

Architecture Portfolio
2012-2022

Youjin Rhee

YOUJIN RHEE

ACADEMIC

452 Lafayette Ave
Brooklyn, NY

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LANGUAGES

English Fluent
Korean Native

2020-present **Master of Architecture**, 2-year advanced standing - expected May 2022

Pratt Institute, Brooklyn, New York

2012-2017 **Bachelor of Architecture**, 5-year

Yeungnam University, Daegu, South Korea

• ACHIEVEMENT •

2022 **Pratt GAUD Critic at Large Finalist**

Selected by studio professor to exhibit and present in GAUD final's main event

2020-2022 **Graduate Annual Scholarship**

Pratt Institute, Brooklyn, New York

2016 **Academic Excellence Scholarship**

Yeungnam University, Daegu, South Korea

2016 **Yeungnam University Graduation Exhibition, Second Prize**

Yeungnam University, Daegu, South Korea

2016 **Urban Design Competition, Third Prize**

Design Daegu Forum 'Design Improvement Project for the road of the East Daegu', Daegu, South Korea

2016 **The Remodeling Competition, Honorable Mention**

Korean Institute of Architects (UIA, International Union of Architects)

EXPERIENCE

• PROFESSIONAL •

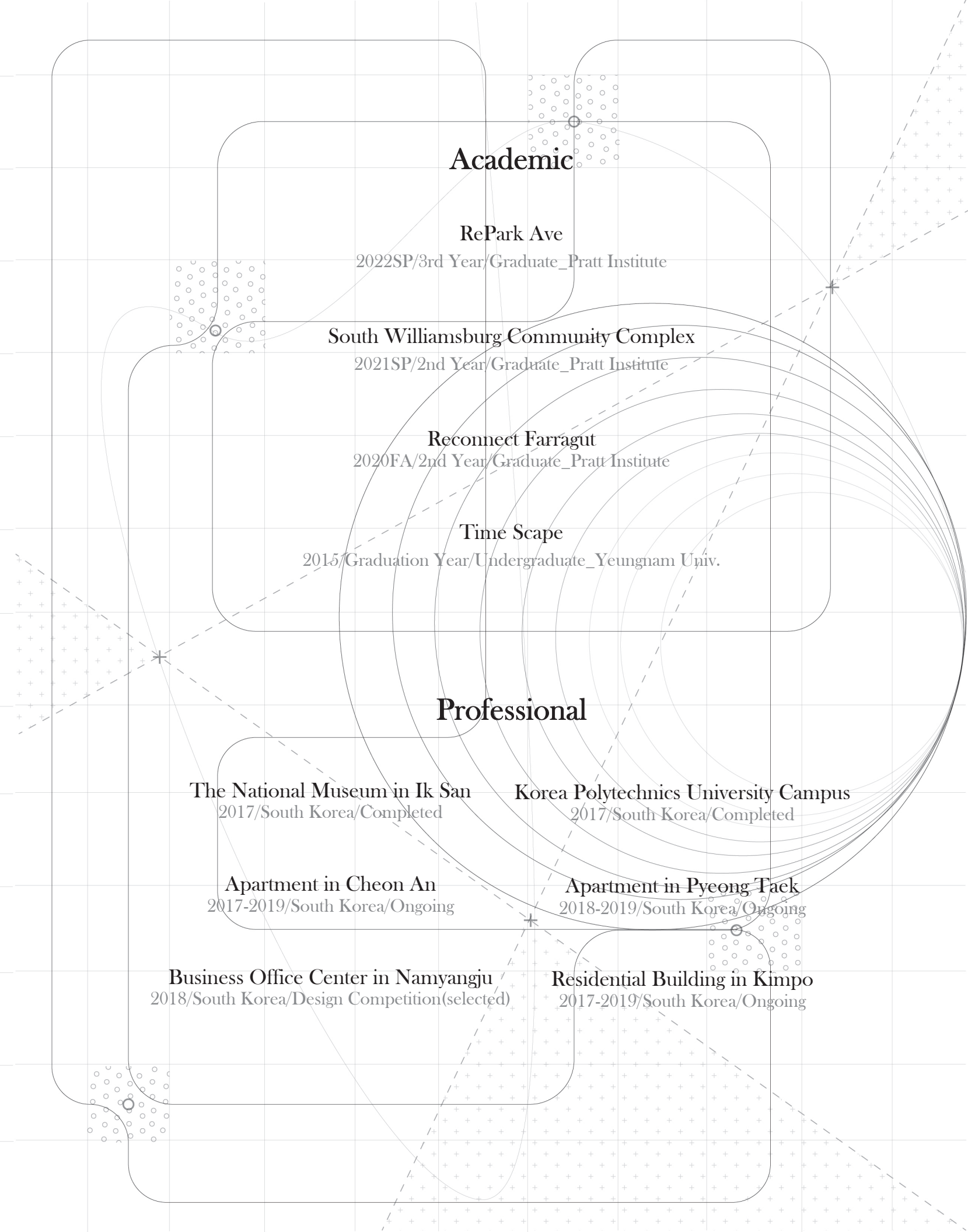
2016-2019 **Architecture Junior Designer (Full Time, 3-year)**

USUN, Seoul, South Korea

- Residential Tower In Pyeong Taek Goh Deok, South Korea
Designing in both AutoCAD and Sketch Up across residential, mixed-use projects. Have successfully taken on many roles, gaining experience in designing early stage of the construction.
- Korea National Museum In Iksan, South Korea
Worked all phase 100% CD, primarily in building section, construction part by using BIM and worked visualization by using Rhino rendering and Twin Motion.
- Residential Tower In Asan, South Korea
Worked from DD to 100% CD, such as architectural, especially section plan and coordinated with underground parking lot and MEP consultants, community center layout.
- Business Office Center In Namyangju, South Korea
Assisted in PD. Worked primarily in making photoshop diagramming. Had the opportunity to accomplish an architectural competition.
- Education Buildings, Korea Polytechnics University Campus In Milyang, South Korea
Worked part of phase SD and CD, coordinated with construction consultants. Drafted various design drawings by using BIM and made physical models.
- 2015 **Architecture Summer Internship**
SAMOO Architects and Engineers, Seoul, South Korea
- Samsung Head Office In Beijing, China
Assisted in terms of podium design of the building by using Sketch Up and hand drawing.

TOOLS

Auto Cad	Sketch Up	Rhino_Vray
Revit	Ladybug, Kangaroo_Grasshopper	
Photoshop	Illustrator	Indesign
Twin Motion	Unity	Enscape



RePark Ave

Academic 2022SP_3rd Year
M.Arch, Pratt
Prof. Kai-Uwe Bergmann
Program : Residential
Site : 350 Park Ave, NY
Group work (with Sunghwan Um)

After the pandemic, there is an issue that a lot of mounts of Co2 was kept emitting from the vacant office building with low energy grades. This project aims to convert from an office building to a residential building and upgrade its energy grade. We selected the 350 Park Ave building among many office buildings, and it would be one of the solutions that reflect today's situation.

Role : render images, diagrams, animation video, physical model
(Rhino, Photoshop, Illustrator, Enscape)

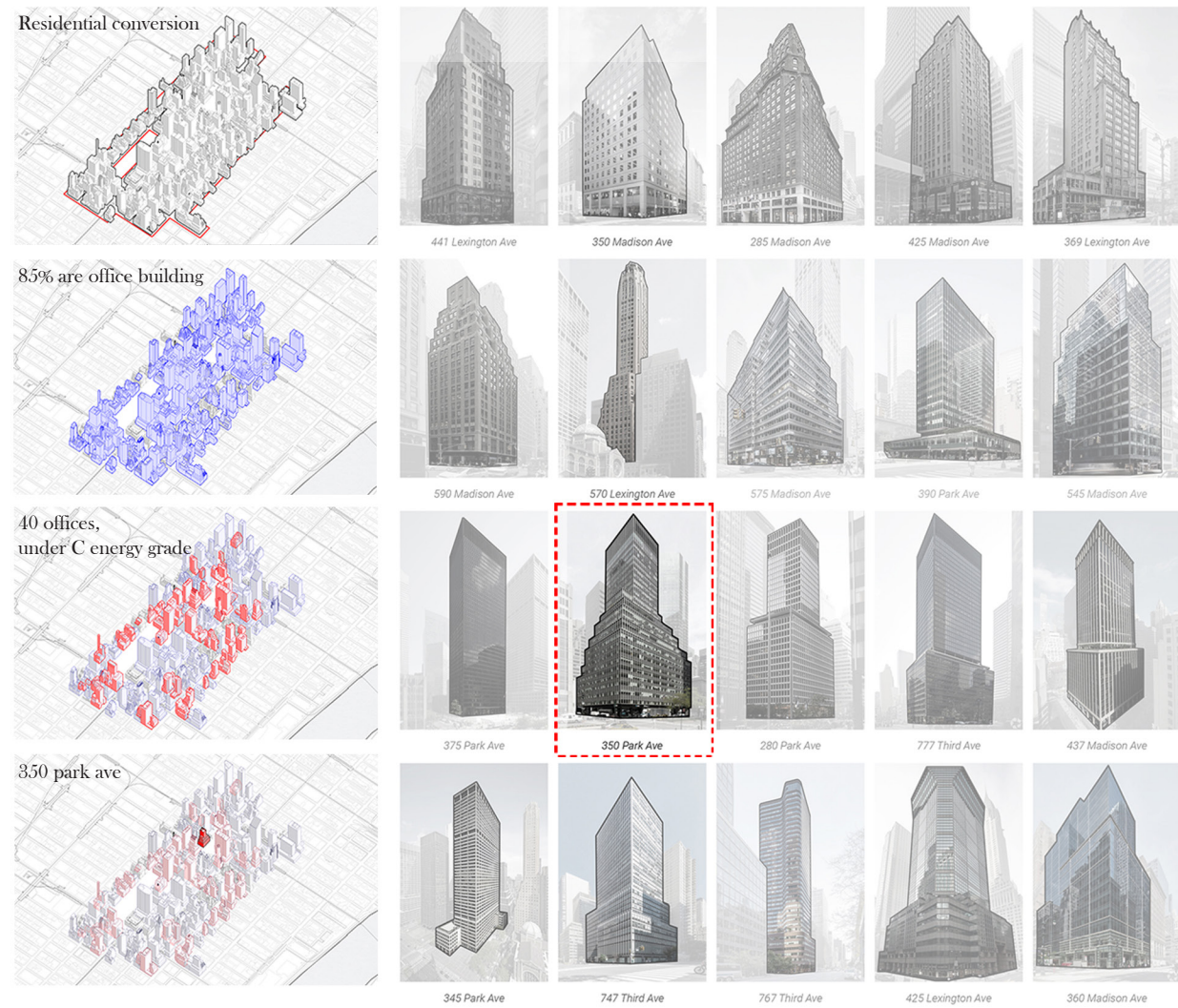


" Upgrade poorly performing office buildings into new types of housing and sustainability "

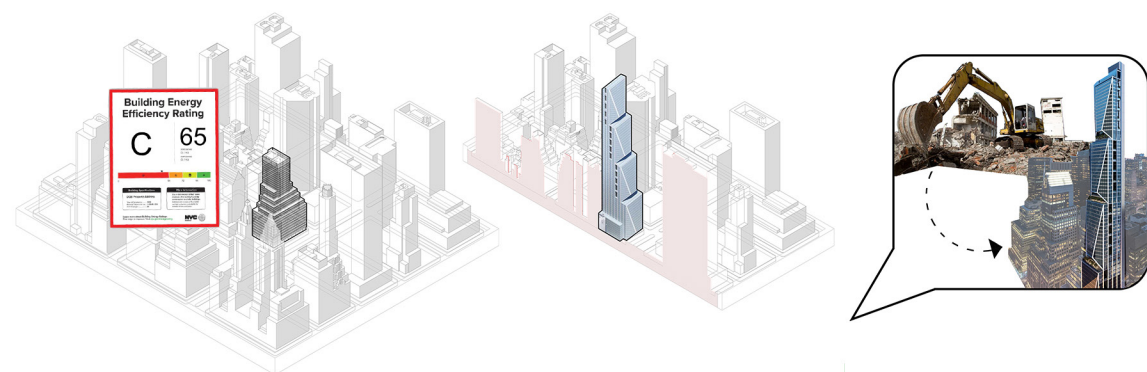
In 2020, New York City emitted about 56.5 million tons of carbon dioxide equivalent; that is projected to fall to 6.7 million tons in 2050 under the Diversified Pathway, even as NYC's population grows. Buildings are by far the largest contributor of greenhouse gas emissions in New York City. The city has a new goal to reduce emissions from large buildings 40% citywide by 2030 compared to 2005 levels. New York City's Local Law 84, 87 and 97 require building owners to assess their energy usage and improve it.

But, after the pandemic, the office inoccupancy rate has risen higher and the buildings are still operating as they are with low energy grade.



