



# PORTFOLIO

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MSAAD 2024

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*Instructor: Philip Rham, Mariami Maghlakelidze*

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# 01 SECOND LIFE

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*Reusing Wind Turbine Blades*

Advanced Architectural Design Studio

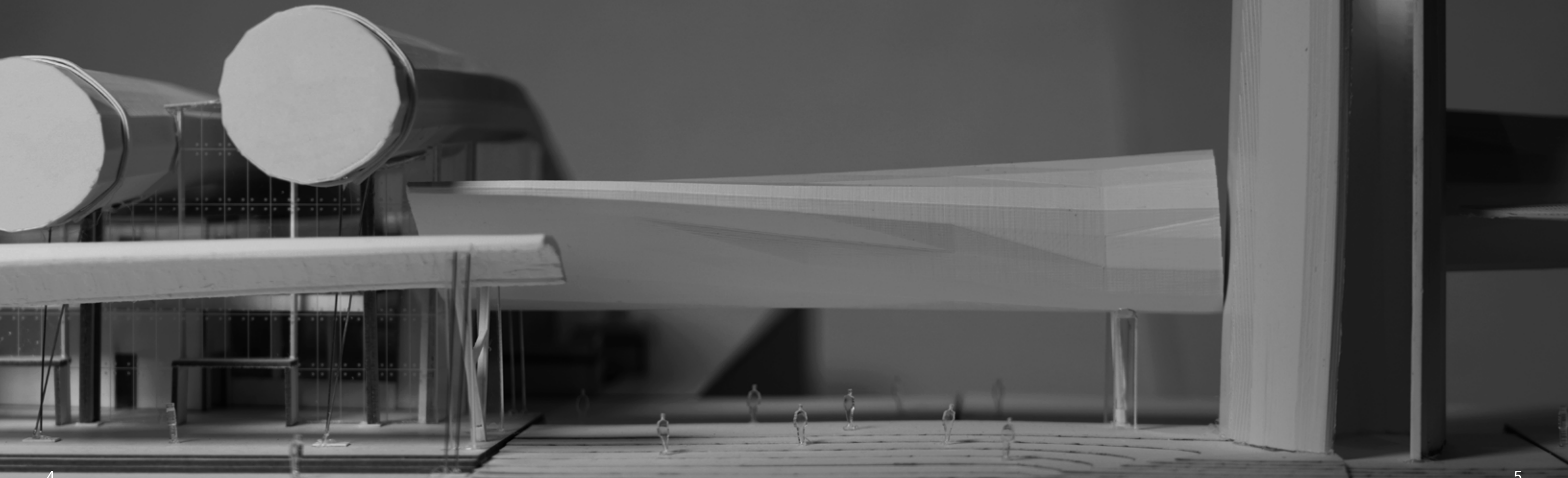
**Instructor:** Laurie Hawkinson TA Steven Lin

