landowners and the agricultural landscape becomes extremely vulnerable.

Our idea is putting more emphasize on the landowners and build up a new relationship to enhance the flexibility and tenacity of the whole island.

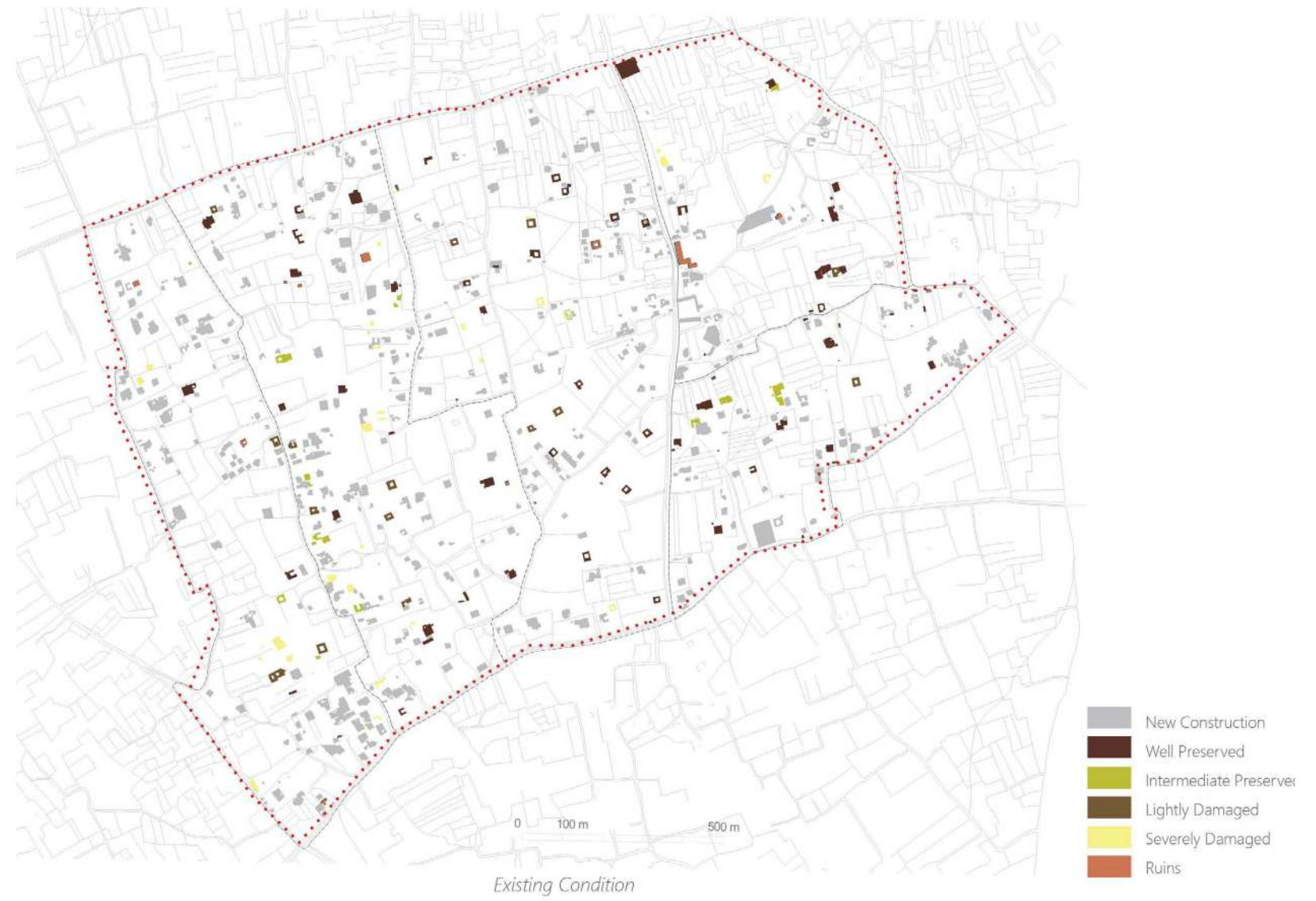
In this new relationship, architects and Landowners can negotiate and adjust the design simultaneously with the official code and text work at the outer ring. Also, world Heritage is not the final goal. For us, it is more important as an opportunity for the revival of Djerbean agricultural landscape and its deserted Menzels.





We will test our design on a 500ha site inside the irrigation farming menzel region.

The buildings quality varies greatly and there're much deserted menzels we can work on.

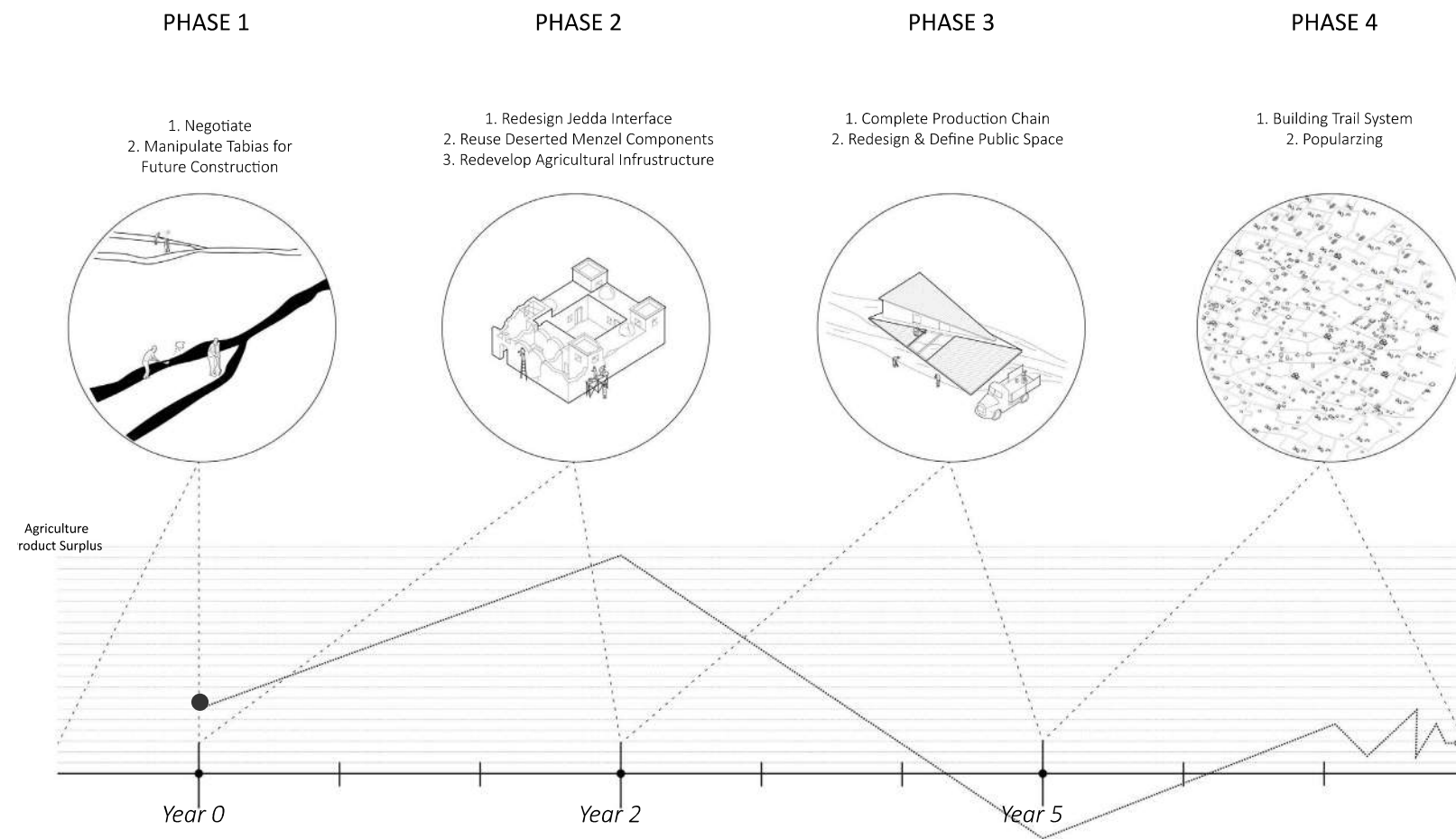


Our design has four phases. Phase one is mostly the negotiation between landowners and other stakeholders. At the end of this phase, tabias are manipulated by landowners to enable future construction.

Phase two is focused on deserted menzel components. In this phase, Deserted Menzels as well as agriculture infrastructures are renovated and reprogrammed to support the upliftment of agriculture industry.

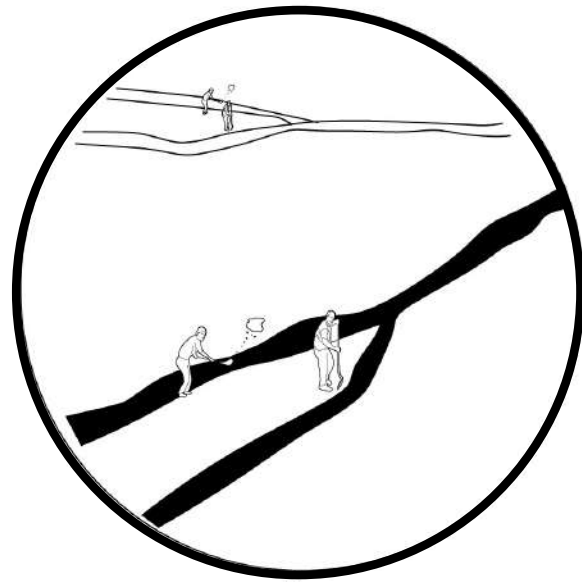
At phase three, local agriculture industry has recovered and farmers have much surplus products. We plan to do some new construction to add more value to the agriculture products and also attract visitors. The new construction also redefines the boundary as well as the public space.

At phase four, tabias as well as architecture build up a complete cultural trail system. They can also be popularized on the island.



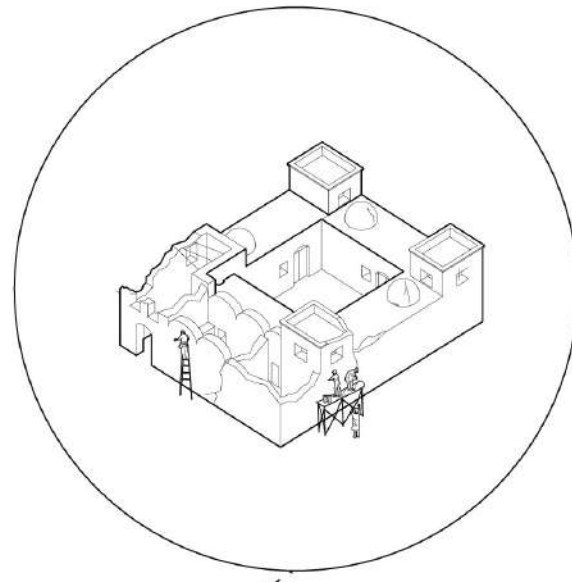
PHASE 1

1. Negotiate
2. Manipulate Tabias for Future Construction



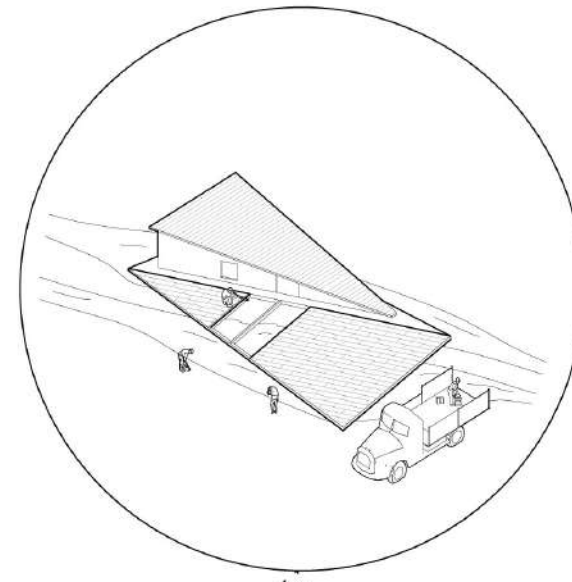
PHASE 2

1. Redesign Jedda Interface
2. Reuse Deserted Menzel Components
3. Redevelop Agricultural Infrastructure



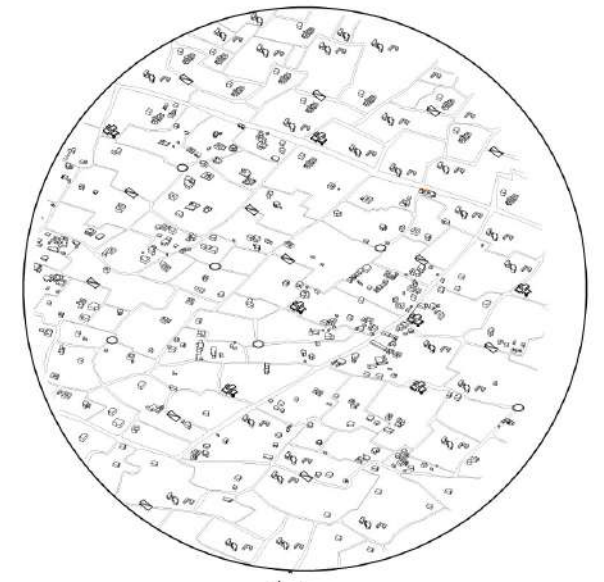
PHASE 3

1. Complete Production Chain
2. Redesign & Define Public Space

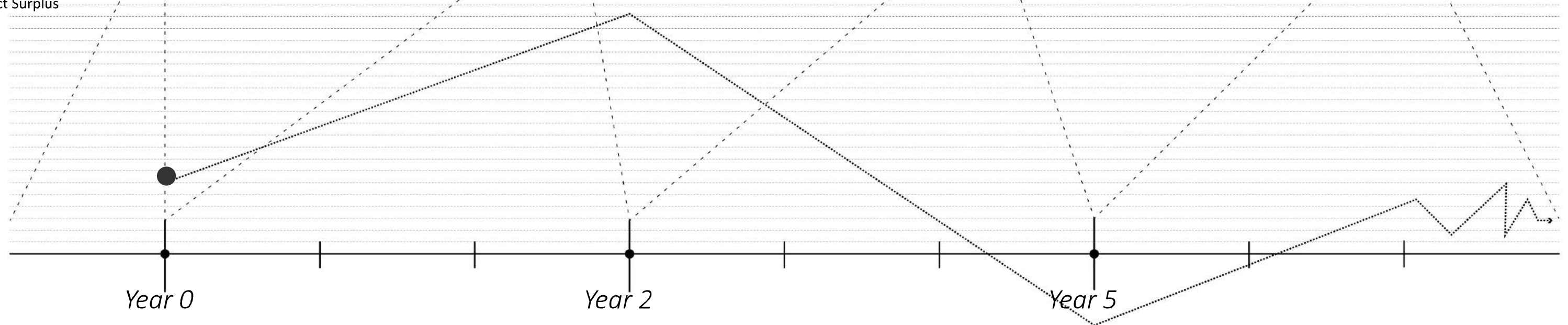


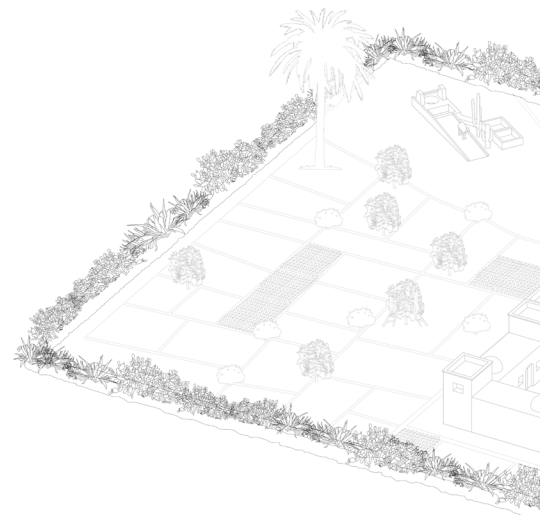
PHASE 4

1. Building Trail System
2. Popularizing



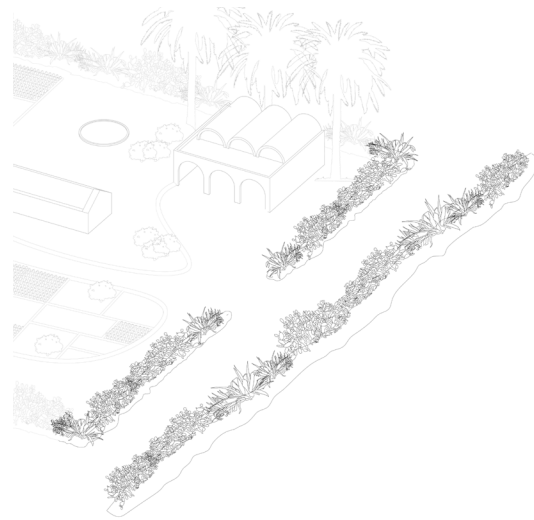
Agriculture
product Surplus





Phase One is both the easiest and the hardest part. It is hard because negotiation is unpredictable and each negotiation is able to change the whole design as well as the landscape.

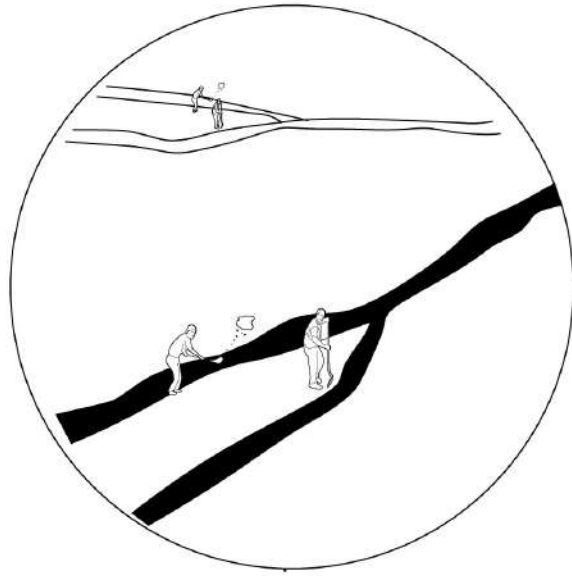




But it is also easy because jedda is basically a dirt path defined by two tabias and you only need two shovels to reshape it. The new jeddas enable people as well as materials to circulate in later phases.