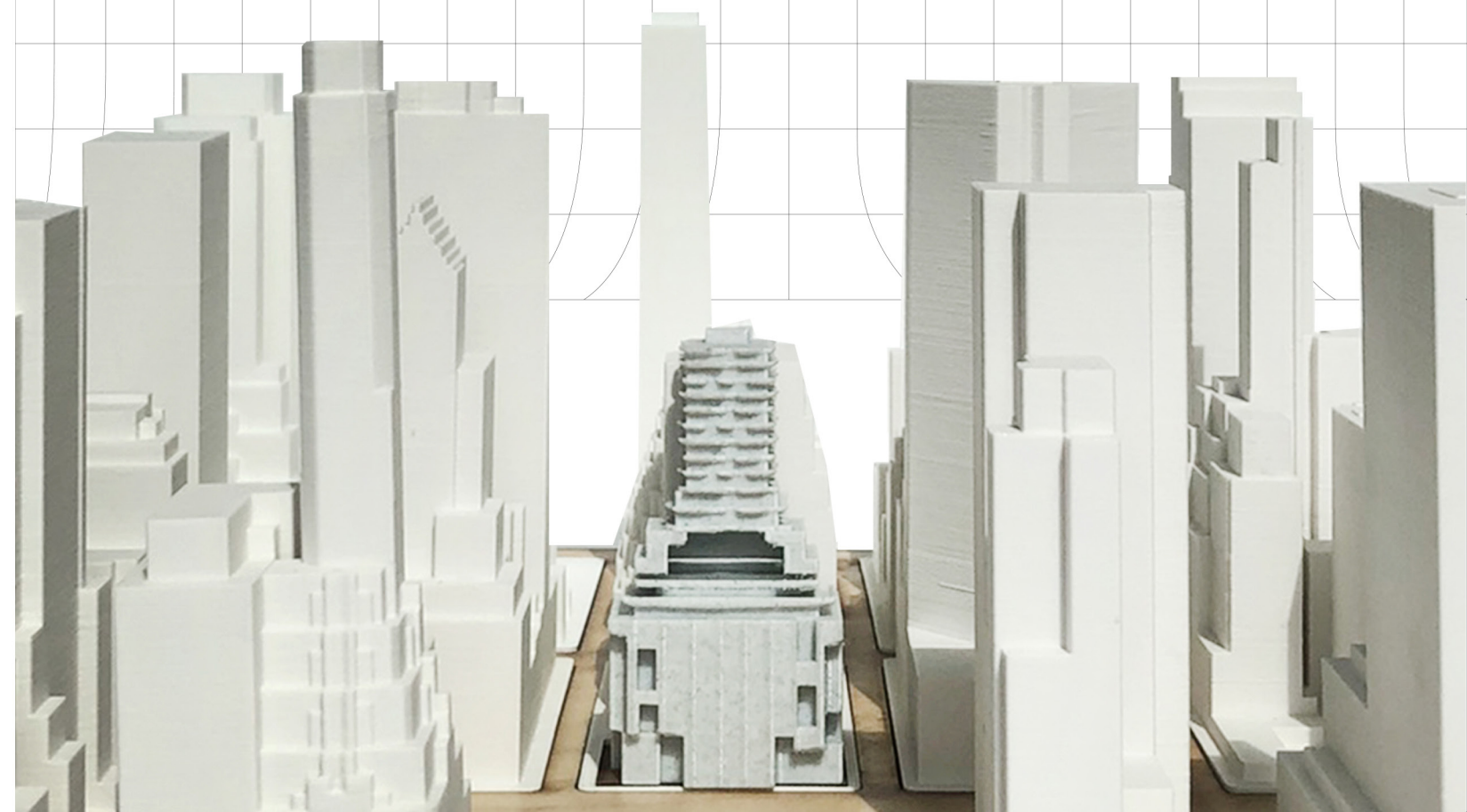


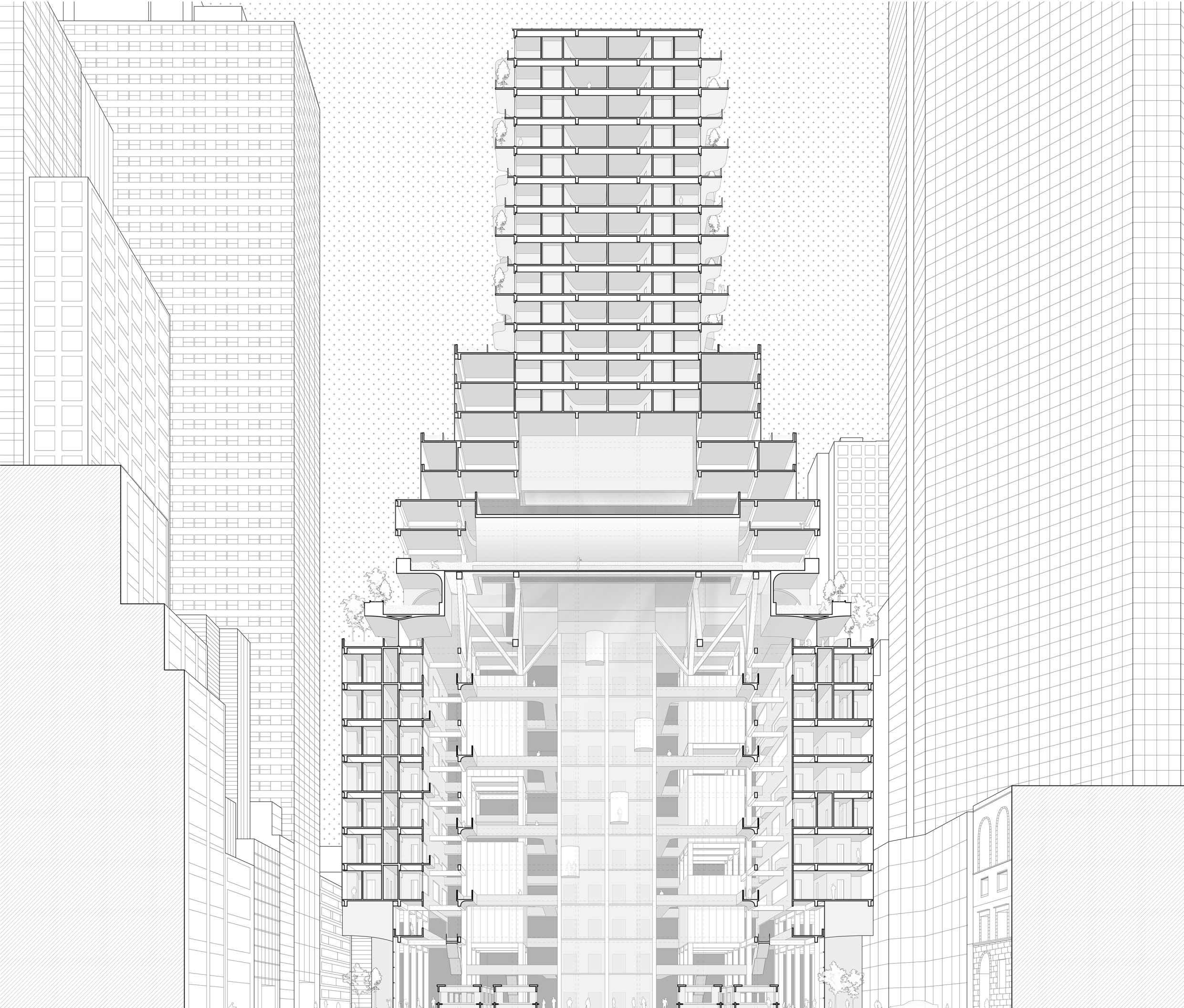
In 2017, Department of City Planning approved the Greater East Midtown Rezoning. residential conversion activity is part of its commitment. Among the buildings in the area, 85% are office buildings impacted with pandemic situation by any means. Approximately 40 office buildings are under C grade in energy score.



The building owner, Vornado, wants to demolish the current building and reconstruct a high-rise office building in the same location.

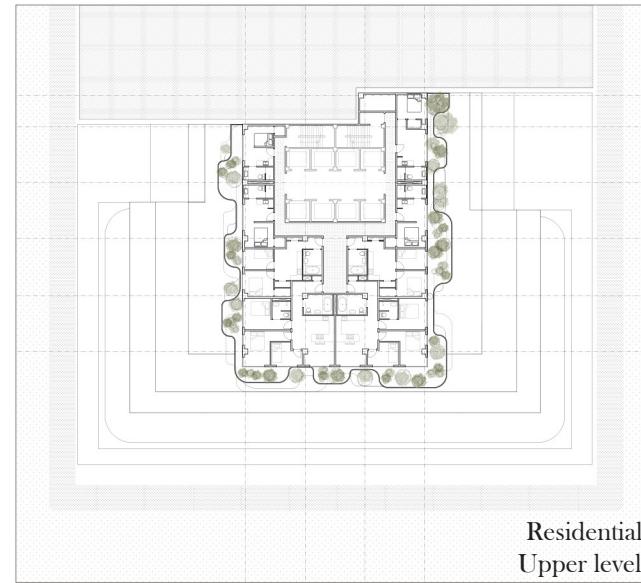
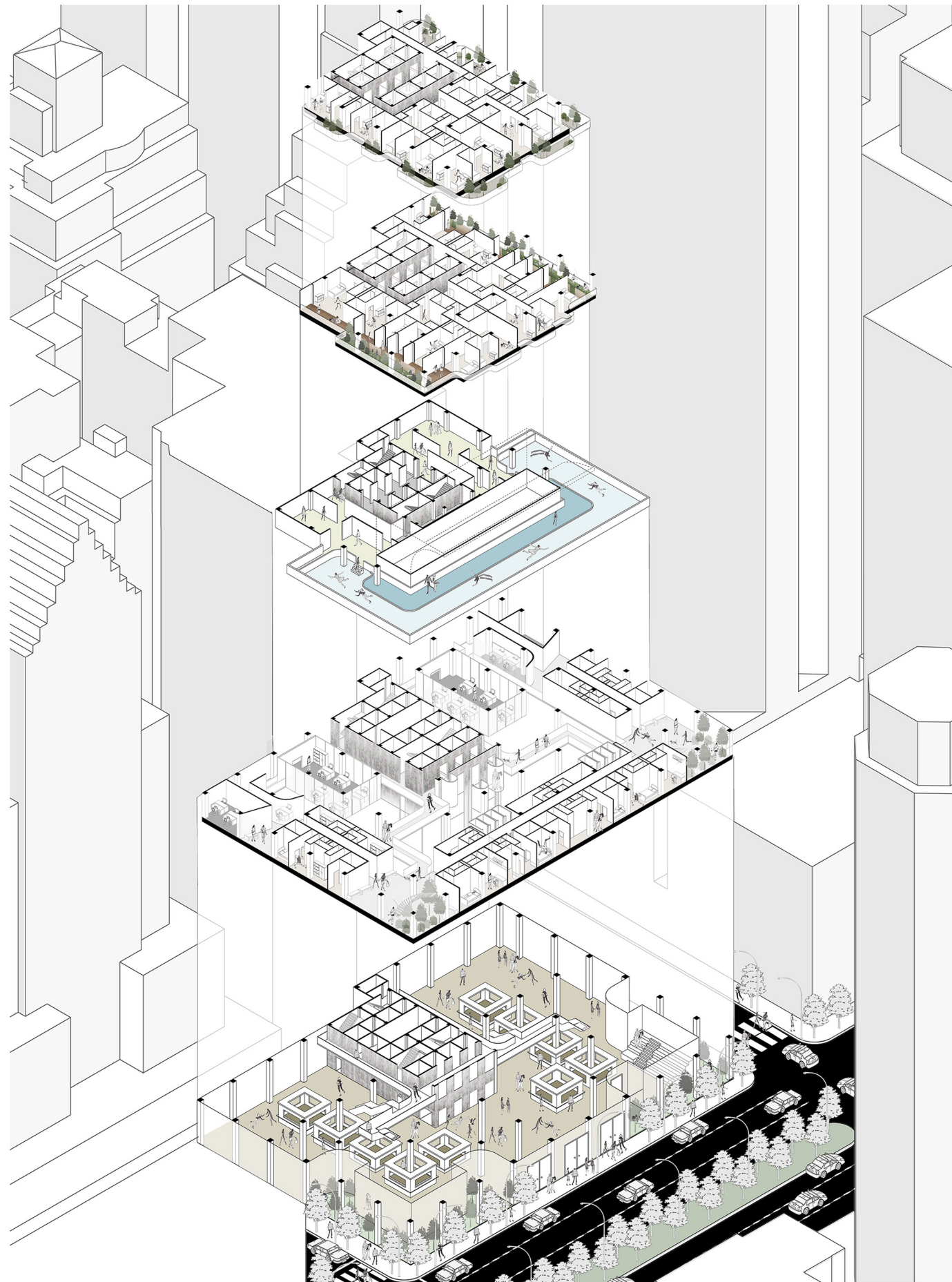
	2-10 floors	11-12 floors	13-15 floors	16-17 floors	18-20 floors	21-30 floors
Current						
Hotel (20ft from Facade)						
Residential (30ft)						
Office (40ft)						
	Current (All office)	30ft setback from facade	Atrium	Add & Carve		



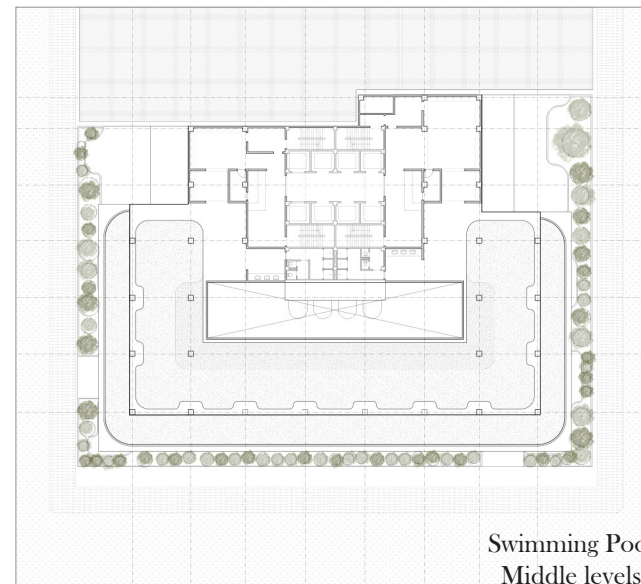


By changing the programs of the building, from office to residential, mix-use, and lodging, the building is affected by a 30ft setback from the facades. Because of this, the building has its own atrium and the sunlight come through the glass floor of the swimming pool with wavy visual effects. Both visitors who are using the lower parts of the building, which is lodging, and residents who are living at the upper level use the mix-use programs in wherein middle part of the building. The visitors can access the green space located on each floor of the lodging program and residents who live on the upper level can have their own balconies or use shared outdoor corridors.