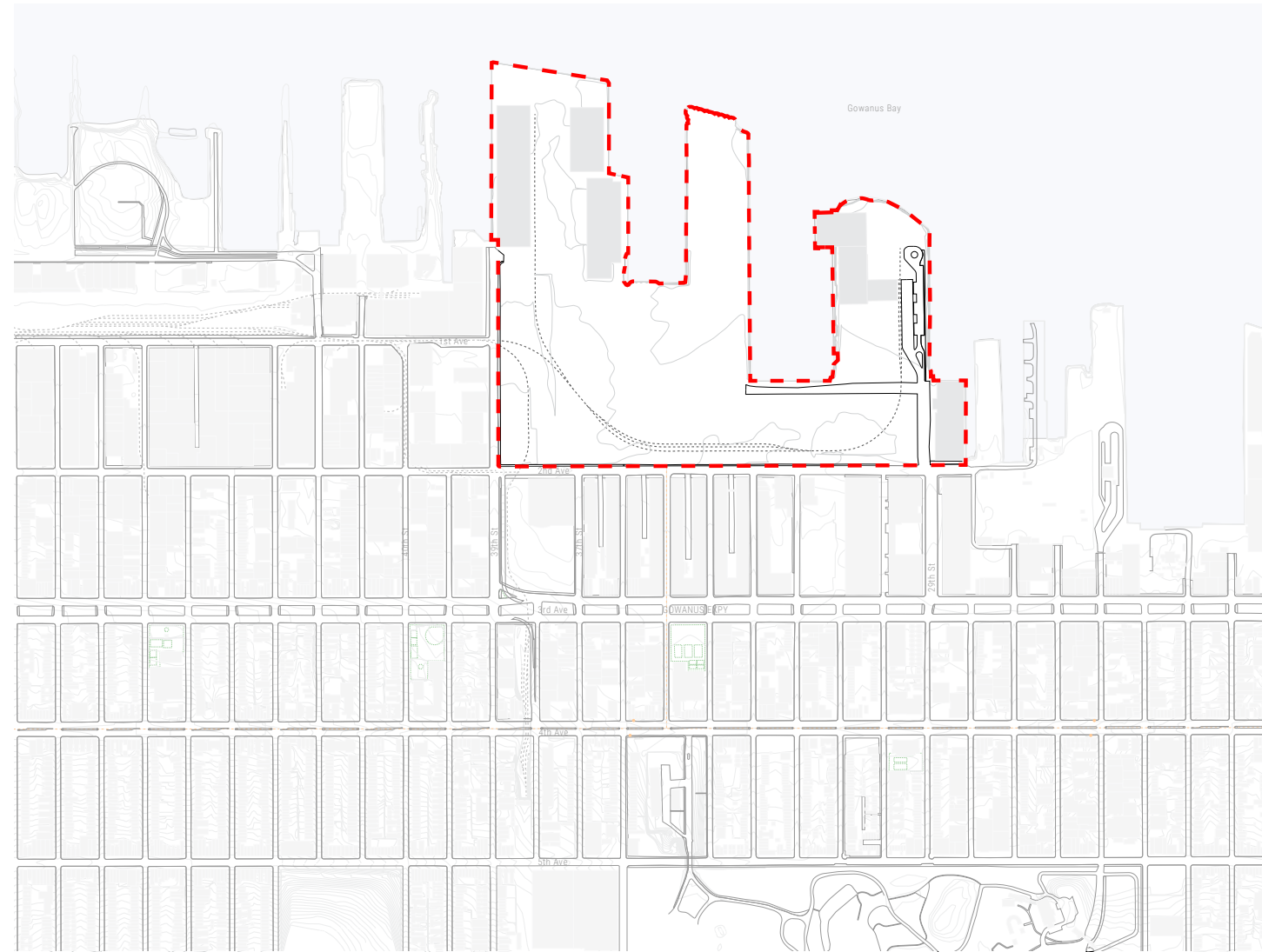
**Year:** Spring 24'