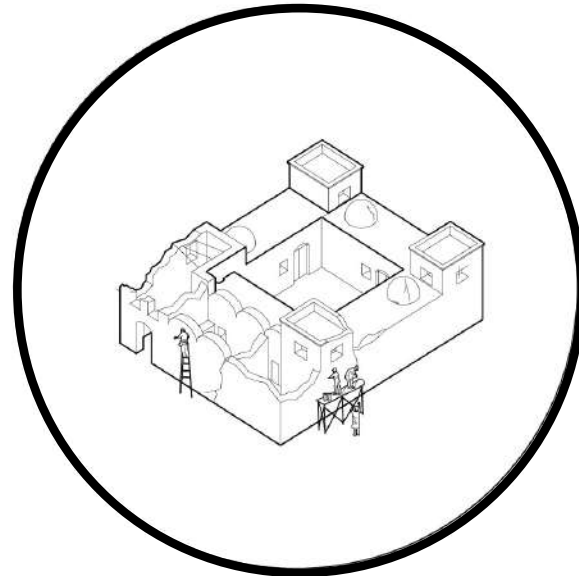
PHASE 1

1. Negotiate
2. Manipulate Tabias for Future Construction



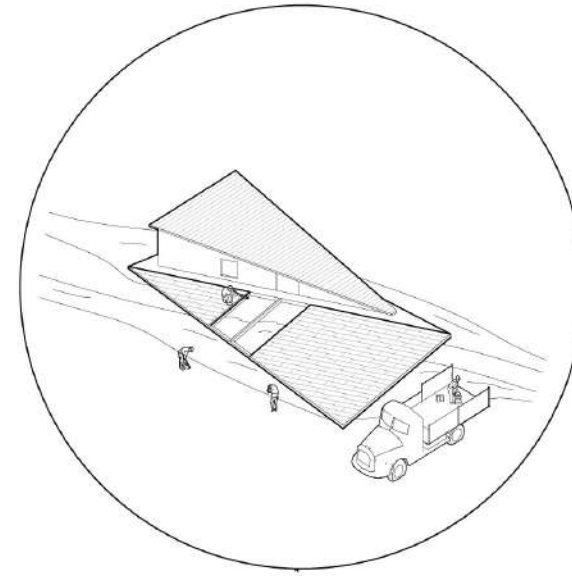
PHASE 2

1. Redesign Jeddah Interface
2. Reuse Deserted Menzel Components
3. Redevelop Agricultural Infrastructure



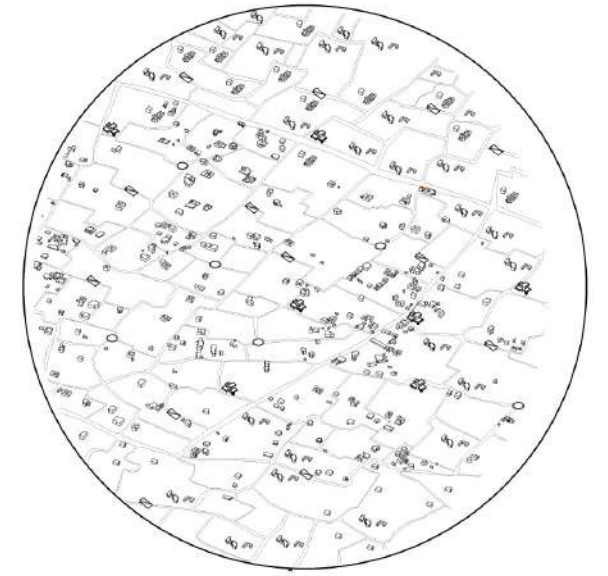
PHASE 3

1. Complete Production Chain
2. Redesign & Define Public Space

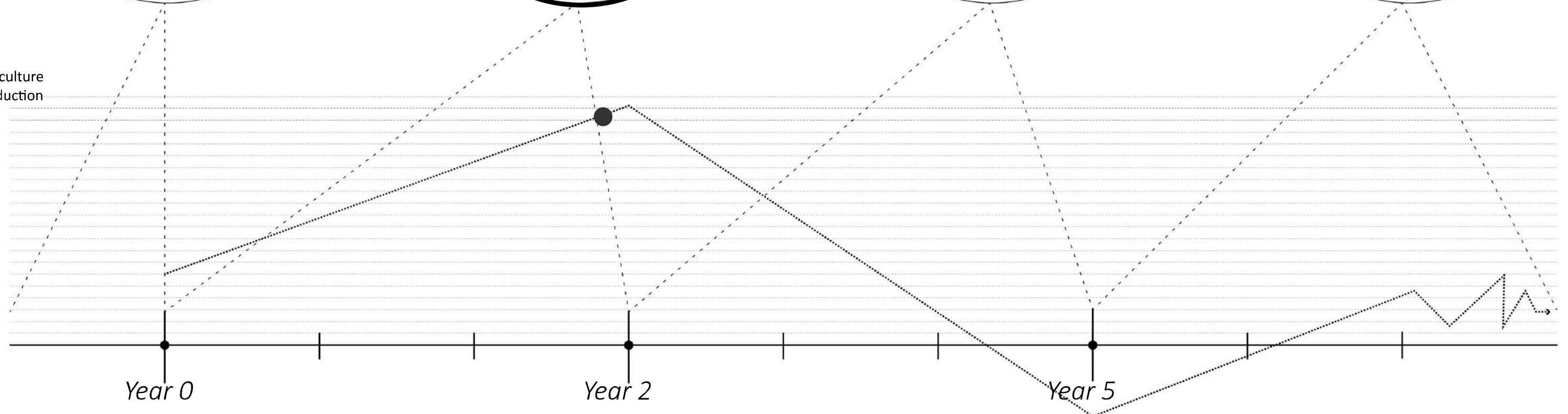


PHASE 4

1. Building Trail System
2. Popularizing



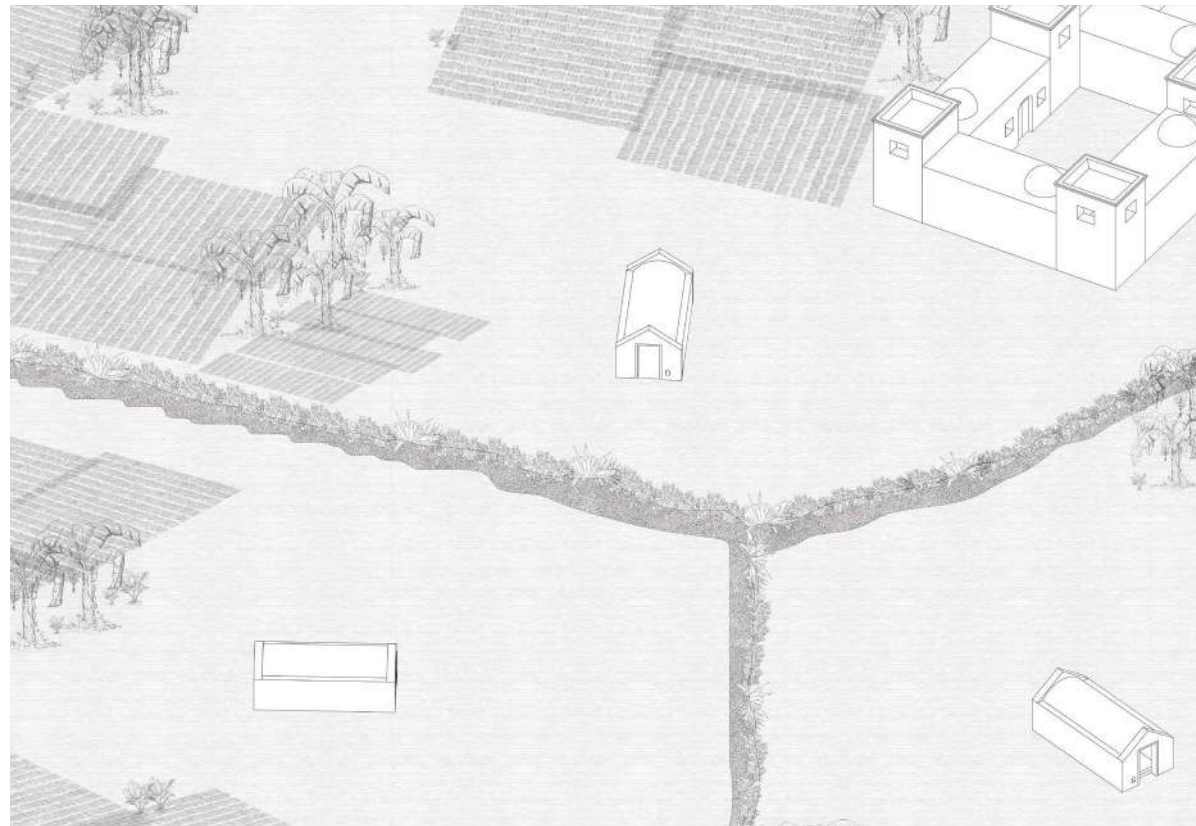
Agriculture
Production



DESERTED MENZEL COMPONENTS RENOVATION

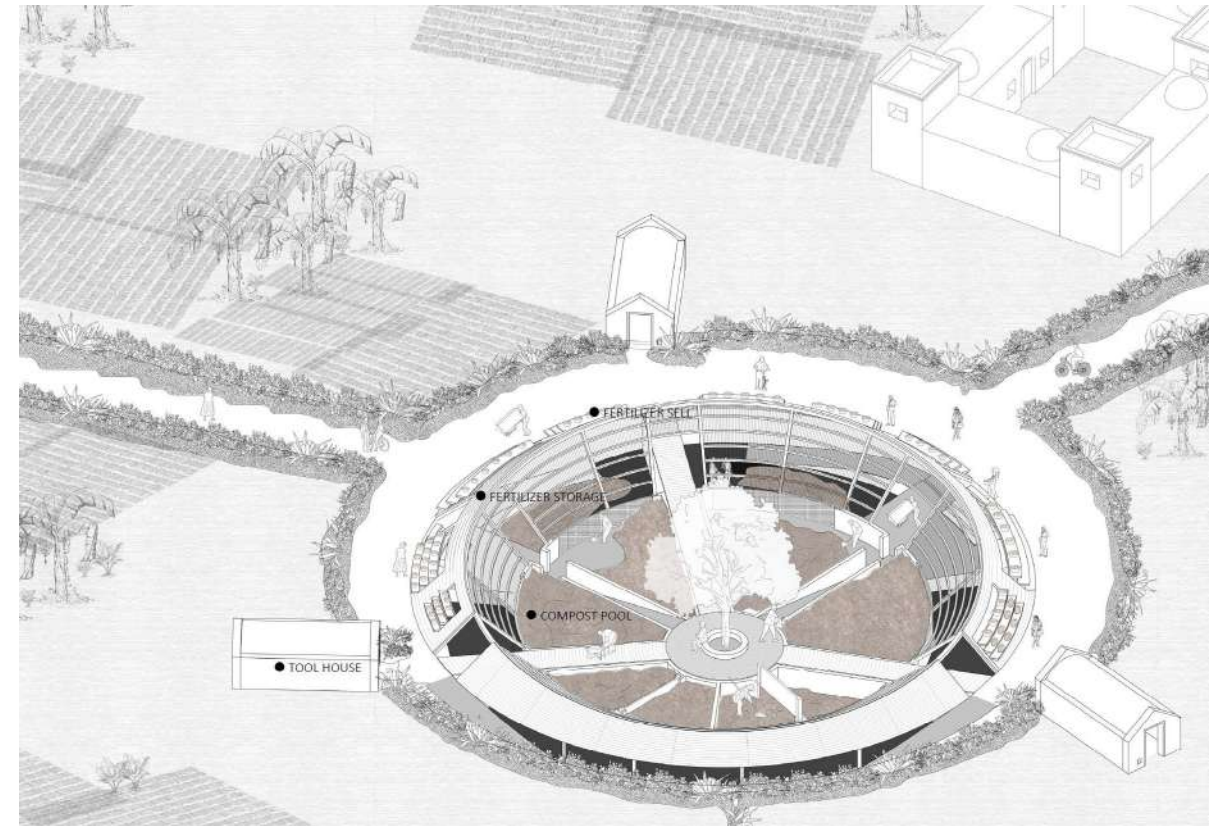


Makhzen Ett'ben
From **Storage House**
To **Shared Fertilizer Composting Field**



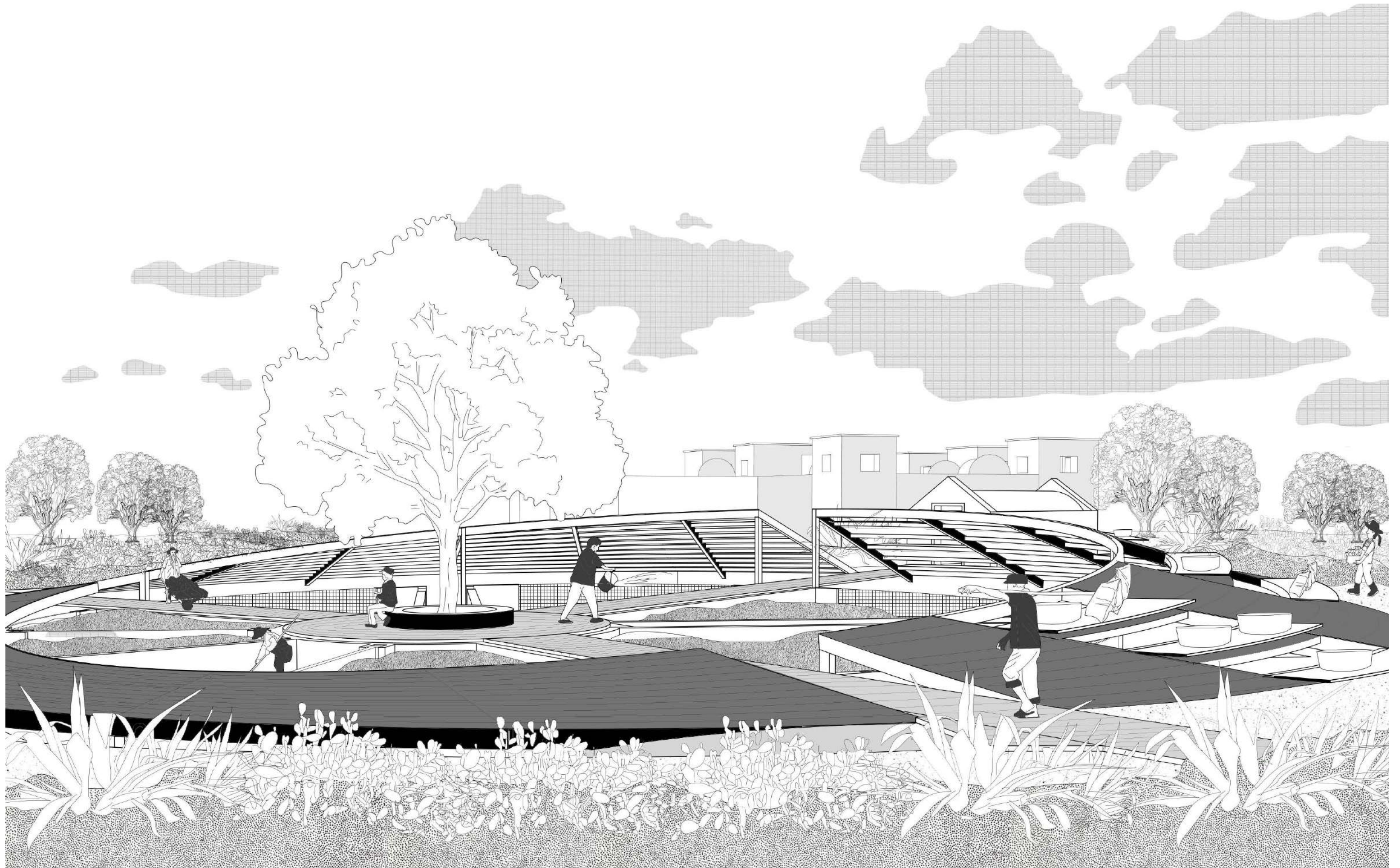
Before

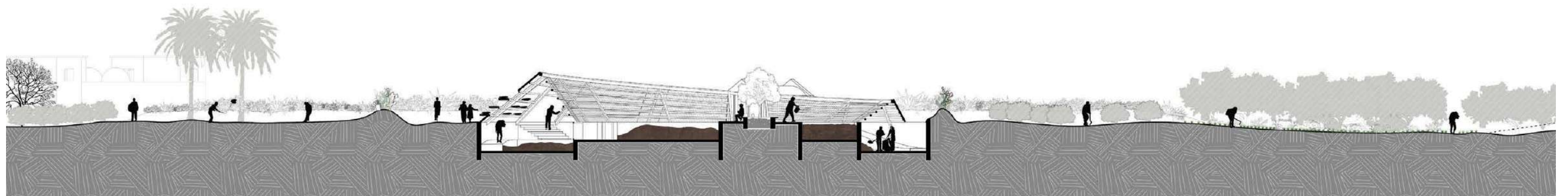
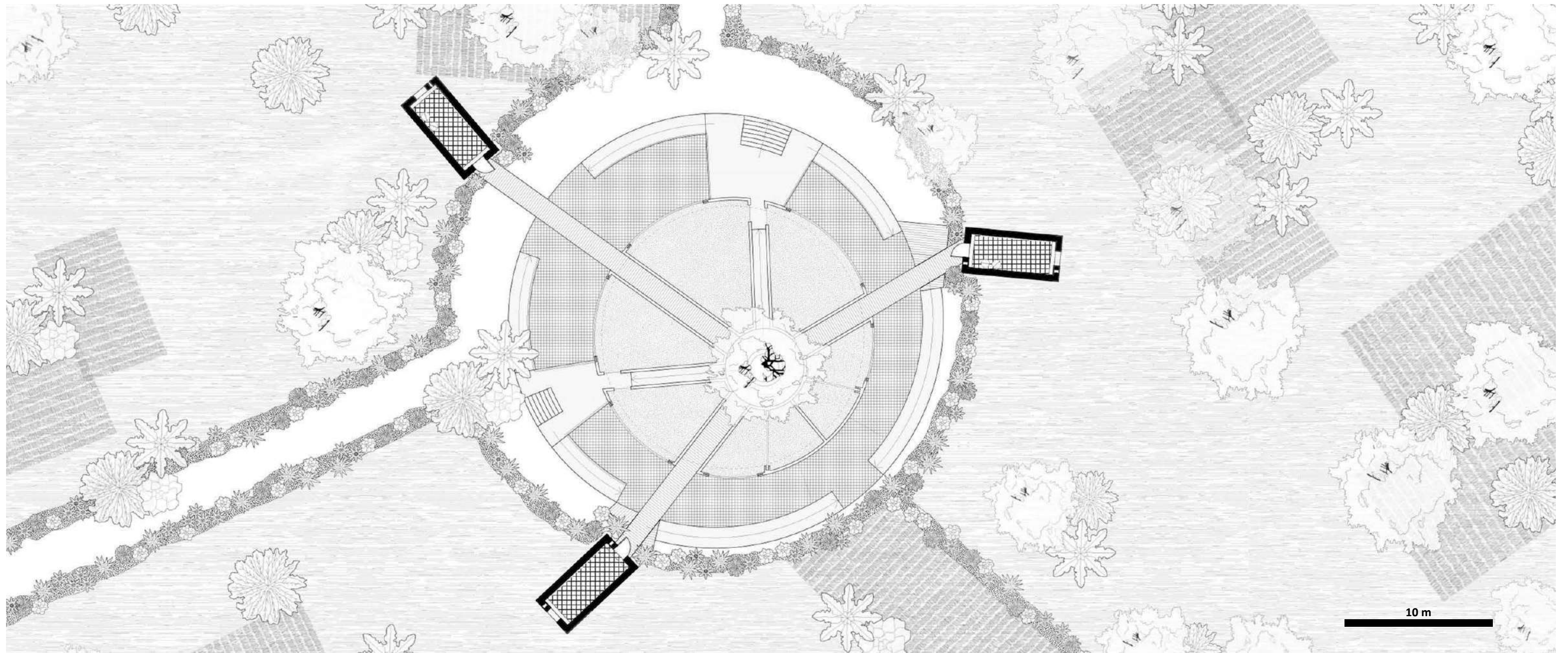
Three Deserted Storage in Three Separated Menzel



After

One Public Fertilizer Composting Field Shared by Three Menzel Where Farmers Could Collaborate Composting and Share Fertilizer

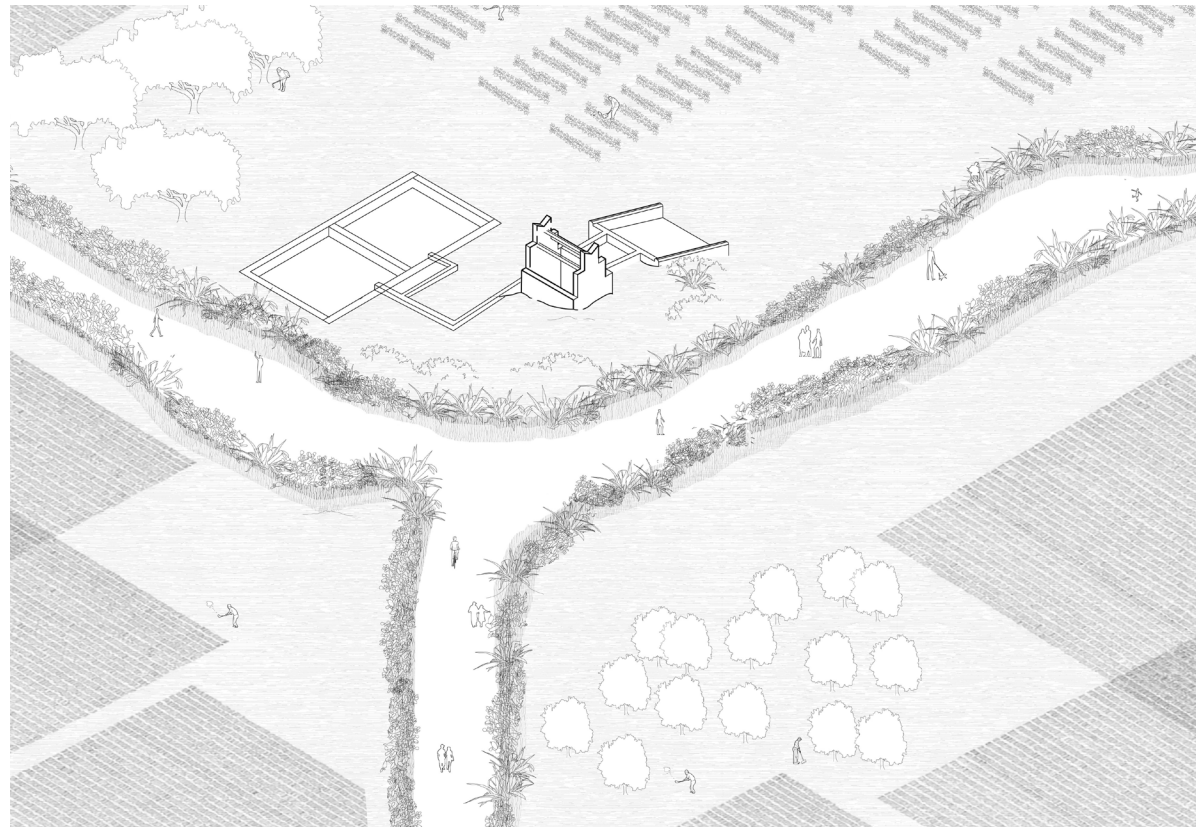




DESERTED MENZEL COMPONENTS RENOVATION

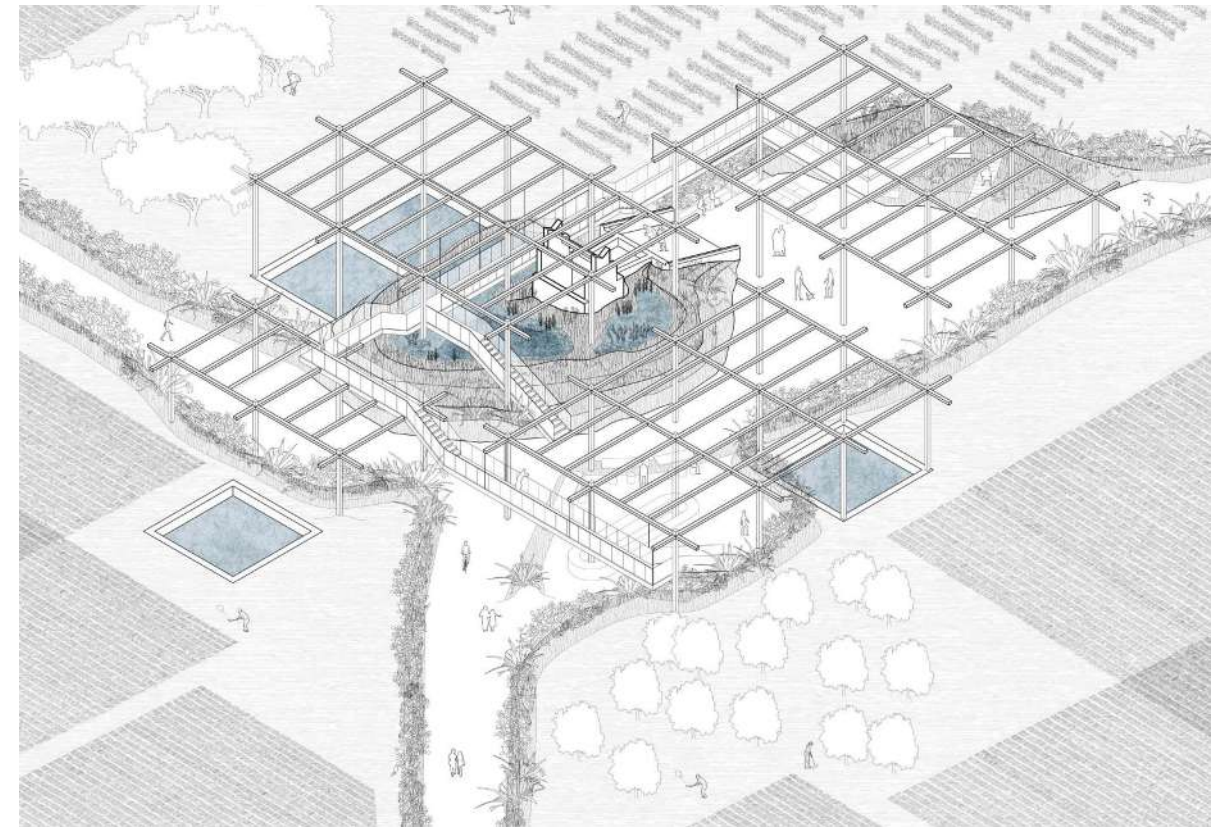


El Bir
From Water Well
To Water Treatment Place



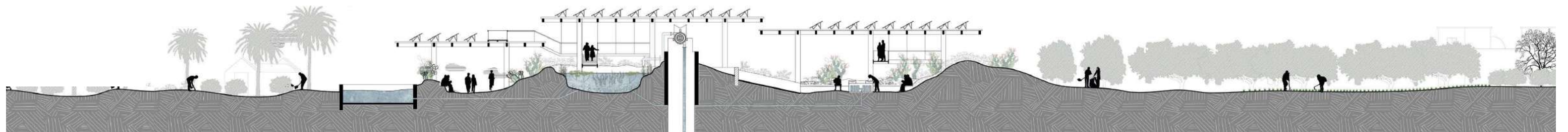
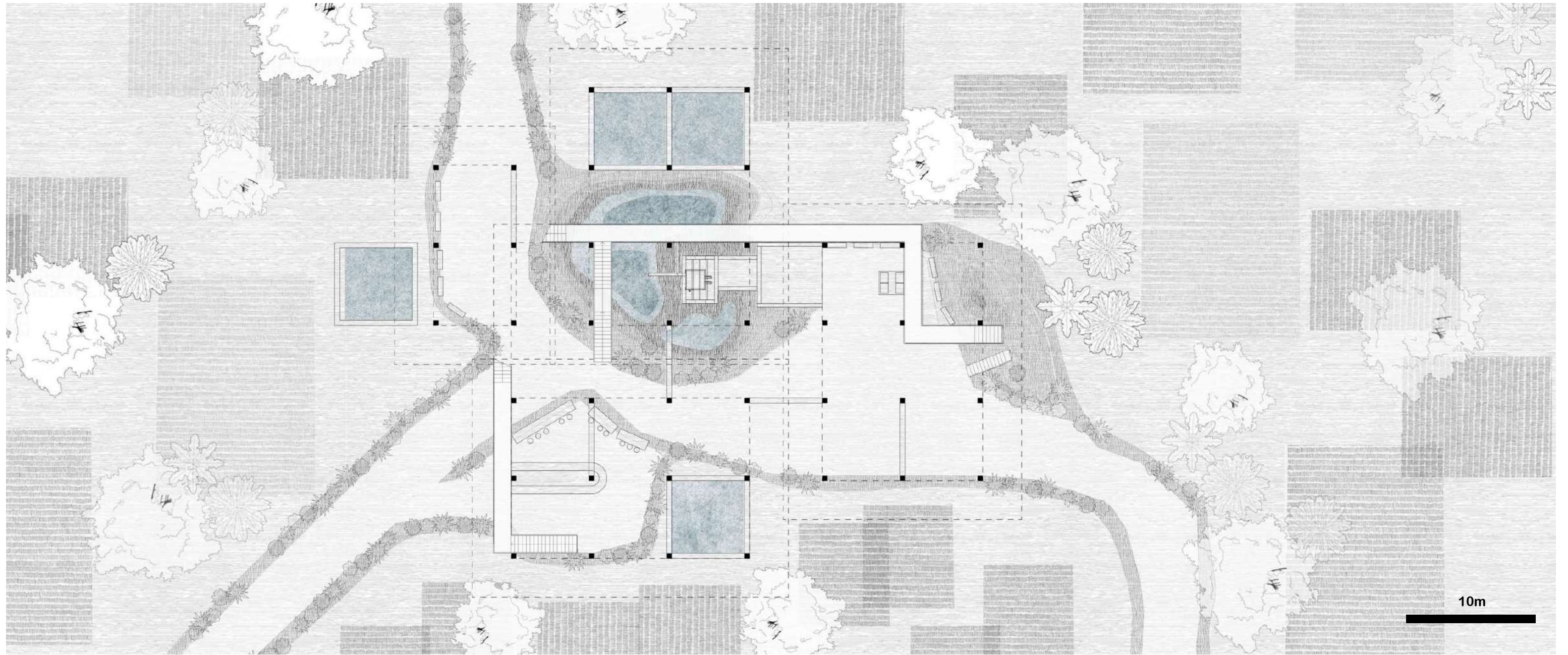
Before

One Deserted Well in a Private Menzel



After

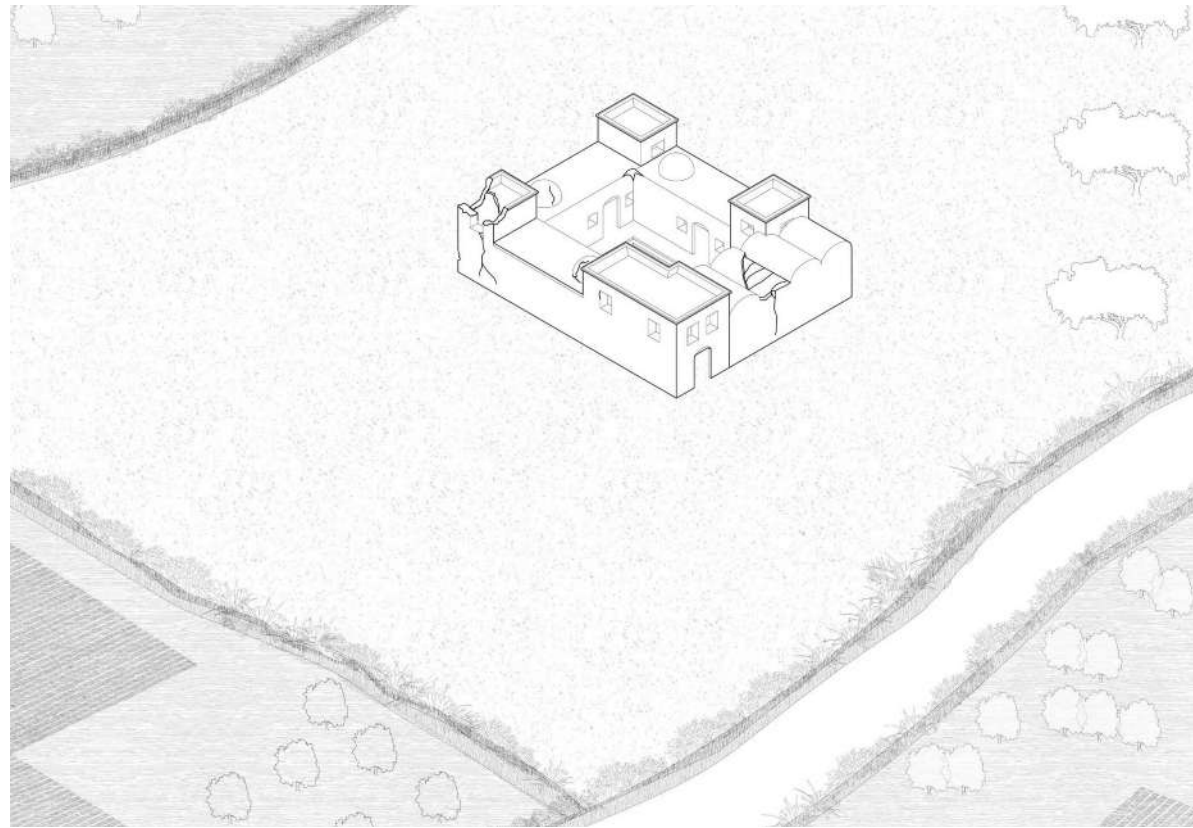
One Open Water Treatment Place + Public Shelter Where Farmers Could Share Irrigation and Take Rest