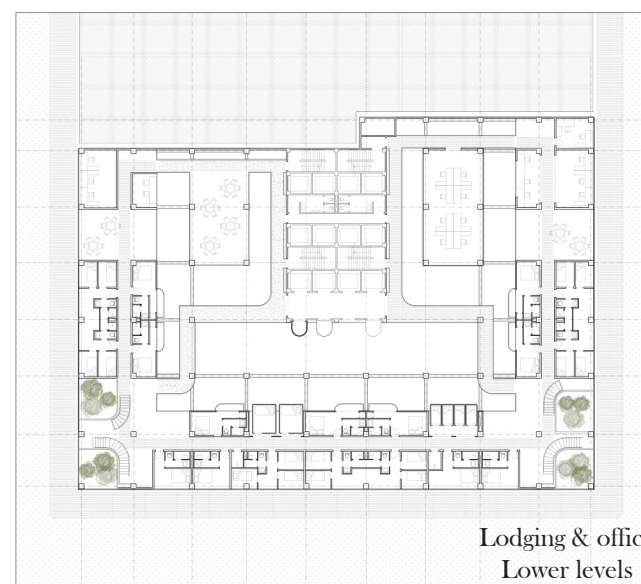




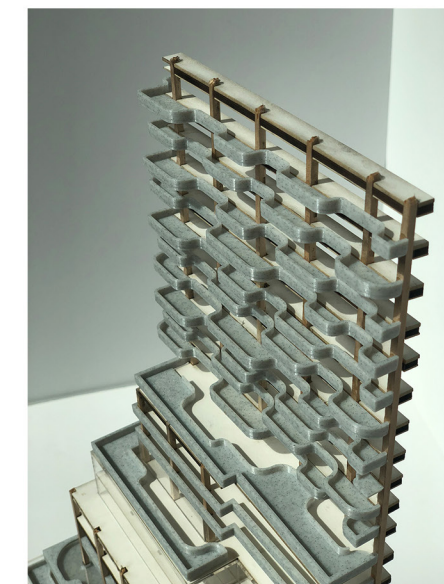
Residential
Upper levels



Swimming Pool
Middle levels



Lodging & office
Lower levels



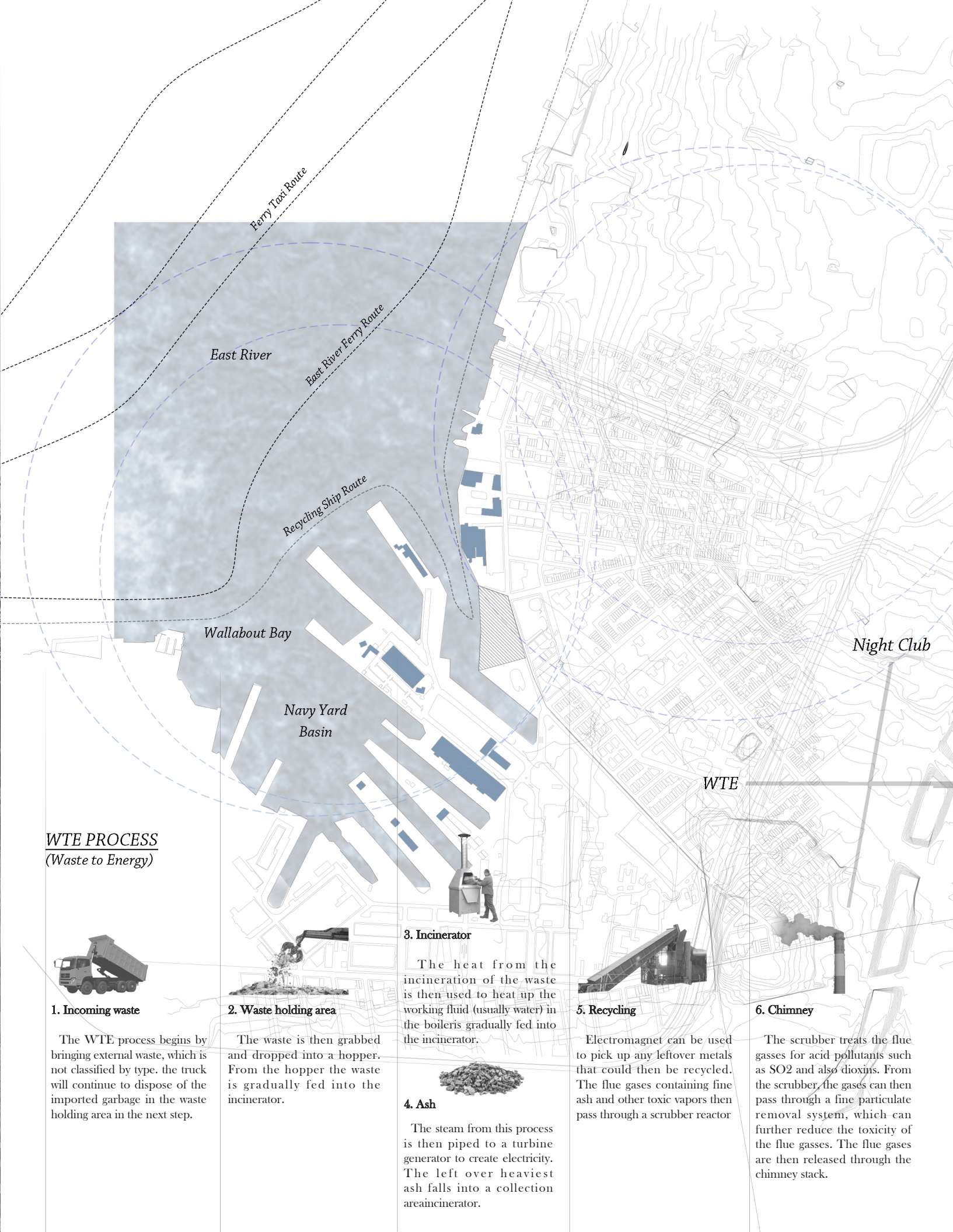
South Williamsburg Community Complex

Academic 2021SP_2nd Year
 M.Arch, Pratt
 Prof. Alexandra Barker
 Program : WTE(Waste to Energy)
 + Night club
 Site : Willamsburg, Brooklyn
 Group work (with Jack)

This building has multiple programs serving the community. These programs are a Waste-to-Energy facility, a recycling facility, community center functions, educational space and a nightclub. The programs are closely intertwined and visually connected to each other.

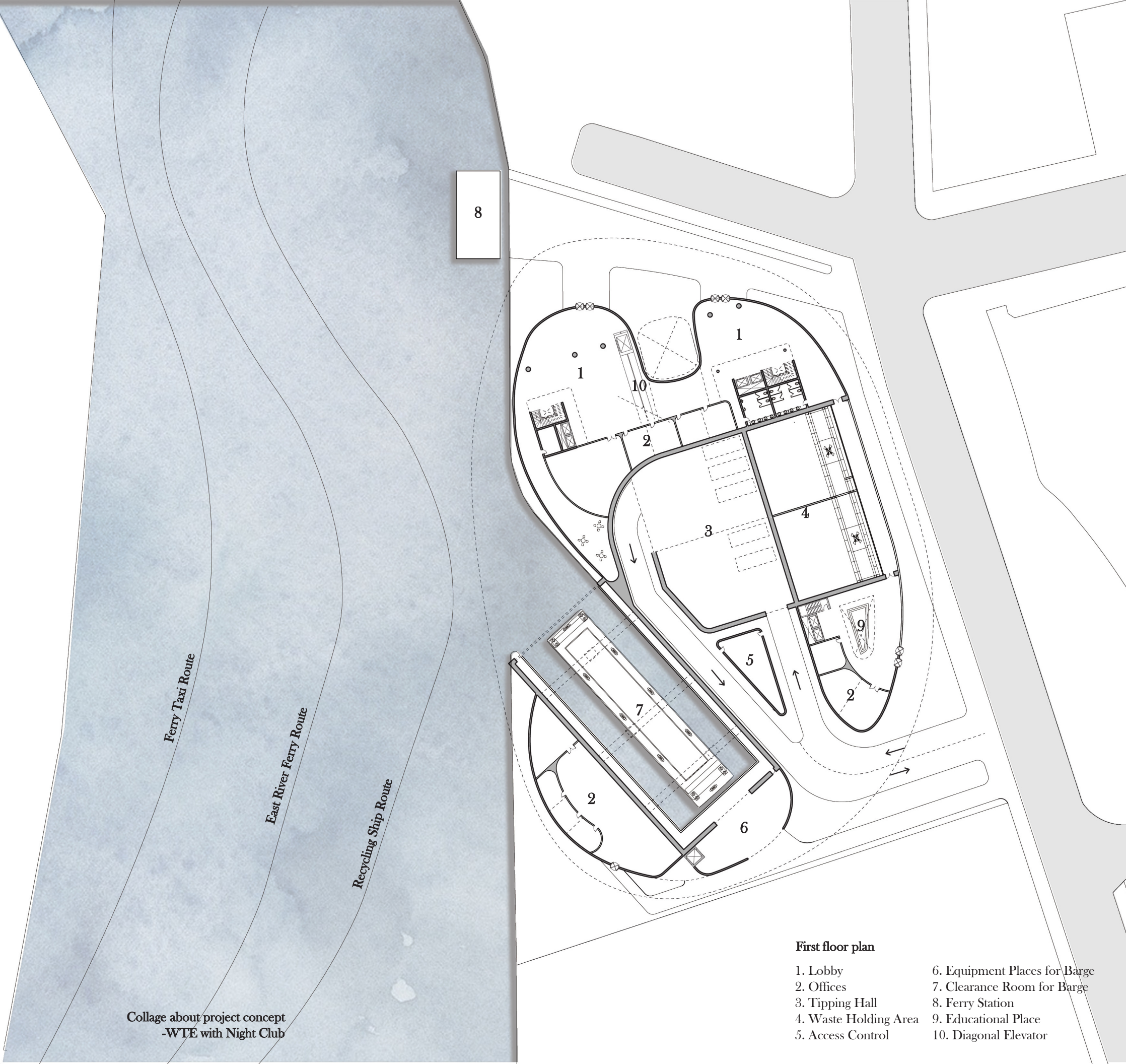
The courtyard space introduces natural light to the building, and a diagonal elevator moves alongside the courtyard. The diagonal elevator provides a unique way of transportation and resembles a conveyor belt in the waste management process.

Role : render images, producing floors, sectional plans, diagrams
 (Rhino, Photoshop,Illustrator)



Waste to energy is for humans, but it is still unfamiliar to people. It is a space for people and the environment, but what people avoid is the most important part of this project. I wanted to present a part where people were most excited and many generations could observe the process of the program at a glance as they formed a space together.

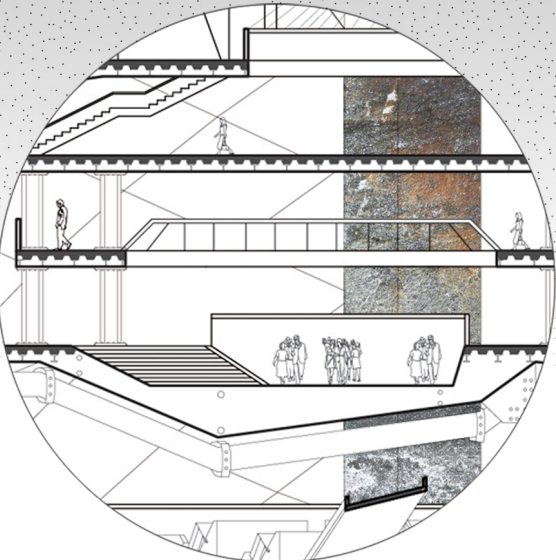
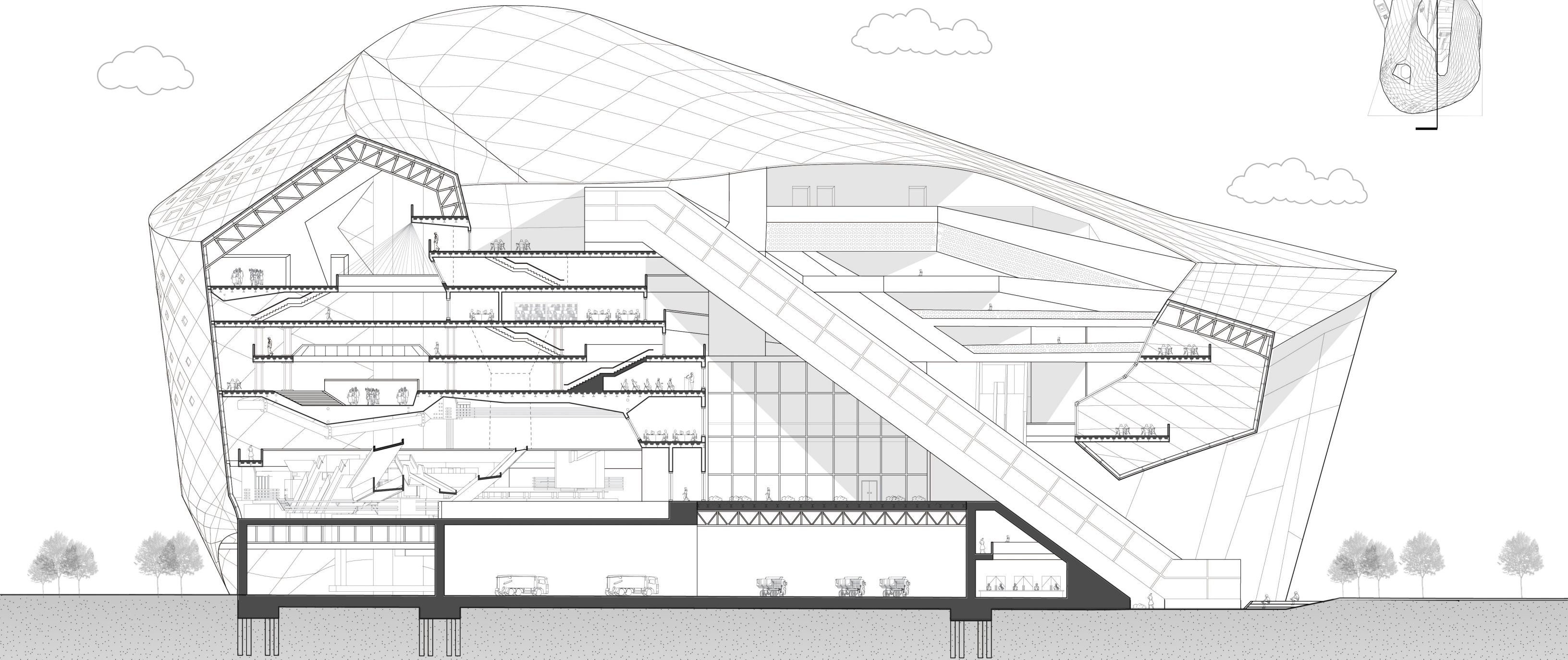
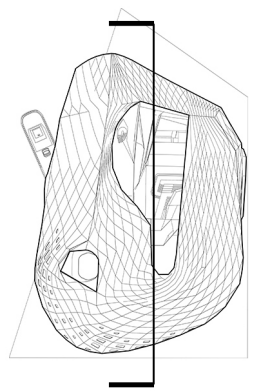
The collage below shows the concept of this project. Through the diagonal elevator, people can enjoy the joy of sight at the same time as moving the space. And I wanted to present a **space for industrial machinery to enjoy together**, not to be avoided anymore.



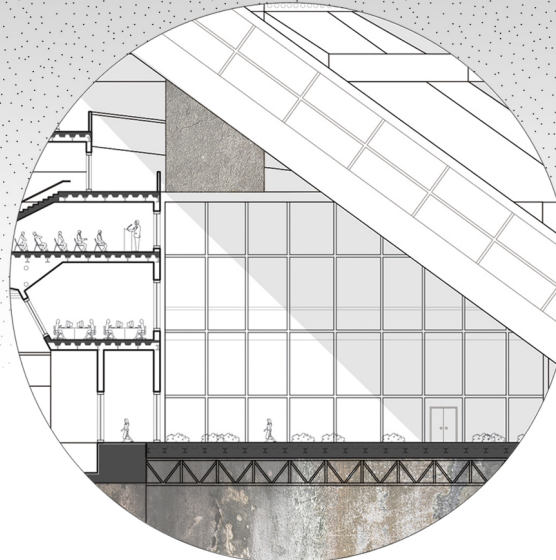
Collage about project concept
-WTE with Night Club

First floor plan

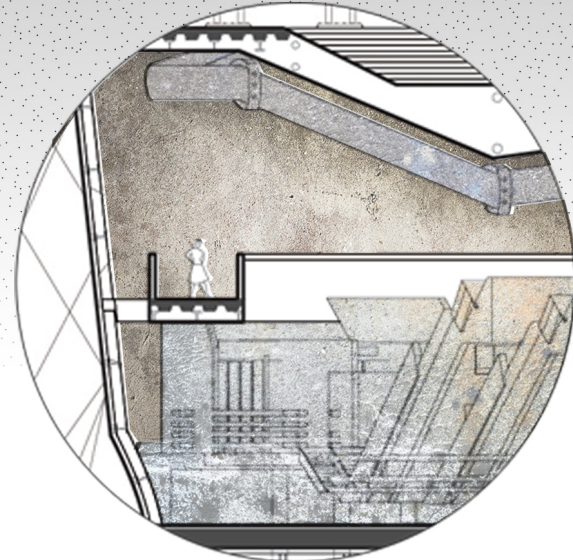
- | | |
|-----------------------|-------------------------------|
| 1. Lobby | 6. Equipment Places for Barge |
| 2. Offices | 7. Clearance Room for Barge |
| 3. Tipping Hall | 8. Ferry Station |
| 4. Waste Holding Area | 9. Educational Place |
| 5. Access Control | 10. Diagonal Elevator |