**Location:** South Brooklyn Marine Terminal, New York

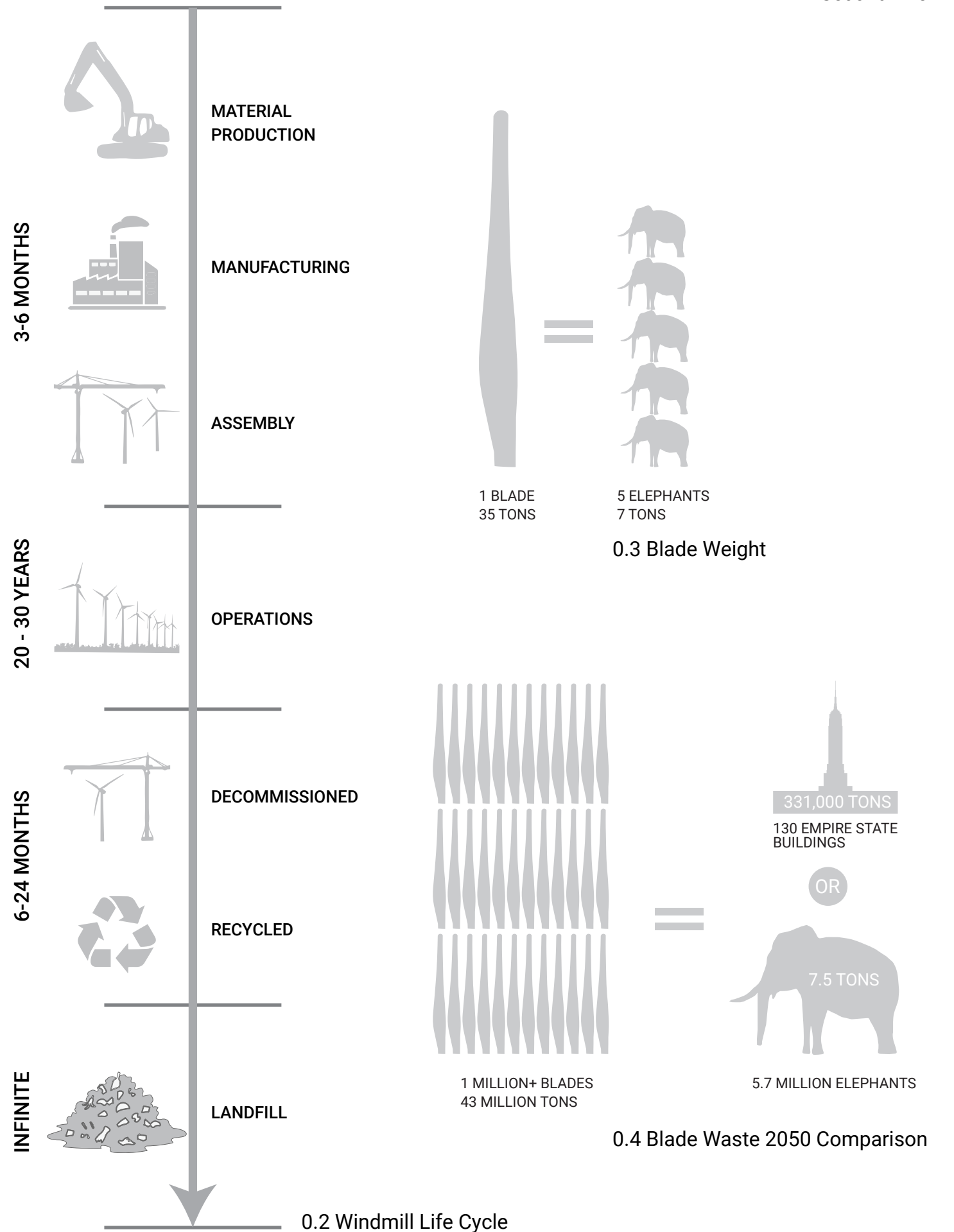
## Description

This was a team project done in teams of two. We were given a massive site that is currently being converted into a wind turbine parts assembly site. Our brief was to think of ways to utilize the site after the parts assembly has moved on from the site. Our team focused on the idea of reusing the blade of the wind turbines as the main factor. We saw the waste issue being caused by the hard to recycle blades of the turbines. At the current rate of waste there will be more than 43 million tons of waste by 2050. After seeing such an issue we wanted to propose a project where the focus was on how to reuse the blades.