DESERTED MENZEL COMPONENTS RENOVATION

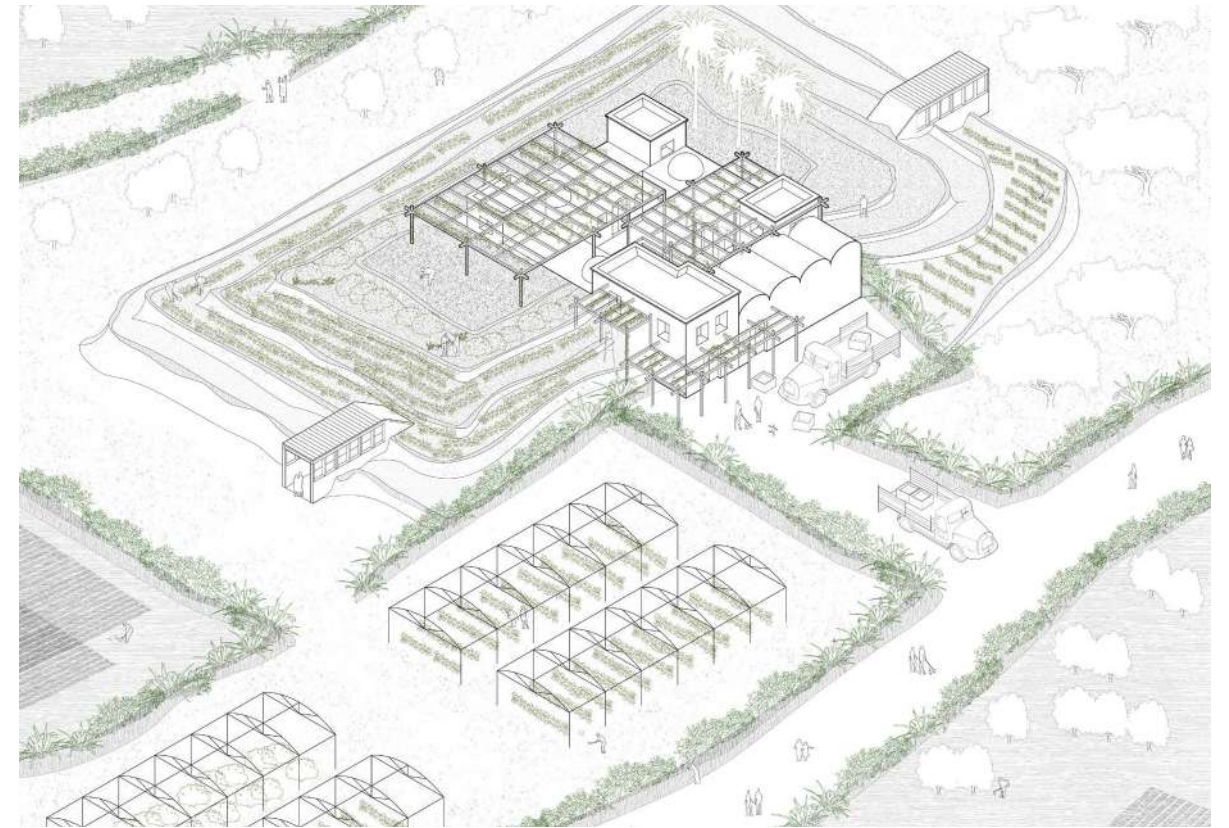


Houch
From **House**
To **Agriculture Research Center**



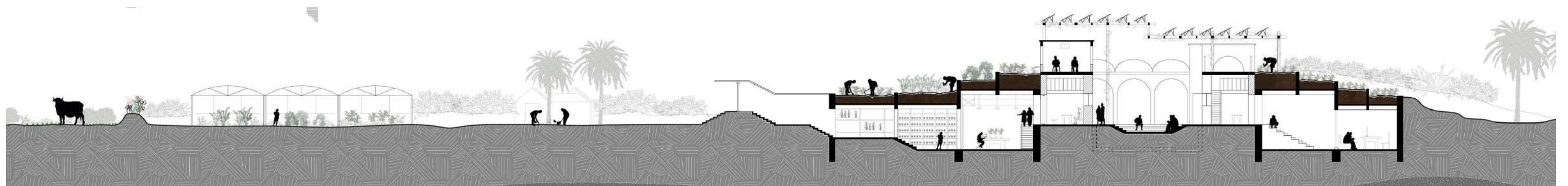
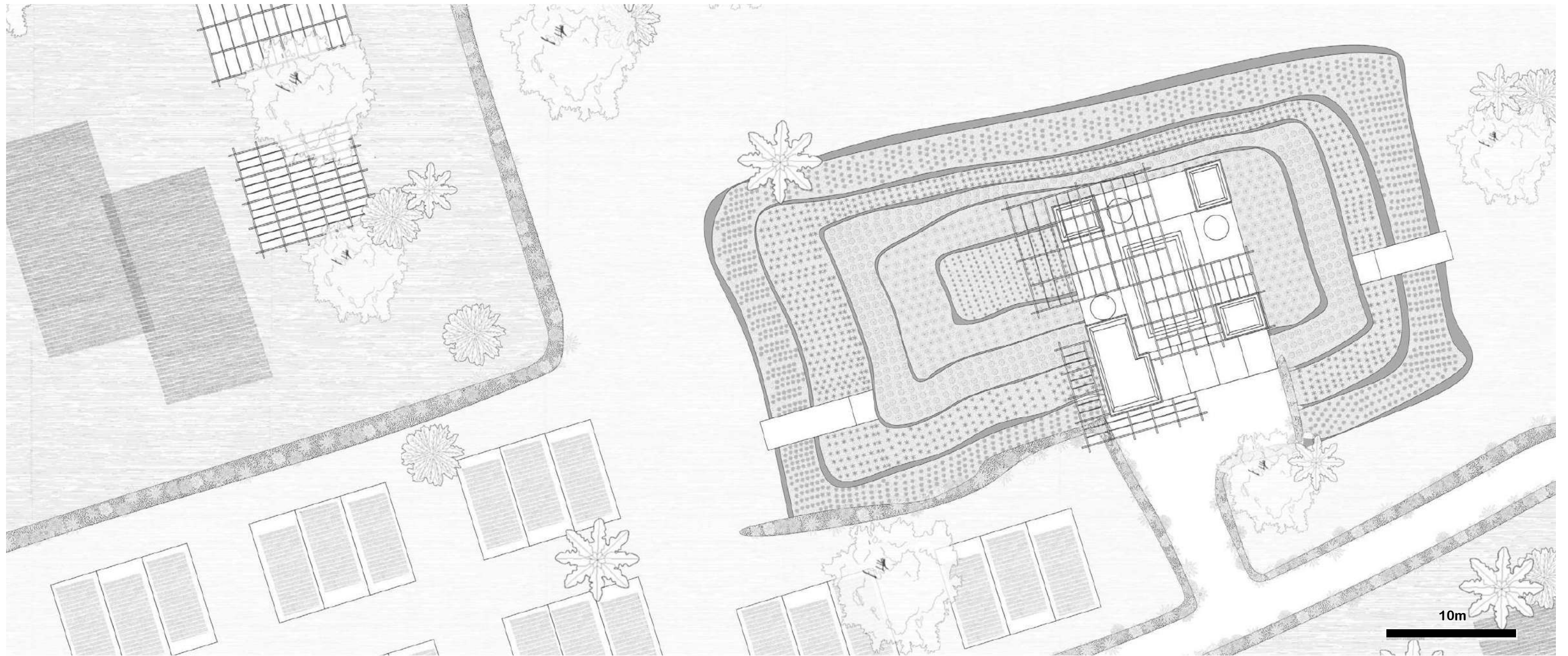
Before

One Deserted Houch (House) in a Private Menzel



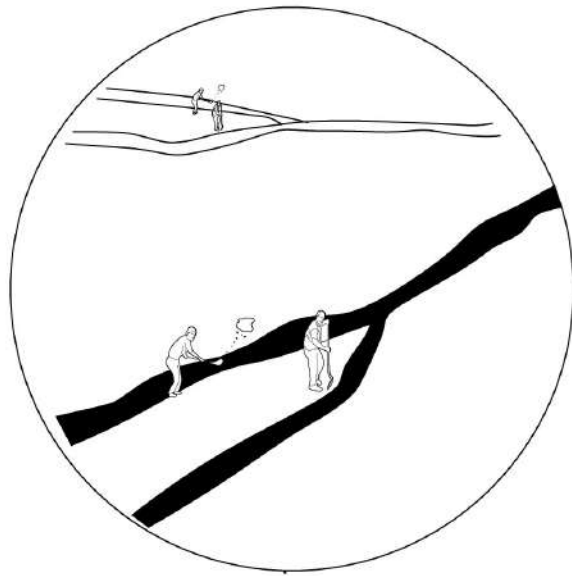
After

One Agriculture Research Center Where Experts Share the Technology with the Whole Community



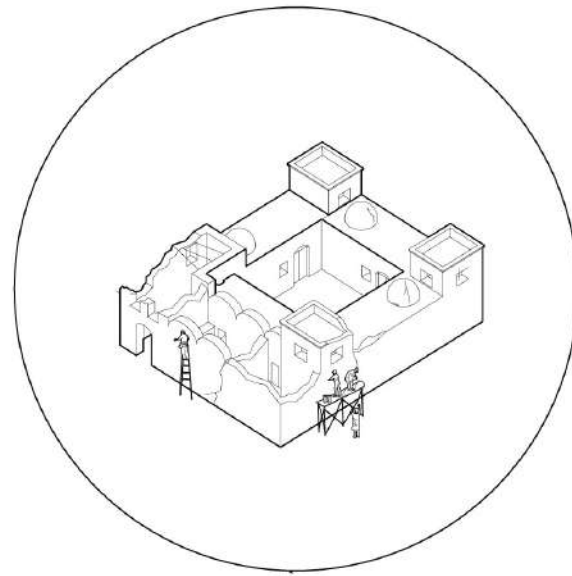
PHASE 1

1. Negotiate
2. Manipulate Tabias for Future Construction



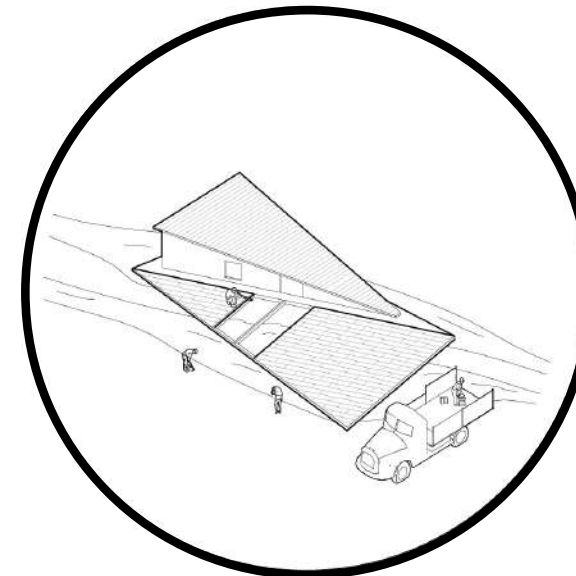
PHASE 2

1. Redesign Jedda Interface
2. Reuse Deserted Menzel Components
3. Redevelop Agricultural Infrastructure



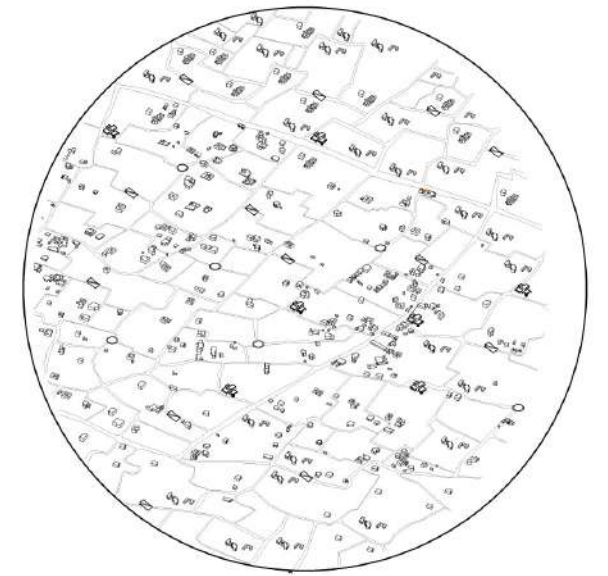
PHASE 3

1. Complete Production Chain
2. Redesign & Define Public Space

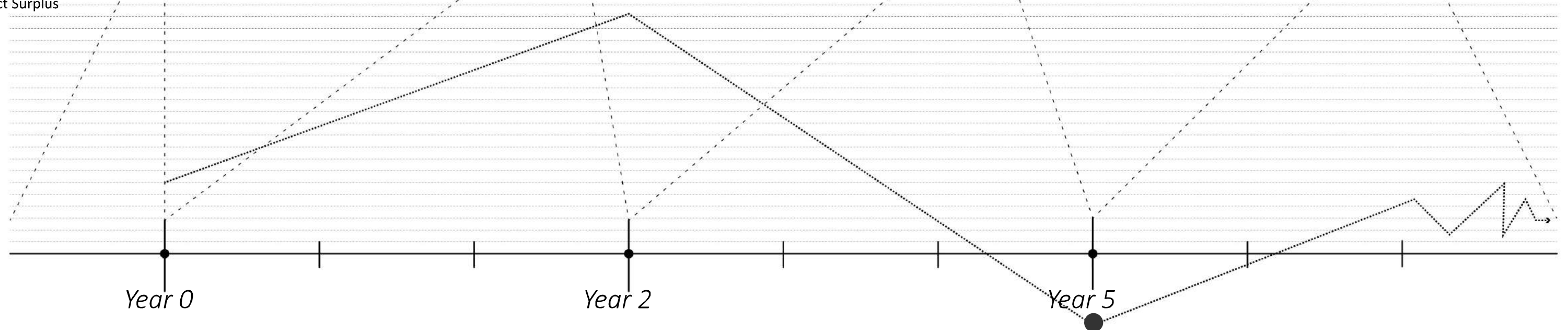


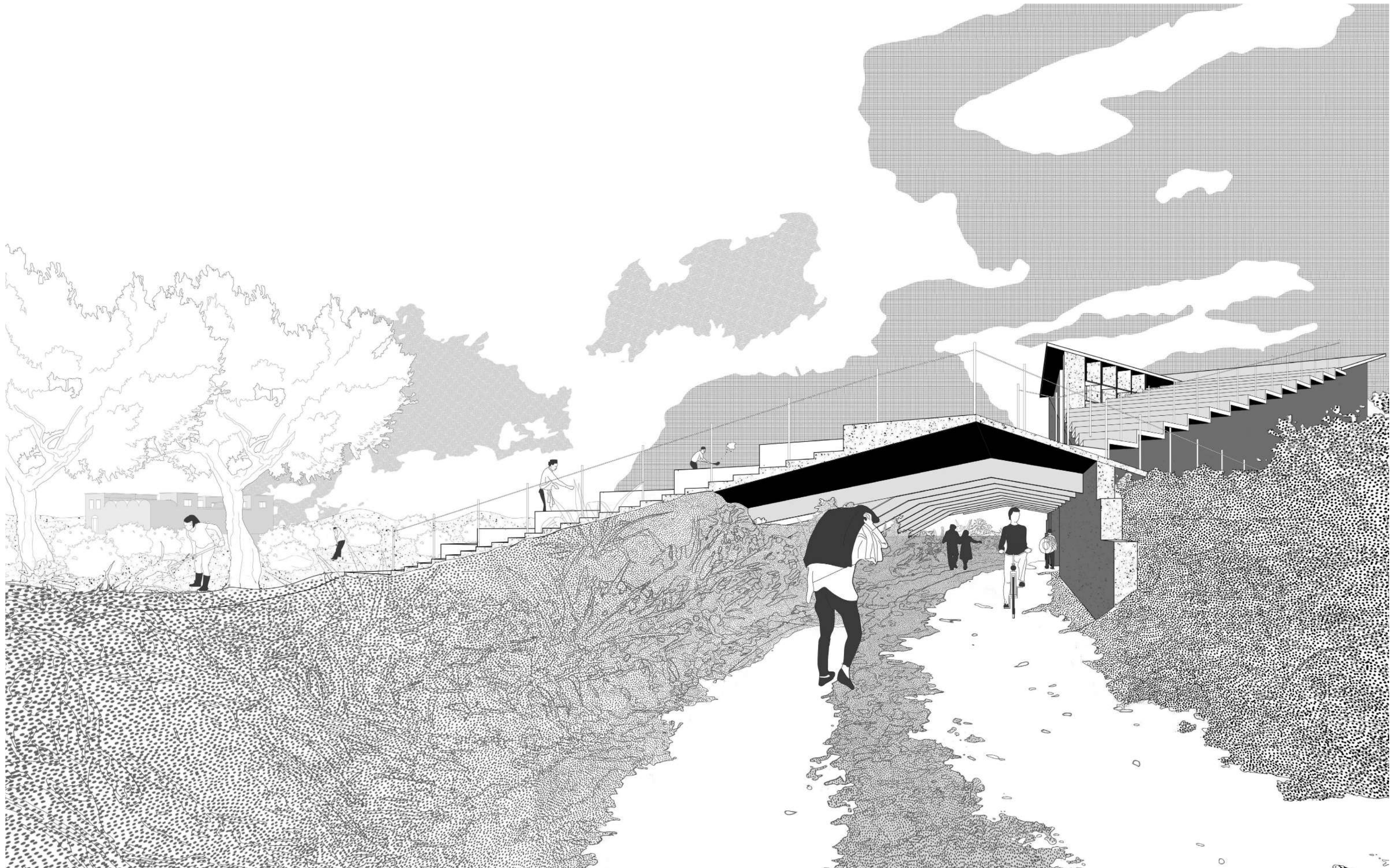
PHASE 4

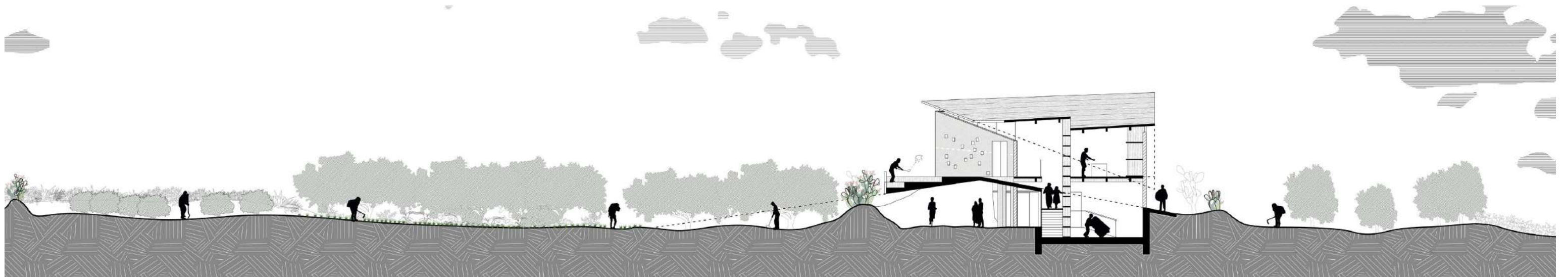
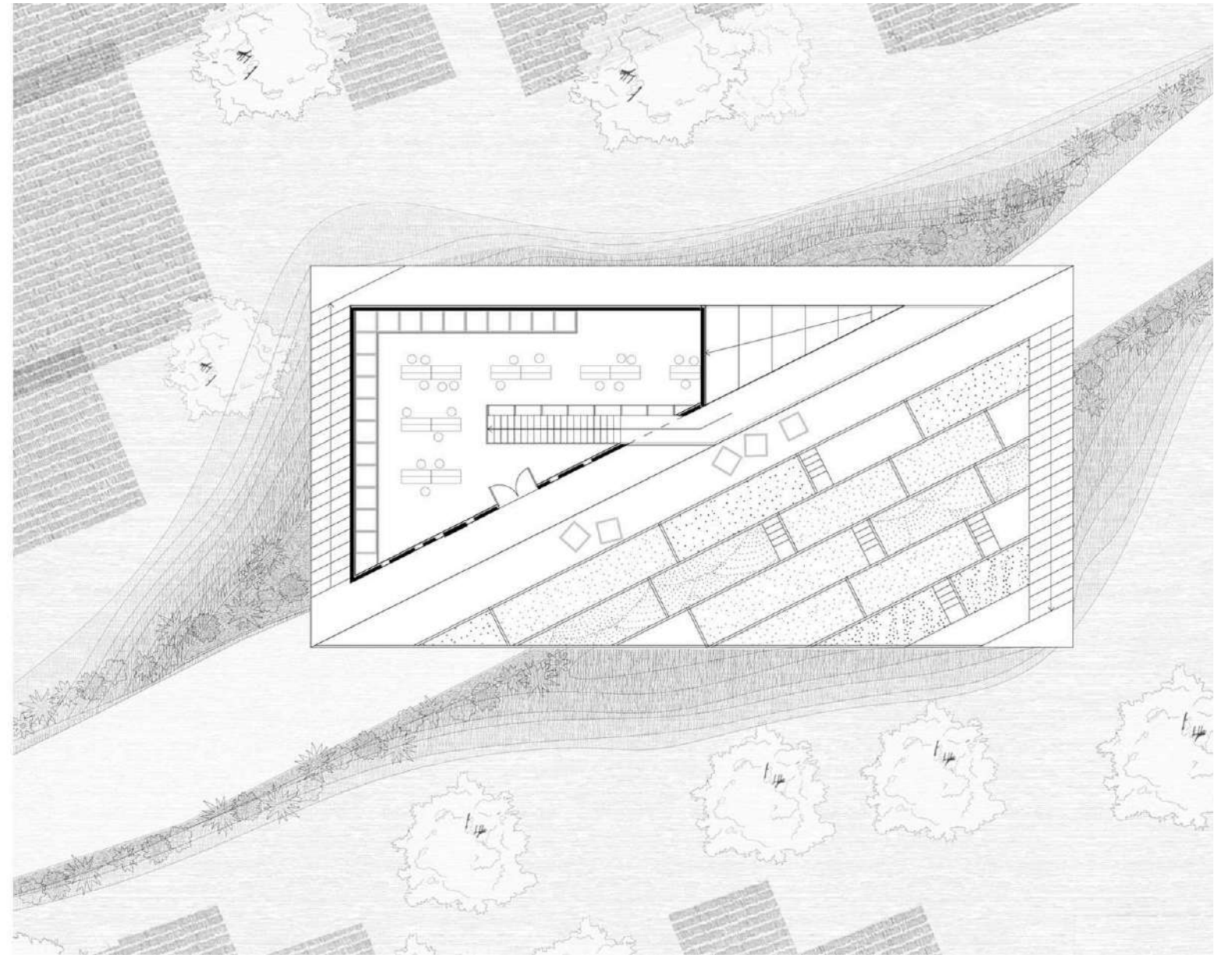
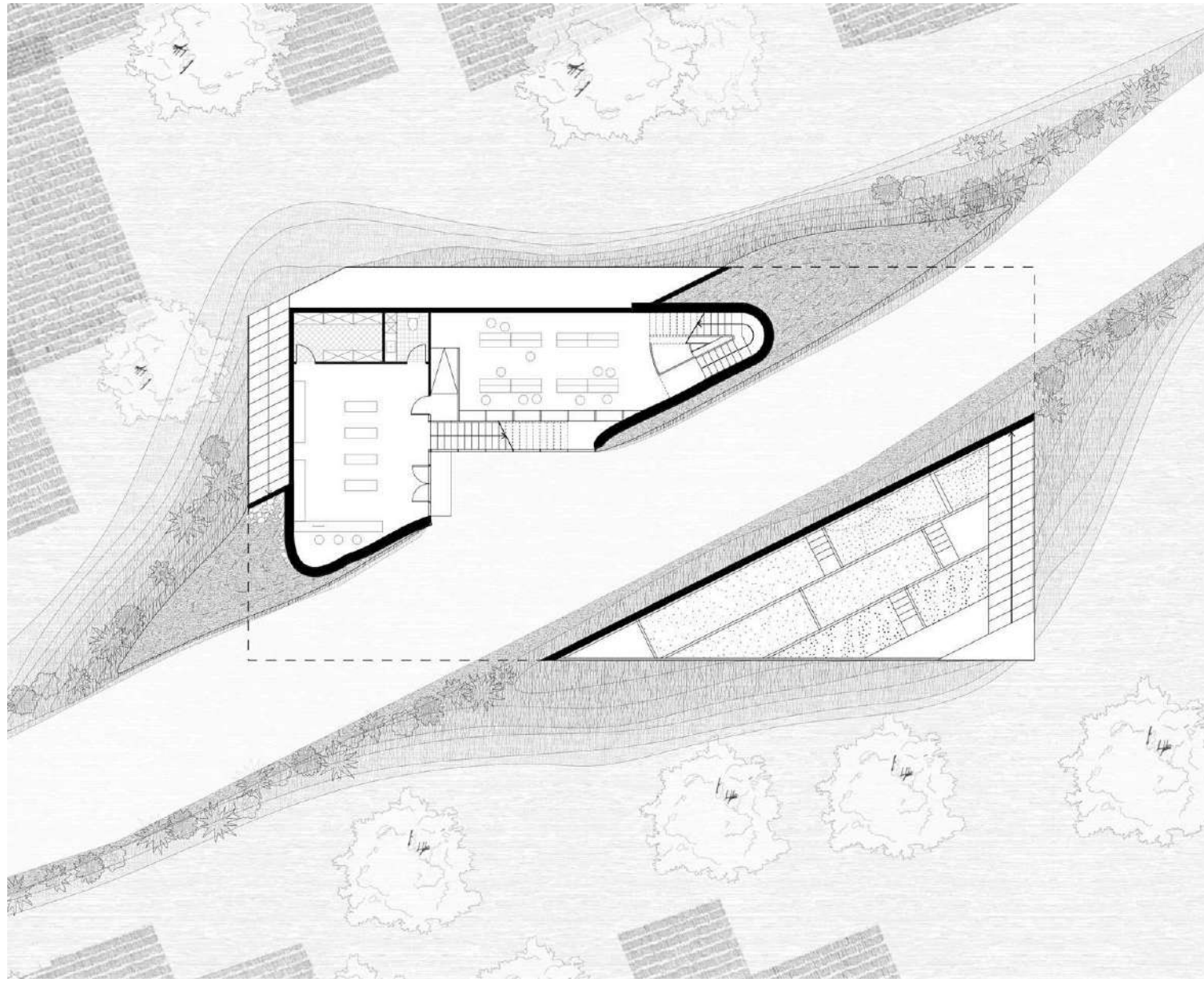
1. Building Trail System
2. Popularizing



Agriculture
product Surplus

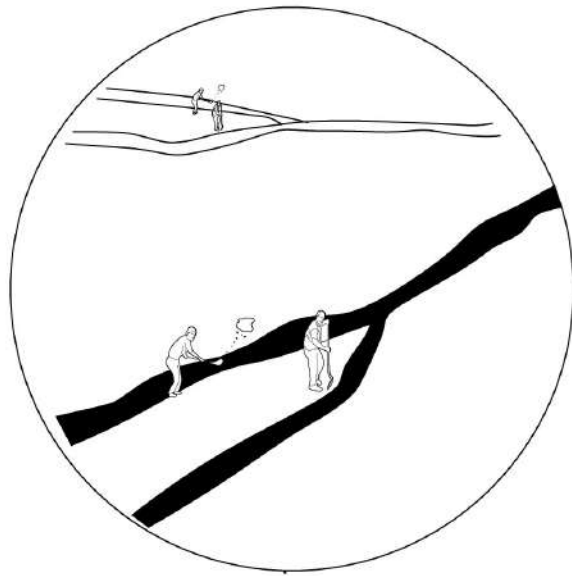






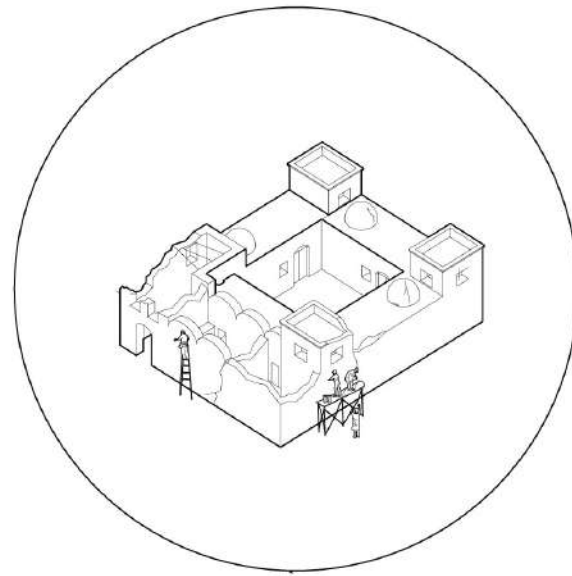
PHASE 1

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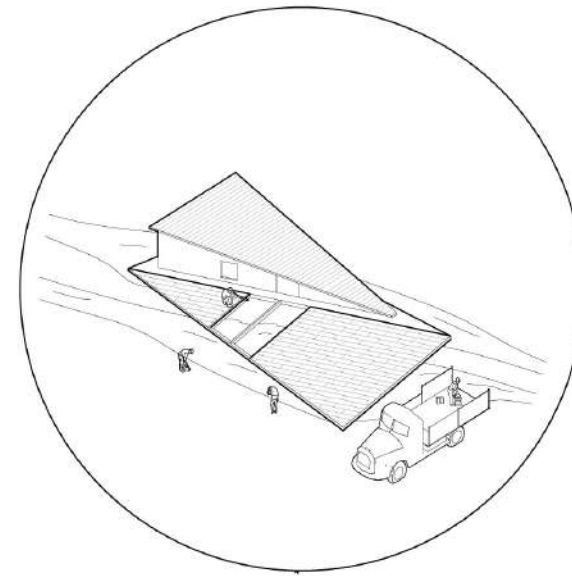
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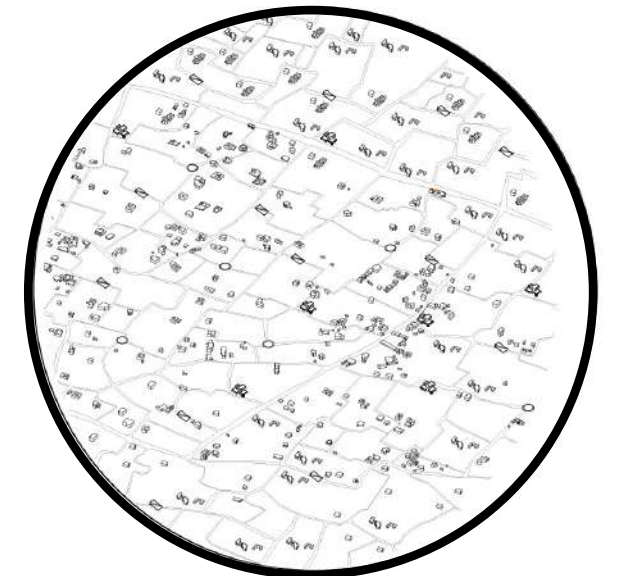
PHASE 3