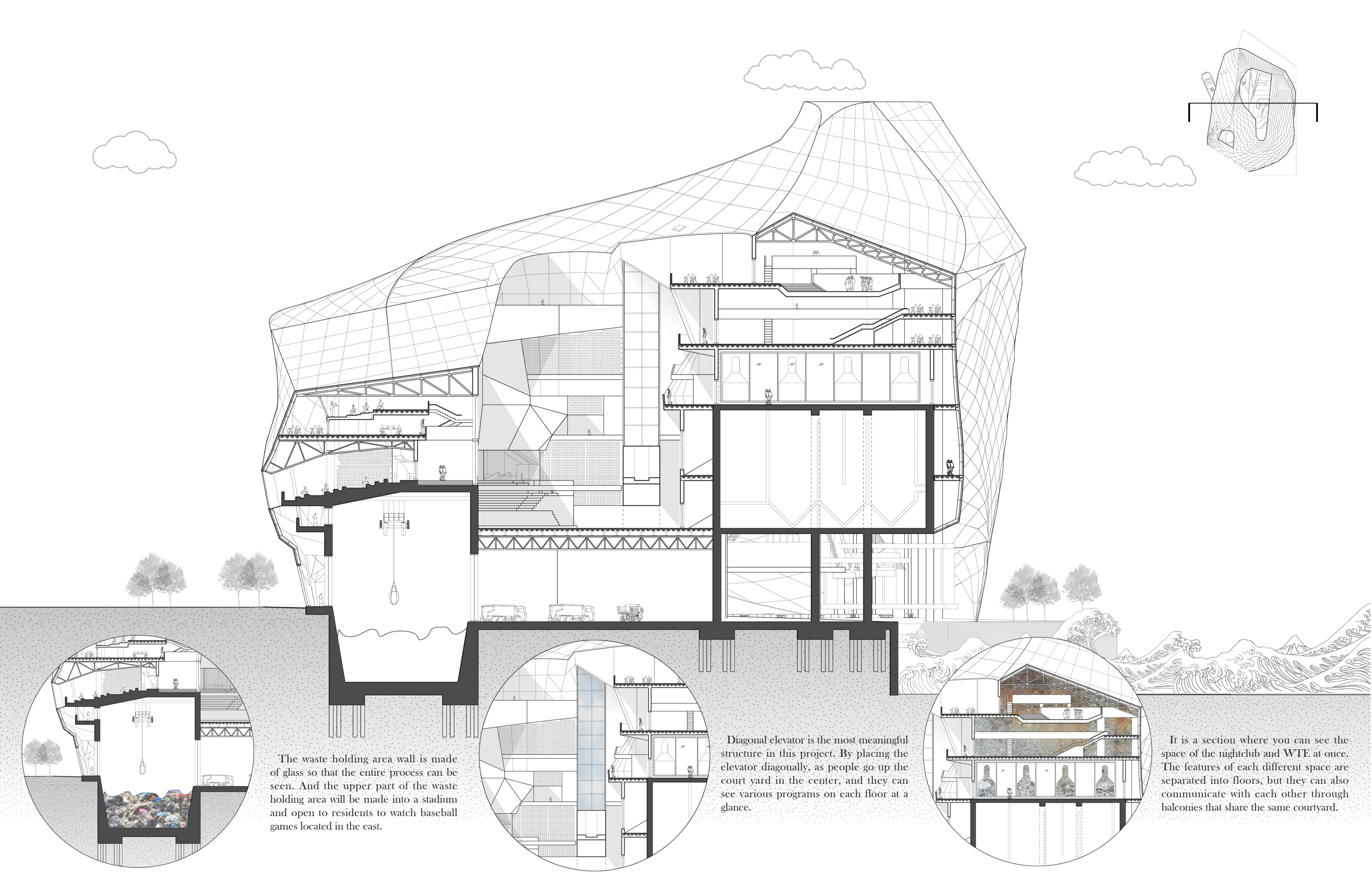
The vertical language of the WTE and recycling machines was penetrated through different layers so that different programs could be experienced at any time.



The courtyard space introduces natural light to the building, and a diagonal elevator moves alongside the courtyard. The diagonal elevator provides a unique way of transportation and resembles a conveyor belt in the waste management process.



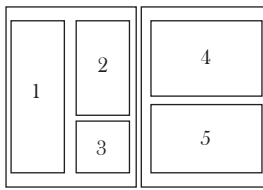
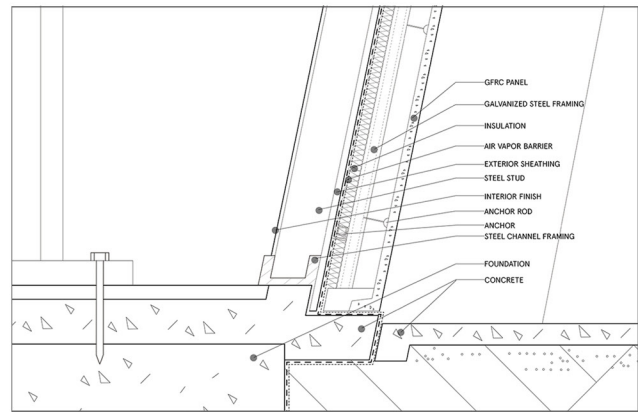
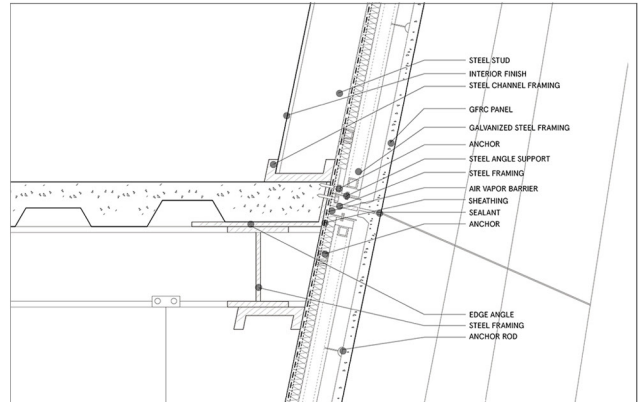
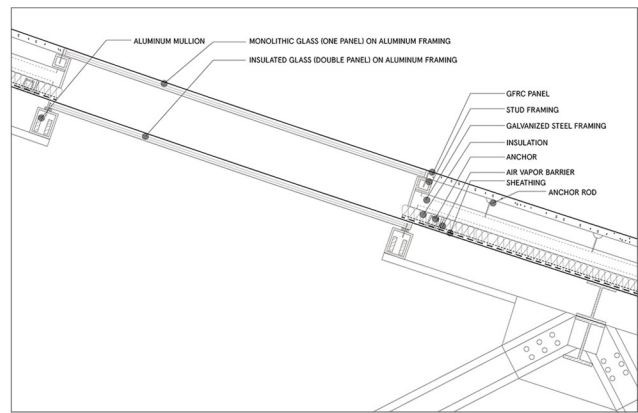
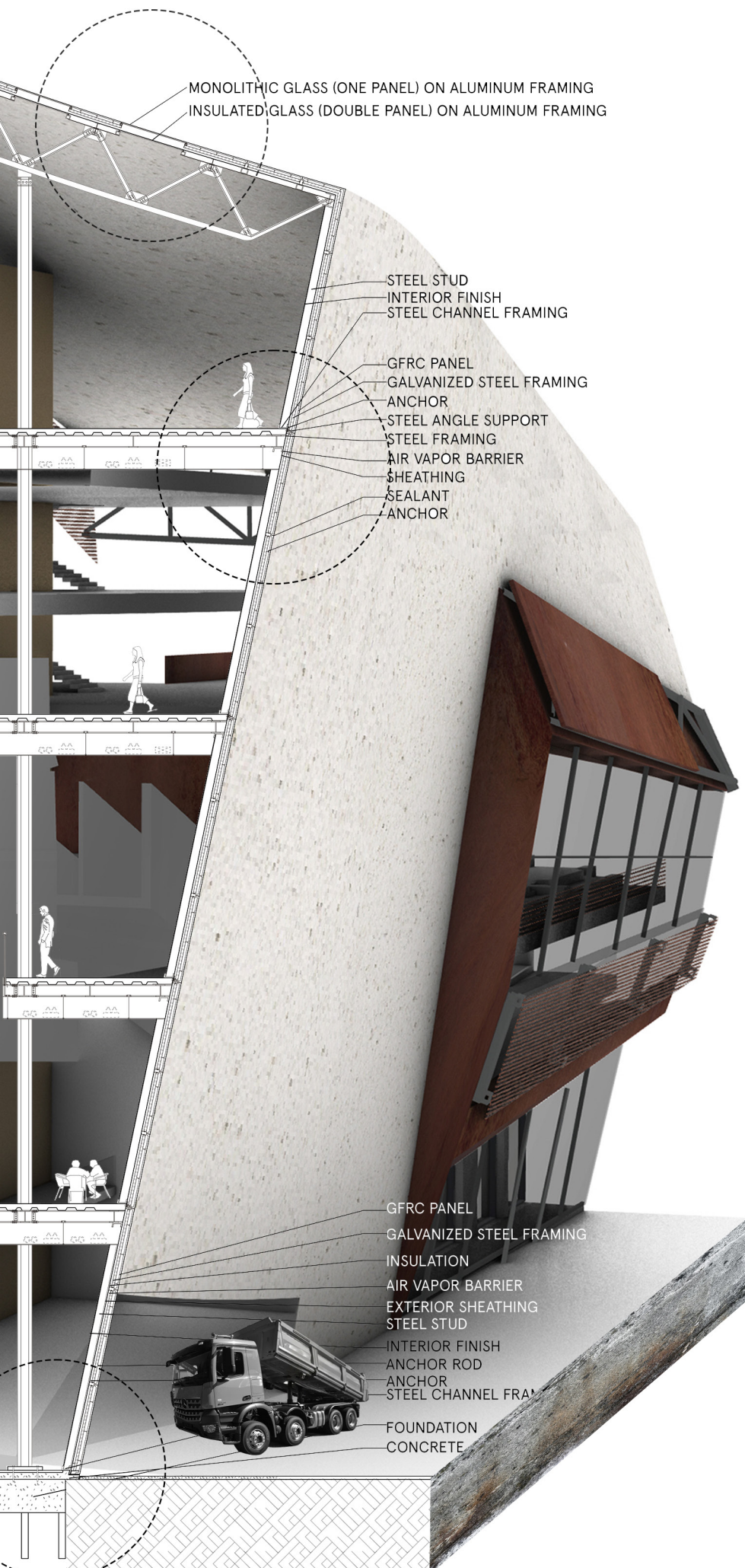
The machine was exposed as much as possible and a circulation line was created around the machine to construct an educationally helpful program. As people move to each program, they will naturally know the process of WTE.



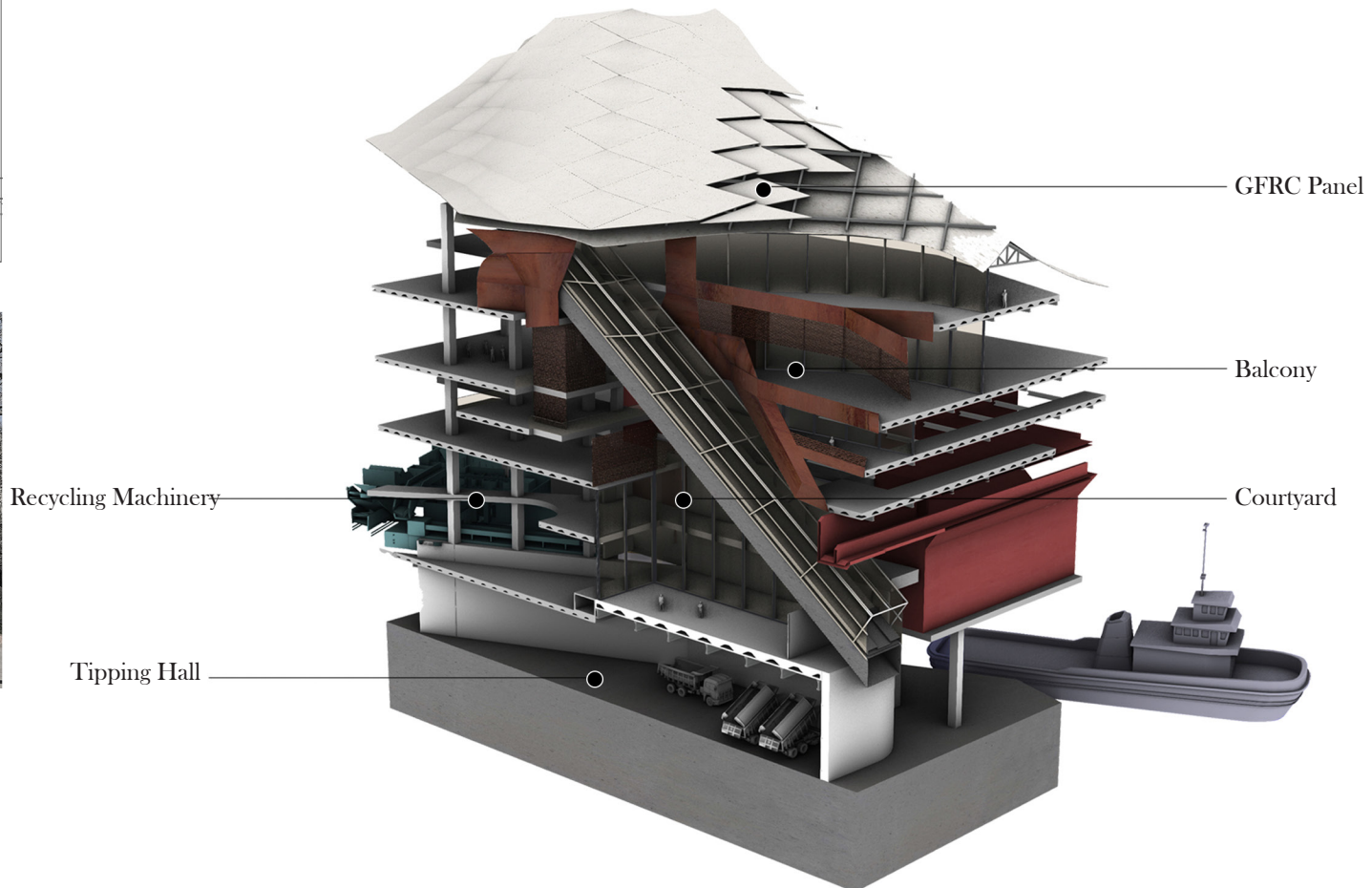
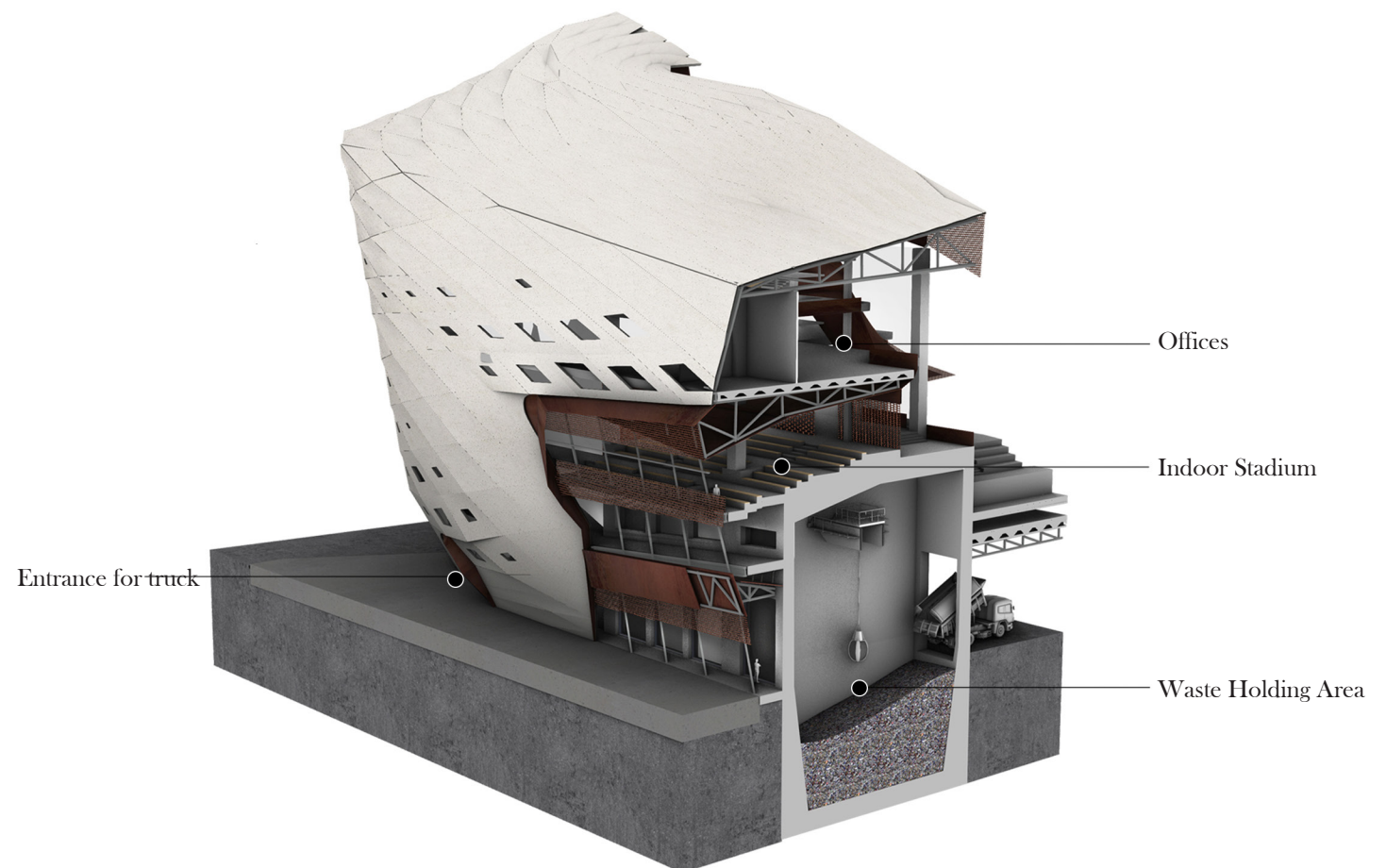
The waste holding area wall is made of glass so that the entire process can be seen. And the upper part of the waste holding area will be made into a stadium and open to residents to watch baseball games located in the east.