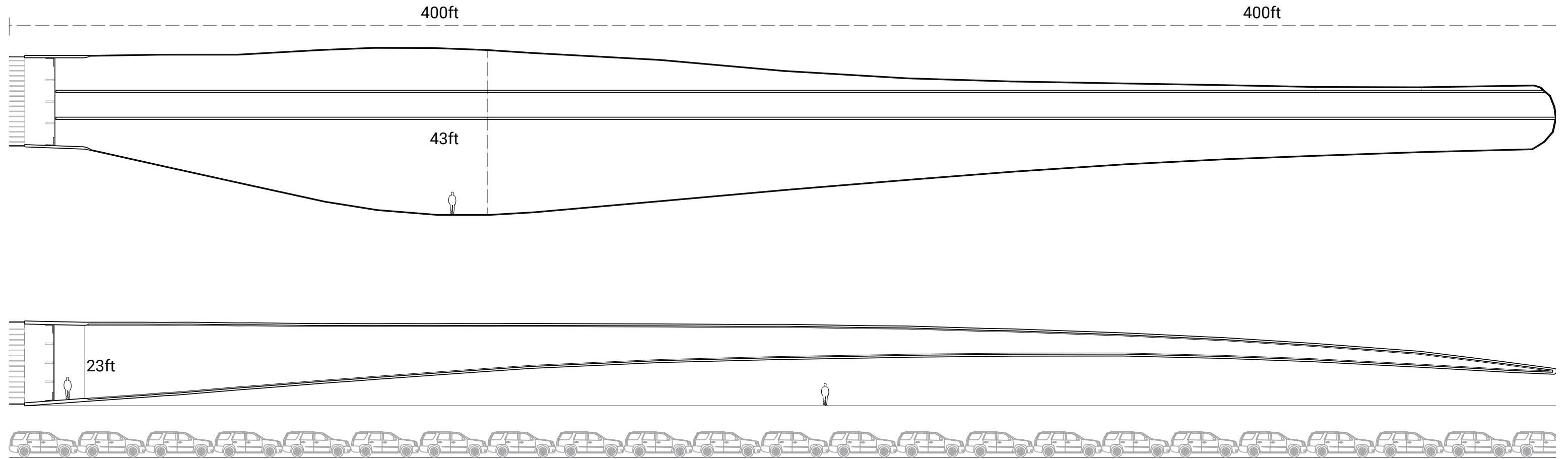




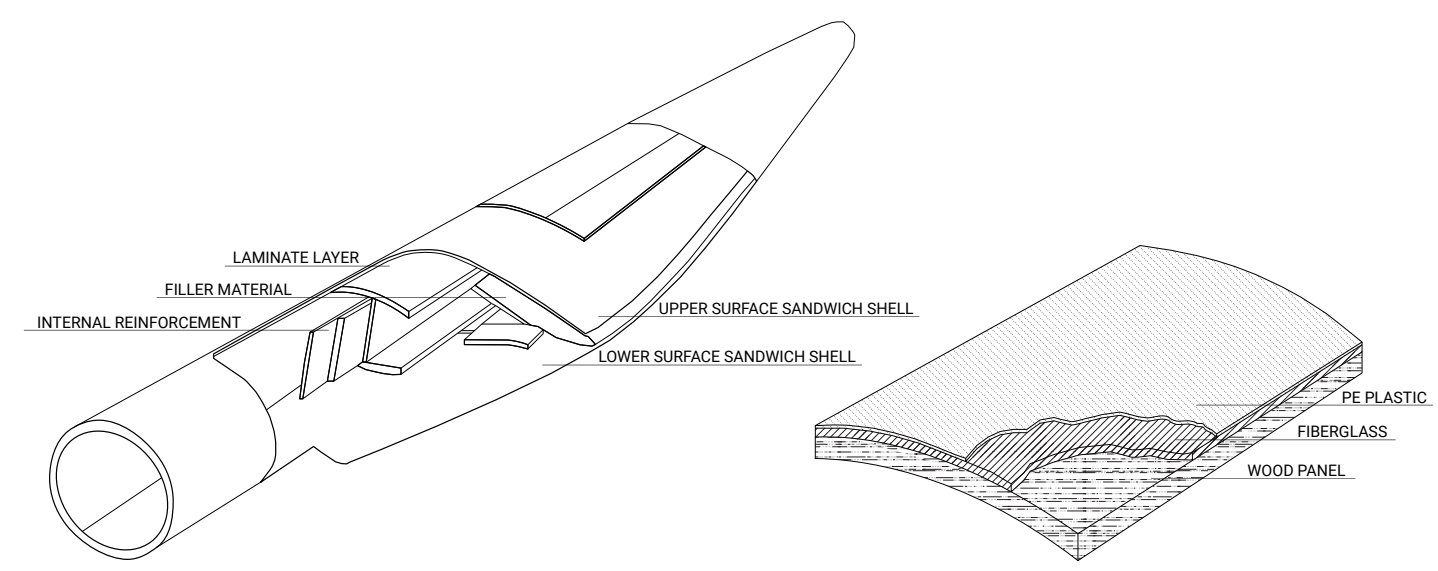
0.1 Site Plan