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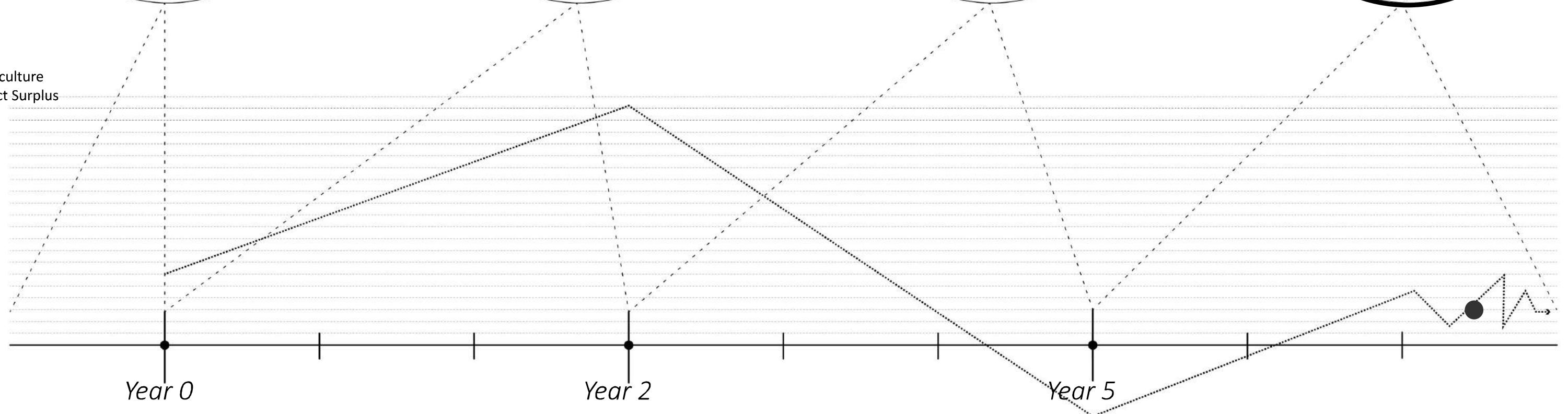


PHASE 4

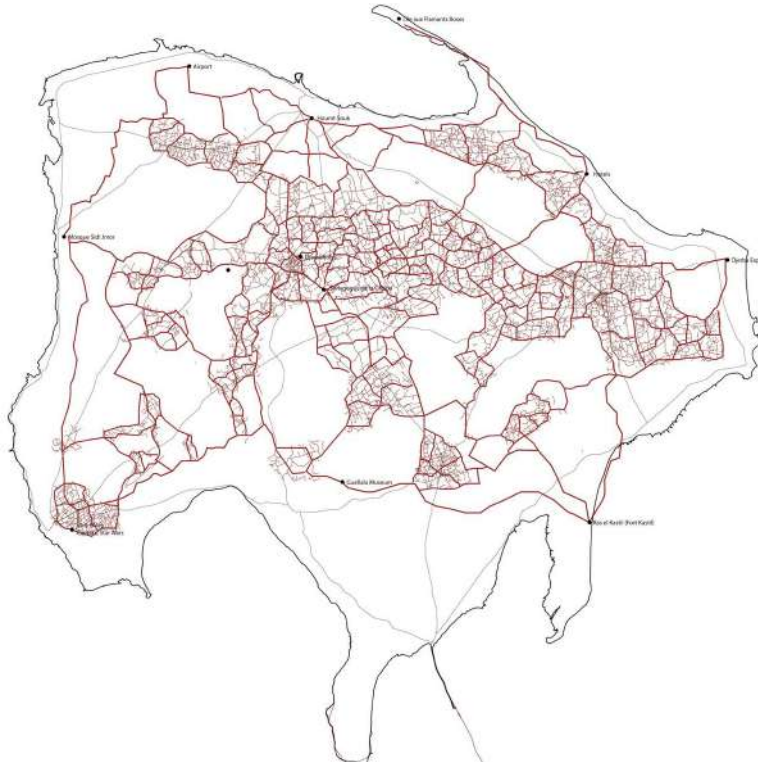
1. Building Trail System
2. Popularizing



Agriculture
product Surplus

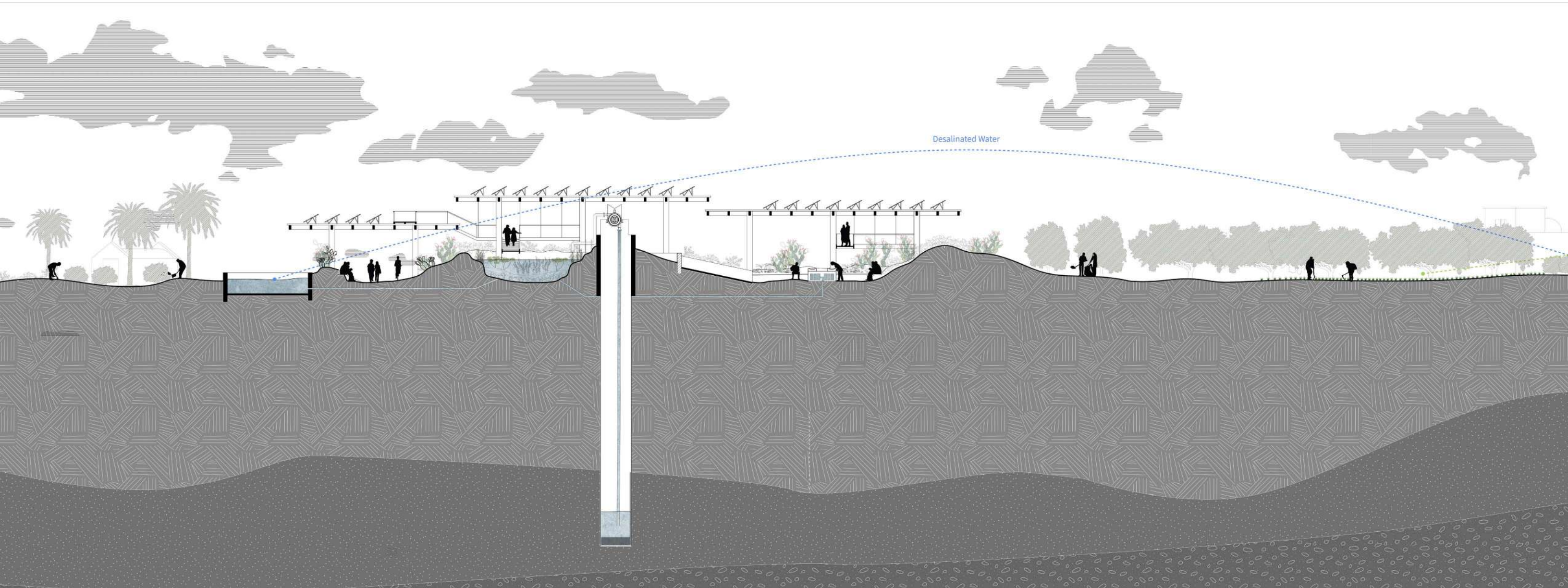


BUILDING TRAIL SYSTEM THROUGH THE ISLAND



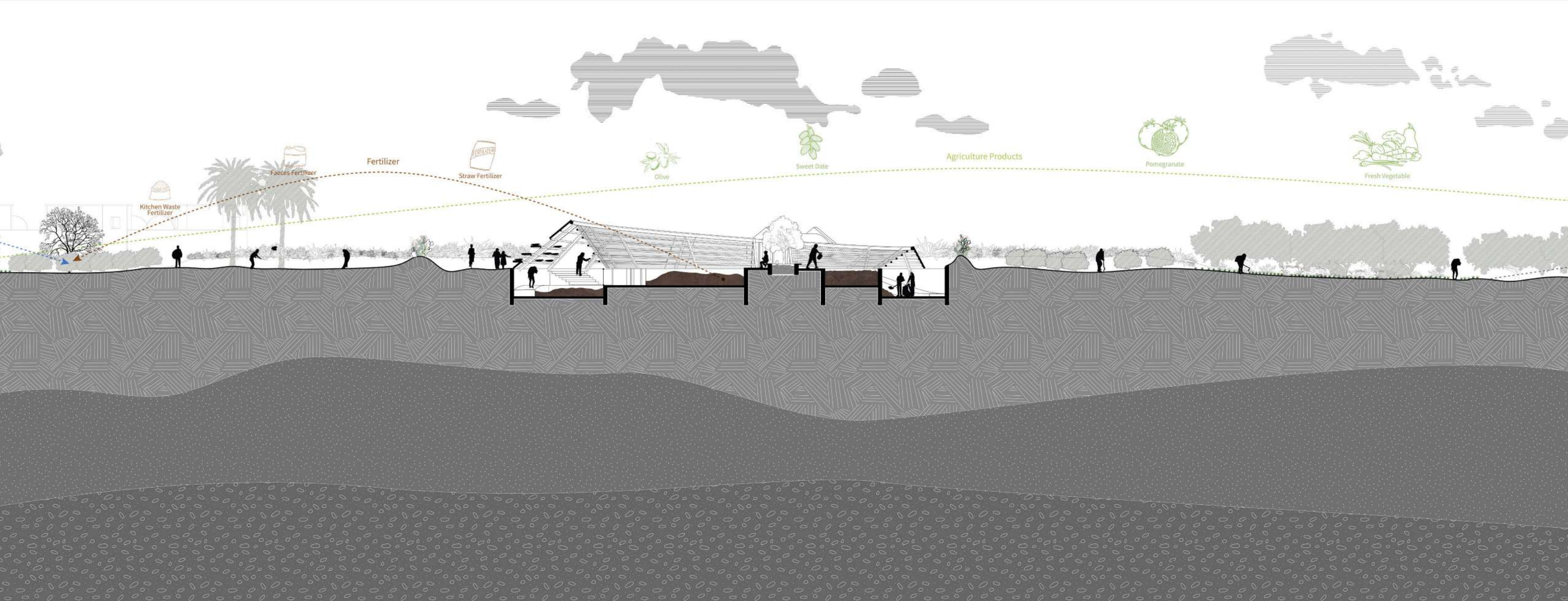
A NEW DJERBA AGRICULTURE LANDSCAPE

Deserted Menzel Components Resuing
Resources Sharing



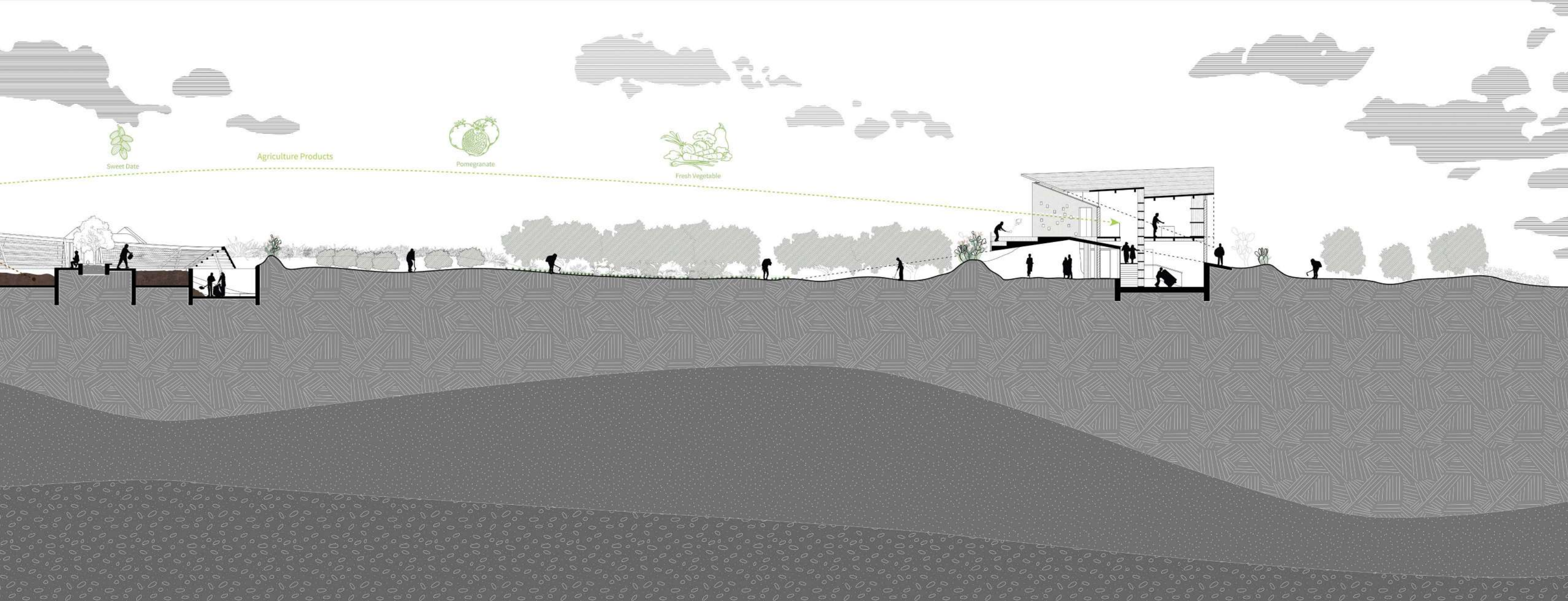
A NEW DJERBA AGRICULTURE LANDSCAPE

Deserted Menzel Components Resuing
Resources Sharing



A NEW DJERBA AGRICULTURE LANDSCAPE

Deserted Menzel Components Resuing
Resources Sharing





03

WHAT IF ...? THEN...?

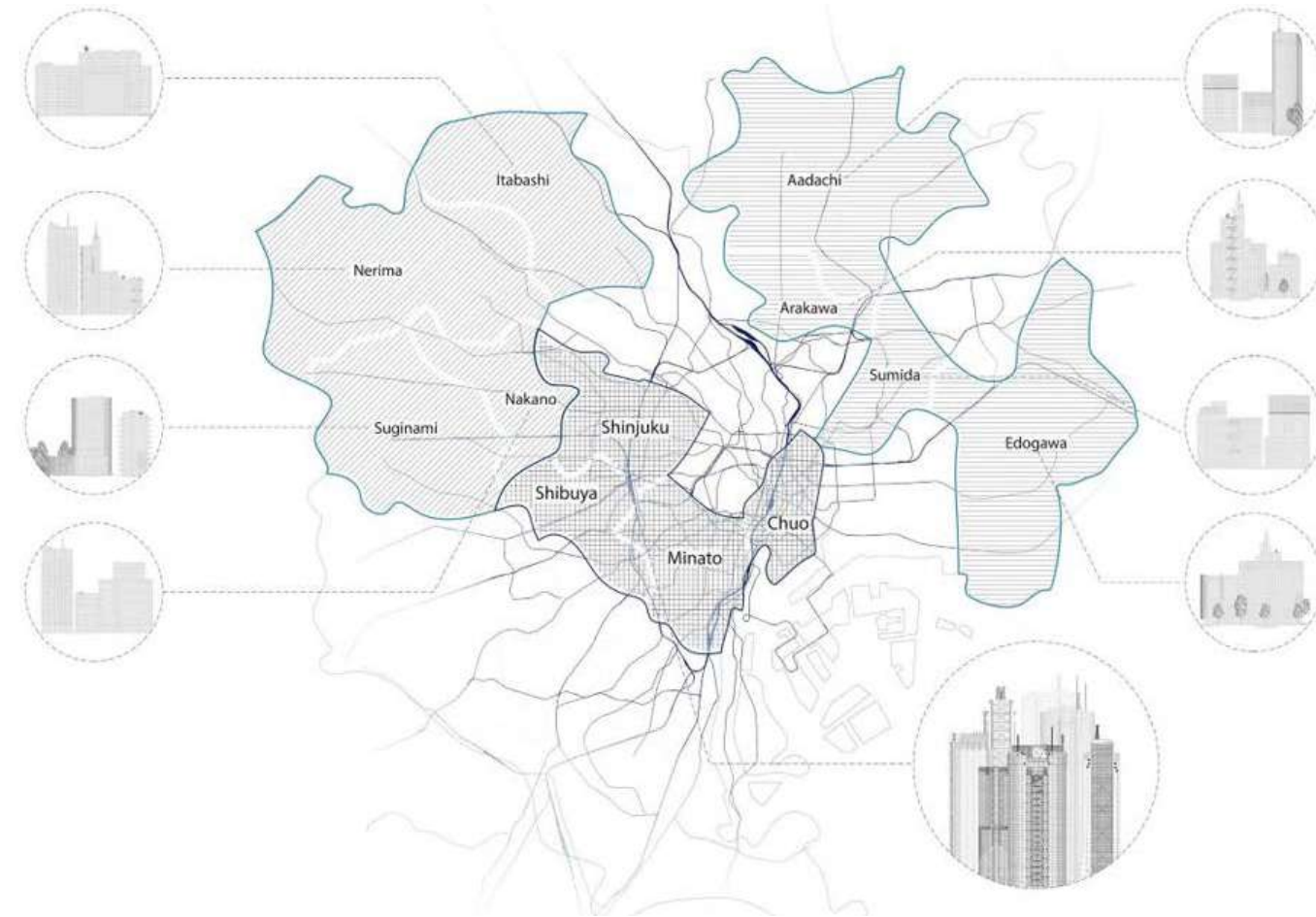
Urban-scaled Architectural Speculation in Tokyo

One Day of Salary(wo)men
Studio work in Spring 2020
Instructor: Sarah Dunn, Martin Felsen
Group Work with ZHU Xinglu

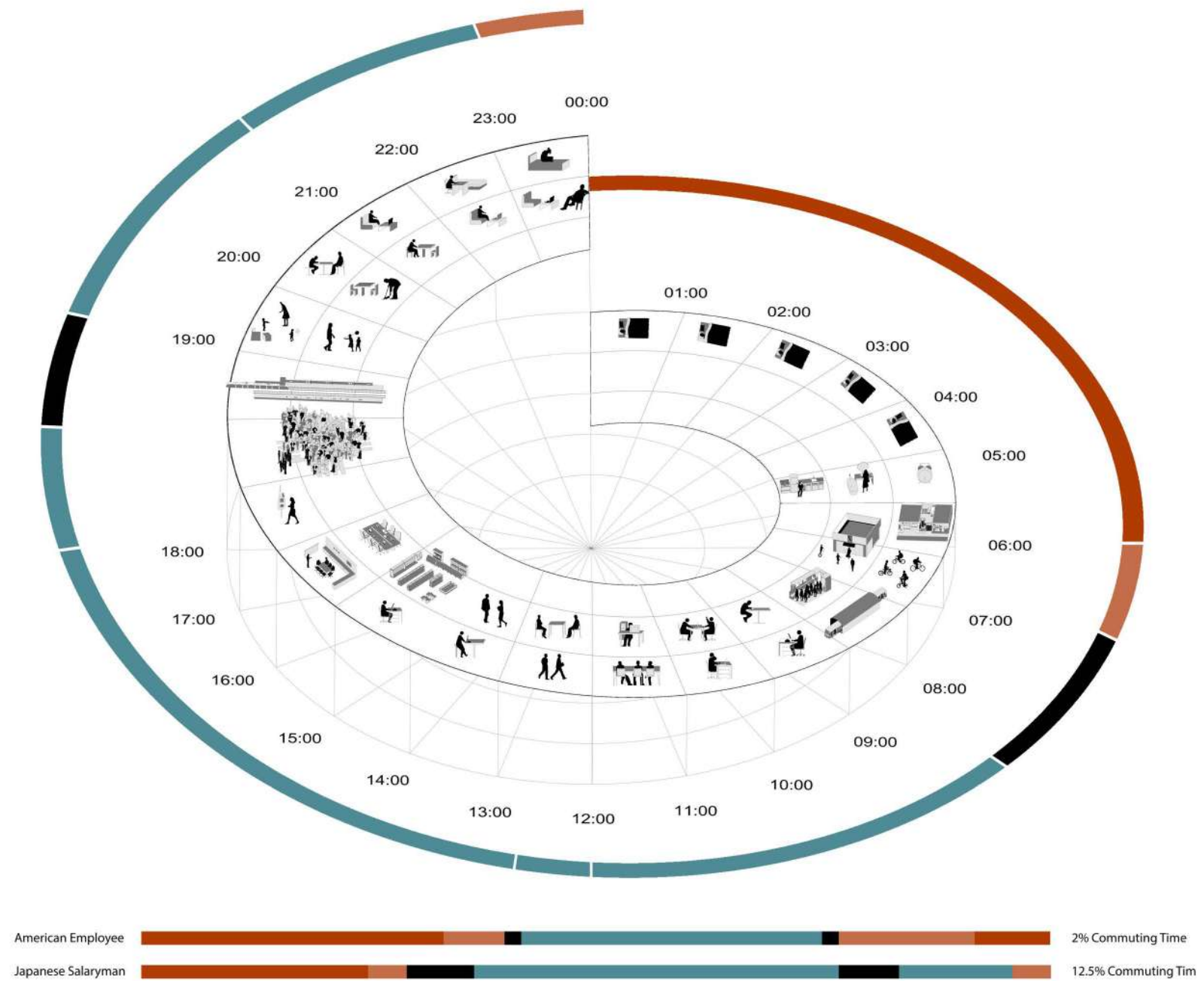
There is a group of people named salary(wo)men in Japan. They work in central business district in the city while living in suburban areas. Commuting time occupies 1/8 part of their daily life, which leads to bad life-work balance and many resultant social problems. What if an urban-scale architecture could transform salary(wo)men's commuting time into their personal time?

This project is composed of a mountain-like structure frame wrapping around in Shinjuku, a CBD with highrise office building and the world's busiest station in Tokyo. The boxes attached on it could provide salary(wo)men with housing near their working places as well as entertaining spaces in between, so that their daily 3-hour commuting time could be saved for pursuing a happier and healthier life.

There is a group of people in Tokyo wearing suit everyday called SALARY(WO)MEN. They work in central business districts like Shinjuku while living in suburban areas and have a bad work-life balance.

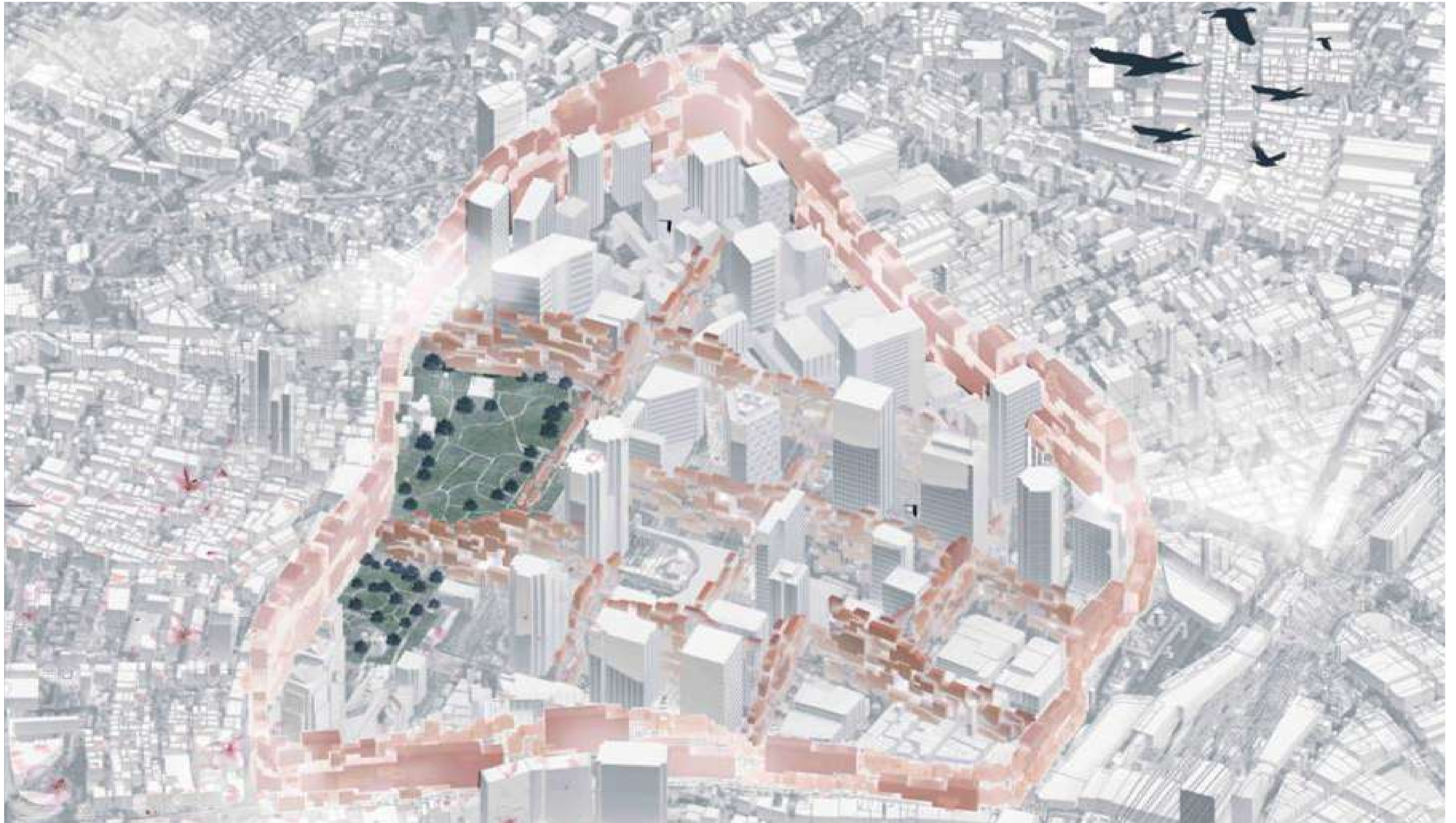


Their daily life is occupied by working, commuting and sleeping without any personal time for recreation.



However, they have diversified hobbies which could be super interesting, like Taekwondo, Cosplay, Tea art etc. It is not hard to see the entertaining potentials of their life if they had time.



