



YANSONG WANG

*PORTFOLIO*  
*Selected works 2023-2024*



01

## TRACING LOSS

Necrotic disease does not mean disappearance, but a transformation of a form of life

Graduate Third-Semster Project

Size:368000<sup>2</sup> m

Location:New York,United States

Tutor: Karla M. Rothstein, Javier A. Flores Leal

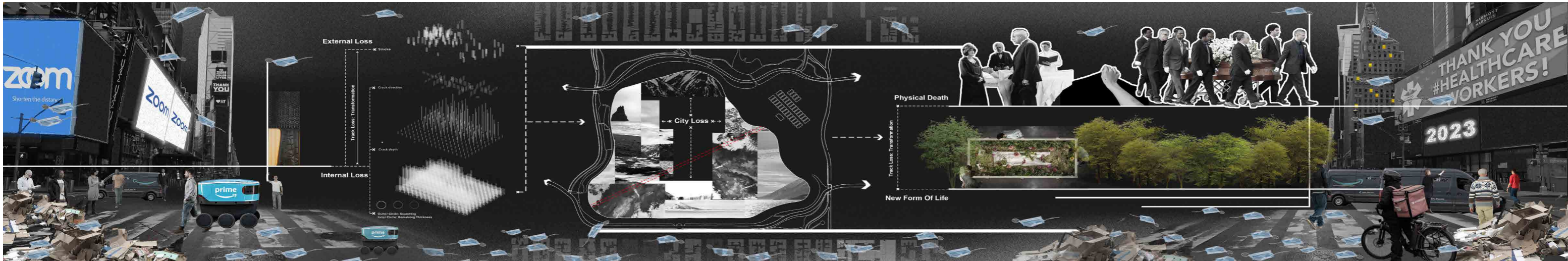
Contributor:Yansong Wang, Tianhao Shen, Junming Liao