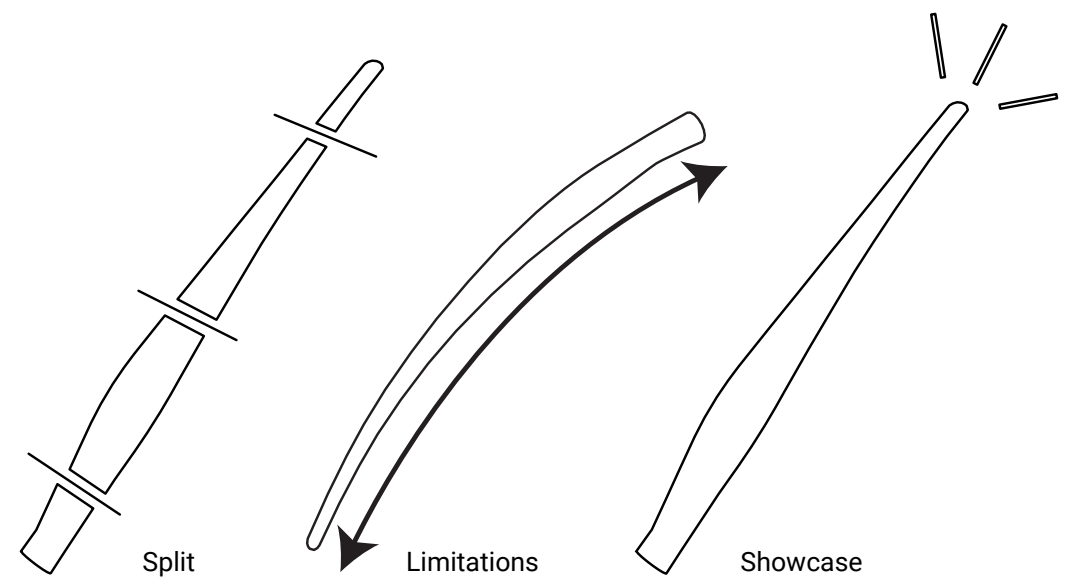




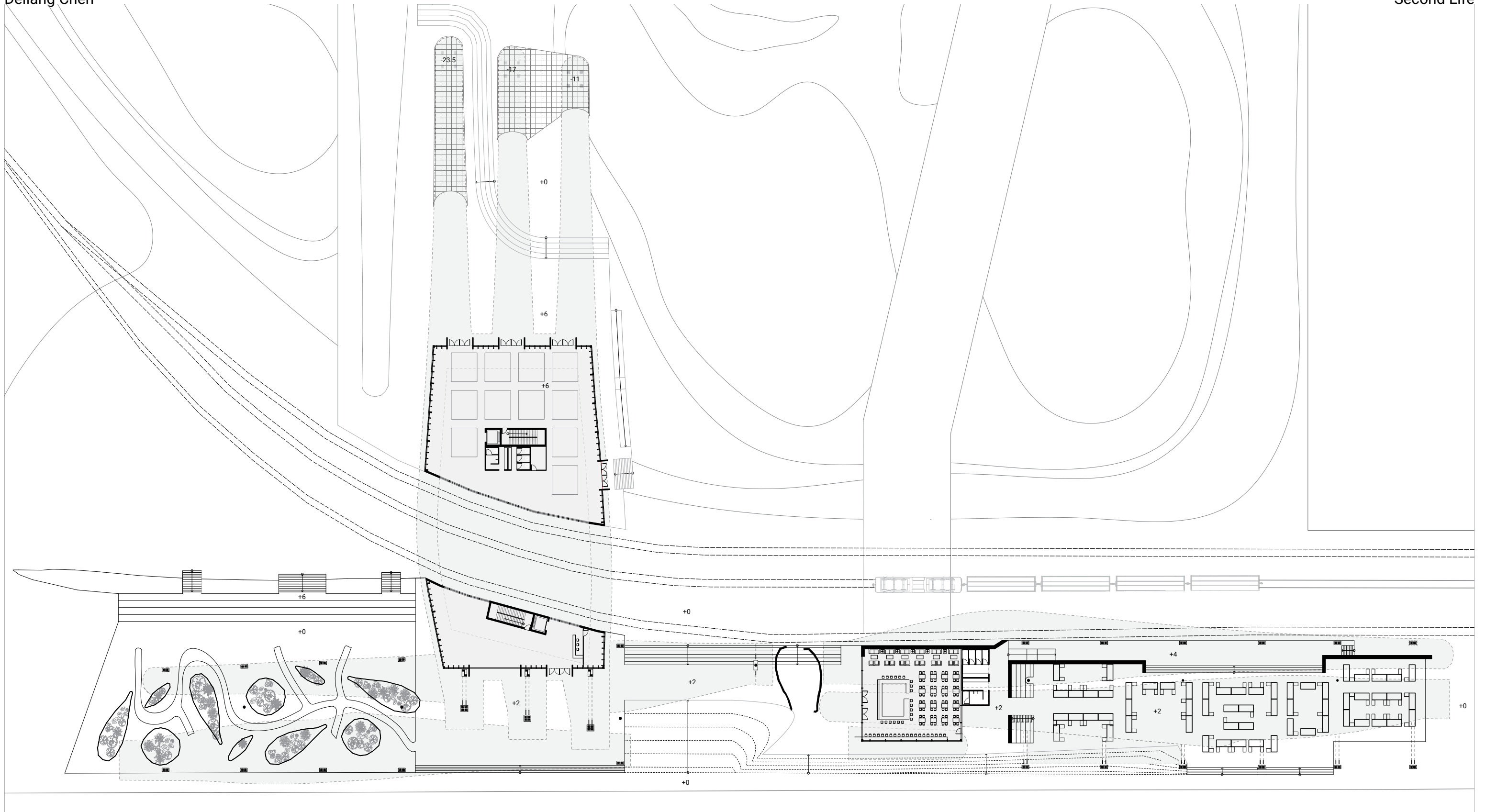