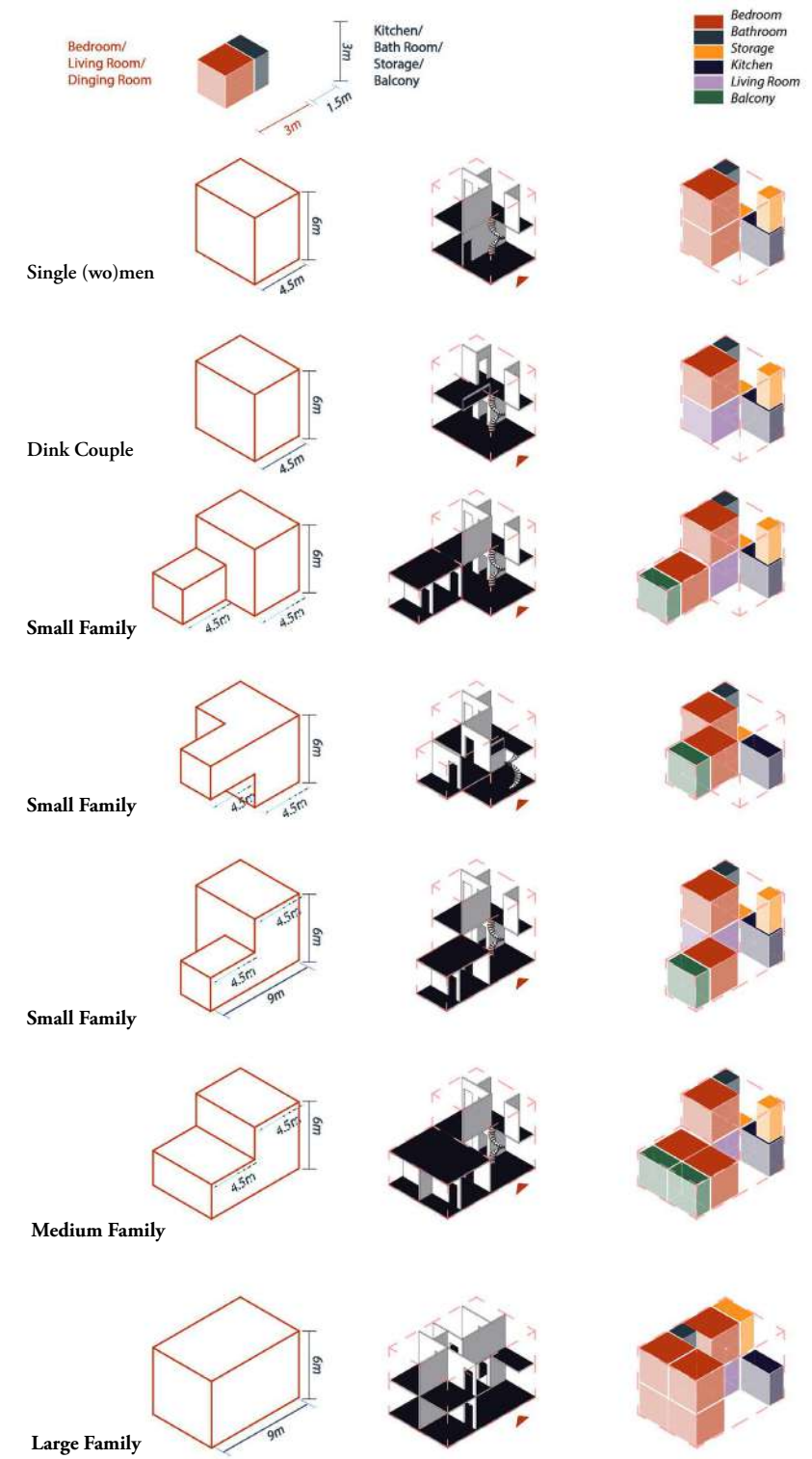
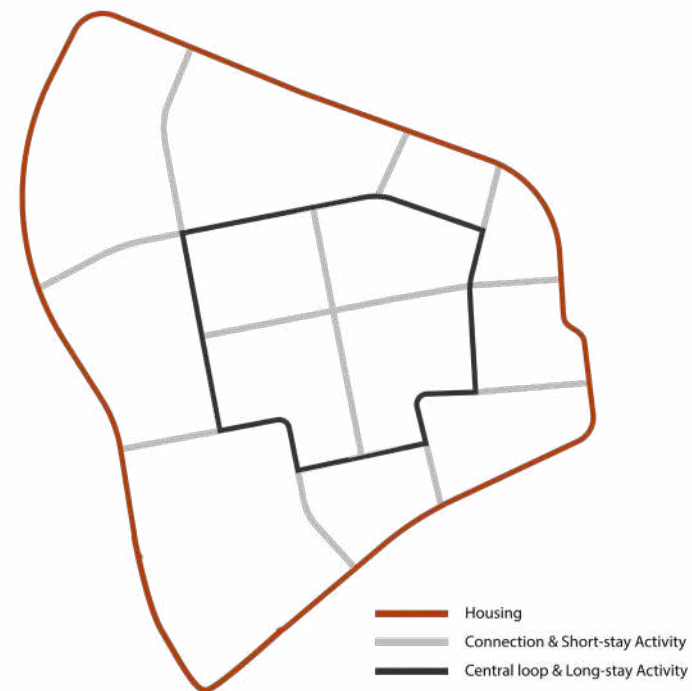


WHAT IF..

an urban-scale architecture could begin to help transform commuting time into salary(women's) personal time?

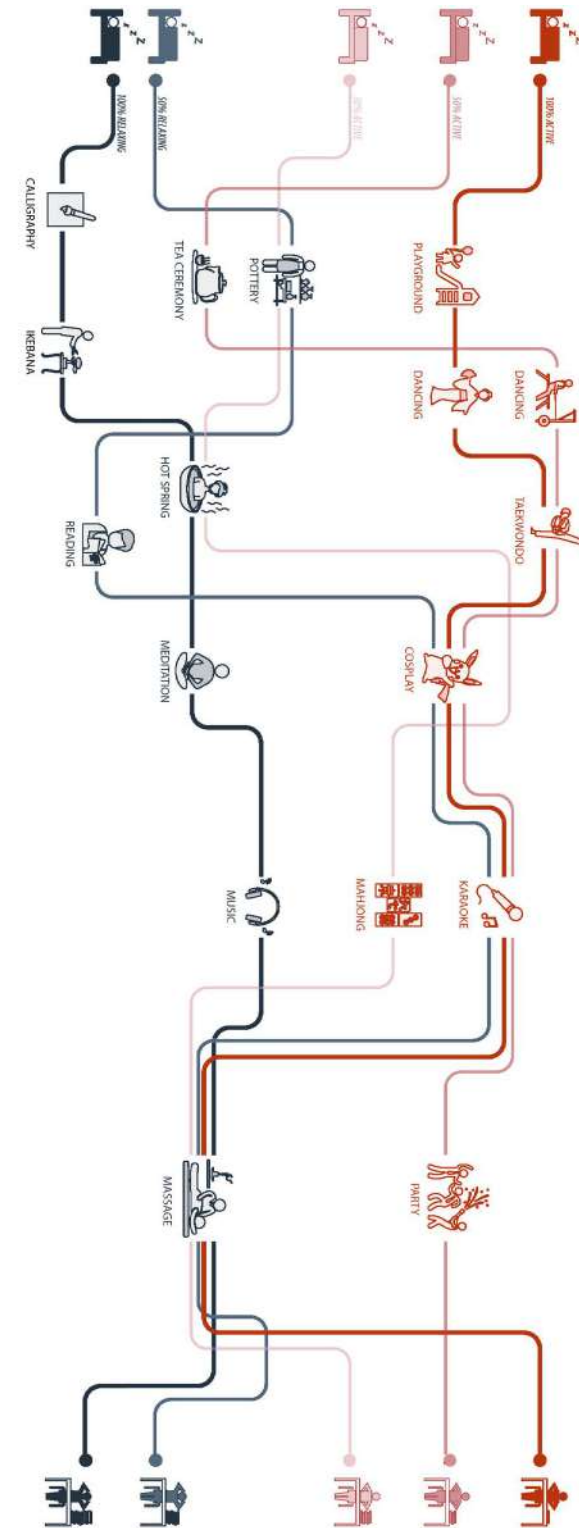
WHAT IF

housing units for different groups of people could be arranged in the outer circle of CBD like Shinjuku?



WHAT IF...

diversified hobby spaces could be inserted between the residential area and office area?



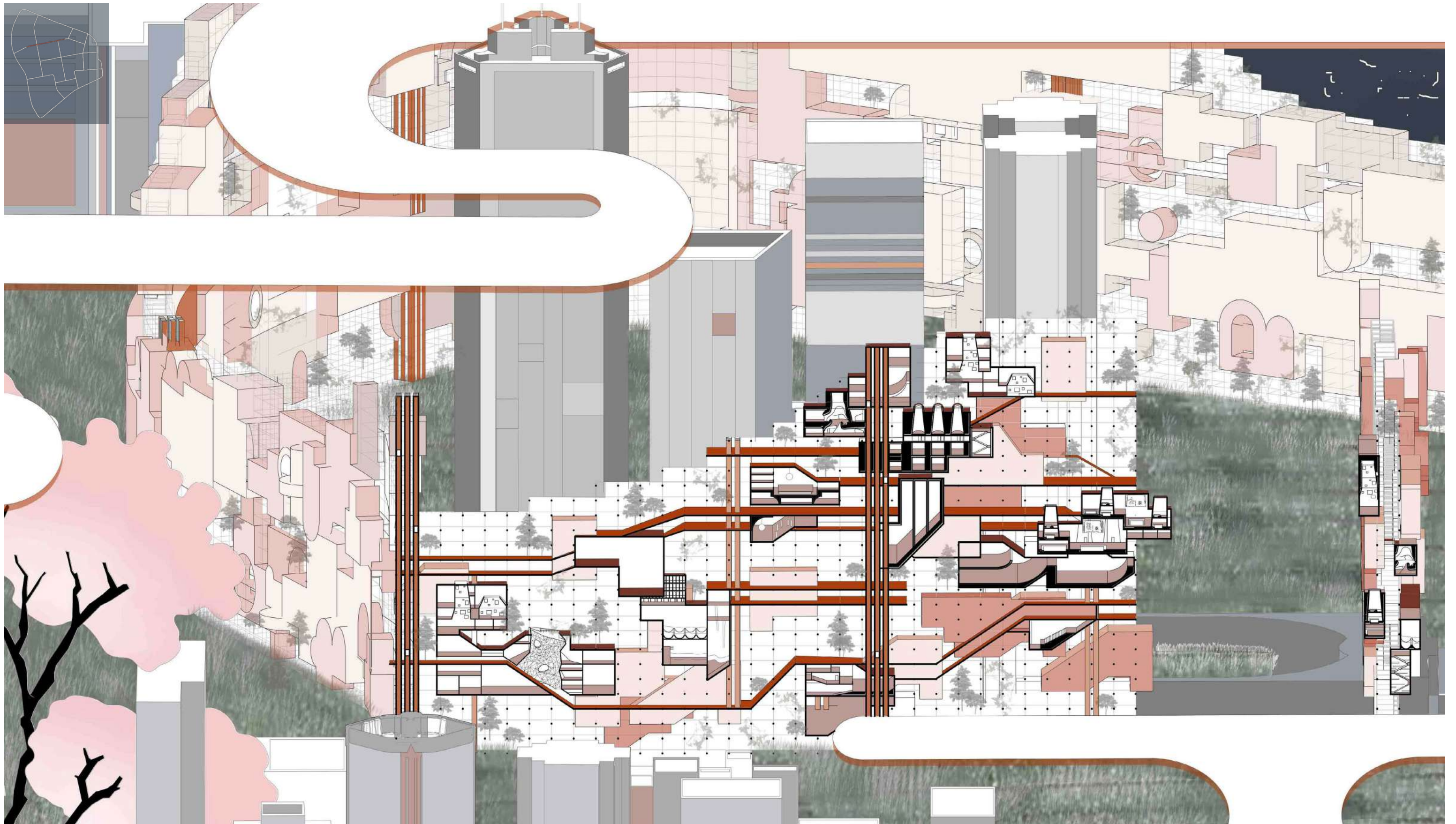




What if housing units for different groups of people could be arranged in the outer circle of CBD like Shinjuku?

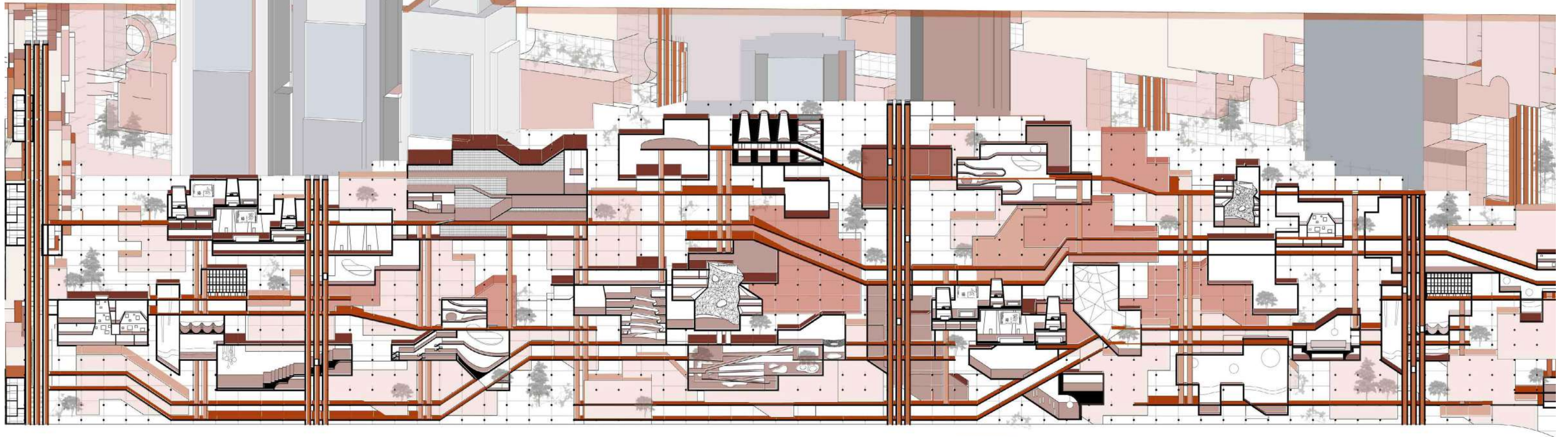
Then salary(wo)men are able to live close to their working places and thus commuting time could be finally be saved.

Then people with similar hobbies could live close and share the entertaining activities.



What if short-time entertaining spaces site in between outer and inner circle?

Spaces are smaller, providing short-time activities such as cafe, snacks and grocery.
Then salary(wo)men could be served with these short-time entertaining activities on the way to work.



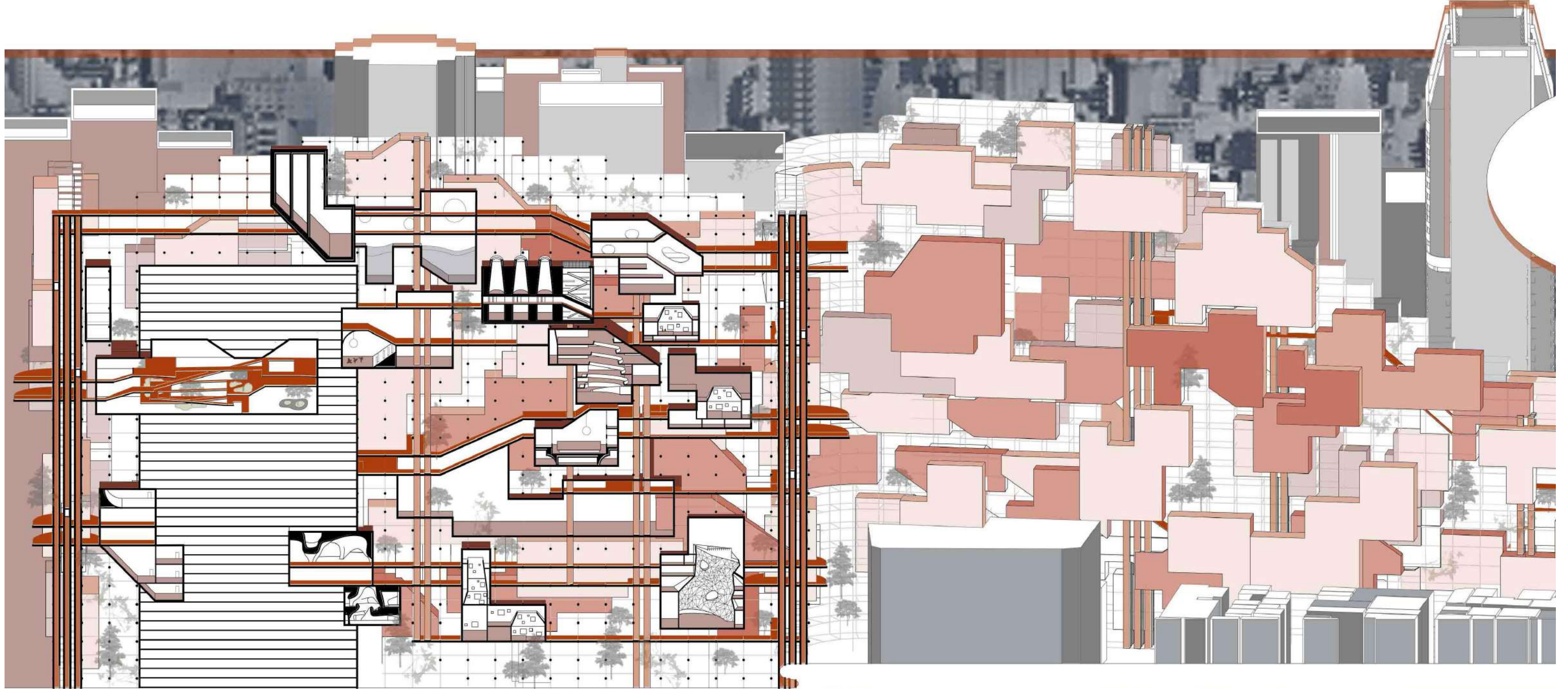
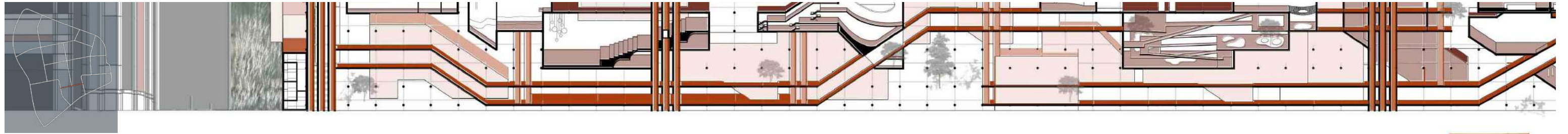
What if entertaining spaces site in between office buildings?

Spaces are bigger, overlaid and provide people with long-time activities such as hot spring, karaoke, massage, mediation etc.
 Then salary(women) could get refreshed for work / get released from work with these activities in the transformed cummuting time.



What if entertaining spaces could interact with central park?

The vertical connections with the ground allow people to get access to the park.
Then salary(wo)men could carry out some outdoor activities as well as enjoying their lunch under sunshine.

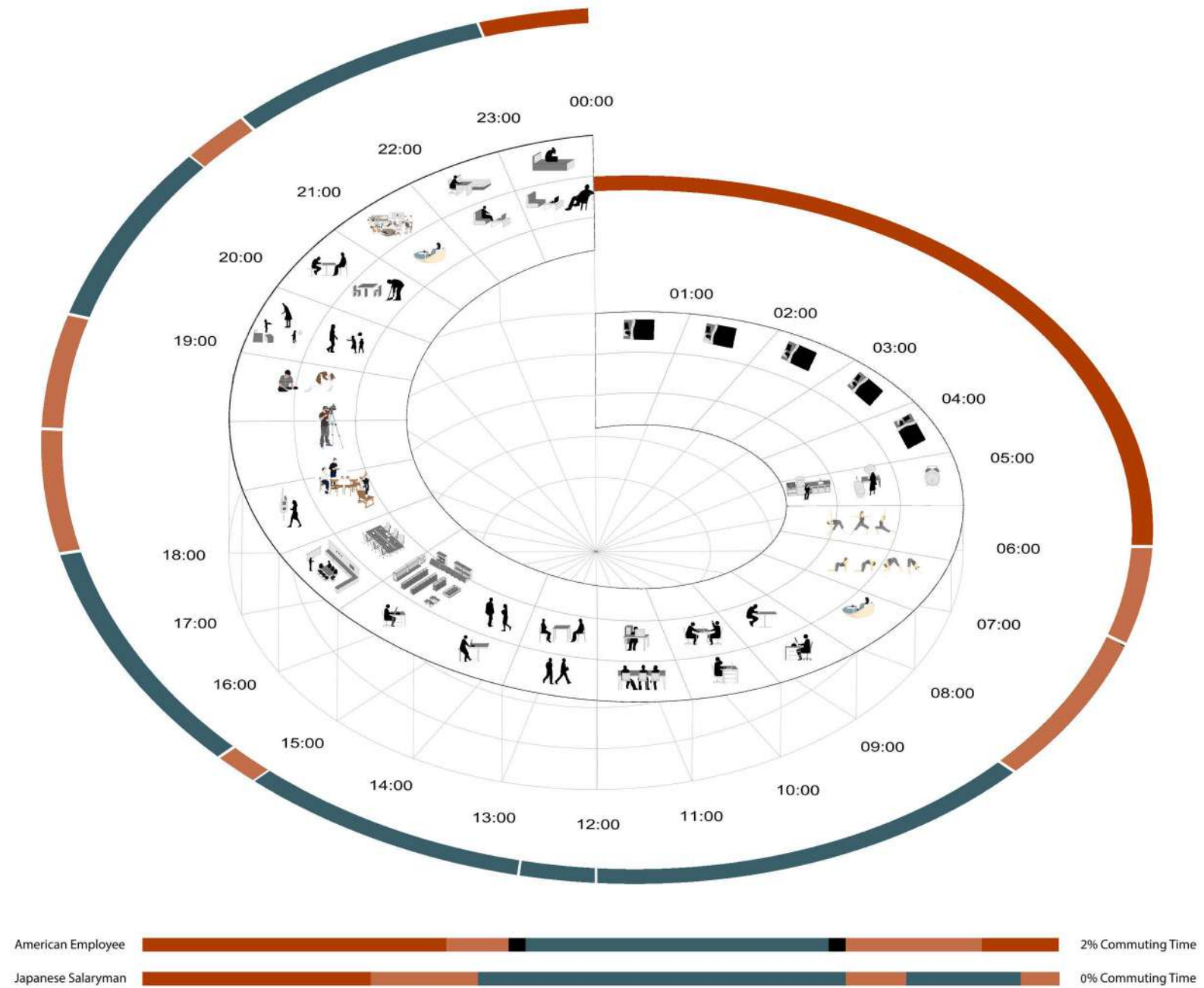


What if entertaining sapces could cut through office building?

Relaxing spaces and shortcuts to outdoor spaces are introduced for salary(wo)men working here in offices.
Then Salary(wo)men are easily engaged with the relaxing activities when they get tired of their work in weekdays.

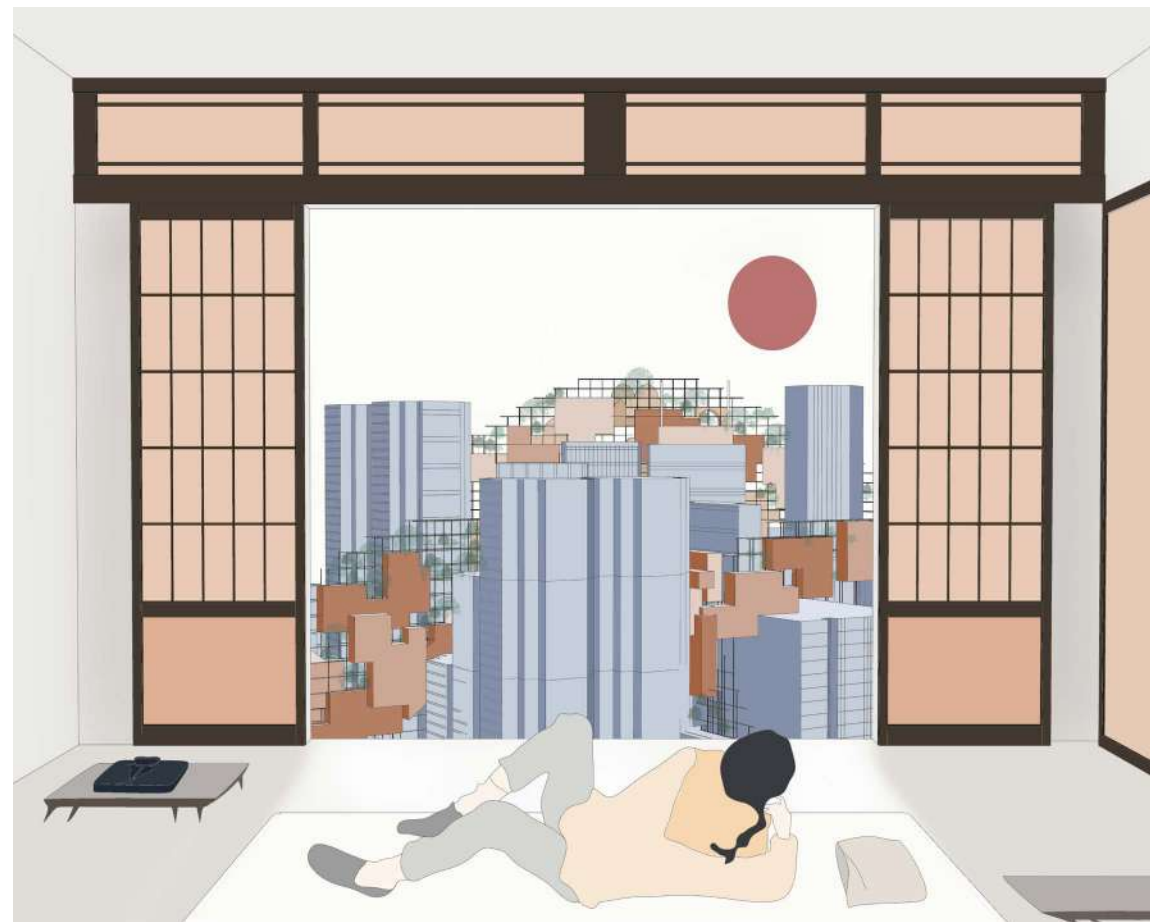
THEN...

he commuting time could be changed into personal time. And salary(women's ONE DAY would be much more



The salarywoman gets up at 7 am, watching the sunrise and the city context through her window.

Between 7 and 9, which was her original commuting time, she can freely walk through the structures to carry out her hobbies.



07:00



09:00



12:00

At noon, she and her colleague come to the park, where they enjoy nature and meet people from their neighborhood doing different things.



15:00

After a while working, around 3 pm, she asks her girlfriend in a semi-outdoor balcony. They talk and plan their activities for the coming weekend.



18:00



21:00

At 6 pm, she comes to the rooftop garden with her loved one to appreciate beautiful sunset while drinking some wine and talking about their dreams.

At 9 pm, she enjoys a hot spring to release herself from a day's work and see the great city night view from the big window. The spring space is just next to her home, so she just takes time to slow herself down.