Contribution:Concept: 50% Model: 80% Render: 50%

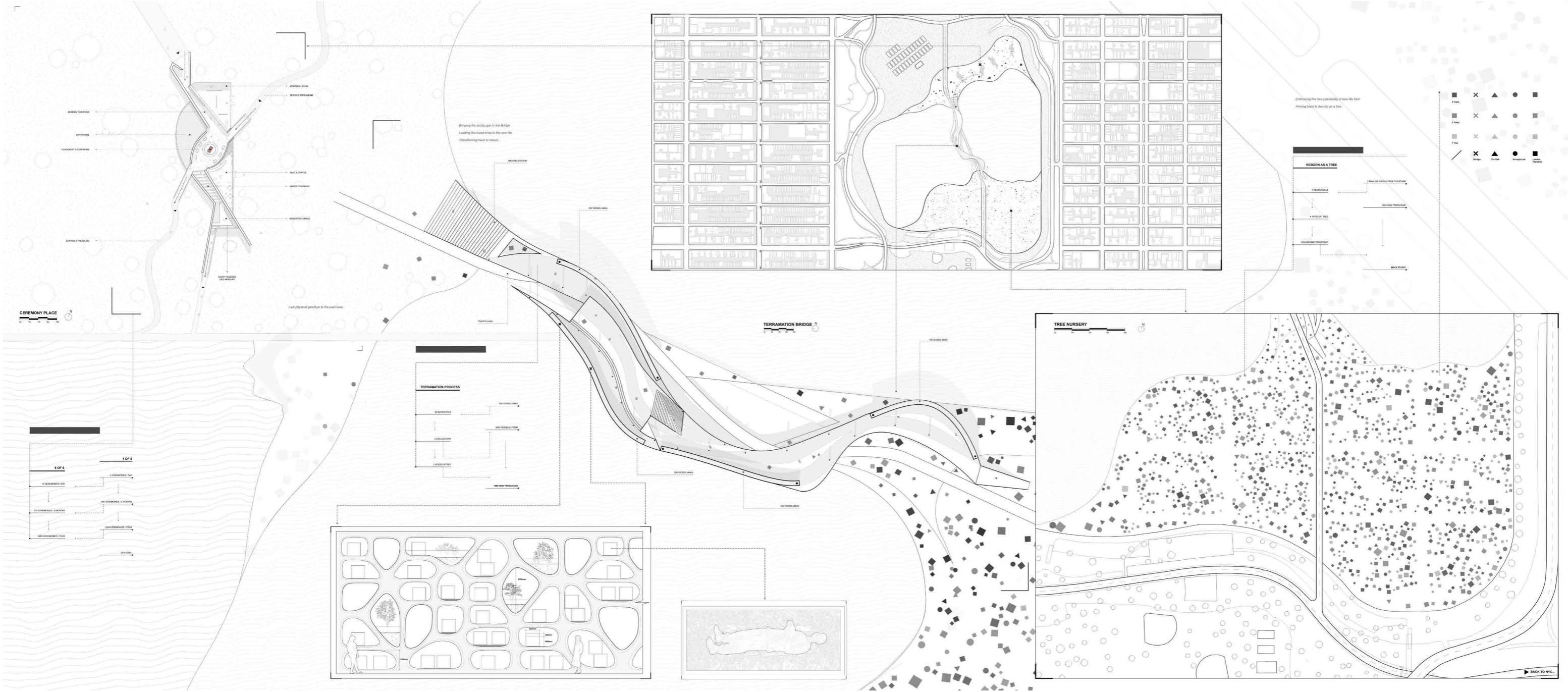
Duration:2024/1-2024/5

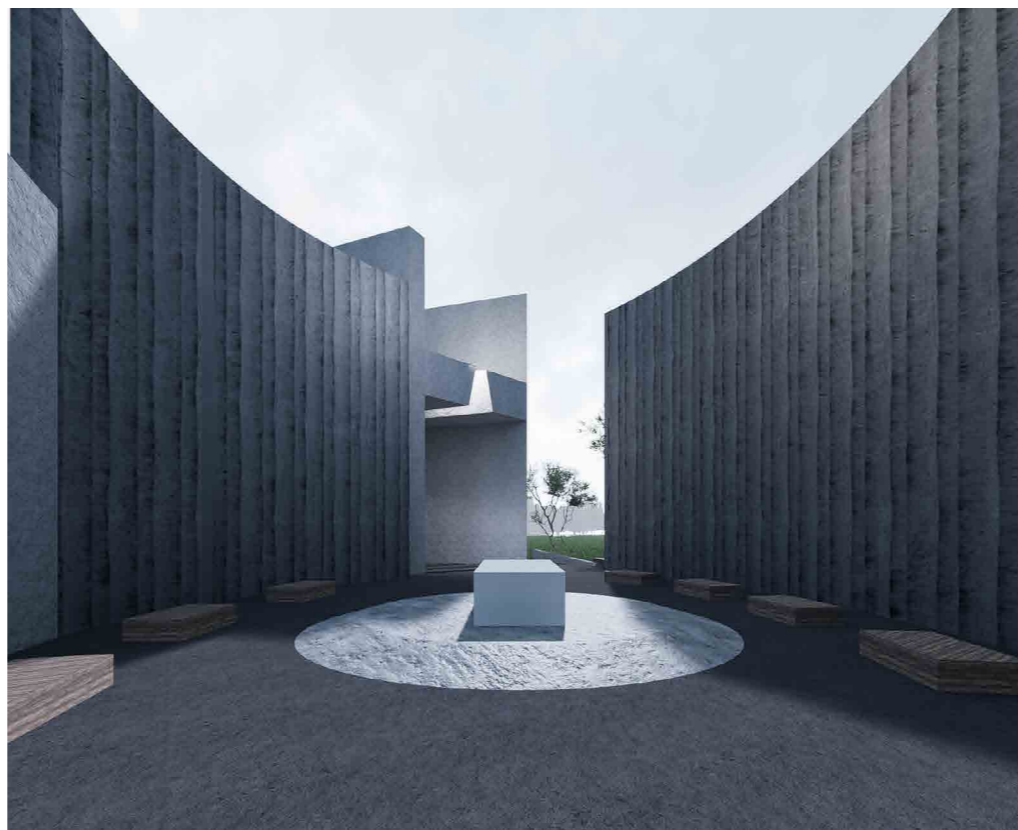
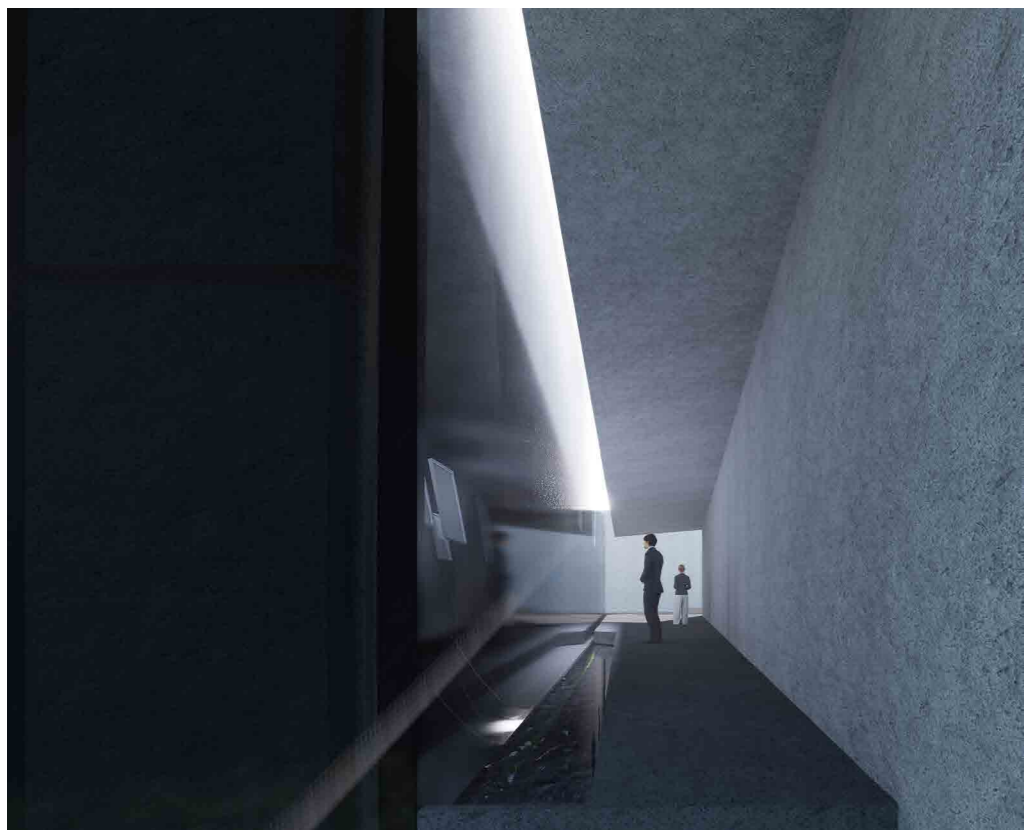
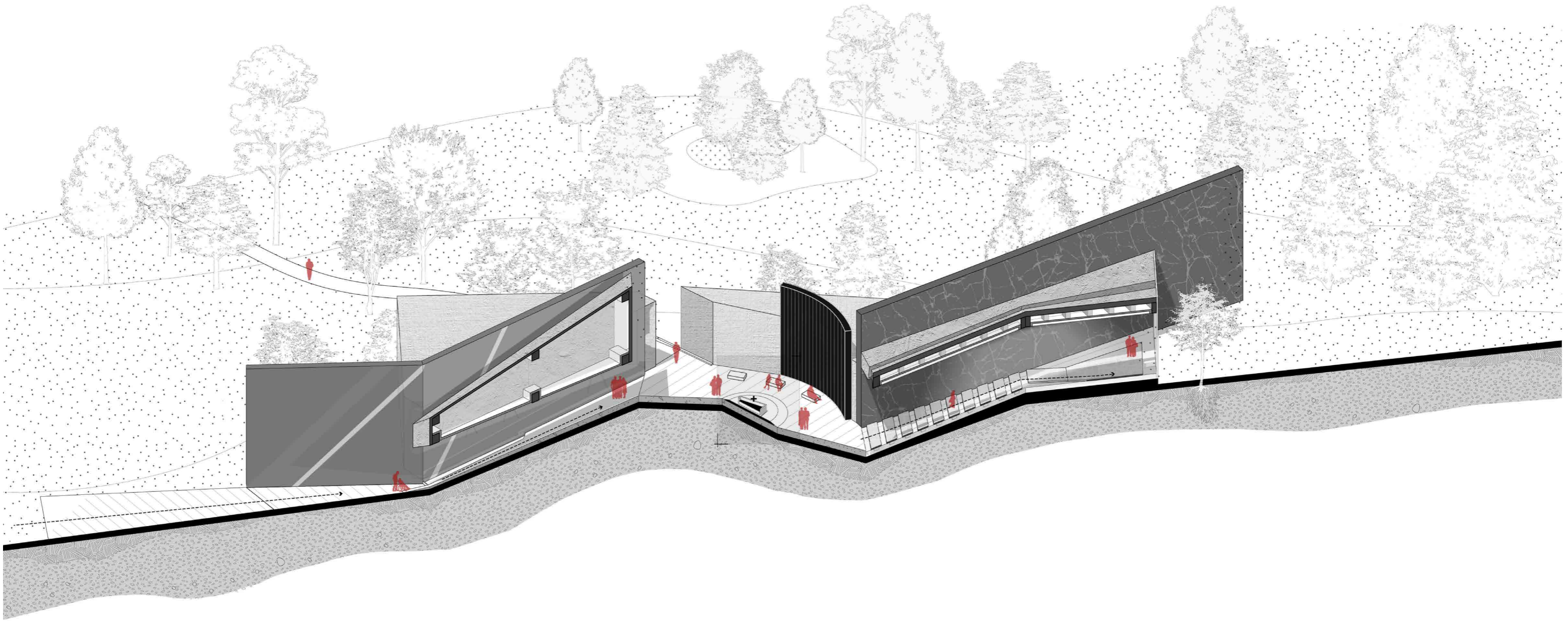
Since 2020, new crown epidemics have profoundly affected our physical and social environments and how these changes have facilitated the shift to a new post-pandemic reality. In this project, transformation and loss are symbolised by examining the effects of fire on a variety of materials. The narrative then connects these concepts to practical applications by redesigning the reservoir in Central Park as a space to commemorate urban loss, integrating the concept of enriching urban life and the natural environment through land transformation. This reflects a broader consideration of resilience, impermanence, life cycles and renewal in the urban environment.