Diagonal elevator is the most meaningful structure in this project. By placing the elevator diagonally, as people go up the courtyard in the center, and they can see various programs on each floor at a glance.

It is a section where you can see the space of the nightclub and WTE at once. The features of each different space are separated into floors, but they can also communicate with each other through balconies that share the same courtyard.



1. Wall section (West-East)
2. Detail section of GFRP, weathering steel
3. View from south direction
4. Chunk A
5. Chunk B



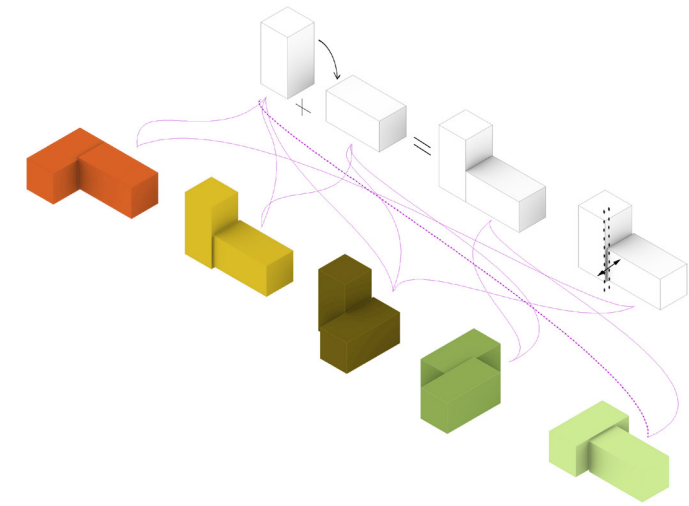
Reconnect Farragut

Academic 2020FA_2nd Year
M.Arch, Pratt
Prof. Stephanie Bayard
Program : Residential
Site : Farragut Houses, Brooklyn
Group work (with Theo Guo)

Project looks at Farragut Houses' Current issue at two different point of view. One is to reimagine the living conditions and unit types that defines the lifestyle of the low income housing in the area; Another is, by removing the solid boundaries that was created by the green spaces, to redesign the landscape and public spaces that gathers people in the community.

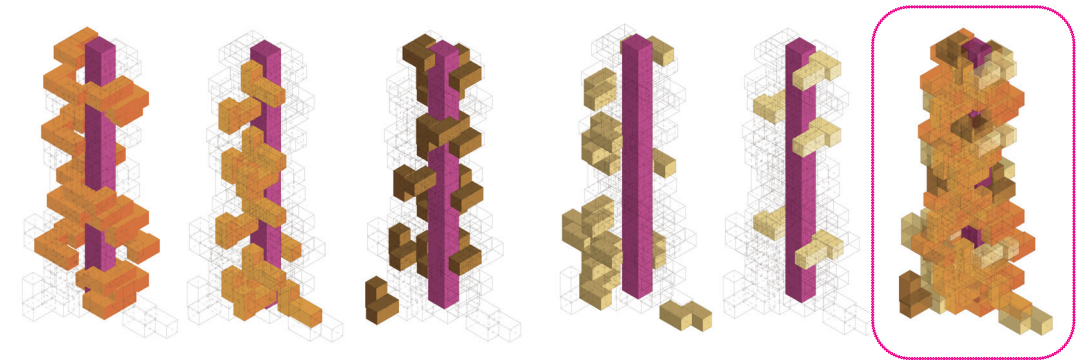
The two system was then translated into two distinct structures that were combined together at the selected site, one as the stacking of units and another as an organic shape contains public space and circulations.

Role : render images, producing floors, sectional plans, diagrams
(Rhino, Photoshop, Illustrator)



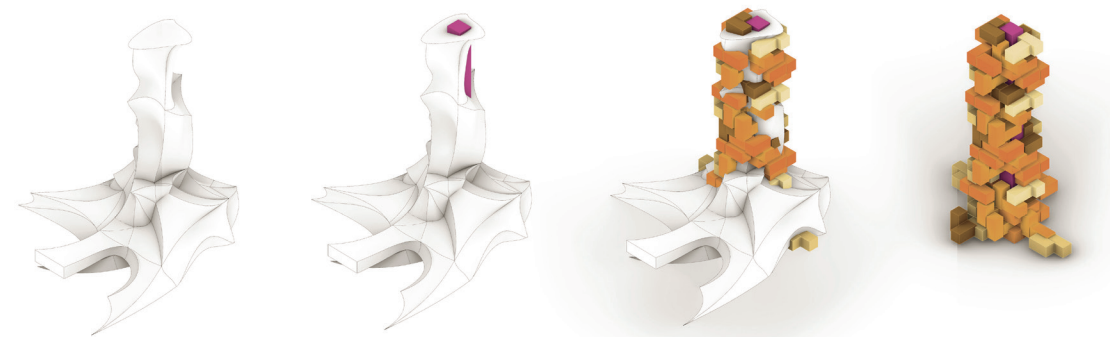
Units Typology

After rotating and moving the mass and trying various combinations, made five types of units.



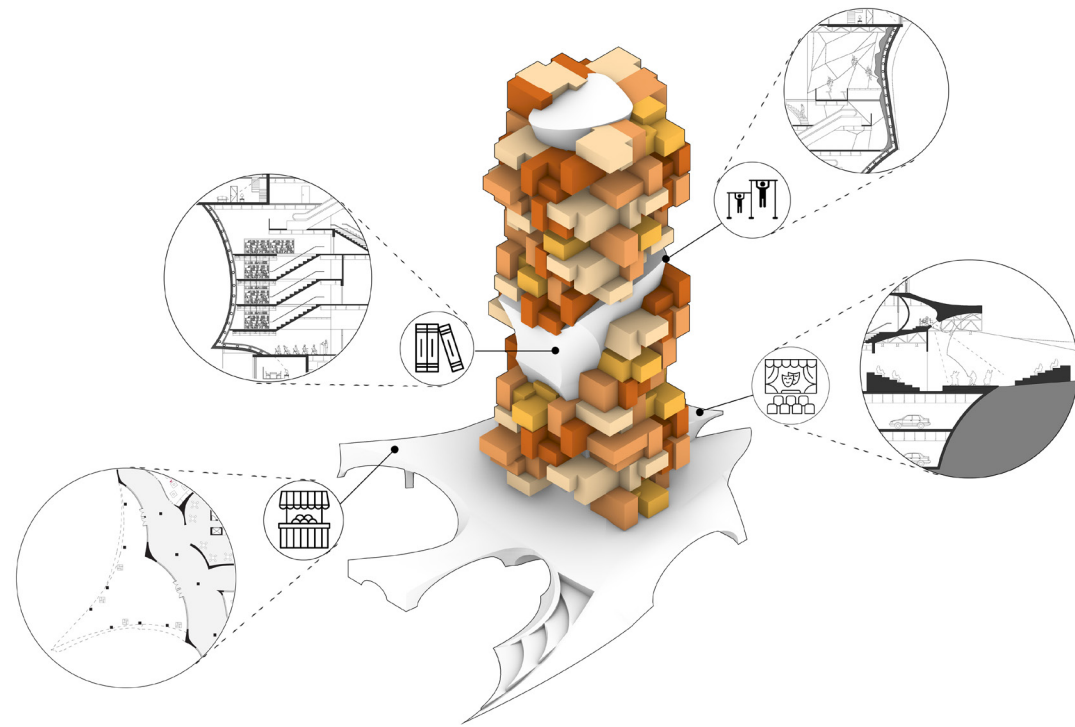
Units Aggregation

The combination of the five units in various directions based on the core resulted in the rightmost mass shape.



Unit Aggregation with Curvy Mass

The two system was then translated into two distinct structures that were combined together at the selected site, one as the stacking of units and another as an organic shape contains public space and circulations.

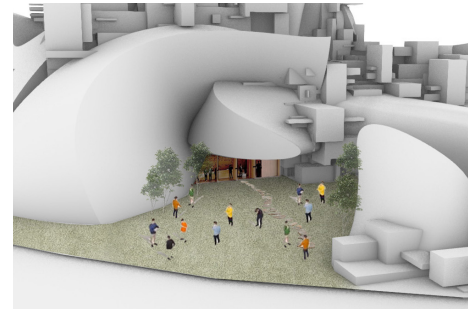


Program Diagram

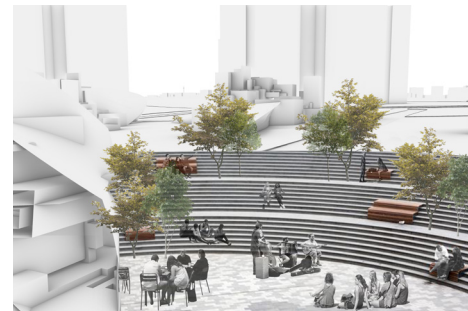
Flea market, Library, Gym/Climbing, Theater (Clockwise from Left Side)