23:00

Around 11 pm, the end of the day, she is now at her home with her family. She might have already gone asleep, or is practicing yoga, or recording her day, or enjoying family time, or watching a movie, or holding a party at home with her friends



04
THE HISTORY
of Architecture Theory

*Aldo Rossi's Architecture Poetics:
"The Architecture of the City"*
GSAPP History Course in Fall 2019
Instructor: Mark Wigley
Individual Essay

Aldo Rossi's Architecture Poetics: “The Architecture of the City”

Xiaoxuan Hu
HOT Fianl Paper
December 16th, 2019

[Abstract]

Published in the embryonic period of postmodernism theory, as the most important theoretical literature of Aldo Rossi, <The Architecture of the City> systematically reflects Rossi's thinking on city and architecture, and profoundly expounds the relationship between city and architecture, city and place. Different from Venturi's focus on the complexity and contradiction based on form, Rossi constructed a rational and scientific supporting system behind architecture from the perspectives of linguistics, geography, history, typology, psychology, etc. The design of place spirit and typology mentioned in the book has influenced the exploration of contemporary architecture design by a batch of new generation architects. This essay is to elaborate how Rossi constructed his post-modernism theory in respond to modernism with the analysis of Rossi's architecture work, what distinguishes it with other theory in the same period and the extravagant contribution it brought out to Architecture.

[Key Words]

Typology; Collective Memory; Place Spirit; Postmodern Architecture

[Body]

1. Background

After the Second World War, modern architecture in the West was in a difficult period. With the death of Le Corbusier, modernism lost its theoretical and spiritual support, so it was also severely challenged by many architecture critics. With more and more weaknesses of modernism exposed, the self-examination on modern architecture grew. What's more, due to the economic miracle and industrialization, large-scale urbanization has brought a series of social problems. Thus, in the western architecture field, there was a heated discussion on urban architecture and social and political issues. The heyday of modernism has passed, and the new trend of thought stood out, bringing architecture into its crossroads of development.

As we all know, the core of modern architecture aesthetics is functionalism. However, modern architecture aesthetics has been accustomed to the most mediocre form of rationality, which leads to the overall passivation of our aesthetic perception ability and the overall degradation of form creativity. In particular, the non-historical attitude of modernist architecture cut off the “merciless scenery” and “no place” of the historical and cultural connection, which led to the rigidity and sameness of architecture form around the world. In fact, this is the attitude which refused to recognize the continuity of history and attempt to establish a history without connotation with its own aesthetic hegemony. As a result, modern architecture has fallen into an awkward situation of rootlessness and vacuum, which not only led the architecture to the exciting aesthetic realm expected by the early modernism, but also contributed to the total loss of architecture aesthetic culture. In consequence, the forerunners of anti-modernism firstly questioned the functional aesthetics of modernism. Louis Kahn put forward a new viewpoint of “form evokes function” based on the viewpoint of “form obeying function” raised by Sullivan of Chicago school. As the last master of modernism team, Kahn criticized the neglect of modernism from the perspective of form concern.

However, the most fundamental problem of architecture is not the dialectical relationship between function and form, while space and place are the main purpose of architectural proposition. In the bustling stage of contemporary architectural aesthetics, the new rationalist aesthetics represented by Aldo Rossi was the team with the most potential and lasting charm. In 1966, he published “The Architecture of the City” and put forward a set of new rationalistic typology theories, trying to improve the reality of separating architecture from environment and city, and separating tradition from reality in view of the decline of European and even the whole western aesthetic standards. In his theory, architecture is formed along

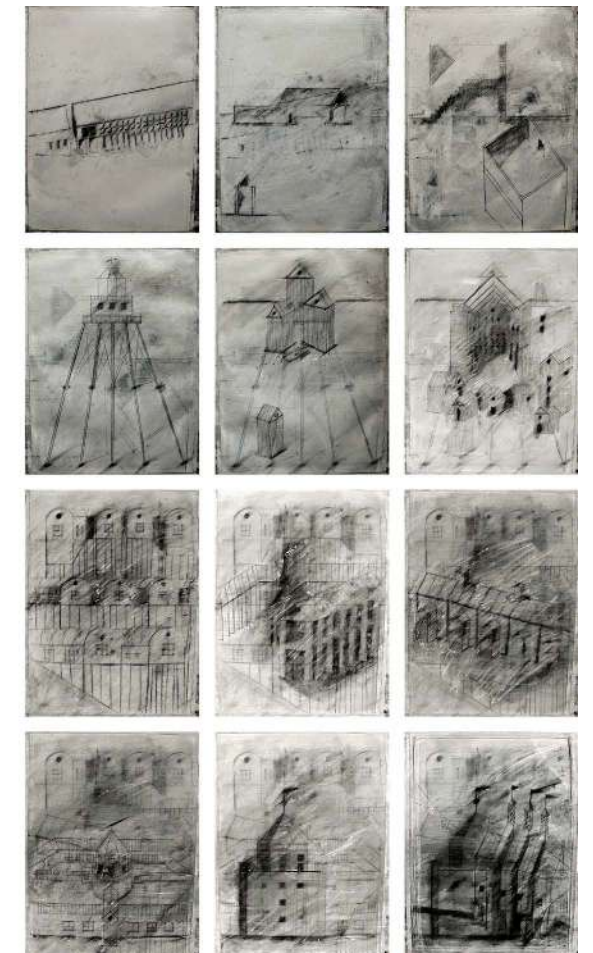
with its whole history; architecture comes from its own rationality. Only through this kind of developing process, architecture can be integrated with the artificial or natural environment around it. When it establishes a logical relationship through its original, architecture is created; then, it becomes a place. Ancient temples and churches, factories and industrial facilities, bridges and highways of our time, show the environmental characteristics of a place with the same expression. Rossi emphasized the connection between architecture and history, and also the connection between architecture and environment, that is, place. But his basic starting point is to fully respect the objective nature of the building itself. That is to say, he did not want to see people change or hinder the rationality and logic relationship between architecture and the city itself for the sake of historical sense and place sense, because the result of doing so is likely to break the rationality and logic relationship of the city itself and sacrifice the nature of architecture and the city. The new rationalistic aesthetics with typology as the core points out clearly that the design originates from the prototype, but must surpass the prototype. Only in this way can the history and reality, the individual and society, the particularity and universality be perfectly combined through the design process.

2. Context of “The Architecture of the City”

“The Architecture of the City” is one of the most important theoretical documents of Rossi. It systematically embodies the urban architecture theory of Rossi, and profoundly expounds the relationship between city and architecture, city and place. It is Rossi's discussion on the essence of architecture. In this book, he believed that architecture was an activity based on logical principles, and architectural design was developed based on these principles, which leads to his design method. But he thought that this rationality is not only an abstract logical deduction, his rational method came from “analogy thinking”, which is more complicated than simple logical thinking. There are two basic attributes in Rossi's typology theory: one is the connotation of history; the other is the abstract feature. Now let us discuss Rossi's theory of typology with the main contents of this book.

2.1 The Structure of Urban Artifacts and a Theory of the City

The first chapter of this book talks about one thing basically: architecture is actually a city's artificial structure. In fact, architecture is a fact of human being, and a fact of historical development has created the whole context of architecture. Rossi thought we could do a lot of typology classification to architecture at the



Sketches of Study on Typology / Aldo Rossi

beginning. There are different types of architecture, but these types are not only scientific classifications. The reason why each type is established, why each type can assume its role in the city and becomes a fact of the city or history, is that it has narrative characteristics. Rossi thought about types, but he opposed the type of pure superficiality and functionalism, and advocated that architecture was a composite collection of urban artifacts rather than a single functional thinking. He believed that architecture was a continuously changing, and the dynamic process of the city depended on architecture. There are two kinds of buildings in a city, one is a multi-cultural building that has been changing with the history and culture; the other is a memorial architecture that he regards as never change with vital importance. Memorial architecture inherited the commonality and never changes, making themselves unique. Eternal architecture has such charm. It represents the collective symbol, collective thinking and collective culture, but it is unique in the end.

2.2 Primary Elements and the Concept of Area

In the second chapter, Rossi mentioned the unique elements and area. He talked about ways to understand architecture and city. Should we understand that through a single building? Or a region? Or a city? He proposed to understand the structure of the city in terms of the local relationship of the city, it was against the original plan of CIAM to accidentally rebuild the city in the historical block reserved in 1950. He regarded that as problematic, because cities are accumulated gradually and are continuous. The mixture of the old and the new represents the continuous development of the city. He assumed that the significance of architecture lied not only on its form, but also on how it constructs a city. So he mentioned an important element - dwelling. He hoped to turn the dwelling into a prototype, and used this prototype to understand the city. For example, we should understand the changes of housing types with the development of society: from single villa to multi villa to collective residence, to understand the economy behind, the philosophy behind, and the impact of this prototype on architecture. These different influences would form the unique elements of different types of buildings. The uniqueness of buildings is never because they look special. Therefore, the unique point of the development of a city and architecture does not lie in its shape, its style, but in its understanding of historical culture and social culture. To understand the relationship between architecture and city, it is also very important to understand the ancient city. It is the history that makes a city charming. What it is understood is its transformation process. How did Rome build several different monuments from five hills? How did it turn these hills into the focus of vision through the construction of roads and axes? To understand the changes of Rome in different periods is actually another understanding of architecture. In this process, two things are very important, that is, to understand the geography and history, because only in this way can we fully understand how the building types of the city are generated. Just as Rome originally had five big hills, people then built different axes to avoid hills and rivers. Geographical factors have been influencing our understanding of the development of cities or buildings. Of course, historical background and policies also contribute. So the second chapter is about the organic relationship between architecture and the city.

2.3 The Individuality of Urban Artifacts; Architecture

The third chapter is comparative metaphysics. He was talking about psychology. In addition to the historical and geographical factors just mentioned above, there is another thing of architecture called place memory. Place and memory, these two elements are very personal, but also very universal. The memory we usually talk about includes two parts, one is individual memory, the other is collective memory, which is what Carl Gustav Jung called individual unconsciousness and collective unconsciousness. The individual unconsciousness is composed of the content that has been perceived by people, but it enters the unconscious level for various reasons. For example, someone knows the names of many friends and acquaintances, but these names are not always kept in his consciousness, which may be remembered when necessary. However, the content of collective unconsciousness is not directly perceived in the whole process of individual life. People are born with a variety of innate tendencies, such as thinking, emotion, perception,

etc., while collective unconsciousness is the store of these innate tendencies. For example, people don't need to experience the fear of snakes and beasts. Unlike individual unconsciousness, collective unconsciousness is common to all people in the world because its content can be found everywhere in the world. All the original settlements in the world, no matter where they are, are round, which is no accident. "Archetype" refers to the "primordial image" which repeatedly appears in human psychological experience. This kind of primordial image is the collective unconsciousness, which can be externalized into a universal and primitive narrative structure or image of manifestation. When we design a museum, memorial hall or public building, we should think about how the public building or memorial building can awaken everyone's collective memory. However, at the same time, we should not let collective memory be fascist, that is, let collective memory not only give people a sense of common, but also let collective memory transfer to personal memory. Don't become fascist, let everyone's collective memory be the same. If everyone's collective memory is the same, that memory may be fake. Aldo Rossi thought every architecture had a basic element, and architecture was also a basic element of the city. In this basic element, we need to acquire a lot of different recognition. Meanwhile, we need to consider many factors. Here we call it the place spirit. Rome's Plaza is a good example, it is both collective and individual. It is a vital collective memory of Europe, especially of Italians, and it has become a place. So the Italians are very infatuated with the square since it is where they live together and the most wonderful place in their life. In such a concept, Rossi reinterpreted the place and memory of historical records left by the city.

2.4 The Evolution of Urban Artifacts

The last chapter is about the evolution of urban artifacts. Cities are not built in one day. They are in a dynamic evolution process. Aldo Rossi was Italian, he was very fascinated by this matter, because Italy is built in this way, "Rome is not built in one day". To understand architecture, we must understand the policy behind it. All the development of architecture is related to land acquisition, ownership, housing, housing area, urban scale, policy and so on, and has a decisive influence. Every urban renewal is building a new evolution foundation. Architects should have the ability to see the architectural types in the city, and not only the form, but also the collectivity, individuality, memory and history of these architectural types. Of course, the paradigms and standards mentioned in the theory of modernism cannot be ignored, but architecture should not be so narrow, just technical and functional science. Science should include more knowledge such as geography, history, place, energy generation, psychology, commemoration and urban scale. Architecture here are expanded into space and time, city and time.

3. How the Theory Was Applied to Rossi's Architecture Practice

The design concept of Aldo Rossi can be summarized as follows: the architecture form and concept should be pursued and multiplied based on the historical situation of the city and environment where the building is located. He advocated that the historical form of the city must be respected and continued in order to maintain the harmony of the city.

In specific practice, Rossi selected research objects mainly from the most local urban elements or some classic buildings, including the city wall integrated with the residence, Gothic commercial residence cut by the canal road, dissecting theater, cone-shaped Monument and Pantheon, etc., and then abstracted these elements into simpler geometric forms.

3.1 Cimitero Di San Cataldo

Aldo Rossi once told in a lecture that Cimitero Di San Cataldo was a city of the dead and a city of mournful abandonment. The goal of the 1971 competition was to reconcile traditional Italian death cults with modern needs. The cemetery is consisted with three parts which are cone, cube and the three types of ladder corresponding structure with two wings expanded. These structures are traditional features as well as the norms of Italian Catholic cemeteries. Rossi gave each of these three parts a symbolic meaning.

From the perspective of Typology, the architecture value of Cimitero Di San Cataldo is attributed to the architectural form. This simple and repeated architectural facade composed of original elements forms a permanent and commemorative memory that remains in the mind of the audience, making the cemetery architecture closer to the architecture of the city. The city built through “profound image” leaves a “sacred portrait” in people’s collective memory.

In thinking about death, Aldo Rossi and his contemporary Italian writer Calvino expressed the same opinion: the city is the residence of the living, and the cemetery is the city of the dead. Because of this, compared with other architects who participated in the bidding at that time, what Rossi wanted to build was not a strange afterworld, but a “similar city” from the collective historical memory.

In Rossi’s mind, the cemetery was not much different from the “living city” - so the elements of the courtyard, corridor, bedroom (tomb room), inclined roof, window, wall and ground were all included in the design of the tomb. Even the colonnade, a unique form of residence in Lombardy, was reflected in the design of the basement of the tomb. As the houses of the dead, the architectural features of the cemetery were unfinished and abandoned, which was used by architects to interpret death. Although, for those who insisted that “happiness and death cannot be reconciled”, in Modena cemetery, Rossi chose to bring the breath of death to the house. For Rossi, the happiness of life and the silence of death were not opposite poles. “When I talk about a school, a cemetery, a theater, more accurately, I am talking about life, death and imagination.”.

The form of architecture itself which shaped the form of city is a unique type gradually generated by historical accumulation. And the recollection of urban form also develops into people’s collective memory. Cimitero Di San Cataldo is a city full of collective memory of the dead. Rossi had made the most outstanding practice in typology research by studying and summing up experience in the design of Cimitero Di San Cataldo.

3.2 Gallarate Housing D Block

Gallaratese residential area (1970-1974) is a part of a large residential area located in the northwest suburb of Milan, Italy. This design aimed to create a benign housing model to cope with the housing crisis in Milan in the 1960s and 1970s with Aldo Rossi participating in as a collaborator.

Rossi’s design logic starts from abstracting a set of space prototypes suitable for the residential area from the design logic of Greek and Roman temples. These prototypes are smaller than a residential unit, so we can build the unit variants from the component prototype level. The original intention of Rossi’s architecture design was to consider the loss of the building after the baptism of time, which also included the room for repair and reconstruction of the building in the future society. This consideration led to the final concise design logic - simple colonnade structure, balconies and oversized columns, as well as construction symbols full of contents.

The basic unit of the block was organized in a simple and repeated way, and connected by five sets of super large columns of public stairs and two levels of horizontal and vertical. The public space was located in the continuous corridor on the first floor, which was connected to the upper living space through five stairway traffic cores.

The construction logic of the public domain itself was the same as that of the living space. The panels on the left and right sides and the upper floor defined the continuity of the grid, which was transparent. The simple and repeated facade unit was also endowed with different scenes behind the unit due to this transparency, which achieved the change of the elevation in depth.

In the emerging world, in the context of speculation about the changing future and the urgent need for new housing, the project aimed to rethink the civilian dream in the context of contemporary cities. Therefore, the project was compre-

hensively considered in the three levels of its city, base environment and space. At the conceptual level, it was similar to Corbusier’s residential idea. The design of the residential area was based on the basic principle of “living machine”, focusing on the close relationship between various living spaces and residents. At the strategic level, on the one hand, it considered the setting and equipping of infrastructure, on the other hand, it multiplied the comfort level from the surrounding landscape.

At the specific operation level, the housing typology was summarized from the research of residential areas in history, which was helpful for the local maintenance and critical design of architectural design. A clear framework of the three basic elements of the house proposed by Charles Moore would lead to a discussion on various house types. A house was composed of room, device and people’s will. The multi-level superposition of rooms constituted a house. The design of internal space and external facade of the house were based on the same logic. From the analysis of the types and magnitude of resources consumed by regular activities such as life, cooking, sleeping, learning and bathing, the conventional spatial roles and shape sizes were obtained.

The placement of the machine acted as the medium between the space and the room. It was the auxiliary system that defined the space as the house. The field of machines included static furniture, stairs and ramps, as well as movable systems, such as pipes, vents, refrigerators, etc. People’s will itself was the decisive system to define the house. It acted on the machines serving many rooms and produces a series of activities, endowed space roles, and logically formed the house. People’s will itself was not specific and substantive, so it could be defined as a metaphor of the concept of house.

3.3 Hotel Il Palazzo

To transform collective memory, Rossi not only focused on the abstraction of architecture form, but also involved color. For the use of color, we can see clearly that Rossi’s method of expressing history and region was not miscellaneous, but symbolic after abstraction. Since it is a symbolic color, it is not simply reproduced. Although for those who want to show the true nature of history, the best way to reproduce history is to revive the past. For those who protect ancient buildings, this principle is absolutely true. But in Rossi’s view, not every piece left over from the past is necessarily history. The historical elements expressed by Rossi can even span the distance between region and culture, and become an element with wide applicability. Speaking of the Palace Hotel in Fukuoka, he said: “this granite color is a universal color, it will transport us to a different world. The “Palace” of Fukuoka was painted with a green pigment. This green is acidic and mineral, just like stone, which is covered by an unhealthy natural planting. This green pigment passes through the red stone, through the textured orange red, which represents Persia: an ancient empire, the gate from the ancestors of the west to the East. “ Here, orange has become a representative of the East. In fact, the stone materials of Japanese buildings in the far east come from Iran thousands of miles away. But for Rossi, the symbolic value of materials has well conveyed his idea.

4. Comparison with “Complexity and Contradiction in Architecture” by Robert Venturi

Both Aldo Rossi and Robert Venturi were two enlightening architectural theorists and architects at the beginning of post-modernism. Their biggest difference is that Rossi belonged to the European system and Venturi was in the American system. After World War II, the voice of the whole architecture shifted to the United States, which had a great influence on post-modernism. The complexity and contradiction of architecture mentioned by Venturi is basically from the point of view of the United States, inheriting some new critical or new directions of architecture discussed in the whole history of Europe. The most important point of Venturi is to resist the whole modernism. International style became vulgar when it came to the United States. By 1960, “the less is more” proposed by Mies was criticized strongly. In order to pursue simplicity, what the architecture left behind was just some direct and vulgar life functions, including realistic efficiency and



Cimitero Di San Cataldo / Aldo Rossi



Gallaratese Housing D Block / Aldo Rossi



Gallaratese Housing D Block / Aldo Rossi

realistic technology, losing the attention to culture, history, community and place, and even reduced to nothing in form. Therefore, in the “Complexity and Contradiction of Architecture”, Venturi had always said “less is bore”. Anything less than a certain degree would lose the possibility of thinking and development in many aspects, and become a single aesthetic standard. Venturi thought building should not be black or white. It’s better to use gray, because there is a large range of gray for building development. He hoped that the richness of architecture came from the ambiguity, contradiction or complexity between different forms.

Rossi was Italian. He saw that the development of modernism in Europe has the same tendency of impoverishment and vulgarization. So he used the Italian view of architectural history and culture to see the new trend and theory of modern architecture after 1960. The reason why the “The Architecture of the City” has a great influence is that it began to redefine the content of the building itself, not only focusing on the development of the architectural form, but also the content of the building is deeper, bigger and farther than the building itself. In his opinion, architecture is actually a city, and any form of architectural design represents a very important evolution content of a city, so he expanded the building to a very large scale, and the building itself is interpreting the city.

The biggest difference between Aldo Rossi and Venturi is that unlike Venturi, Rossi did not talk about the diversity of complexity and contradiction, nor about the ordinary and popular culture of life. As an architectural theorist and architect in Italy, Rossi was very concerned about all the European cities and buildings in the historical development, and how much of their development has been flattened by modernism. He attempted to redefine architecture of the city from a cultural point of view, a place point of view or a historical point of view, that is, to define what will happen to architecture after modernism. While Venturi tried to see architecture from a pluralistic point of view, Rossi tried to see architecture from a scientific point of view. He hoped to reconstruct a supporting system behind architecture from a more rational and scientific point of view, and this system can cover the city, history and culture. Venturi was looking at architecture from an inclusive multicultural perspective, while Rossi was looking at architecture from a scientific perspective. Although Venturi talked about complexity and contradiction, he was concerned about the complexity and contradiction of architectural form, which is an external formal point of view. As a European, Rossi believed that architecture could not only stop at form, but also had deeper concepts related to society, history, culture and memory.

5. The Contributions of “The Architecture of the City”

Aldo Rossi’s greatest contribution in this book is that he reconstructed his aesthetic intention. Modernism turns all standards into functionality and efficiency, but it lacks aesthetic intention. Rossi said that architecture is a city, a combination of building type and a total concept. Architecture is to create a more comfortable environment with the intention of aesthetics. It’s very similar to Le Corbusier’s idea. Le Corbusier put forward proportion and model moment, and then told us to pay attention to aesthetics after responding to things produced in this industrial era, such as airplanes and ships. Architecture must have spiritual creation. Rossi and Corbusier had the same basic concept. Although they cared about different things, they all thought that the most important thing of architecture was to respond to the needs of daily life and had aspiration to beauty. Unlike other architects, this aesthetic intention is just to create personal style and talent. The aesthetic standard of Rossi comes from different psychological, geographical and social states in the society. He raised architecture from a single imaginary life function and a single personal performance work to a height related to the city and history, and reconstructed his aesthetic intention, which is his greatest contribution.

The second contribution is that Rossi mentioned the relationship between architecture and city, which is not as absolute and inevitable as we think. As the famous painting “Capriccio” by Giotto de Chirico shows, the memory of the city is an image full of values, as well as various universal experiences. Apart from the general

experience, architecture has its own characteristics, which cannot be listed. But architects or cities have to feel the existence of this uniqueness. In addition to creating their own uniqueness, architects should also be able to grasp the concept of certain places and places in every country or every city. This concept cannot be explained clearly. They are not so concrete. If a city does not have any permanence and uniqueness, it is a pile of structures. He redefined the difference between architecture and construction: all typology must be narrative. Architecture of the city, which we call prototype or typology, can express the state of human beings most completely. The understanding of the city is not only to do basic graphic practice, but also to tell stories. Aldo Rossi tried to use this book to establish a scientific analysis method. This method is based on the city’s artifacts and regards the city as the relationship between the artifacts and the city itself.

There were two golden periods in the 20th century: one was between 1910 and 1925, when modernism built a revolutionary aesthetics standard, which is what we call the golden period of modernism; the other was from 1960 to 1970, especially 1968. The reactionary period is basically anti-aesthetics, that is, to put all intellectuals on the social point of view, rather than on the pure art or aesthetic point of view. In this golden age, “The Architecture of the City” published in 1966 reconstructed a set of post-modernism theory. The influence of these theories extended to the whole world after 1990 when there began to be another group of very important contemporary architects. Most of them were at school or just graduated from school in 1966. These students began to become mature architects in 1990 and then created the contemporary architecture we see. For instance, Christian Norberg-Schulz wrote the book < *Genius Loci, Towards a Phenomenology of Architecture* > and Herzog & De Meuron focuses on shaping place spirit. It is Aldo Rossi’s architecture poetics that brings us to see the hidden layer of contemporary architecture.

In conclusion, Rossi paid great attention to ancient cities, the artifacts in cities, typology, identity of urban elements, mutual relations, urban ecology, psychology, places, collective memory and other issues. In short, he believed that the architectural form had its own autonomy, which came from the urban history. He criticized the tendency of overemphasizing the architectural function and efficiency under functionalism. Different with those architects who ignored the architecture, history, urban form, street network and personal stories in the city, Rossi turned to focus on the European cities in history so as to confirm how the city grew over time and explore how architectural types participate in the evolution of urban form. Rossi understood the type of architecture as rooted in a specific custom of a specific city, rather than an abstraction independent of historical conditions. The form itself has autonomy and is not limited by function. Take the Colosseum of ancient Rome as an example. From the perspective of functionalism, the form comes from the function. Different types of buildings, such as houses, hospitals, libraries, railway stations, etc., should have completely different architectural forms. However, it can be seen from the history of the Colosseum that the facade form of the building has not changed much, but the function has changed several times. In fact, this kind of architectural form has been deeply rooted in the city and the memory of the citizens. Therefore Rossi regarded that the architecture typology as the collection of city history and citizen memory whose development had its independence and stability.