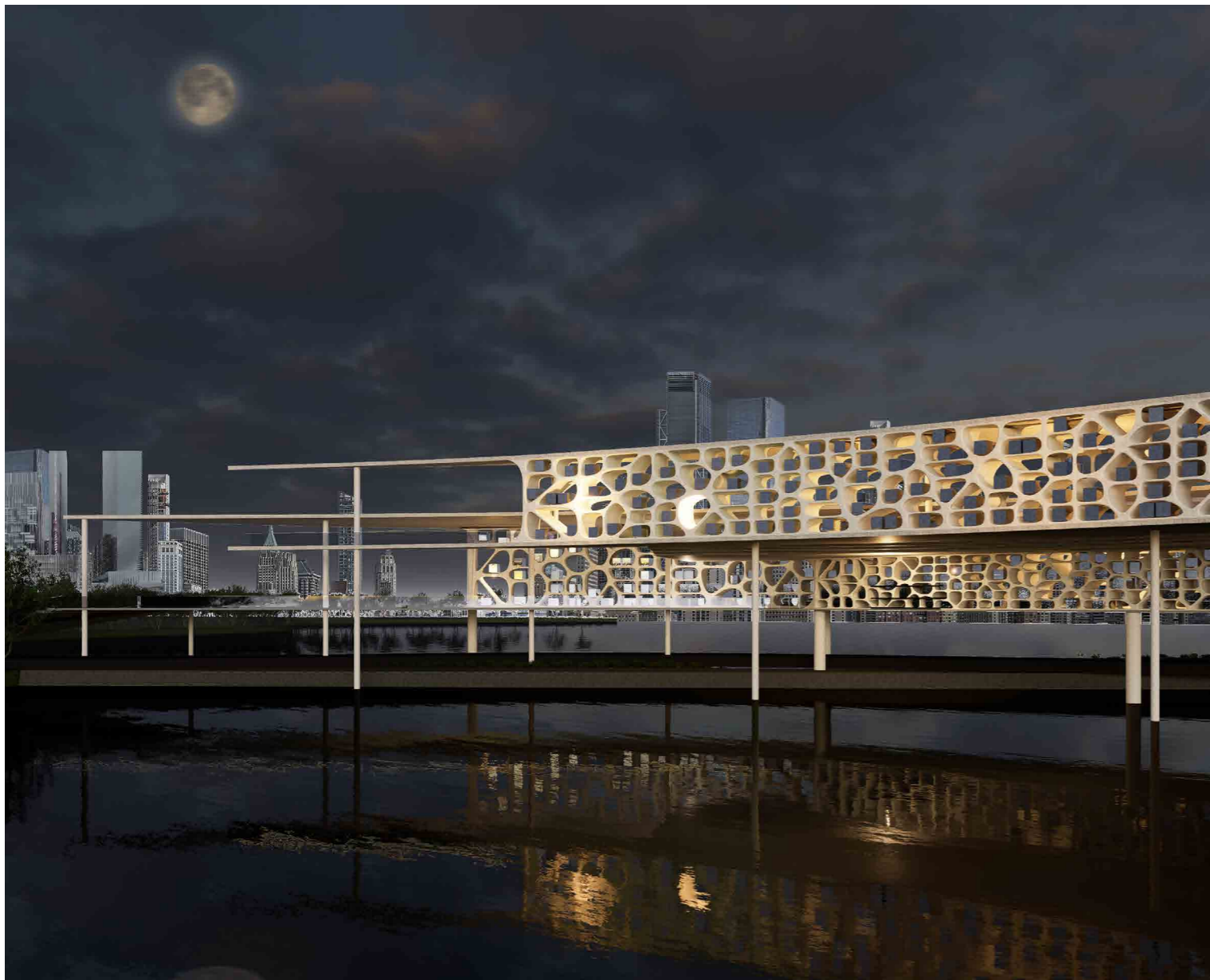
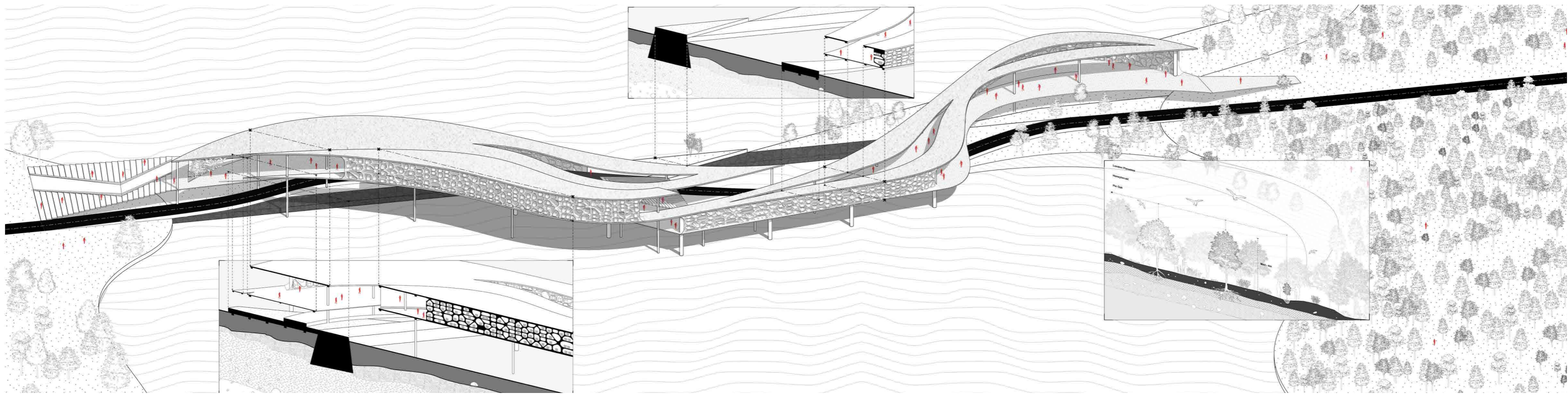
Based on the research, which explores external, internal, perceivable, and unperceivable losses, as well as the significant impact from pandemic, we decided to redesign the area of Central Park reservoir as the archive of daily urban loss through a nuanced practice of mortality memorialization, a deceased journey. The loved ones would experience the process of terramation and nourishment of an urban tree nursery, metamorphosing to another form of life that is dedicated to the natural environment and the city's social fabric.



**TIME JOURNEY**    **LIFE ENDS**    **TRANSPORTATION BEGINS WHEN NOTIFIED BY STAFF**    **LEAVE THE CITY**    **TAKE HALF A DAY TO SAY FINAL GOODBYES**    **BEGIN OF THE NEW LIFE**    **SIXTY DAYS OF TEMPORARY STORAGE ON THE BRIDGE**    **SPEND THREE YEARS OF LIFE TRANSFORMING INTO ANOTHER FORM**    **TRANSPORTATION BACK TO THE CITY**    **NEW FORM OF LIFE**









05

## TROPICAL HIGH-RISE CO-HOUSING

ON THE WAY: DEFINING A NEW LIVING STYLE

Graduate First-Semester Project

Location:Auroville,India

Tutor: Anupama Kundoo, Emily Ruopp

Contributor: Yansong Wang, Tianhao Shen, Raymond Yu

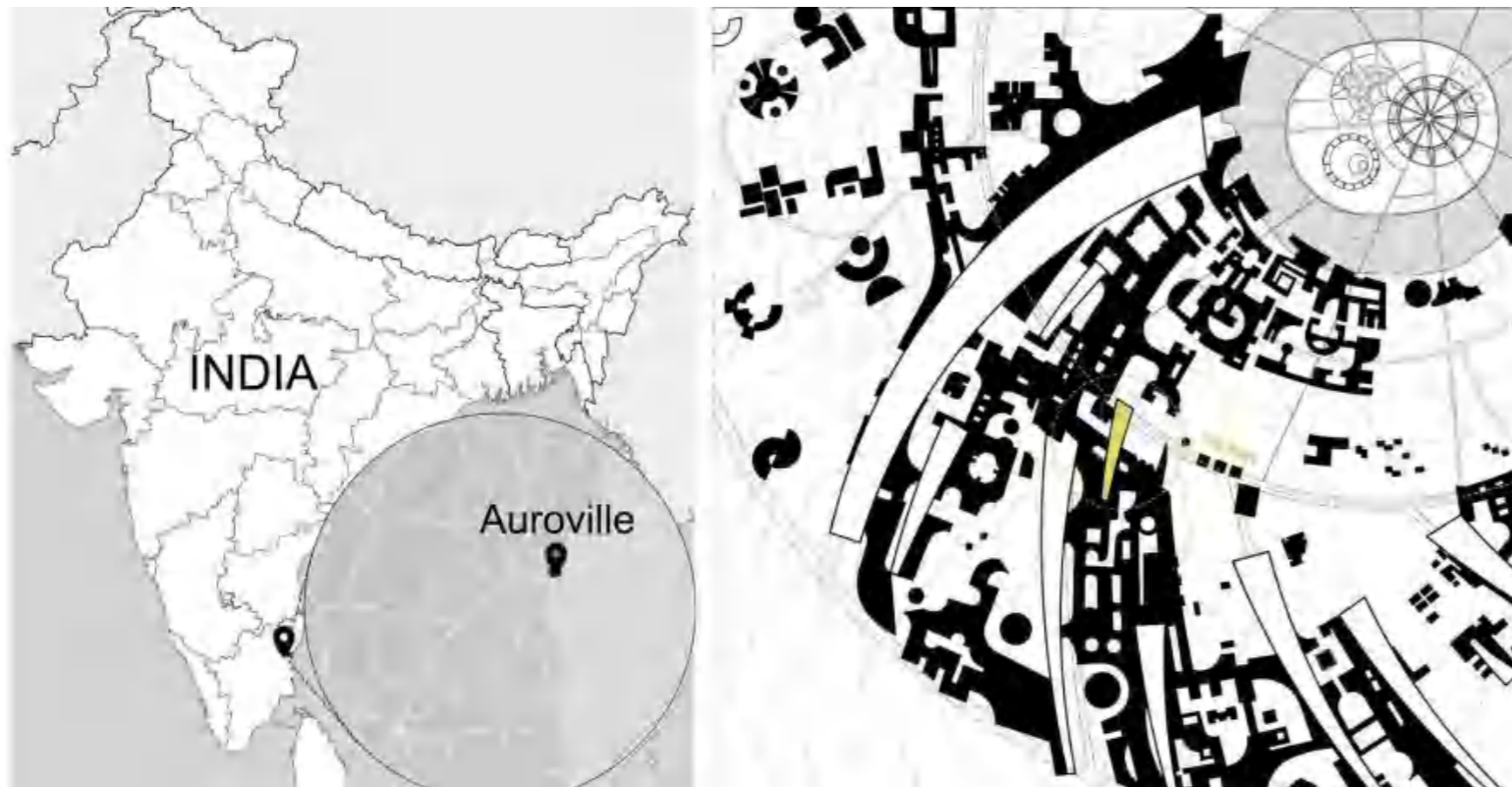
Contribution:Concept:50% Model:50% Analysis:50%

Duration:2023/6-2023/8

In view of the growing population on the available land in India and the increasing imbalances in the former urbanization process, human settlements need to be restructured to reduce resource consumption while increasing human potential and moving human society forward. The need of the hour is to find new models of compact cities with a stronger sense of community and that are self-reliant urban communities where people can live together in relatively small areas while finding diversity and all useful services within walking distance.