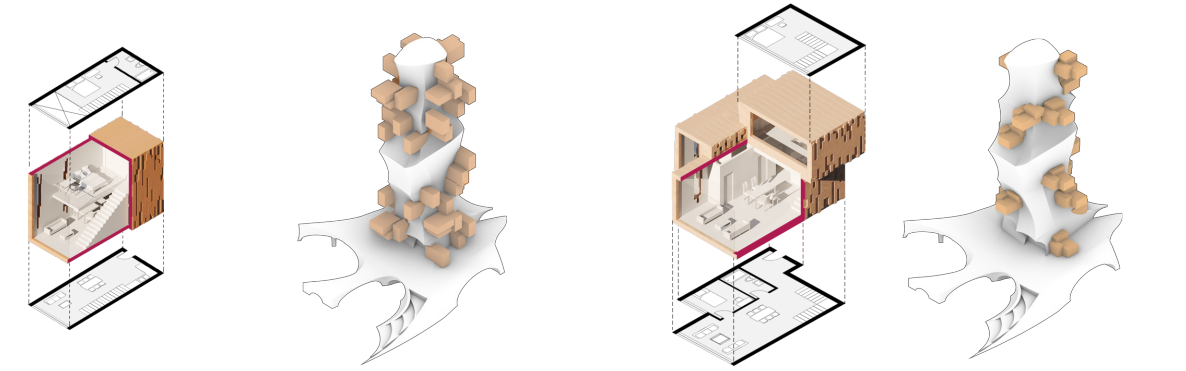
Central Plaza



Flea Market

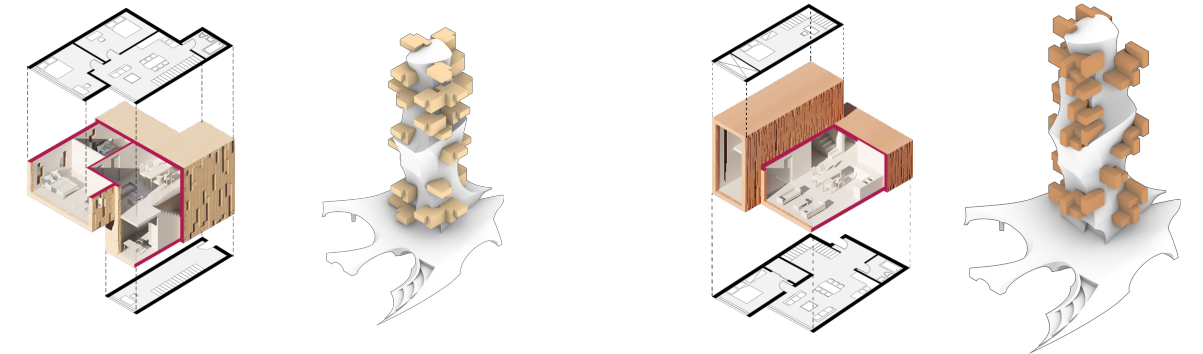


Sunken



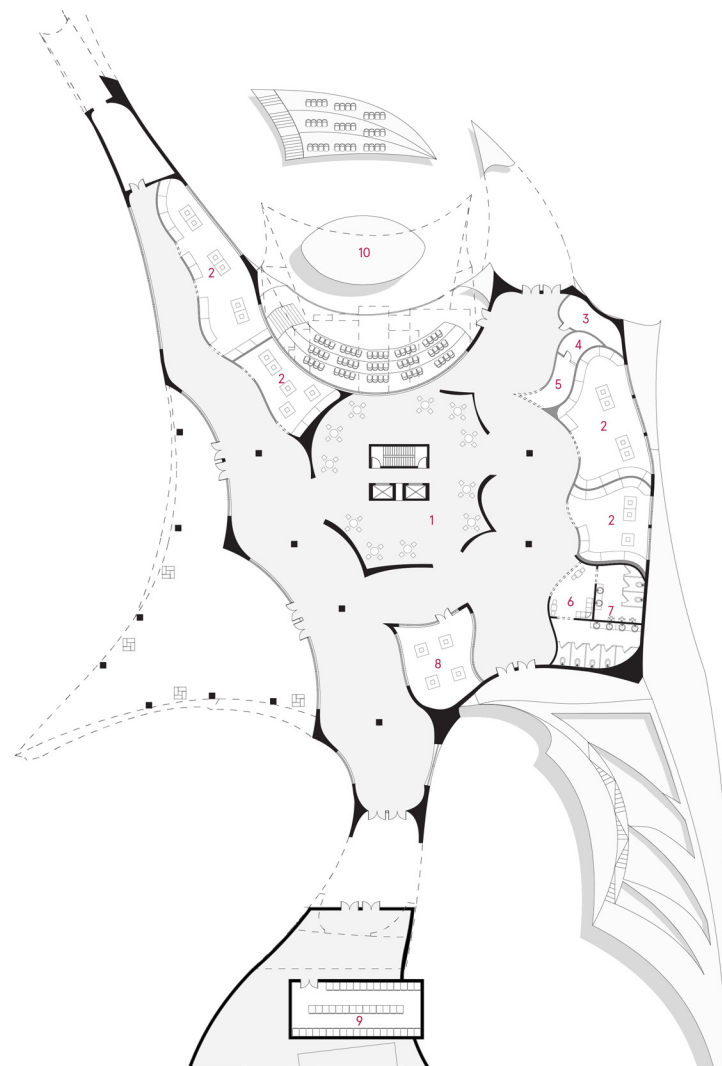
Studio Unit

One Bedroom Unit

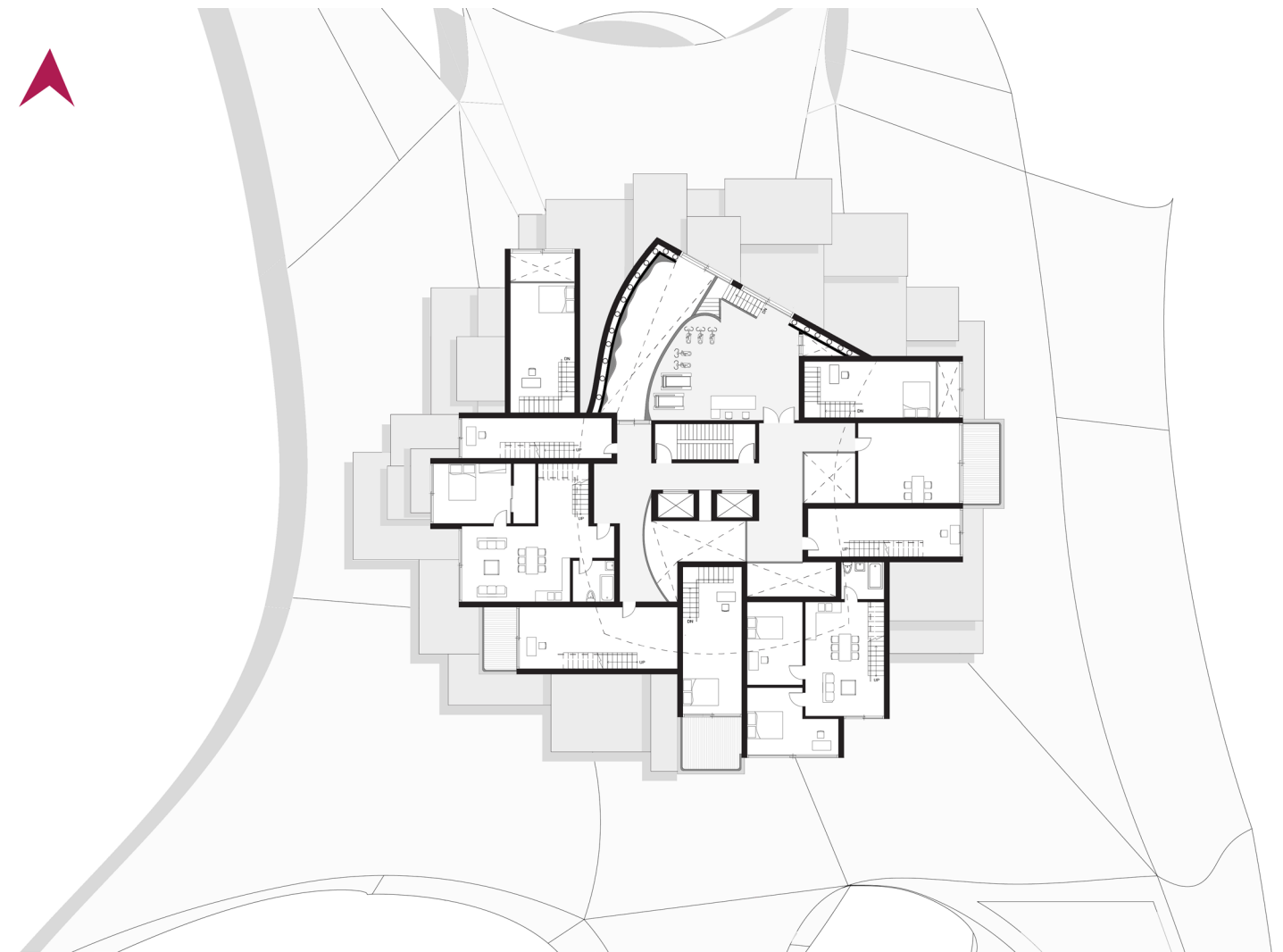


Two Bedroom Unit-A type

Two Bedroom Unit-B type



- 1. Lobby
- 2. Shop
- 3. Nursing Room
- 4. Information
- 5. Security Room
- 6. Rest Zone
- 7. Toilet
- 8. Workshop
- 9. Laundry Room
- 10. Theater

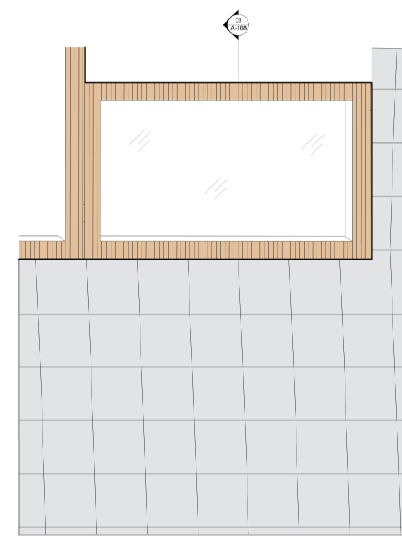
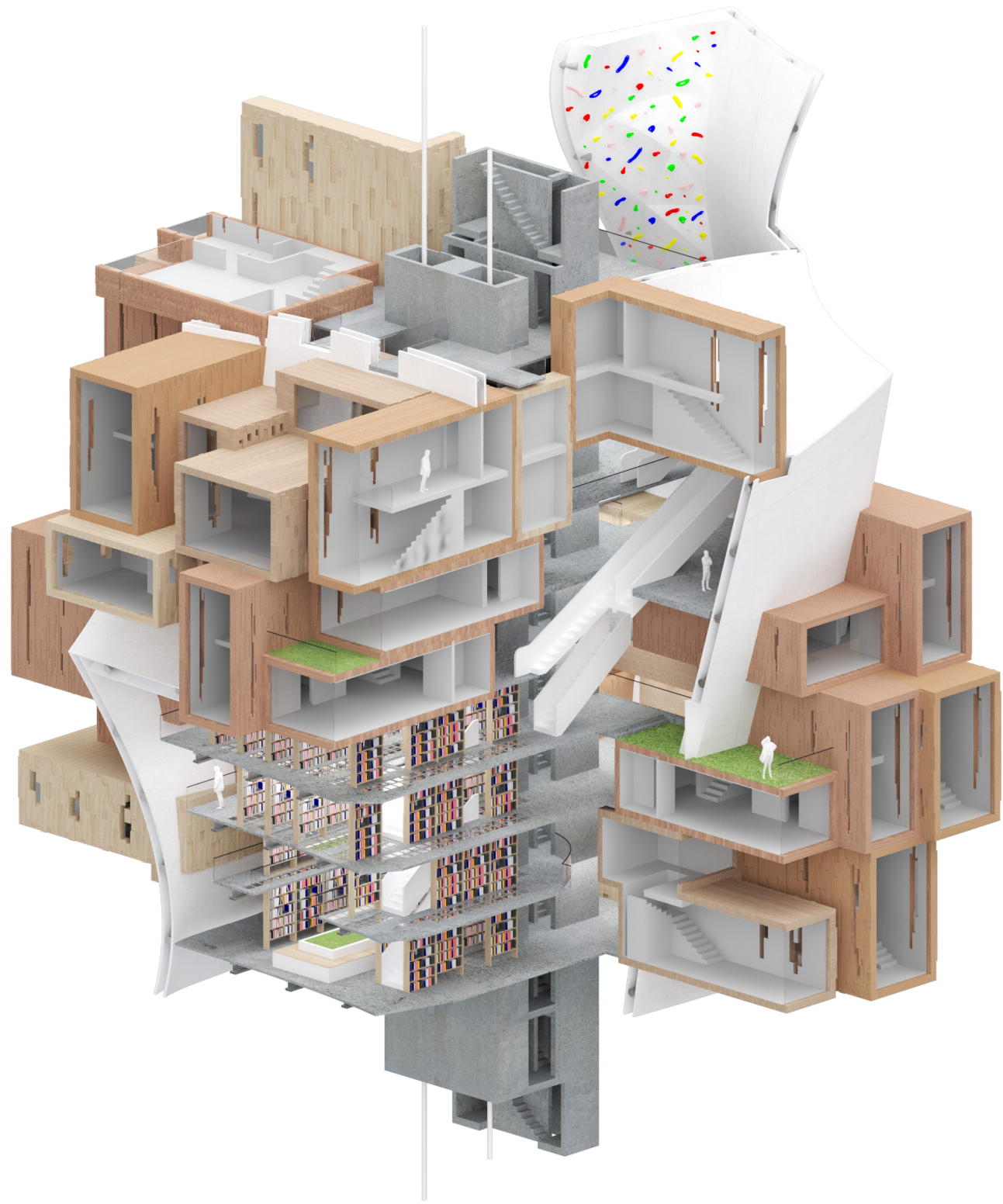


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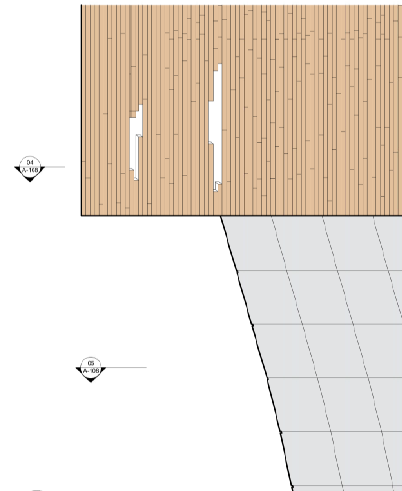
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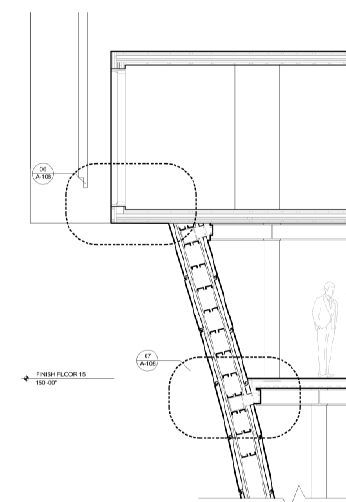
View from central plaza