Unfortunately, in today’s view, the city and architecture have not become some kind of independent structure as Rossi hoped. Under the seemingly fata, the contemporary architecture has become the same as what Graff told “there is no modernism or post-modernism architecture, only the simple architecture before and after capital annexation”. If the architect before the 1960s could have great faith and ambition under the welfare economic system of capitalist countries, then after the economic globalization in the 1980s, in the face of the global tide of privatization and capitalization, this ideal seems to be hidden in the more powerful urban reconstruction power. Half a century ago, Rossi tried to save the lost history of the city with typology. Today, the economic change marked by free trade has given the city a second historical appearance: Italian style community, Amsterdam

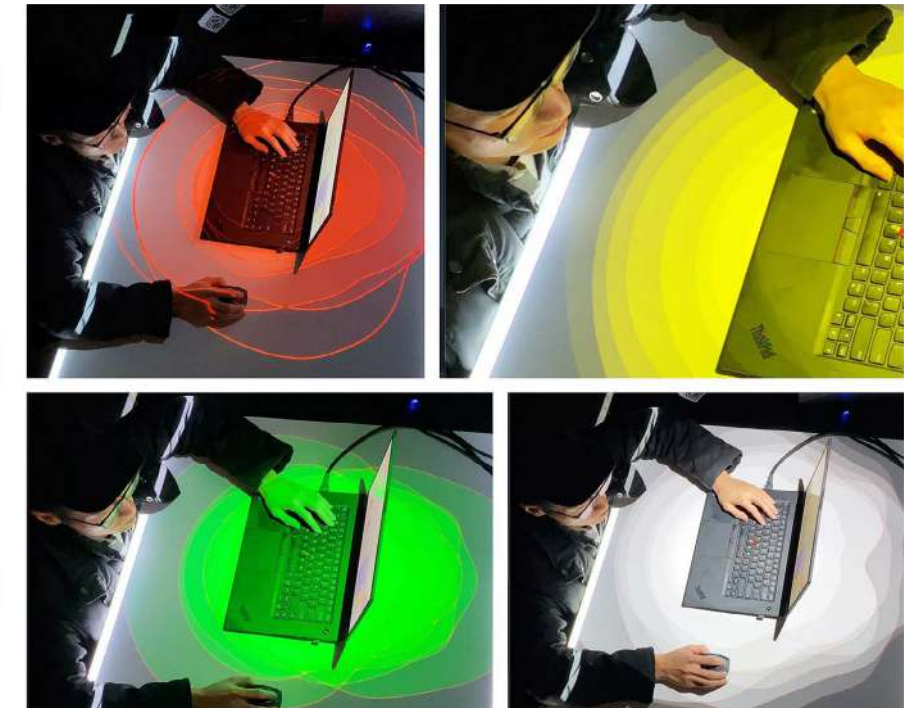
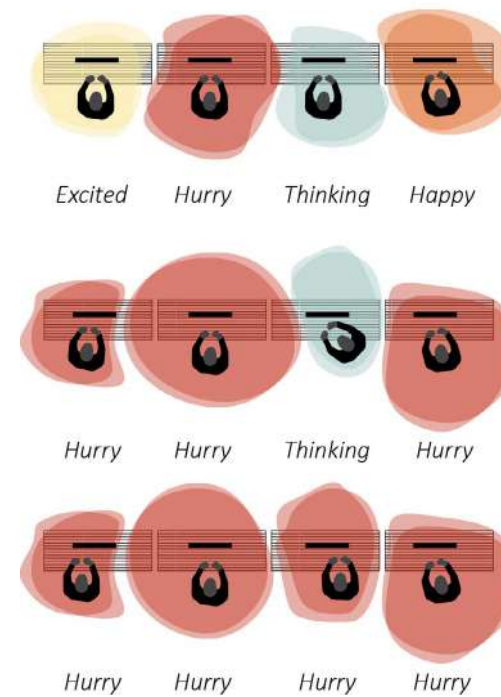
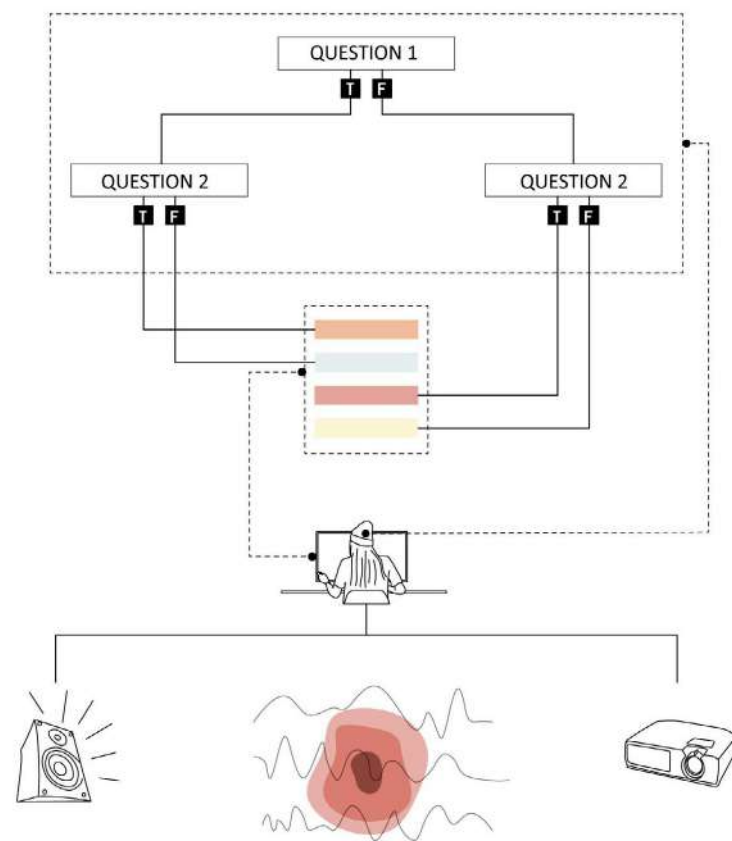
style theme park, as well as the new little Vienna, little Paris, little London built in countless places. These product spaces form a museum of contemporary history. At present, facing the absurd “surreal” picture that the old history has been replaced by the new history, it is more difficult to reshape urban history and autonomy under today’s capital operation than half a century ago. It is a pity to see that today “exchange value” gradually replace the “use value” of architecture and the power of historical shaping of the city gave way to consumerism. Facing the thoroughly changed contemporary economic and social context, Rossi’s typology Theory has lost the possibility of some kind of practice.

[Reference]

1. Aldo Rossi, *Architecture of the City* (Cambridge, Mass.: MIT Press, [1982]).
2. Robert Venturi, *Complexity and Contradiction in Architecture* (New York: The Museum of Modern Art, [2019]).

05
METAL TOOL

Listen to Your APP
GSAPP Tech Course in Fall 2019
Instructor: Dan Taeyoung
Group Work with YANG Yankun, HU Xueqi, Jose Vintimilla



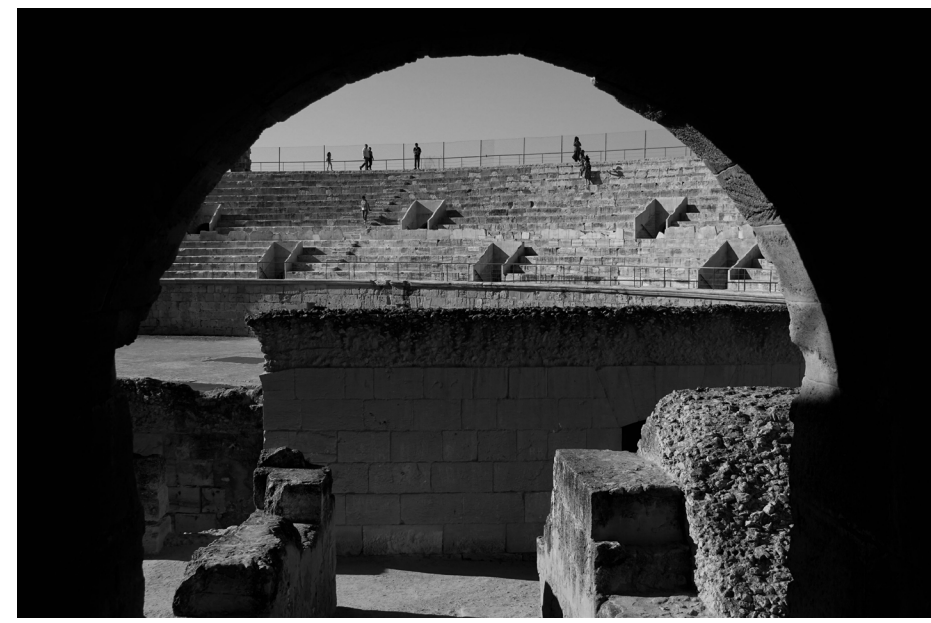
Computer has become such belonging that is so personal to the user. The massive quantity of data is hidden behind the screen that only can be accessed by the user. An invisible boundary between the physical context and the contents displayed on the screen is constructed, which scatters the world (and the social responsibilities) into pieces whenever the screen lights up. This project intends to raise an question, what if the computer is able to interpret the user's working rhythm and emotions (intense, rest, bored, etc) in the physical world, and it exposes the results to inform the surroundings? Can that construct a new social responsibility and enhance the collaboration between people in the age of digital data.

06
ARCHITECTURE
PHOTOGRAPHY

GSAPP Visual Studies Workshops in Fall 2019
Instructor: Michael Vabrenwald
Individual Work



*Arch / Dome / Columns / Light / Shadow
Photo Taken at Masjid'Uqbah, Tunisia*



*Arch Framing the Colosseum
Photo Taken at El Djem, Tunisia*



Girl with Scarf
Photo Taken at Masjid'Uqbah, Tunisia

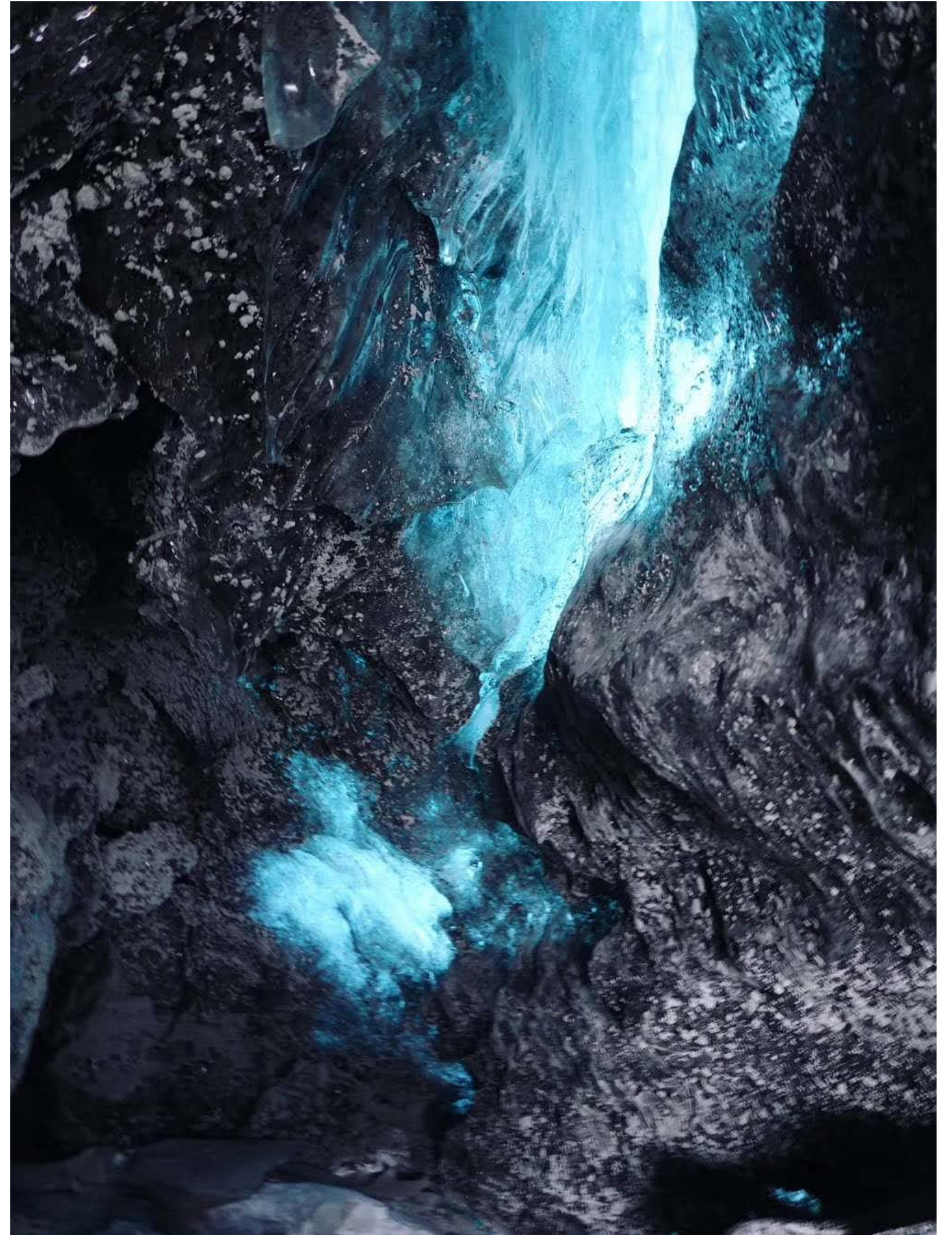


In the End of the Colonnade
Photo Taken at Masjid'Uqbah, Tunisia





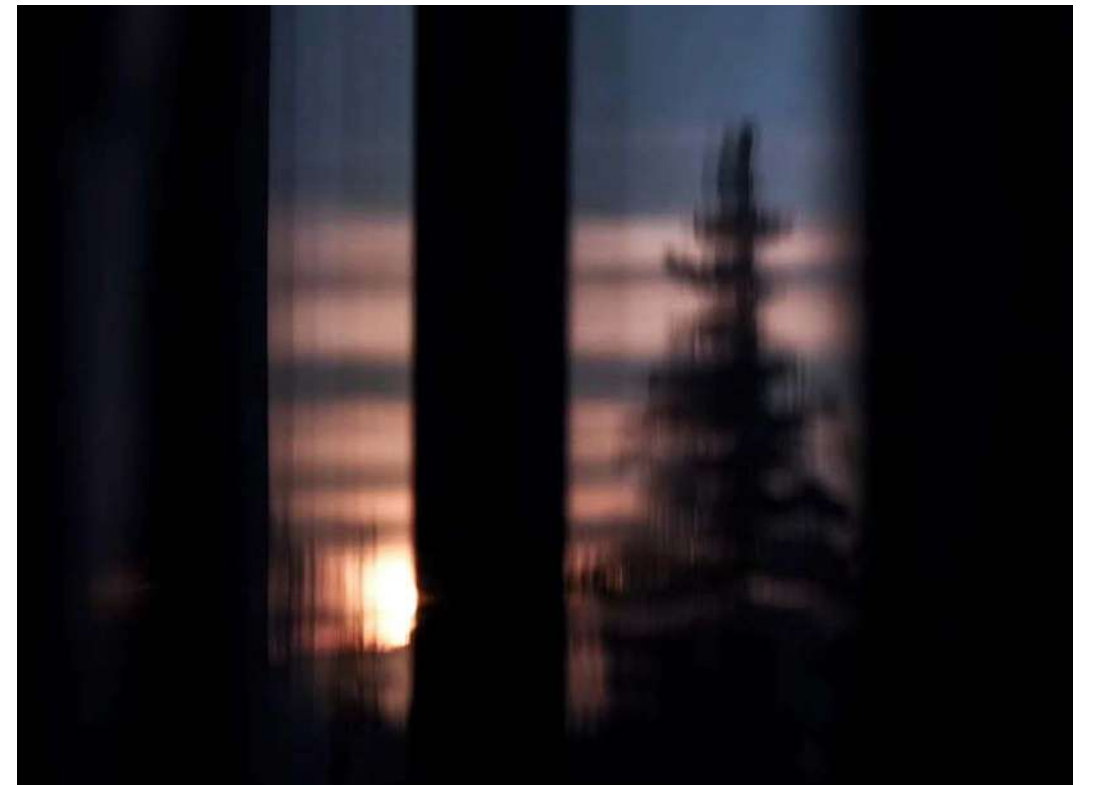
Light Makes Ice Blue
Photo Taken at Matanuska Glacier, Alaska





*Speration by Window
Photo Taken at Alaska Railroad*

*Window Filming the Sunrise
Photo Taken at Alaska Railroad*



07
FACADE DETAILING
A Material Thinking

GSAPP Tech Course in Spring 2020

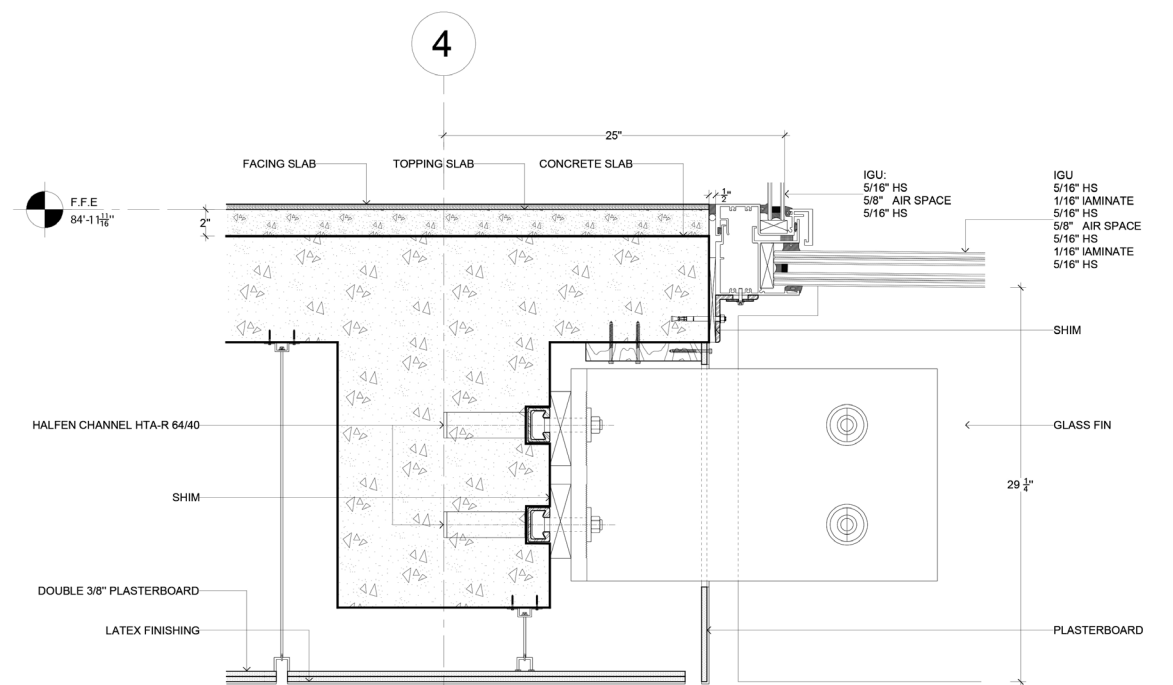
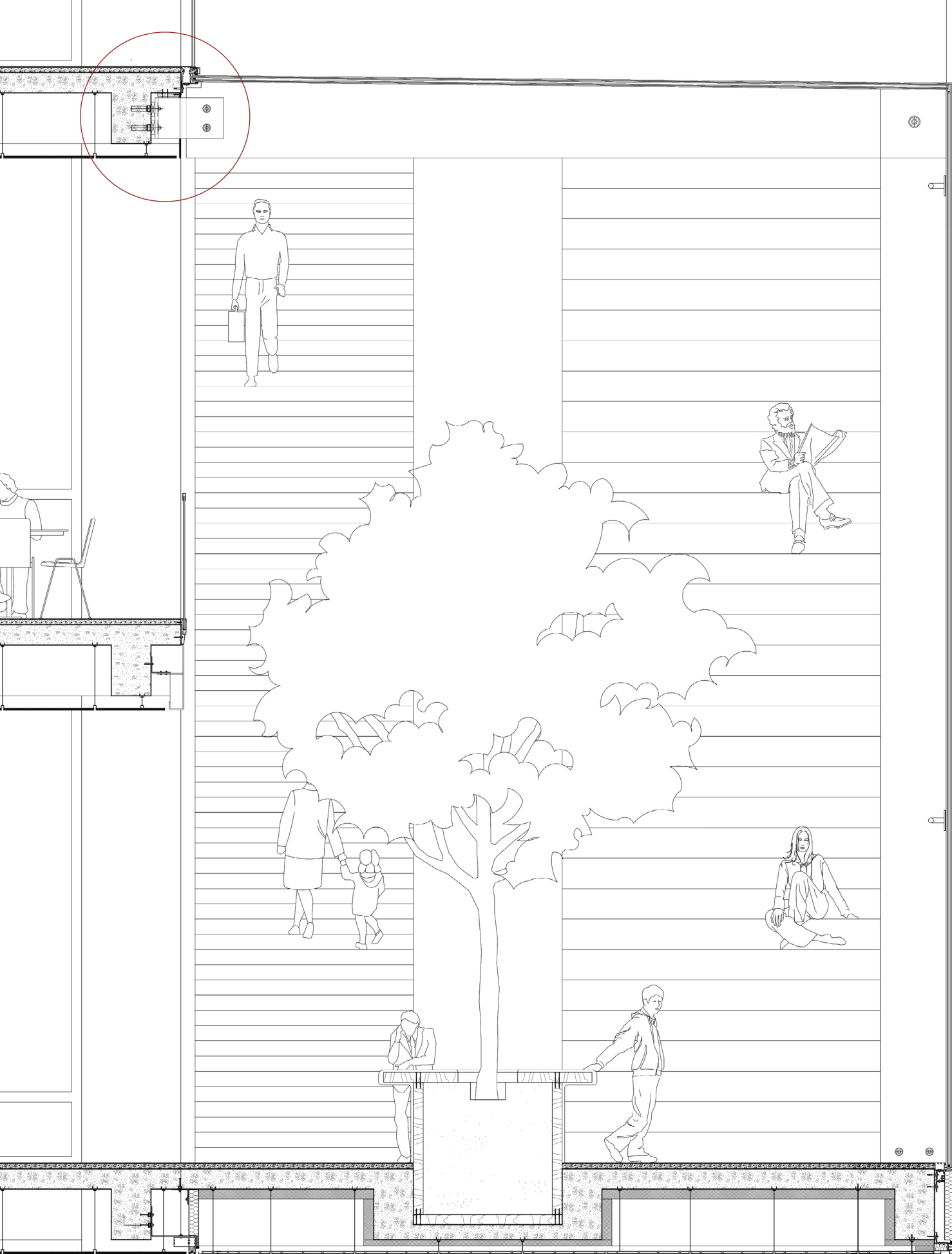
Instructor: Kevin L. Schorn

Group Work with ZHANG Zifan

This is Zifan's summer studio project. It is a skyscraper with a pop-out stair box going all the way up spirally as the "vertical street". In this course, we picked the vertical street at the bottom part of the building to design its facade and make detail drawings.

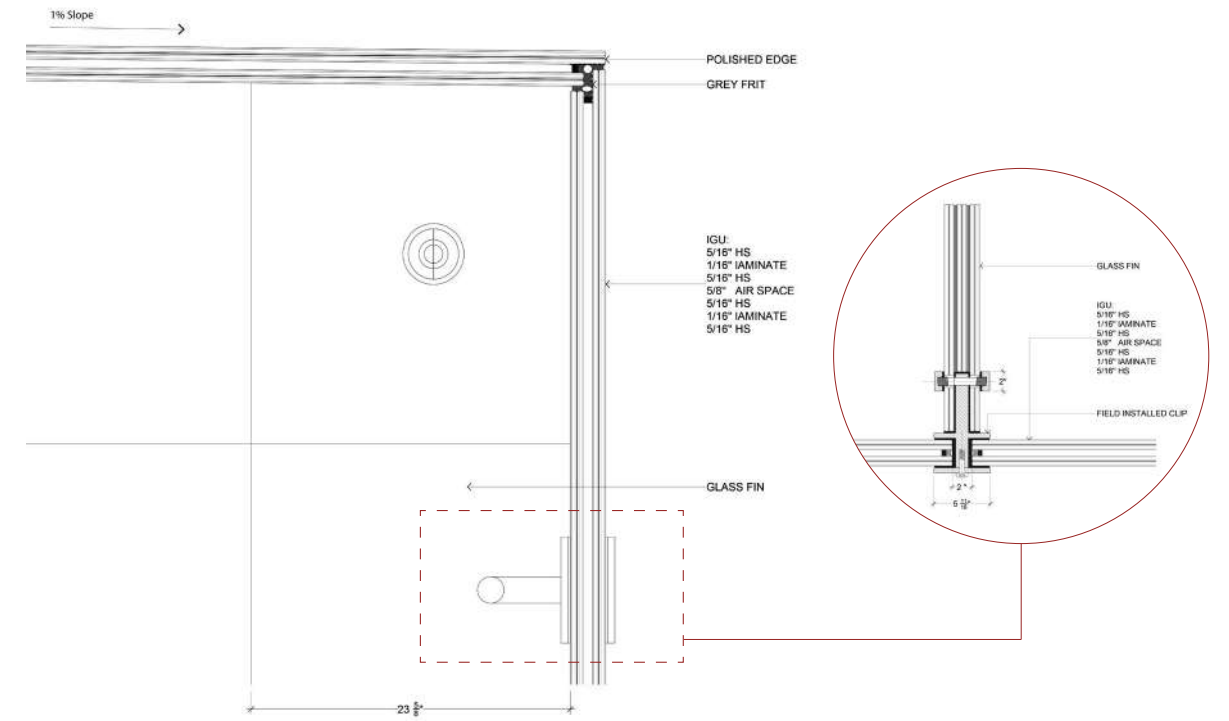
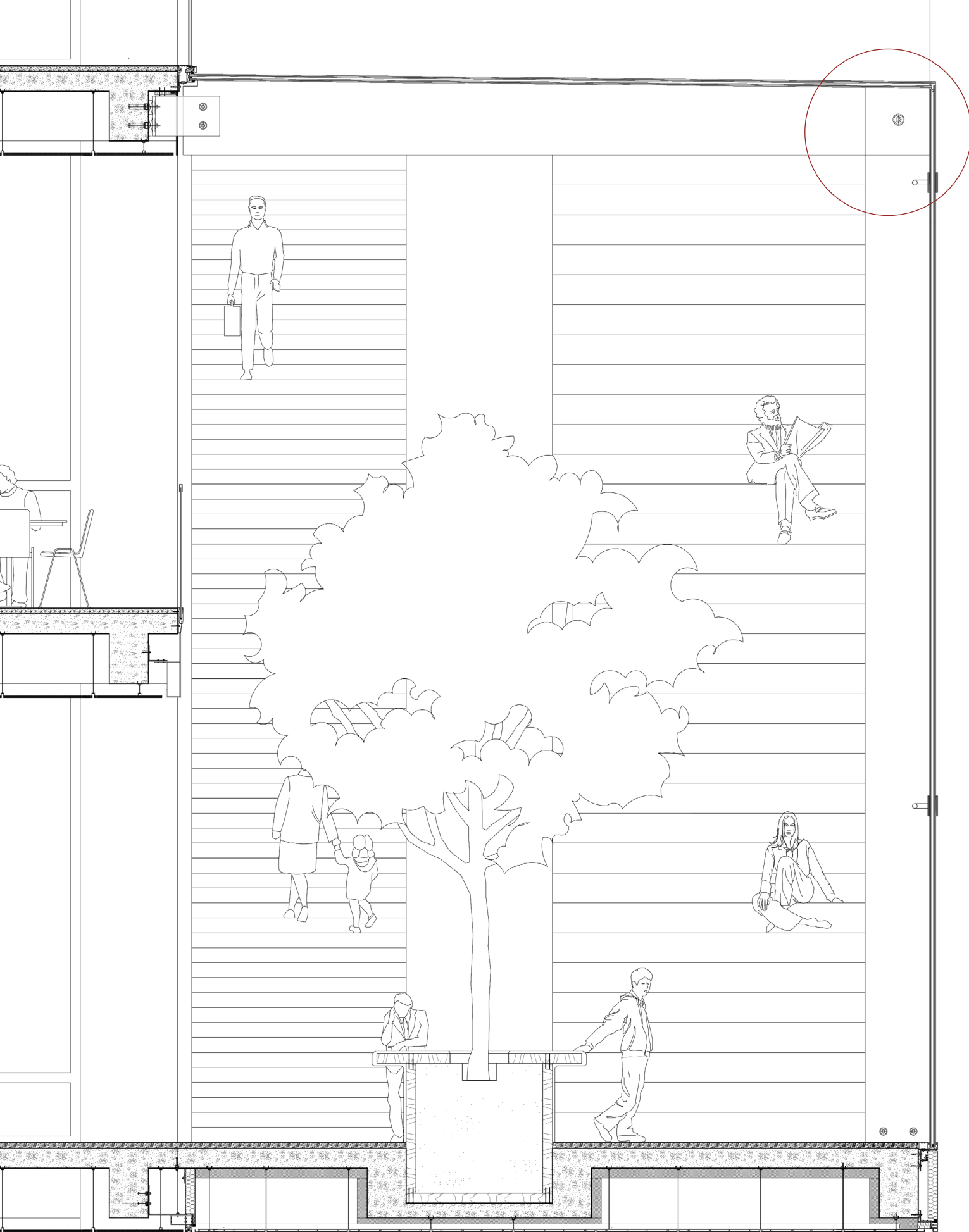
The roof and facade are all composed of glass, supported by glass fins. Therefore, the continuous movement could be shown around the skyscraper. The crystal street box becomes the most active part of the building from outside view.