Investigating a novel shared housing model in densely populated and socially evolving specific sites in India: reorganizing the segmentation of residential communities, adapting to local conditions, and creating shared living spaces that cater to diverse needs. Arranging various shared amenities along streamlined pathways to establish a closer connection between architecture and lifestyle, achieving an innovative "on the way" living experience.'

# SITE ANALYSIS



Auroville is a "city under construction" located in South India and is proposed to be designed within compact residential areas to meet the demands of high-density urbanization.

## SEGMENTATION OF THE POPULATION INTO DIFFERENT CATEGORIES

### GENDER



female:50.49%  
male :49.51%

### NUMBER



one:36.2% two:18.9% three:31.6% four & four+:13.3%

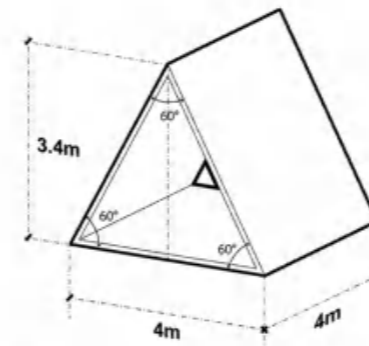
### DEMAND



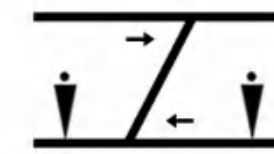
vibrant :18.64% quiet :18.26% social :33.92% sunshine :16.56% plant :12.62%

We divided the crowd in the venue according to different attributes and deduced their approximate proportions in order to prepare for the reorganize, as well as for the prototyping of the different units.

# BASIC UNIT—TRIANGULAR



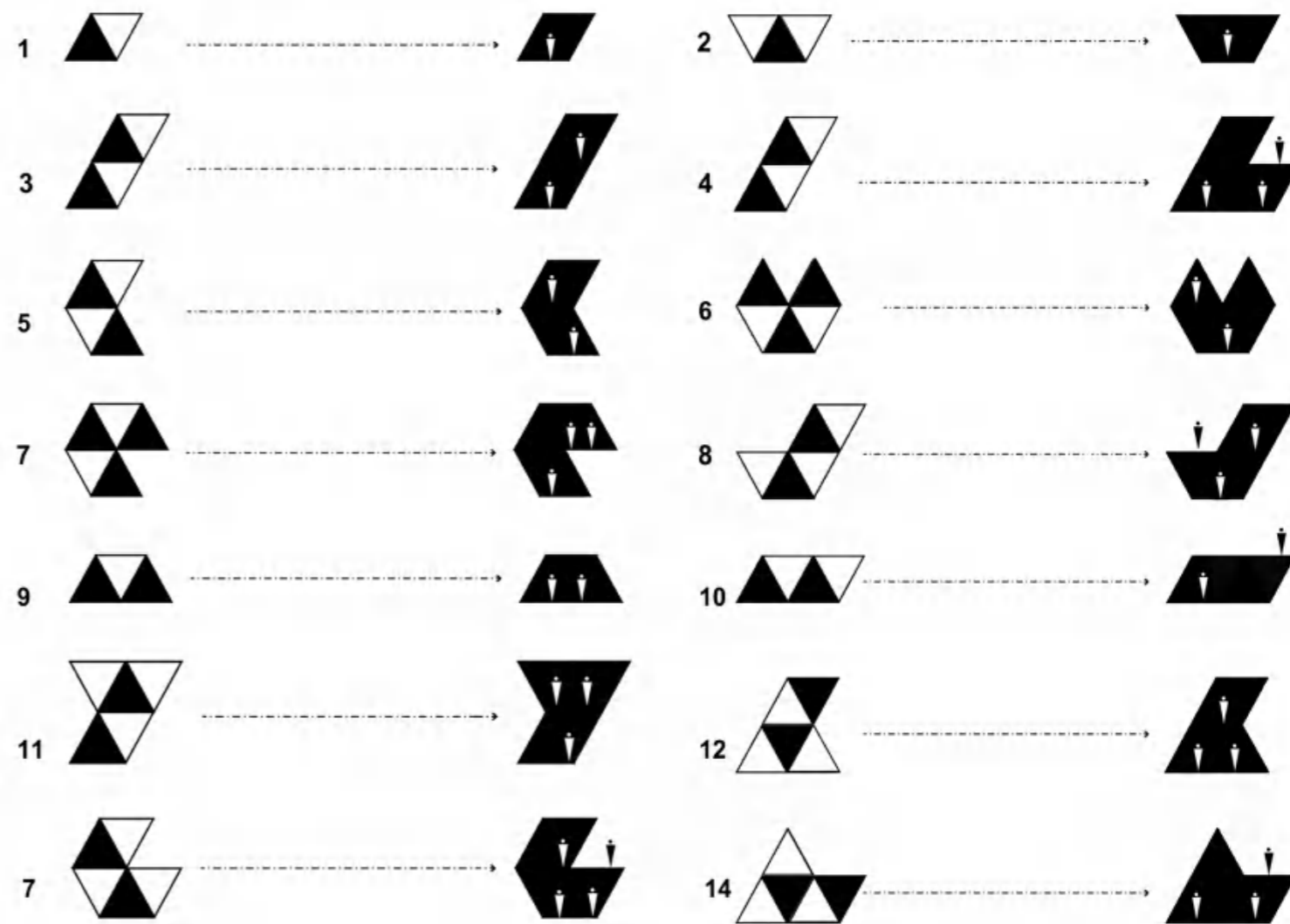
STRICT DEMARCATION OF BOUNDARIES



STRIKE A BALANCE  
SHARE EACH OTHER'S SPACE

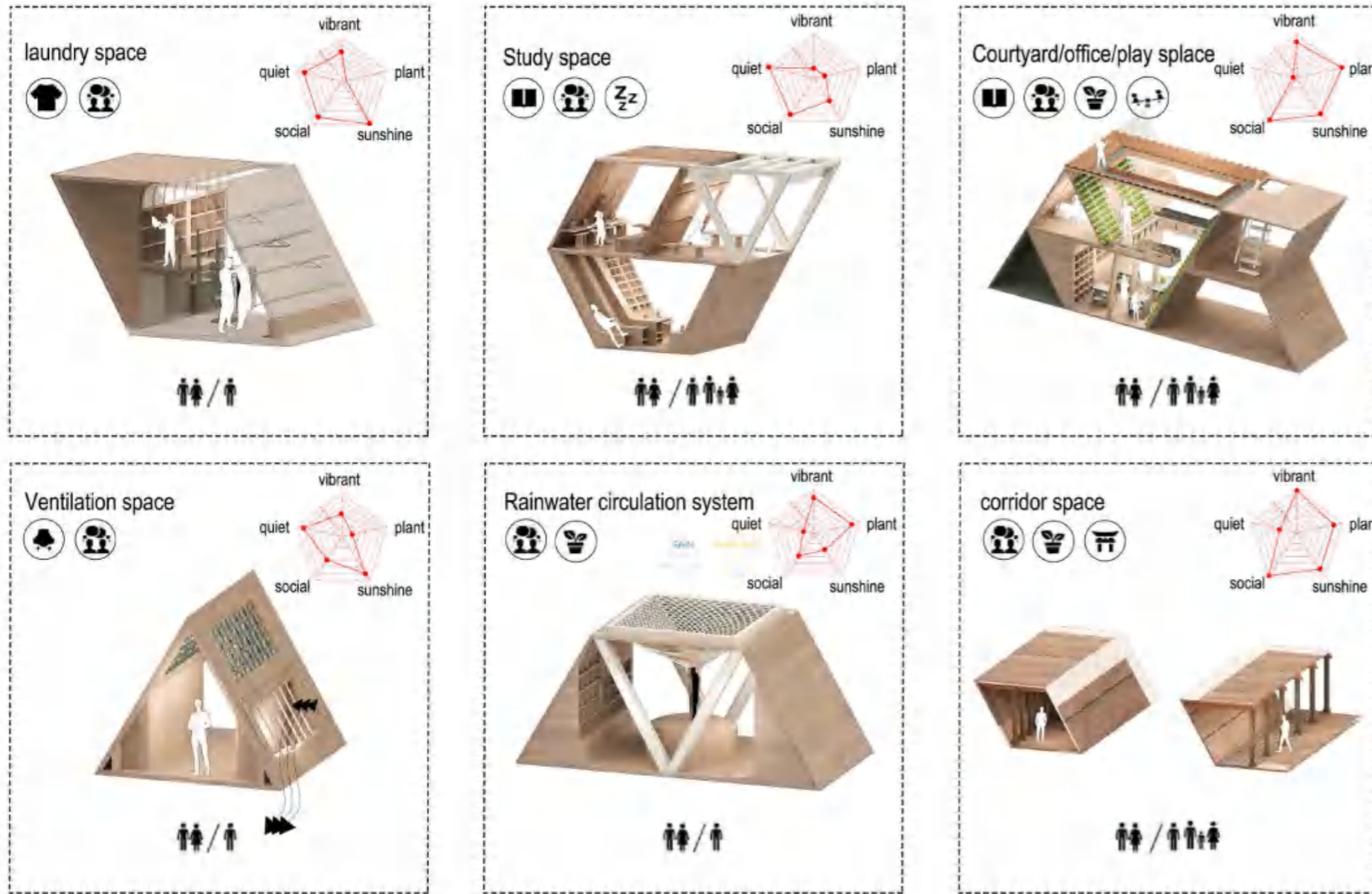
ADOPTING THE TRIANGLE AS THE BASIC UNIT FOR LIVING AND SHARING, WE CAN PUT HIM TOGETHER IN ANY WAY WE WANT, AND WE CAN PUT TOGETHER A SPACE THAT CAN BE TRANSFORMED INTO MANY ENDS. FOR LIVING SPACE, TWO TRIANGLES ARE ENOUGH FOR ONE PERSON, WHILE MORE TRIANGLES ARE NEEDED FOR MORE PEOPLE. THE SAME IS TRUE FOR SHARED SPACES