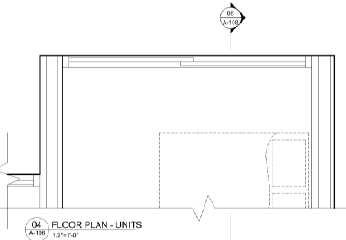
01 ELEVATION SOUTH
A:85 1:200



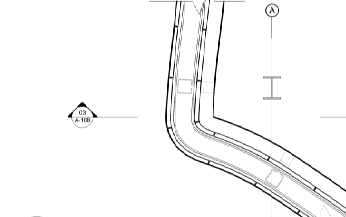
02 ELEVATION WEST
A:85 1:200



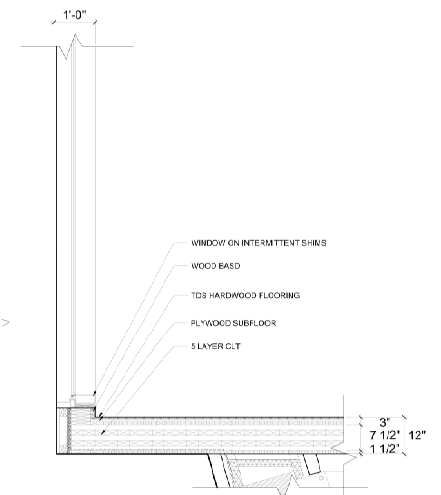
03 WALL SECTION
A:85 1:200



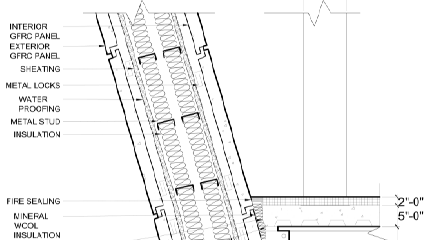
04 FLOOR PLAN - UNITS
A:85 1:200



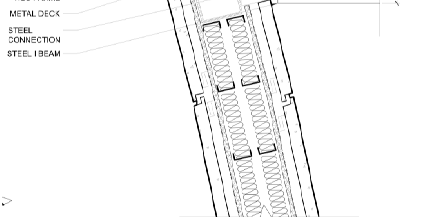
05 FLOOR PLAN - CORE
A:85 1:200



06 DETAIL SECTION 1
A:85 1:200



07 DETAIL SECTION 2
A:85 1:200



08 DETAIL SECTION 2
A:85 1:200



Time Scape

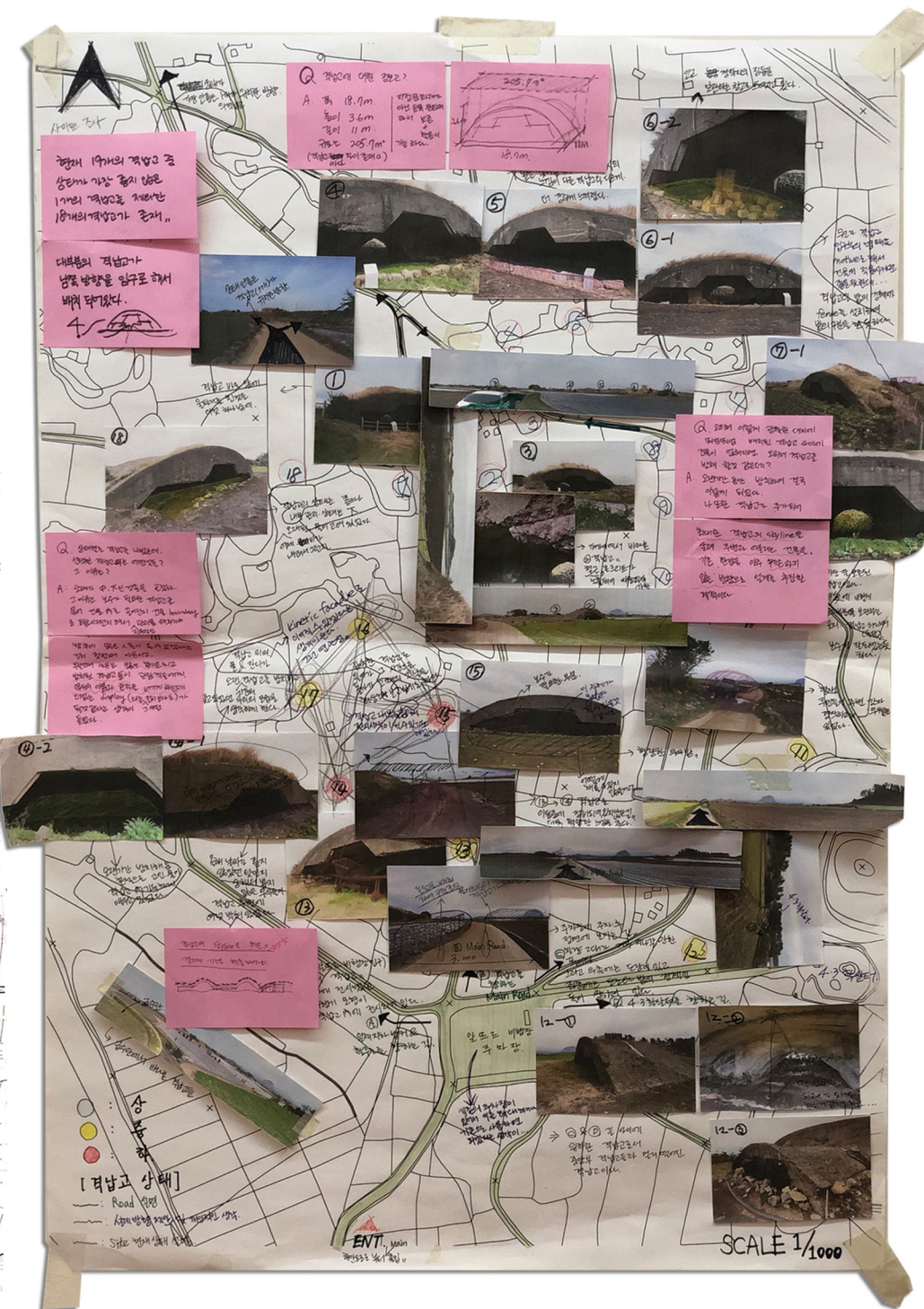
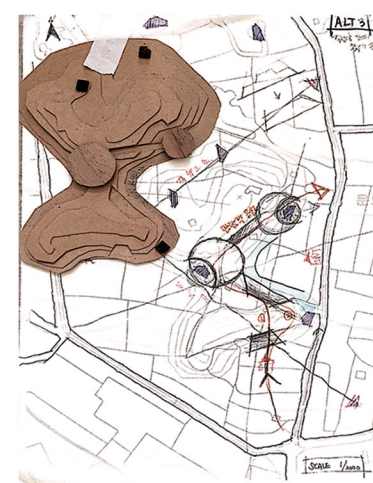
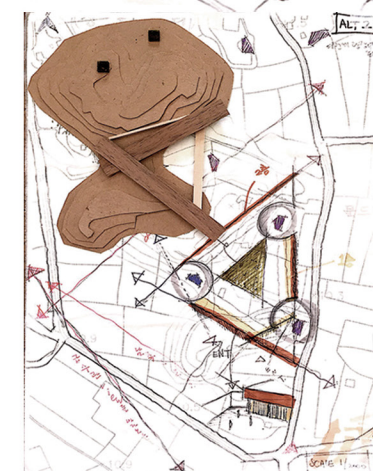
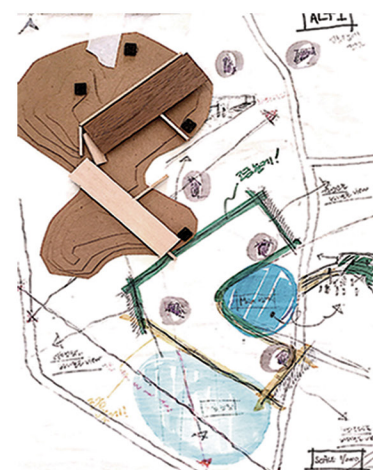
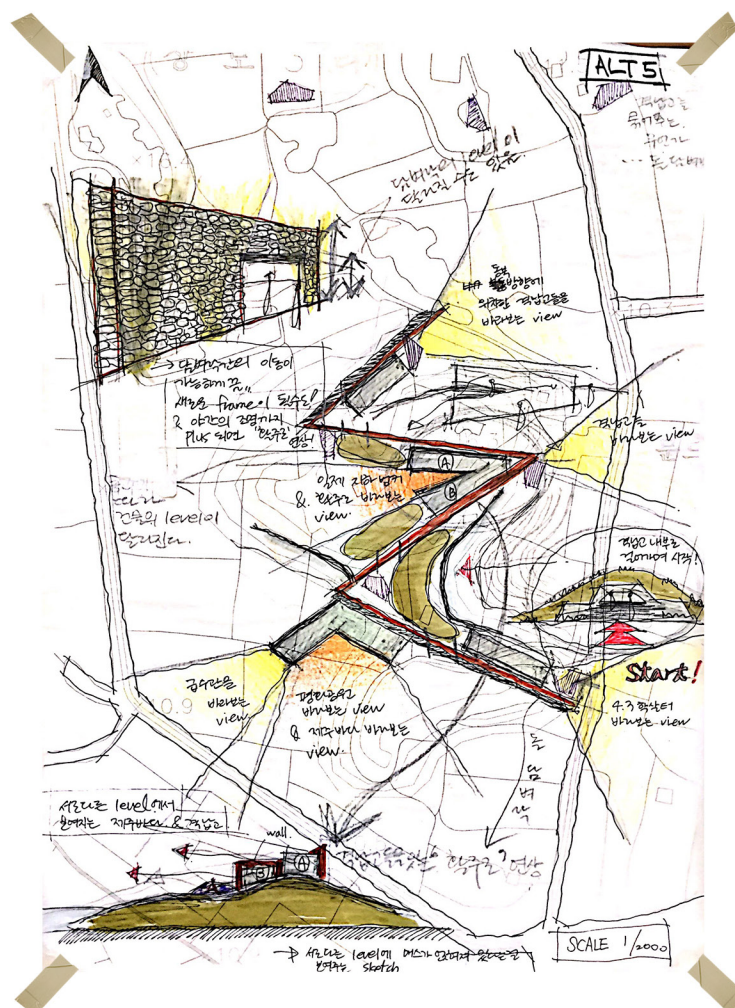
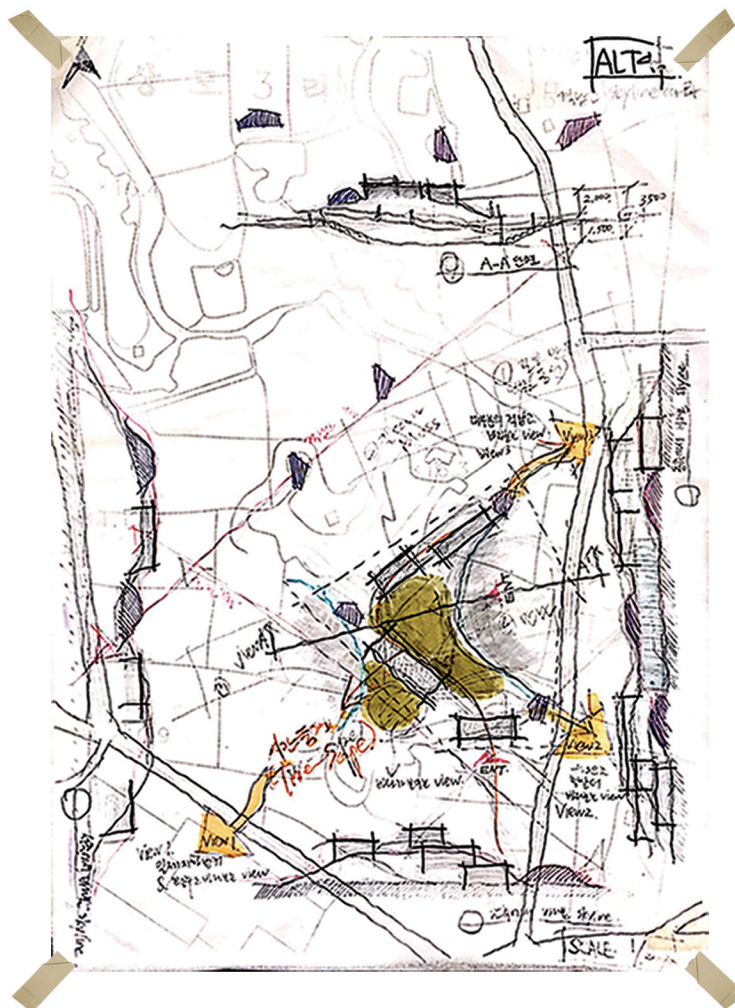
Academic 2016_5th Graduation Year
B.Arch, Yeungnam Univ.
Program : Memorial Center
Site : Jeju island, South Korea
Individual work

In 1937, when the Chinese-Japanese War broke out, the sky over Jeju Island was filled with airplanes announcing the beginning of the war. In Jeju Island, which lies between China and Japan, the Altteureu region was one of the major military hot spots between the two countries, especially as it is located in the middle of the war.

In the middle of the fierce war, Japan prepared for a showdown on Jeju Island in March 1945 when the U.S. military invaded Iosima and launched an offensive against large cities on the mainland, including Tokyo.

The 19 vaulted hangars of heavy reinforced concrete constructed at this time contain the trials and history of the time.





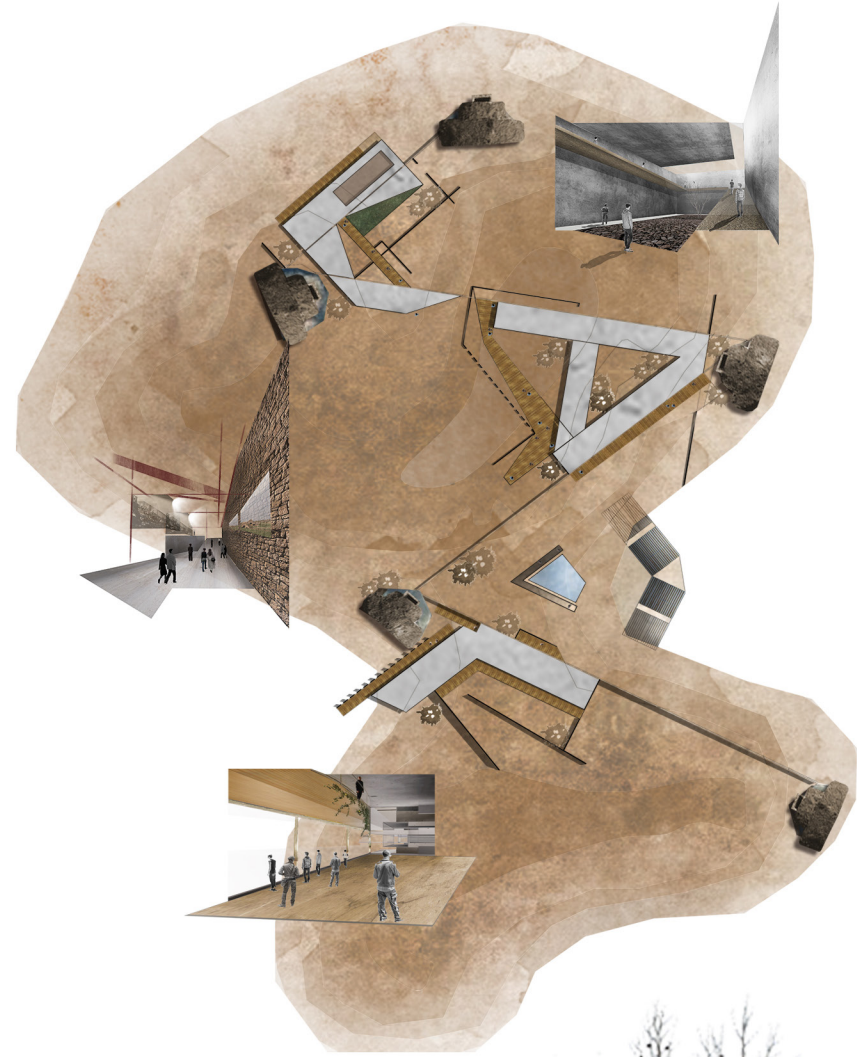
The land that had been waiting for us in the past.

It is currently the widest field on Jeju Island, South Korea. The Alteureu Airfield was designated as Registered Cultural Heritage No. 39 on May 31, 2002 and is owned by the Ministry of National Defense. It is currently used as a potato and a radish field for residents, and there is not a single street lamp. Due to such poor environment, the site has not been seen as a tourist destination, which could be considered an abandoned place for the nation.

I visited Jeju Island and studied 19 hangar conditions one by one, classifying them as upper, middle, and lower and reinterpreted them as a **dark-tourism memorial center**.

1	2	3	4
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- 1 Alt#4 sketches
2. Alt#5 sketches
3. Alt models and sketches
4. Categorized according to 19 hangar conditions



Remembrance

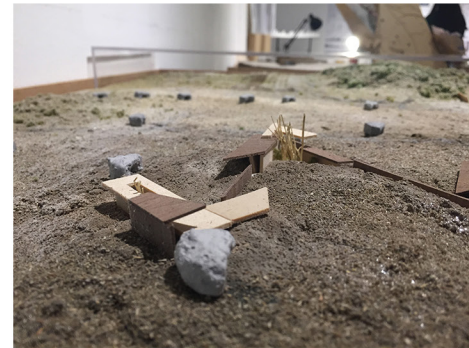
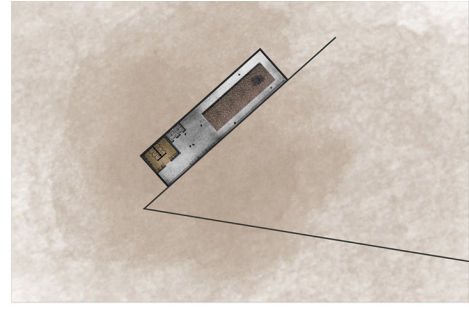
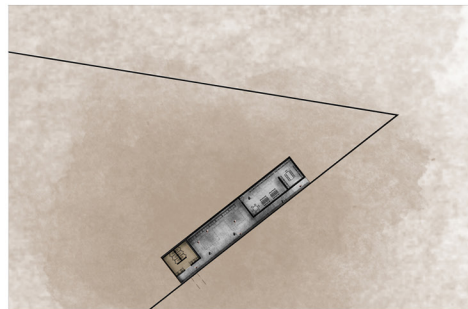
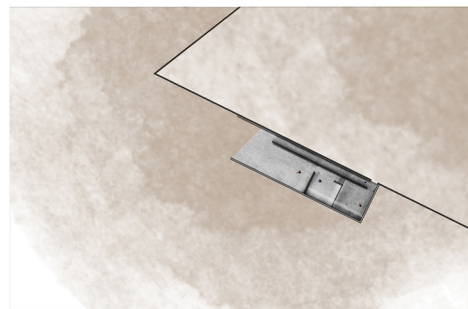
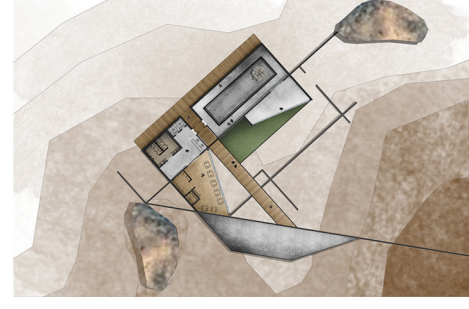
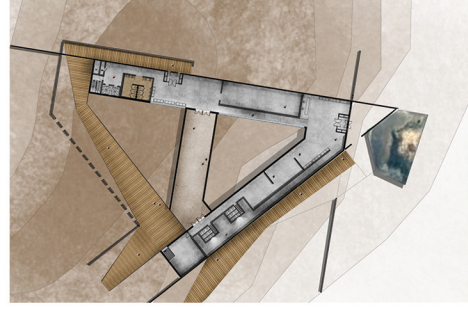
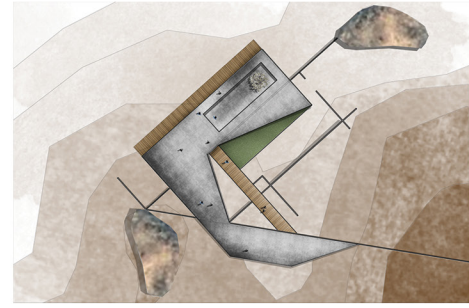
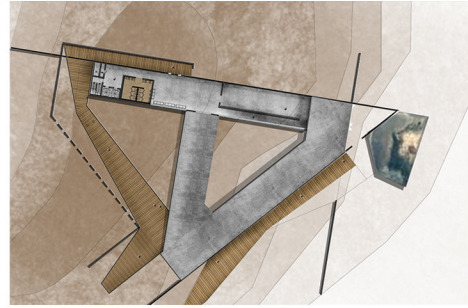
Most of Jeju is made up of hills and fields. I wanted to use this point to show the **harmony of buildings, hangars and nature** within the boundaries of not damaging the skyline of nature. When I was thinking about what I would display or what I would publicize, I thought that I should make the best use of locality and display them on subjects that would go with that.