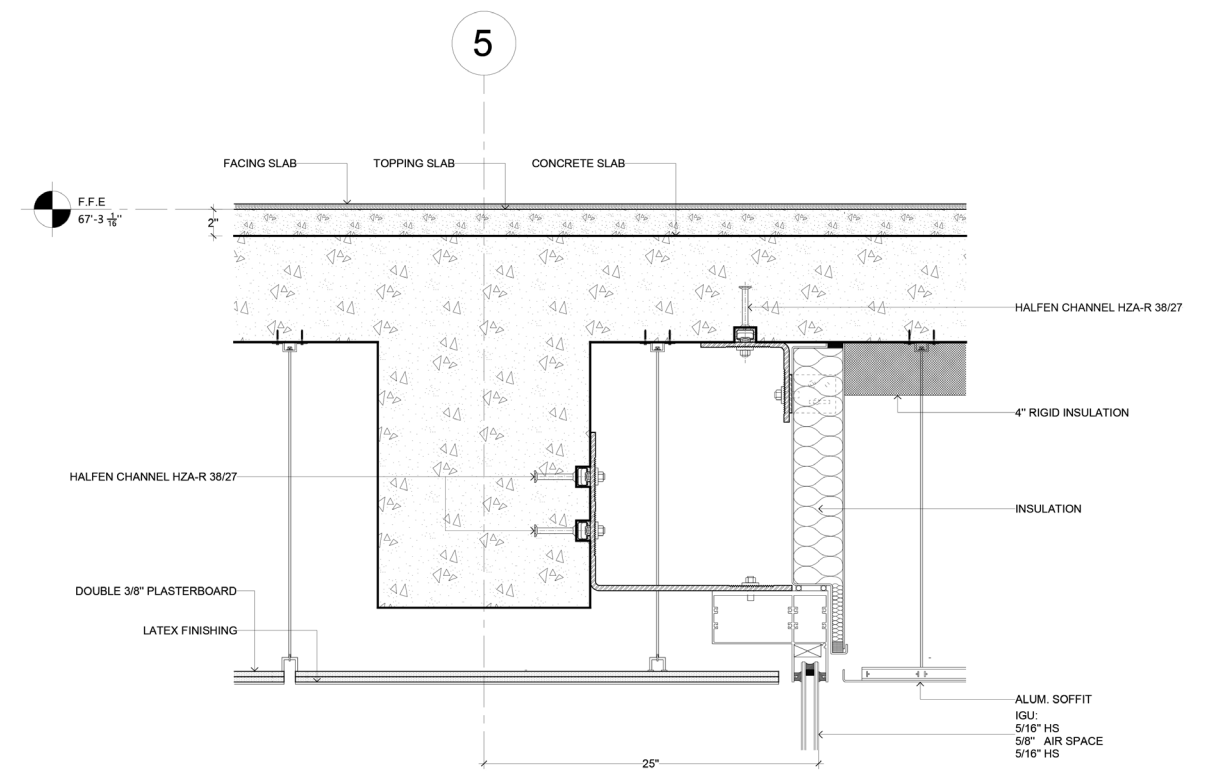
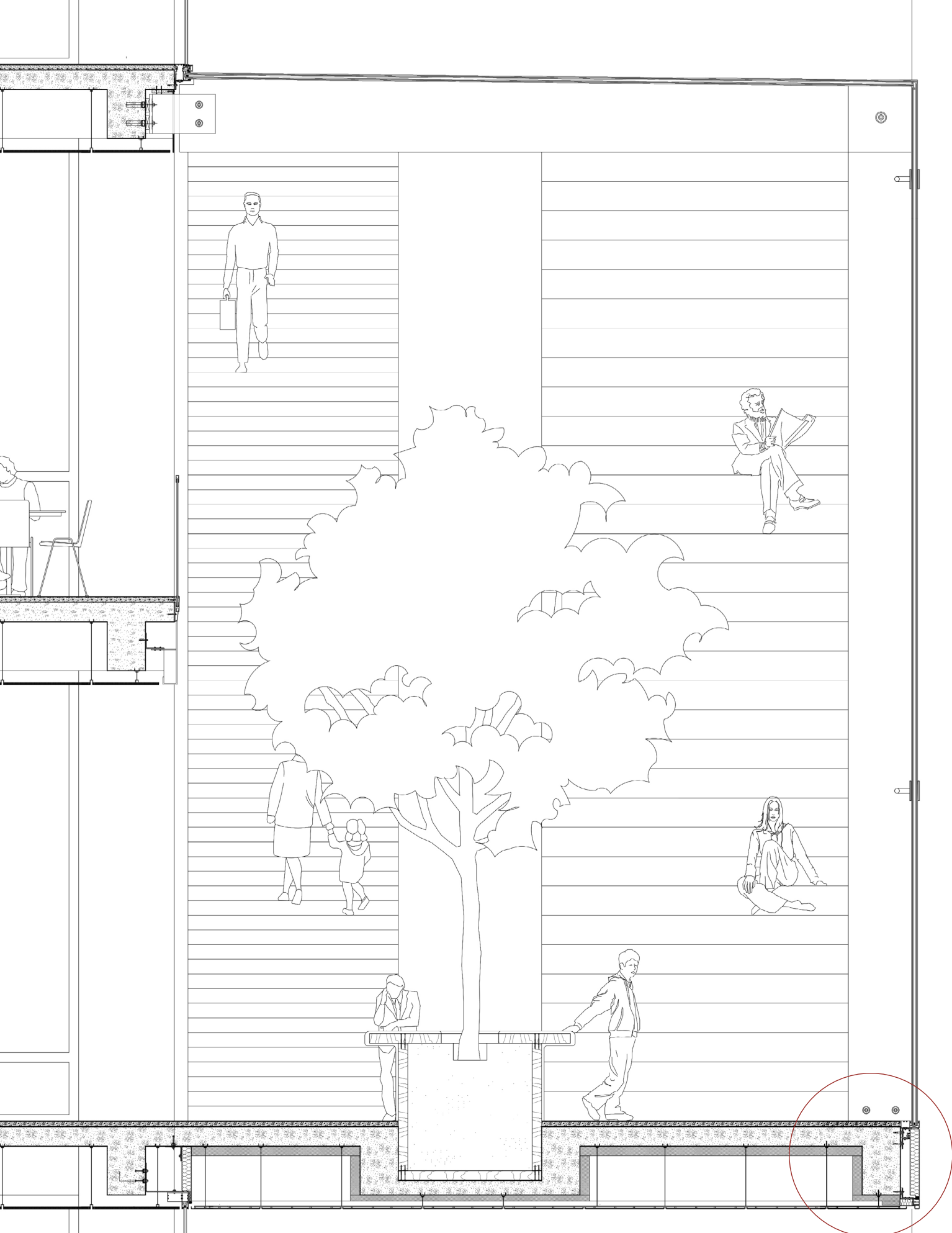
Detail Drawing 1

This is the connection between glass fin and concrete slab as well as the curtainwall system. On the top left corner: there are two pieces of aluminum to hold the curtainwall glass and the glass roof respectively. Continues air seal between the connection of the two aluminum pieces allows the vertical movement. And for the glass fin, the halfen channel and the shim are used here to allow the tolerance from 3 dimensions since the concrete part is not always so precise.



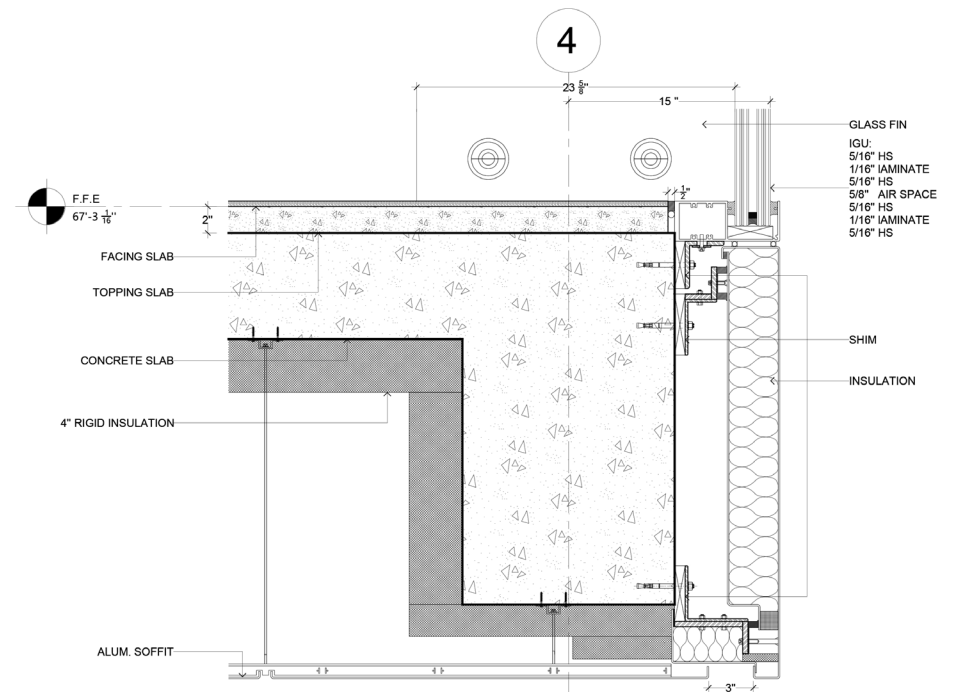
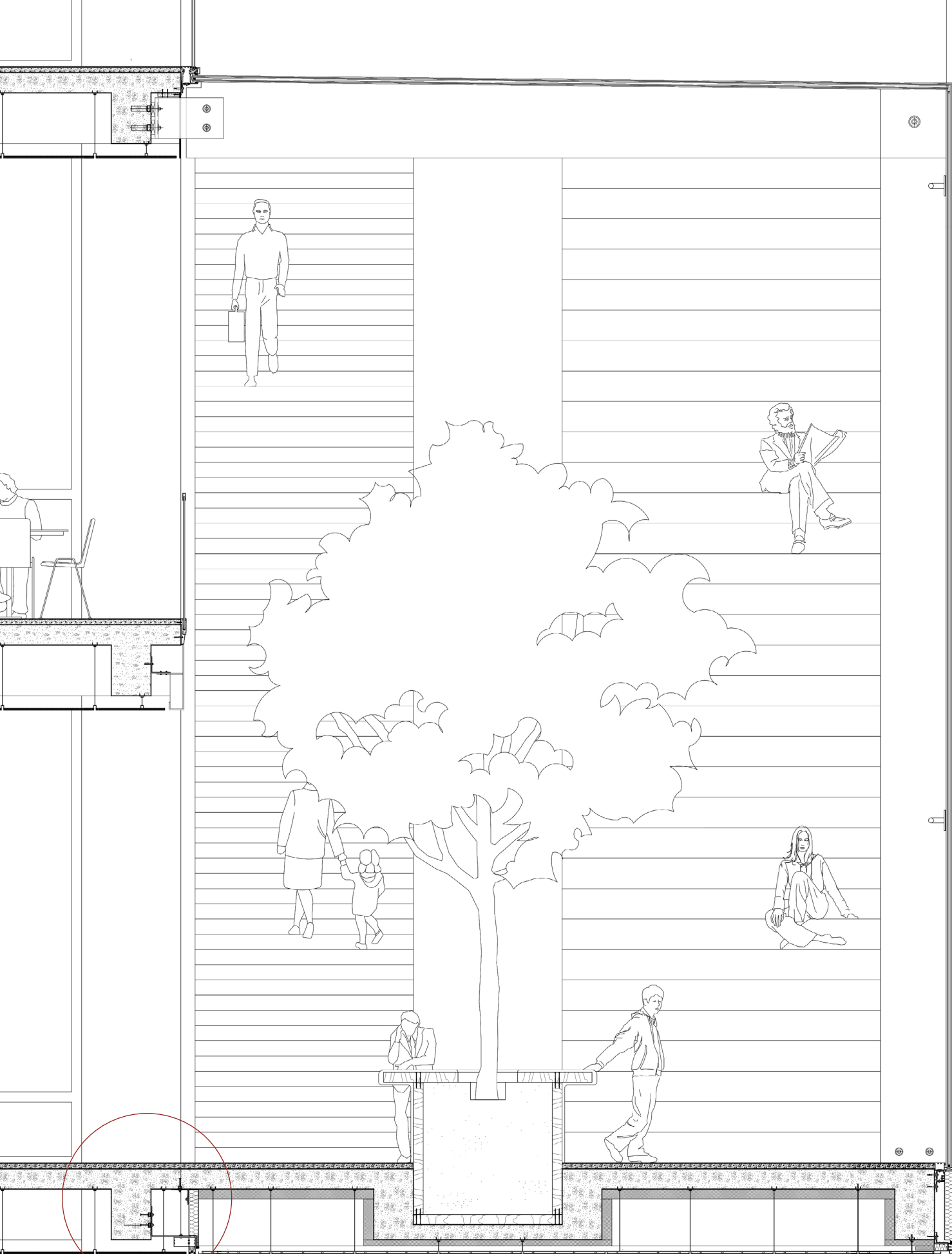
Detail Drawing 2

This is the connection between the glass roof and the glass facade. 1% slope at the top, the bottom of the glass fin should be flat without slope. And its at the same height with the soffit of the ceiling on the right. Also at the corner, grey frit is applied to hide the little pieces in between the glass layers to ensure the pure appearance.



Detail Drawing 3

This is about the connection between glass wall with concrete slab. Shims here when we connect the glass panel and the insulation panel with the concrete for the tolerance. Insulation pieces are all the way continuous to ensure the thermal insulation.

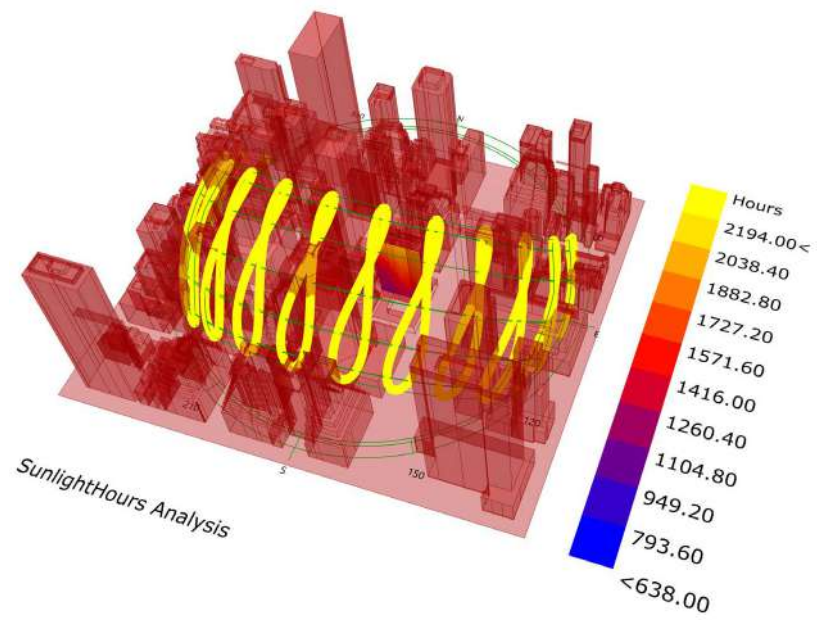


Detail Drawing 4

This is about the connection between building slab and the extended slab. Halfen channels are used here when connecting the curtainwall and the concrete as well as the insulation panel with the concrete to allow the tolerance.

07
RE-THINKING BIM

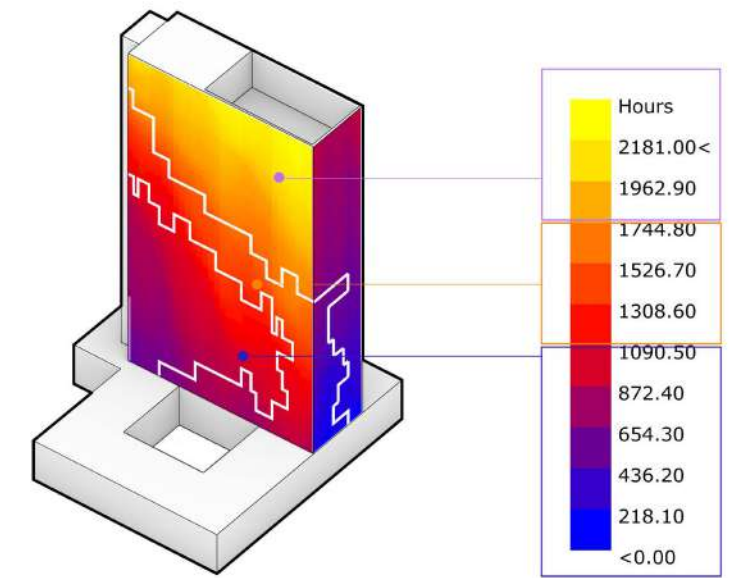
GSAPP Tech Course in Spring 2020
Instructor: Jared B. Friedman
Group Work with ZHANG Zifan



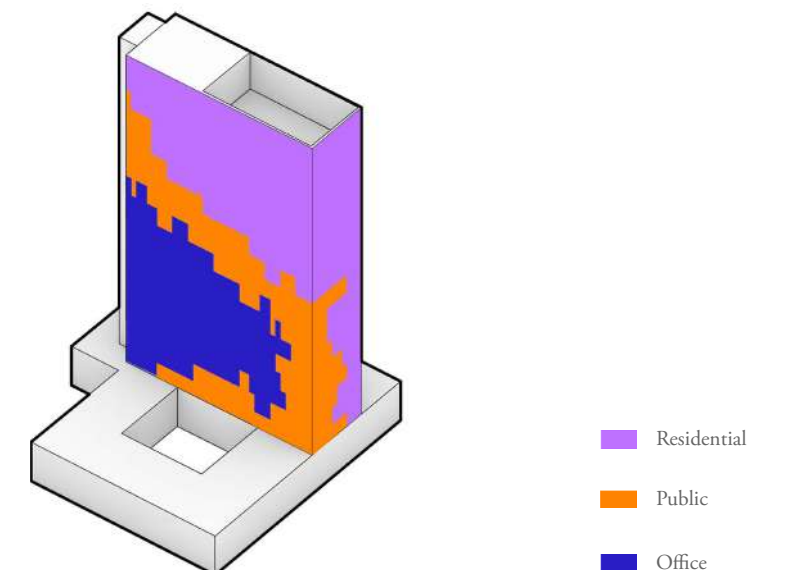
Lever house is an office building which lacks public spaces and suffers from direct sunlight to interior space. In order to improve public spaces, bring different tenants and increase building sustainability, the project proposes to reprogram lever house and add an exterior facade to the original design.

According to annual sunlight analysis, the project divide original office space into there parts-- office at lower level with less sunlight, public spaces with appropriate sunlight hours and residential spaces at higher level owning much sunlight hours. The new skin accommodates to the program. The length of sun shield panels is determined by the annual sunlight hours. At the same time, panels with 41 degree angle are installed with solar panels to use solar energy.

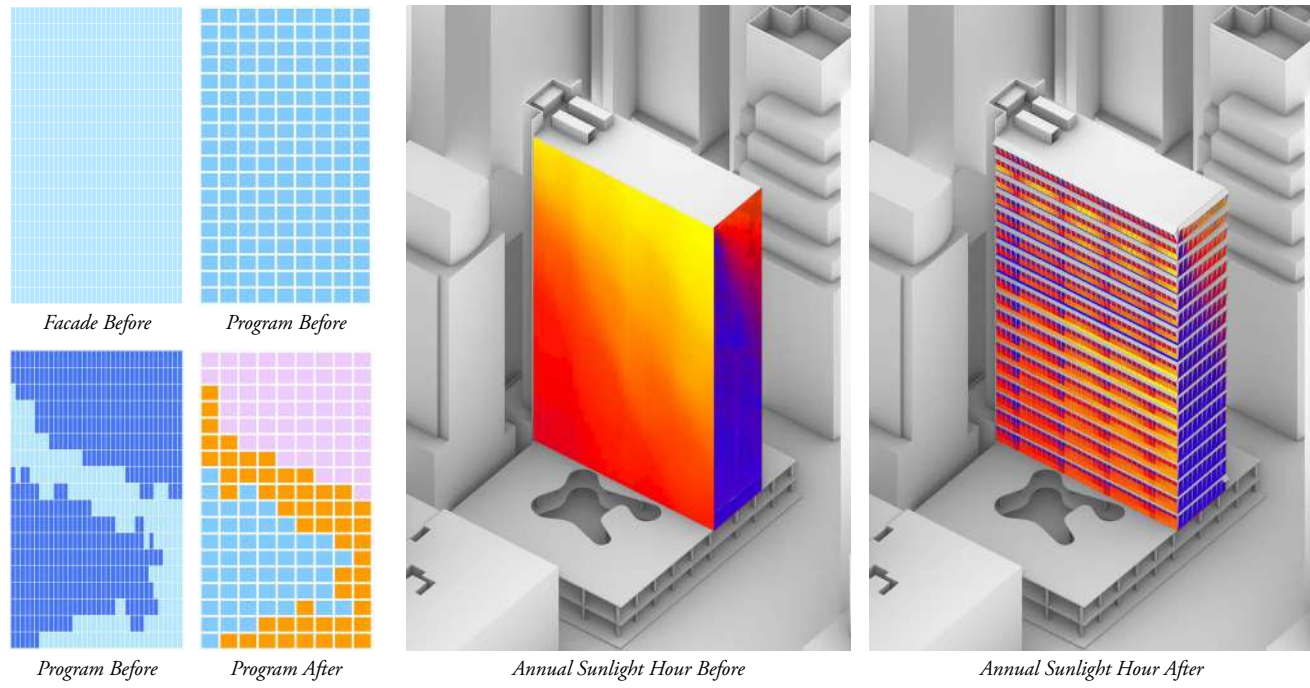
**EXISTING FACADE
ANNUAL SUNLIGHT HOUR DATA ANALYSIS**

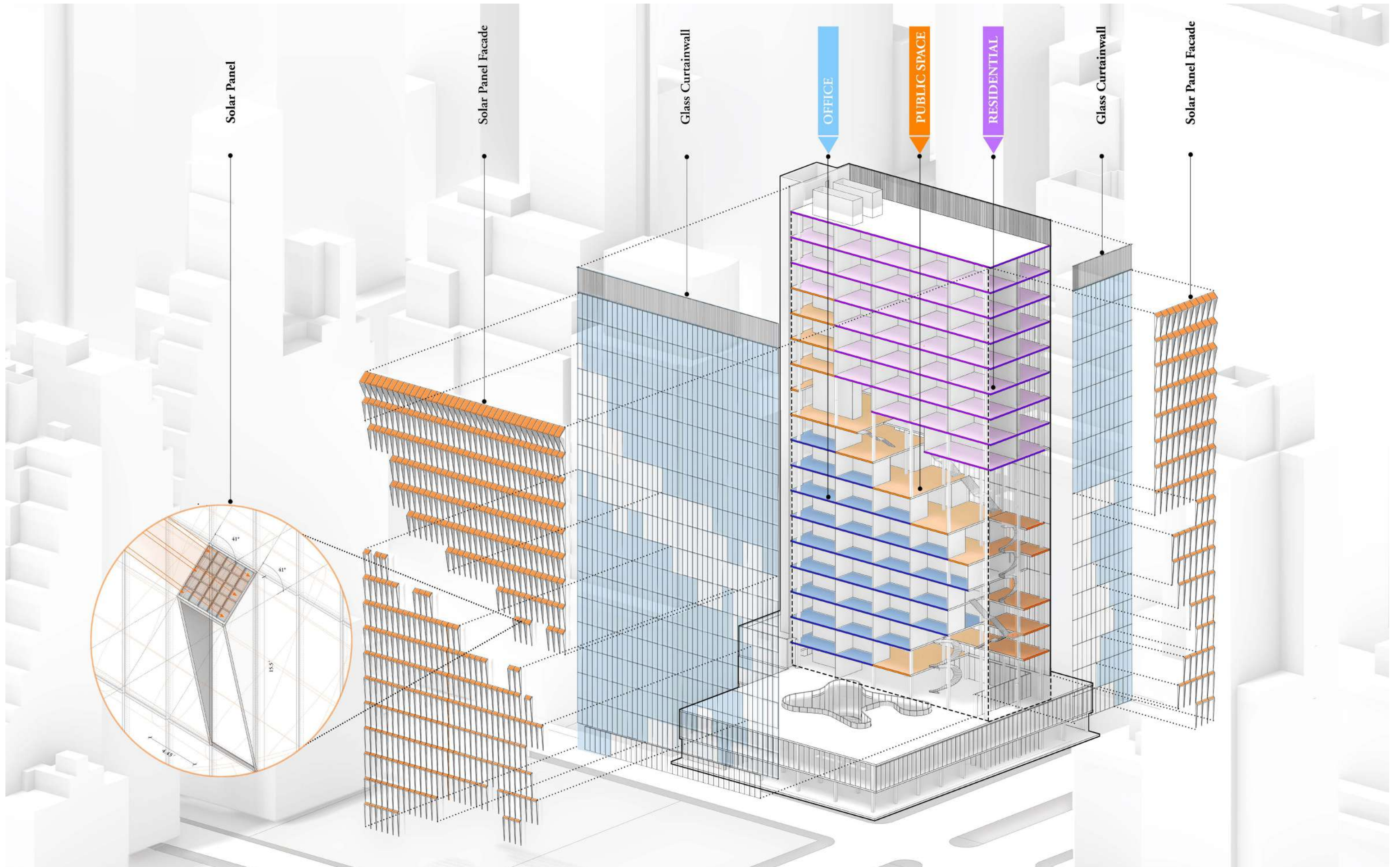


**PROGRAM REORGANIZE
ACCORDING TO THE SUNLIGHT HOUR ANALYSIS**



COMPARATION BEFORE & AFTER
FACADE / PROGRAM / SUNLIGHT HOURS





Solar Panel

Solar Panel Facade

Glass Curtainwall

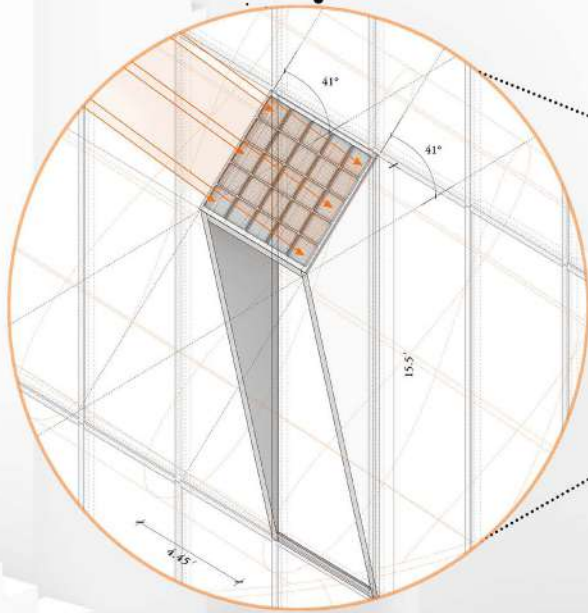
OFFICE

PUBLIC SPACE

RESIDENTIAL

Glass Curtainwall

Solar Panel Facade



**Submitted on 10th May, 2020
to Graduate School of
Architecture, Planning and
Preservation at
Columbia University
in partial fulfillment of the
requirement of the degree of
M.S. Advanced Architectural Design**

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