## UNIT TAXONOMY



DEVELOP BASIC COMBINATIONS TO MEET DIFFERENT USE SPACES BASED ON DIFFERENT CROWD ATTRIBUTES AND TARGET NEEDS

## Example of sharing



A variety of spatial combinations are created through triangles to meet the requirements of different people for different spatial attributes.

## Architectural form generation



Determine the location and volume of the central public & TRAFFIC space



Add architectural details and diverse functional blocks



Cluster consisting of sharing units and living units are attached to the perimeter of the central public space.

We optimize building entrances, transportation, and public space using the grasshopper colony algorithm, enhancing flow and functionality.

## Combination of sharing and living units into cluster

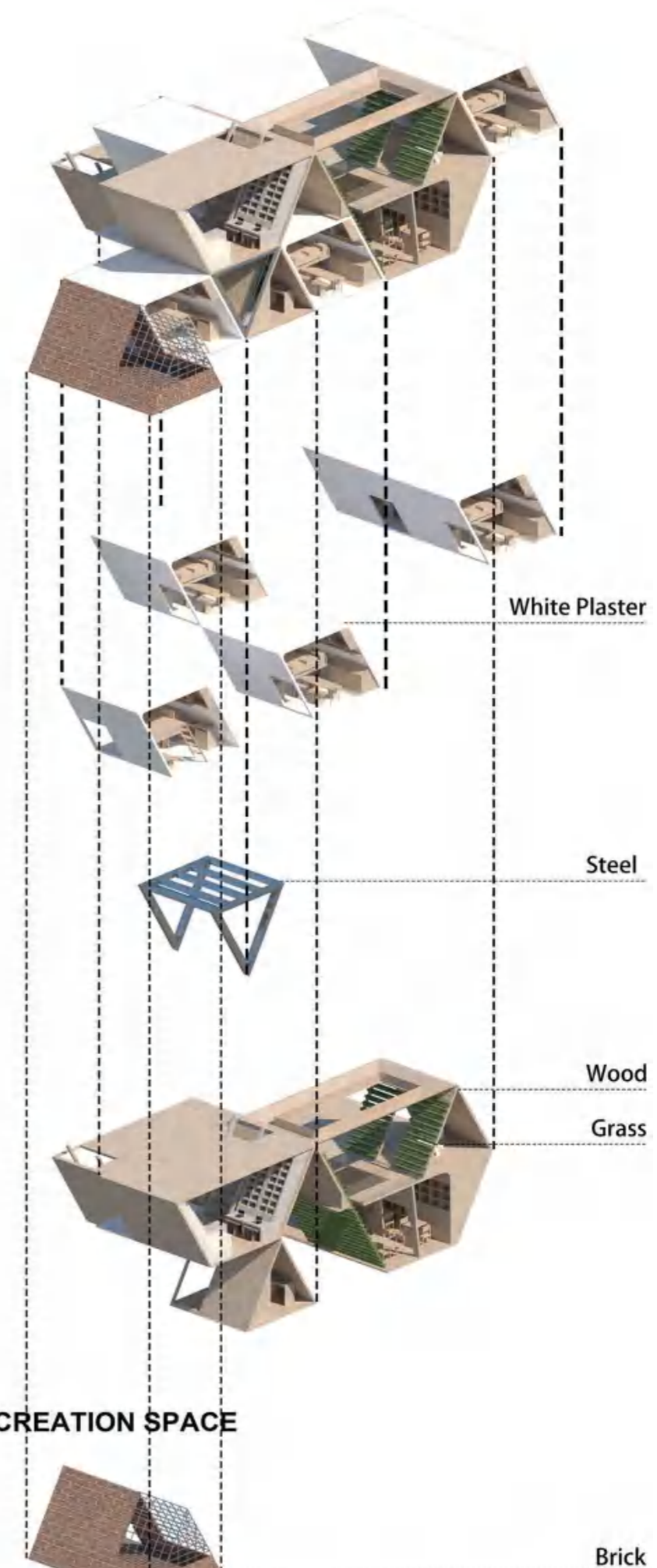
CLUSTER

A.LIVING UNITS

B.STRUCTURE

C.READING  
&OFFICE  
&PLANT  
&COFFEE SPACE

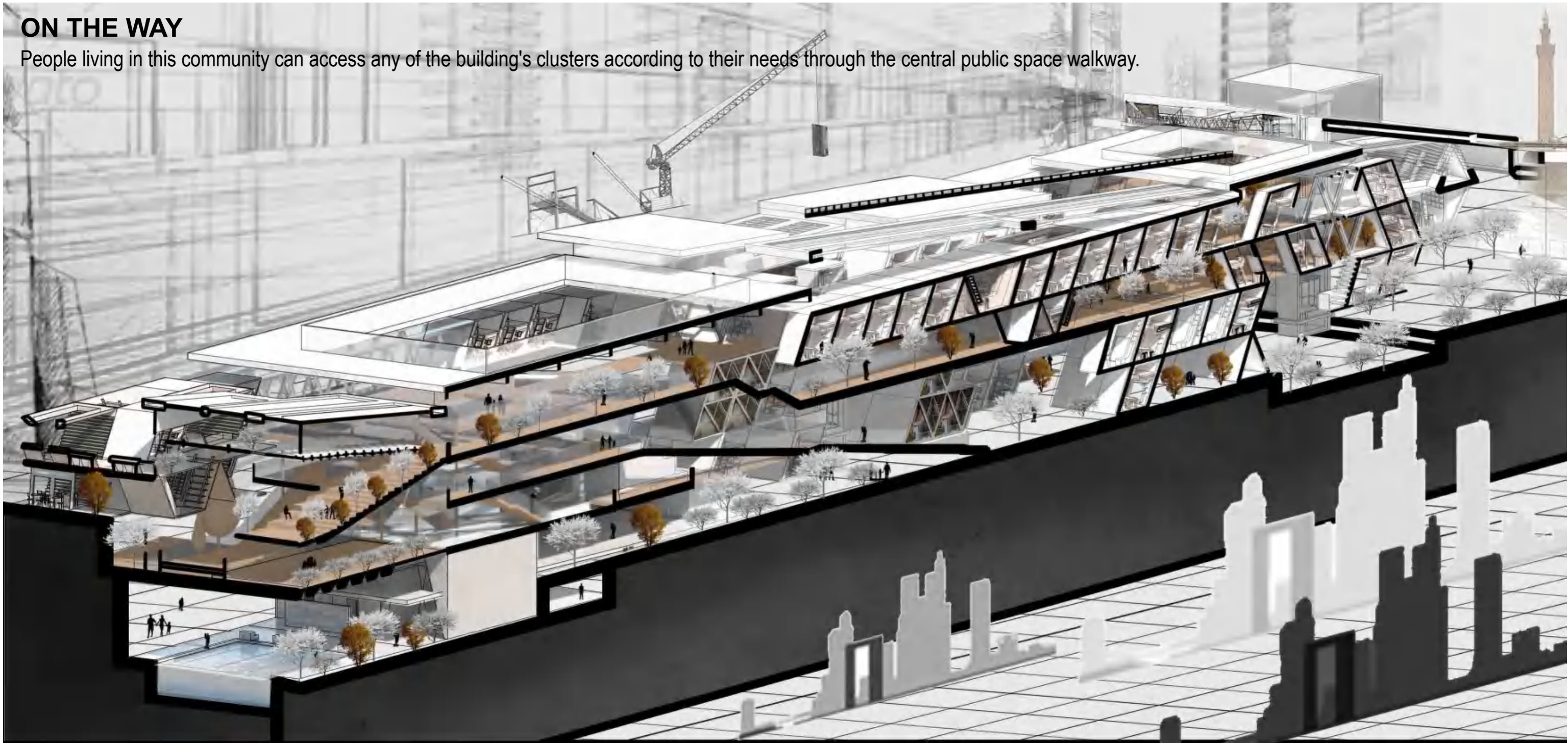
D.CHILDREN'S RECREATION SPACE



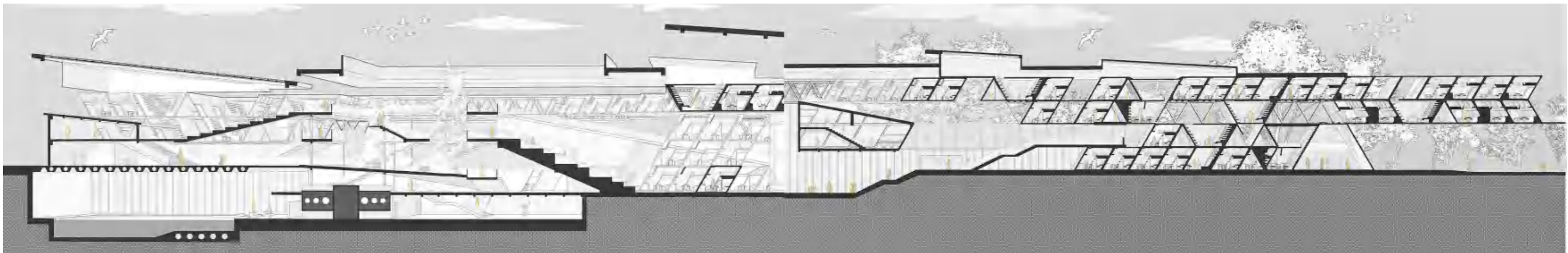


## ON THE WAY

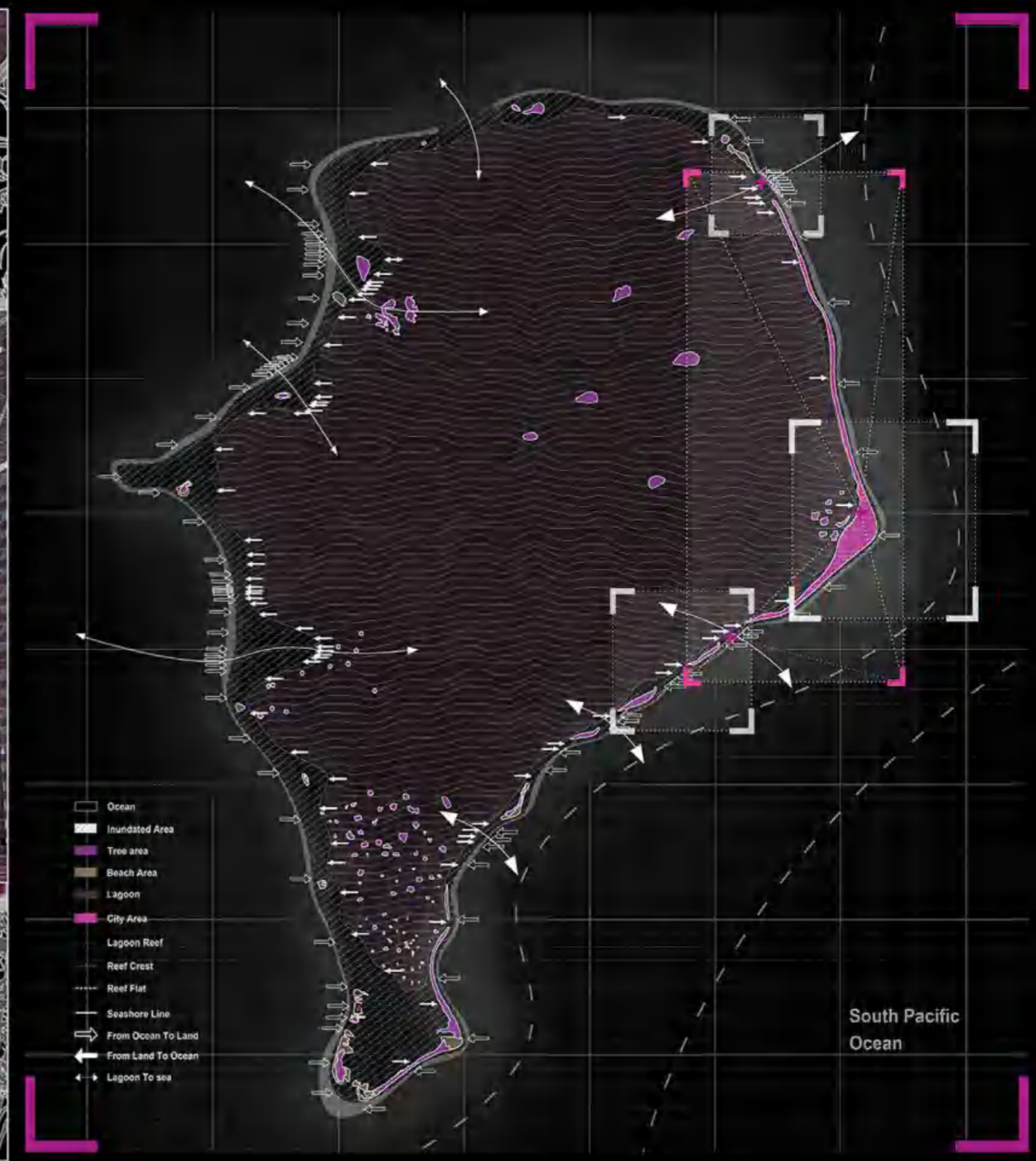
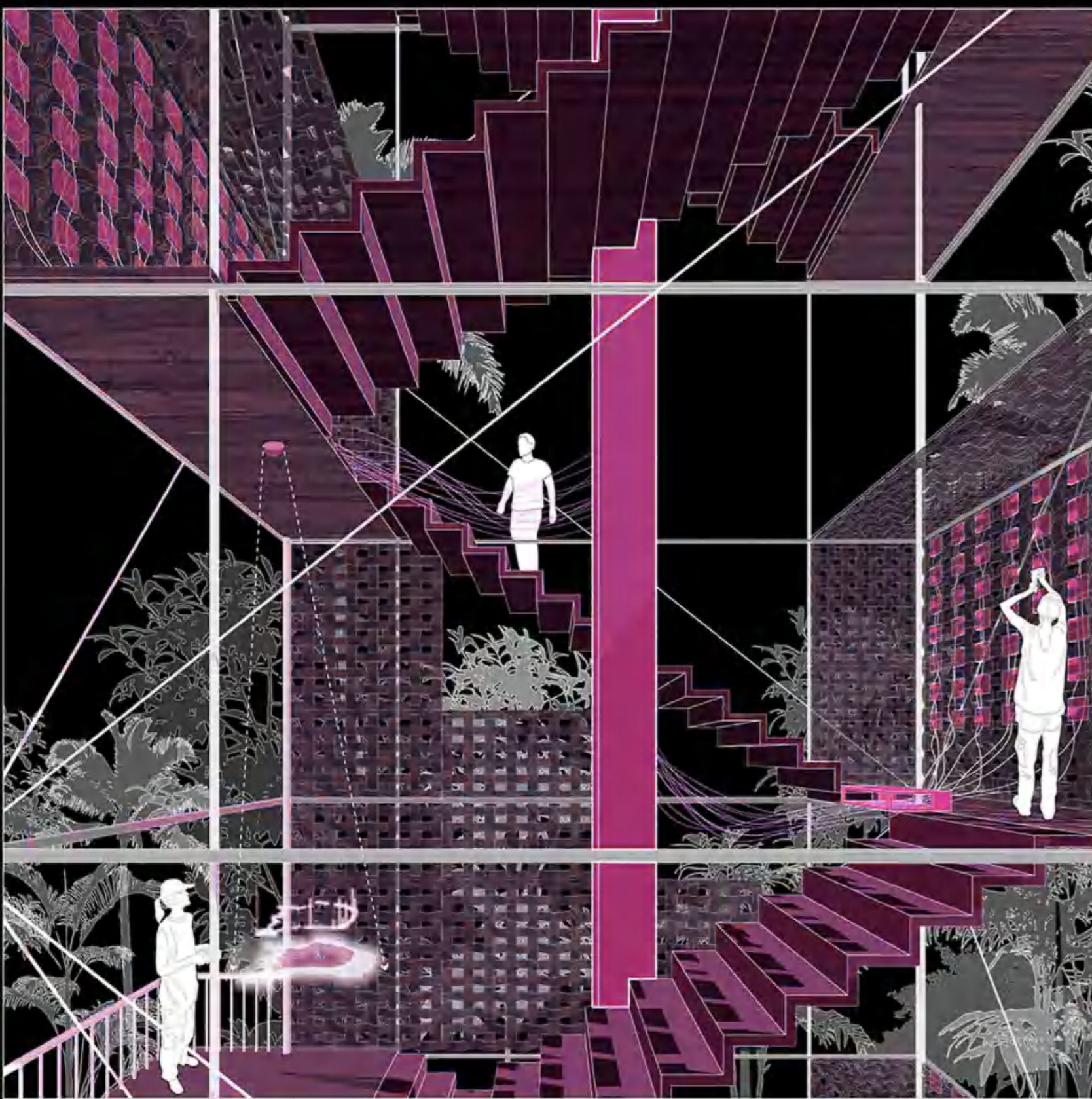
People living in this community can access any of the building's clusters according to their needs through the central public space walkway.