First, the sense of "touch" was gained and the characteristic of Jeju Island was combined so that only the wind could blow inside the building. This meant that the first interest was finally given to the land of Alteureu, where no one had ever visited.

Second, visitors can walk along the wall and watch videos of the Chinese-Japanese War, and watch the hangar outside to see the results of the war.

Lastly, under the theme of "Remembrance", a memorial hall was designed to honor Jeju Island residents who were killed countless times while building the Alteureu airfield. The nearby 4.3 massacre site also wanted to continue the meaning of the Jeju people's massacres and make sure that the memorial service was carried out only in this space.





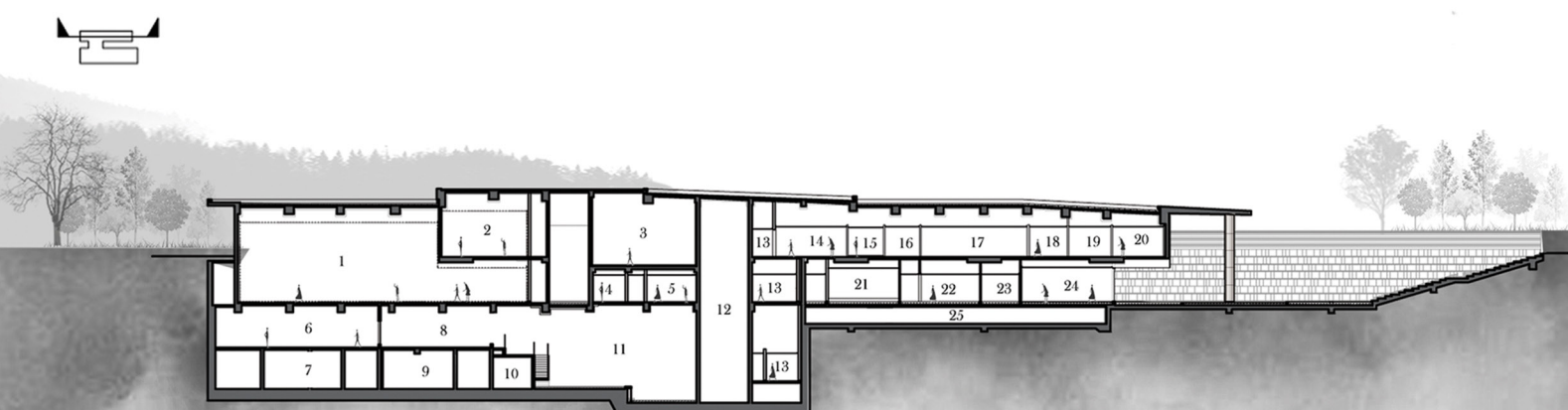
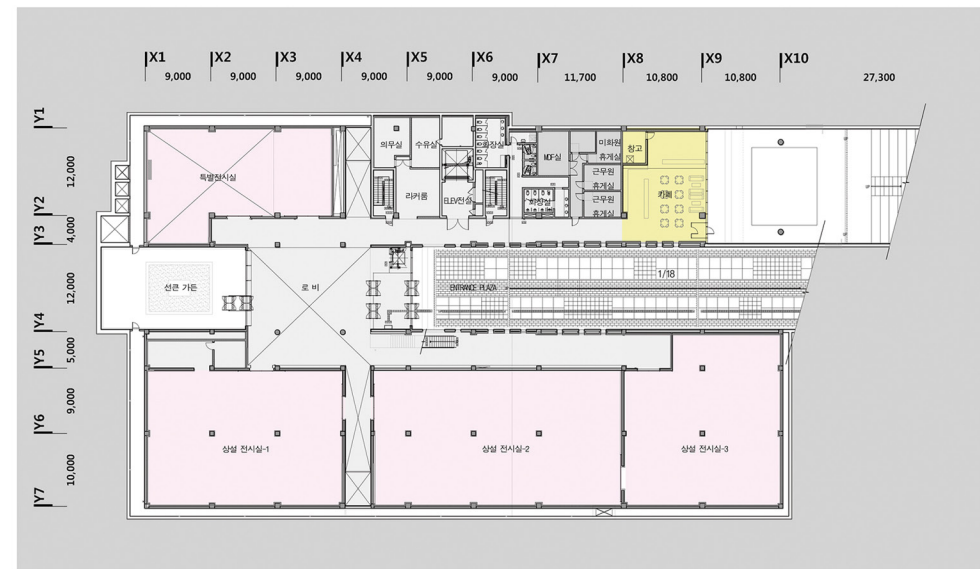
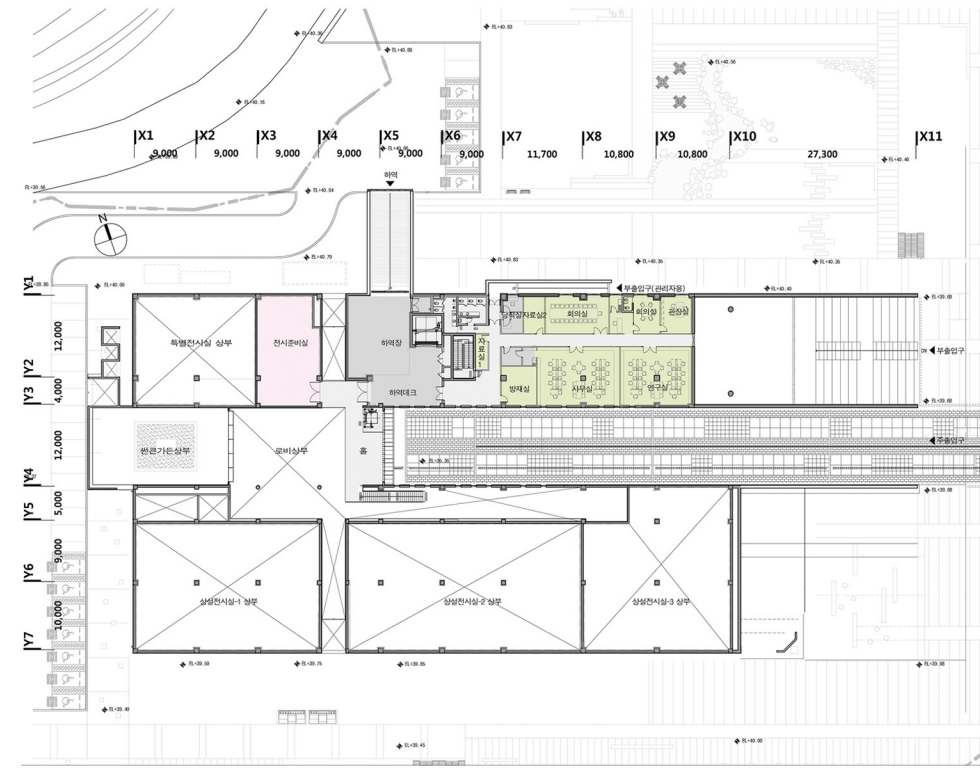
The National Museum in Ik San, South Korea

Professional Experience
Joined in CD Phases
2017-2018 (Built)
National Museum
Ik San, South Korea

I participated in this project when it was selected national museum design. There was an old museum, but the region representatives held a design competition for re-structuring National Museum in Ik San. The site was surrounded by mountains that were not much tall, and there were old cultural heritages, like a five-story stone pagoda. So the government gave the direction that new constructing building design should not bother the surrounding scenery with harmonized other heritages. That is the main reason why our building was built underground.

During participating in this project, I drew several drawings while continuing to communicate with structure, MEP consultants. I usually focused on the floor plans and sectional drawing. While we work in the CD phases, we should keep communicating with governments advisors. So, during that time, I made presentation materials, including some diagrams, retouching plans, and 3D visualization work by using a twin motion program.

Role : Plan drawing (Auto Cad, Revit), 3D modeling (Rhino), retouching the plans (Photoshop, Illustrator), 3D visualization work (Twinmotion)



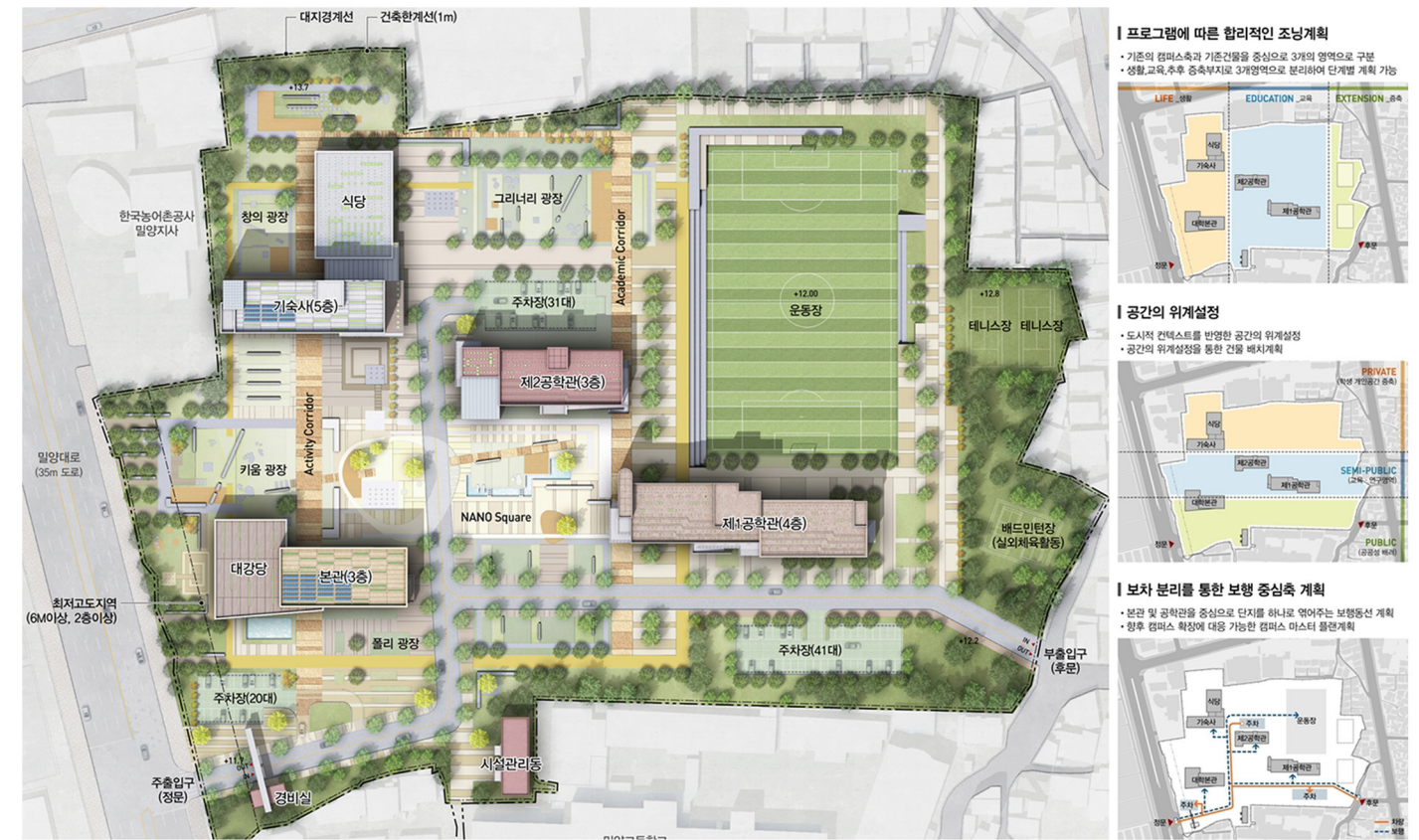
Korea Polytechnics University Campus

Professional Experience
 Joined in SD, DD Phases
 2017
 Education building
 Mil Yang, South Korea

This project includes not only buildings but also surrounding context because it was located in the residential zone. So we mainly designed the buildings with a landscape harmonized with the original site context. We organized with 3 zones, life, education, and extension zone with put hierarchy of the spaces, private, semi-public, and public from the top of the site.

As an architect, I participated in this project in the SD, DD phases, especially, drew schematic site plans, floor plans, and exterior elevation by using Auto Cad, Revit, photoshop, and illustrator. Also, I made several diagrams regarding site programs and pedestrian, car circulation.

Role : Plan drawing (Auto Cad, Revit), retouching the plans (Photoshop, Illustrator), Producing physical models



Residential Office Tower in Cheon An

Professional Experience
Joined in DD,CD Phases
2018-2019
Residential Office Tower
Cheon An, South Korea

This is one of the projects that I participated in for a long time(over 1.5 years). While I joined this project, I had opportunities to closely contact structure, MEP, landscape consultants and kept revising the plans with their comments. Although this project had its own episode that made a longer construction period between the development firm with the construction firm, I gained a wide range of architectural experiences through this project.

Role : Floor plans, sectional drawings (Auto Cad), facade design (Sketch-up)



Apartment in Pyeong Taek

Professional Experience
Joined in CD Phases
2019
Apartment
Pyeong Taek, South Korea

From the 1970s, there was official apartment development from government announcements which can get similar shapes to current ones. Among them, towers and long rectangular shapes of apartments can be the representative type of Korea's residential style. While I participated in this project, I could work on how I can layout those types of apartments and partly worked on CD phases architectural experiences.

Role : Residential units drawing (Auto Cad), layout of the underground parking lot (Auto Cad), retouching the plans (Photoshop, Illustrator)



Business Office Center in Namyangju

Professional Experience
Joined in PD phases
Design Competition (selected)
2018
Office Center
Namyangju, South Korea

As following the importance of transportation, in Korea, the factory wants more located near the city. To build in the expensive small size of the site, the building has to build as a tower. So each small firm is organized as the unit types and put into each floor of the tower. While we designed this project, we focused on the site context which was placed right next to the river, designed nature public spaces with low-level commercial spaces. And designed 3 towers with cross images of the facade which give imagine with context programs features.

Role : Make diverse diagrams for presentation (Photoshop, Illustrator)



Residential Building in Kimpo

Professional Experience
Joined in CD Phases
2018-2019
Residential
Kim-po, South Korea

Through this project, I learned the relationship between construction and architectural drawing. My task was to organize the whole system, such as MEP, construction, lighting, and so on, and help to not place it overlap. So, I keep in contact with different parts of consultants and I could know well about the system of the architectural system in a short time.

Role : Floor plans, sectional drawings (Auto Cad)