## SECTION



The crown is situated in the lower right corner of this location, with a significant daily influx of people commuting to work. Therefore, subtraction was employed in this corner, excavating the mass, aiming to better integrate with the overall urban space. The area was enriched with functional spaces such as theaters. As a result of the excavation at the lower levels, residential spaces were limited, leading to the allocation of a substantial number of residential units on the upper levels. These units are arranged around shared spaces that harmonize with the urban environment.



06

## DATA MORNING

Metaverse World: Transferring The Whole Country To Digitized

Graduate Second-Semester Project

Location: Tuvalu

Tutor: Marina Otero Verzier, Farah Alkhoury

Contributor: Yansong Wang, Tianhao Shen

Contribution: Concept: 50% Model: 50% Analysis: 50%

Duration: 2023/9-2023/12

In recent years, Tuvalu, a small island nation in the Pacific Ocean, has been at risk of being submerged or even disappearing as a result of rising sea levels caused by climate change. Tuvalu is a highly dynamic and constantly changing territory. This change and uncertainty creates challenges for both local people and other species.

Our project reflects and responds to the Tuvalu government's plan to upload the country to the metaverse. It questions how to develop the digitization of the whole territory and what is really part of this digital twin. It is a fixed digital model of a particular moment in Tuvalu's history and is still a dynamic and evolving space.

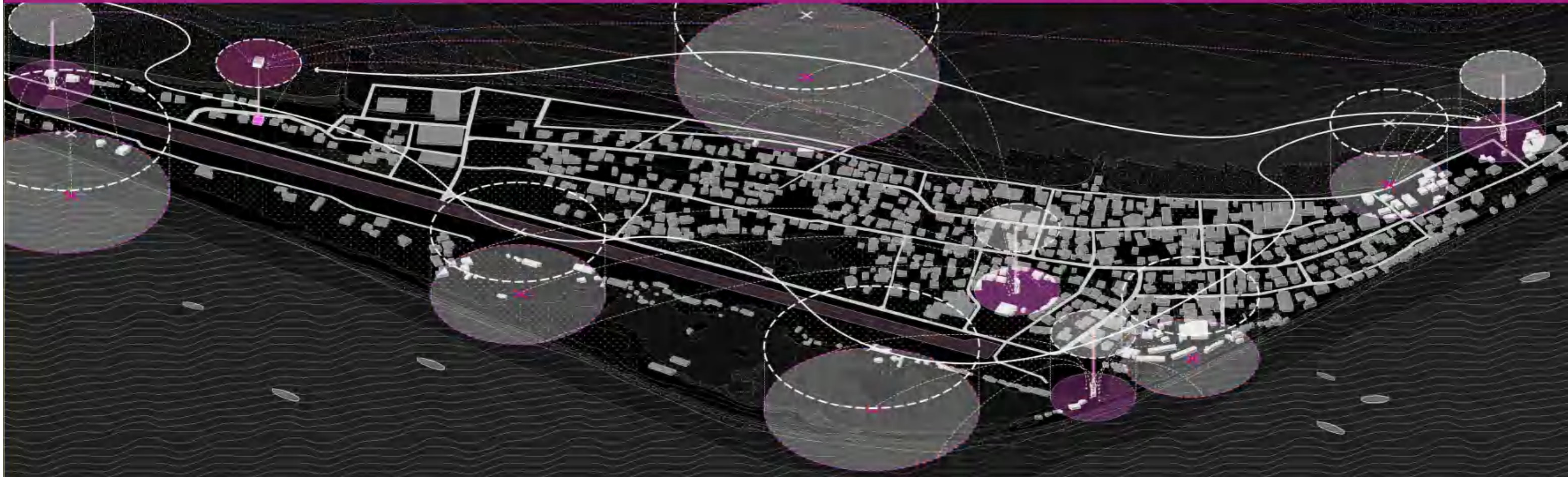
## ARRANGEMENT OF SENSORS

In our system, sensors with different functionalities are strategically placed at key locations throughout the site, according to their detection ranges, to carry out environmental monitoring and data collection tasks.

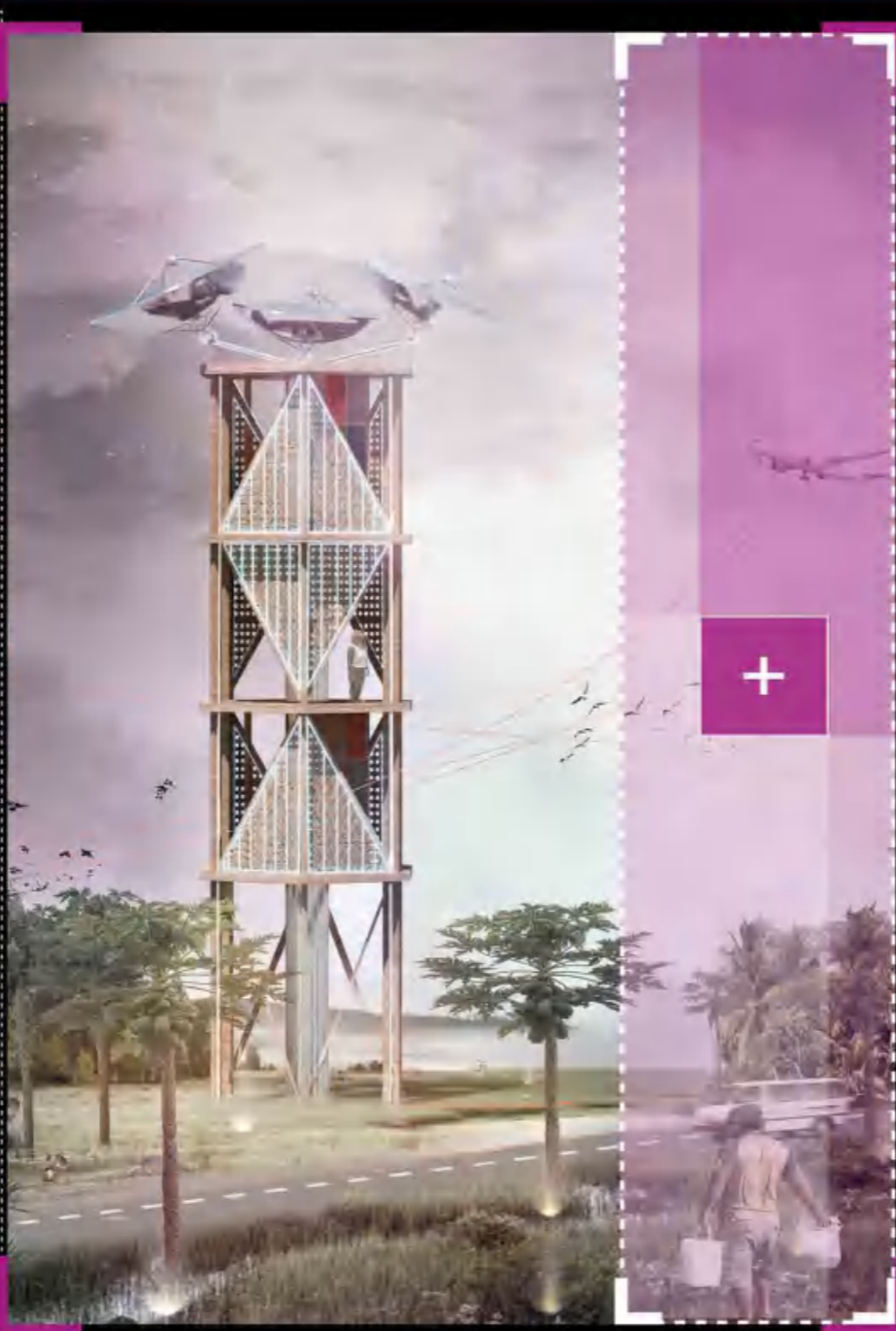
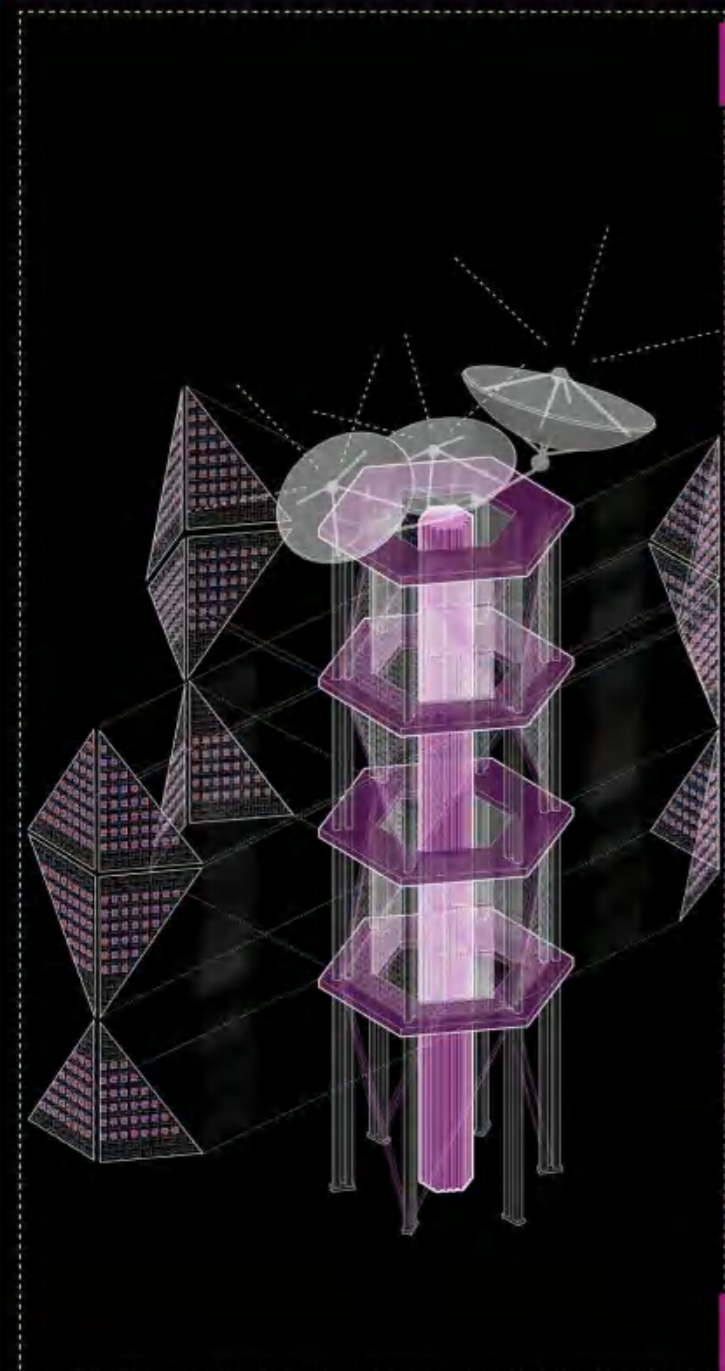


## SENSOR SITE, TOWER & LIBRARY

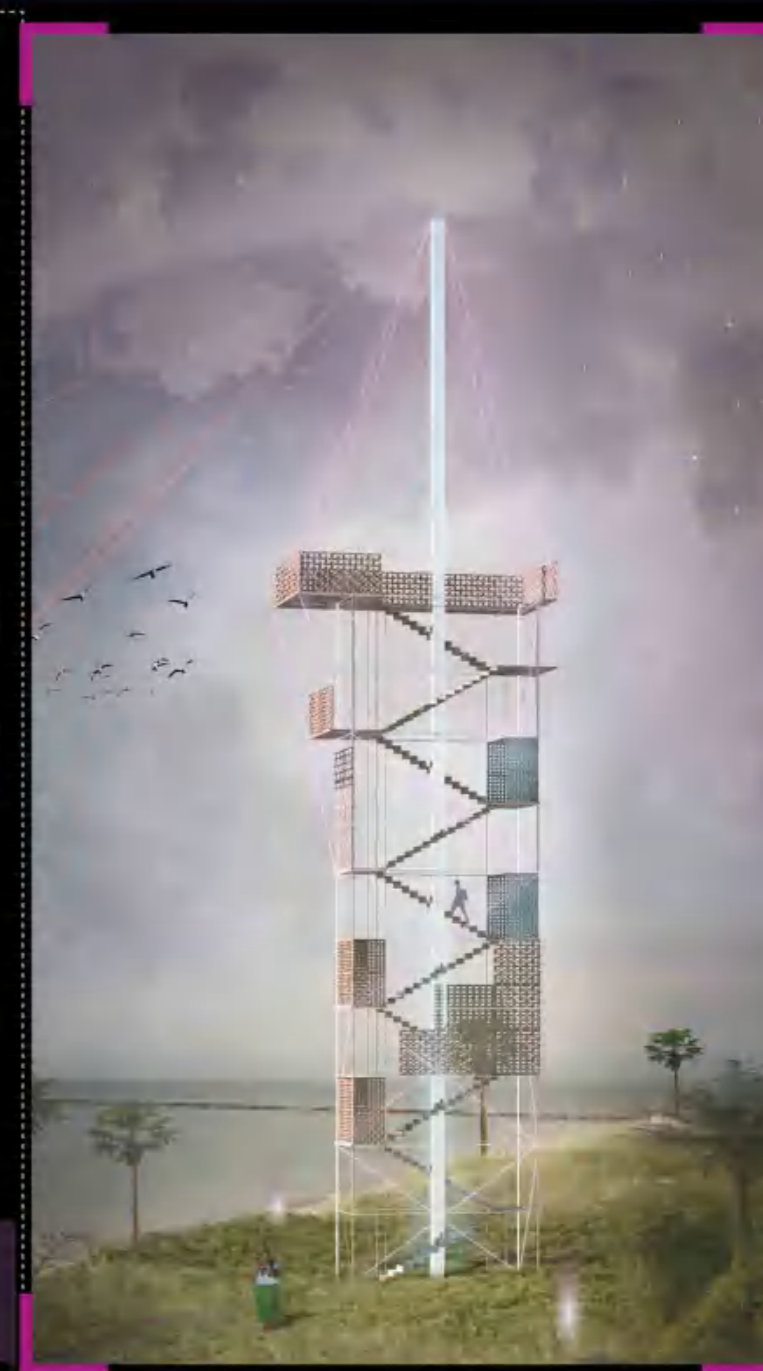
The data is then transmitted to the tower, which, after receiving and processing the data, forwards it to the library. The library, by integrating and processing the data, achieves data visualization, thus allowing people to more intuitively perceive the dynamic changes in Tuvalu. This not only enables people to make more effective, targeted decisions and measures but also aids the entire nation in transitioning more smoothly into the metaverse.



# TOWER A



# TOWER B



The Tower is primarily used to receive sensor data and transmit it to the library in Tuvalu.

Additionally, it serves as an observatory tower, allowing people to climb and observe Tuvalu's basic ecosystems such as wetlands, birds, and trees, while also seeing how the data is processed. This offers an intuitive way to observe Tuvalu's natural environment and helps people gain a comprehensive understanding of Tuvalu's situation.

Our design includes two towers to fit the allocated space: a main tower in the center of the site and another distributed around the perimeter. The design concept of the towers is based on their main function. They consist of several parts: a vertical stair space and observation area that not only supports the structure but also houses the woven structure of the Raspberry Pi system. In addition, there is a corresponding operational area. To give the towers a lighter appearance, we opted for a wooden structure, integrating traditional architectural elements from Tuvalu.