0.5 Full Blade Dimen-




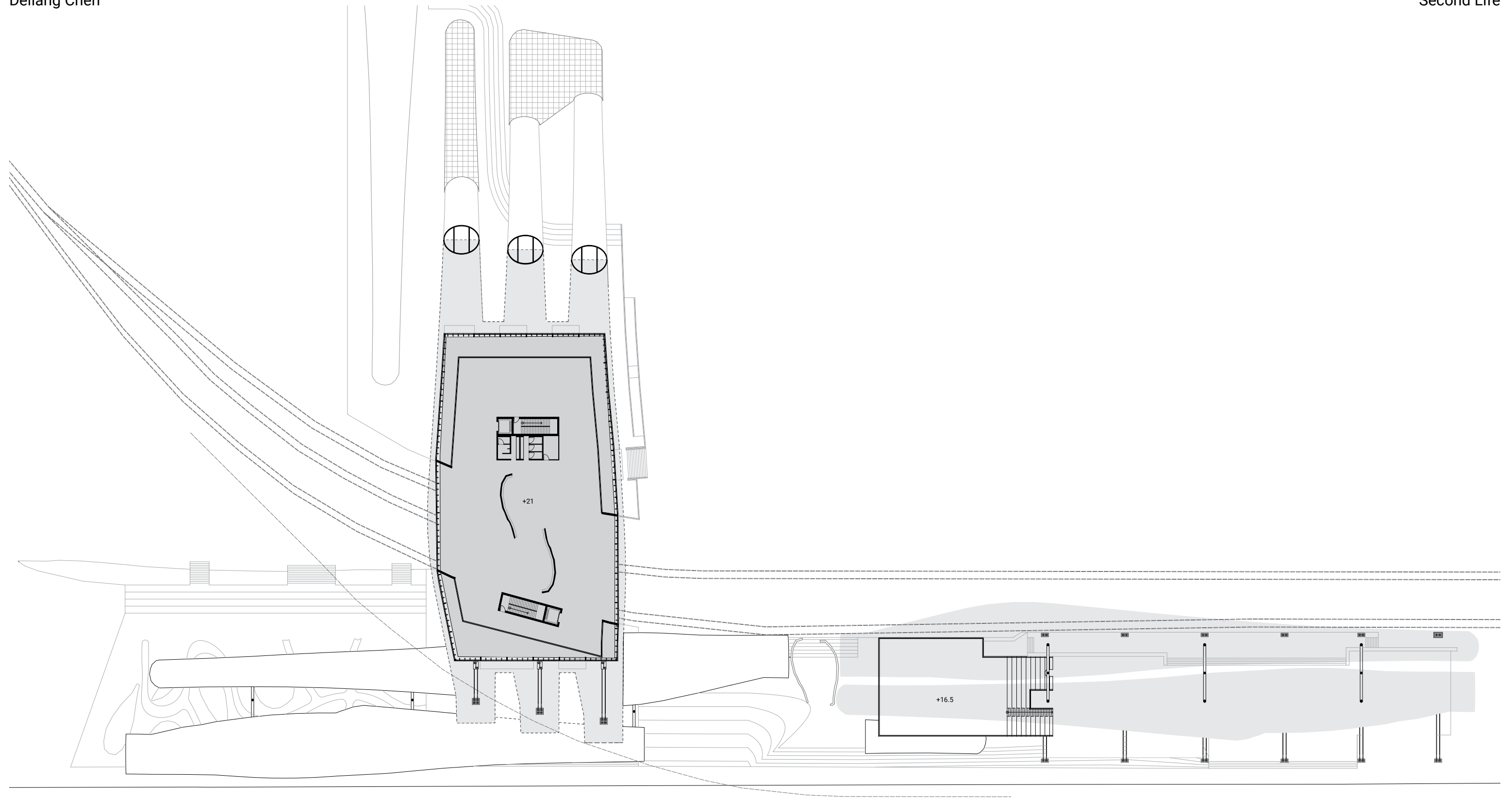
0.6 Blade Material Breakdown



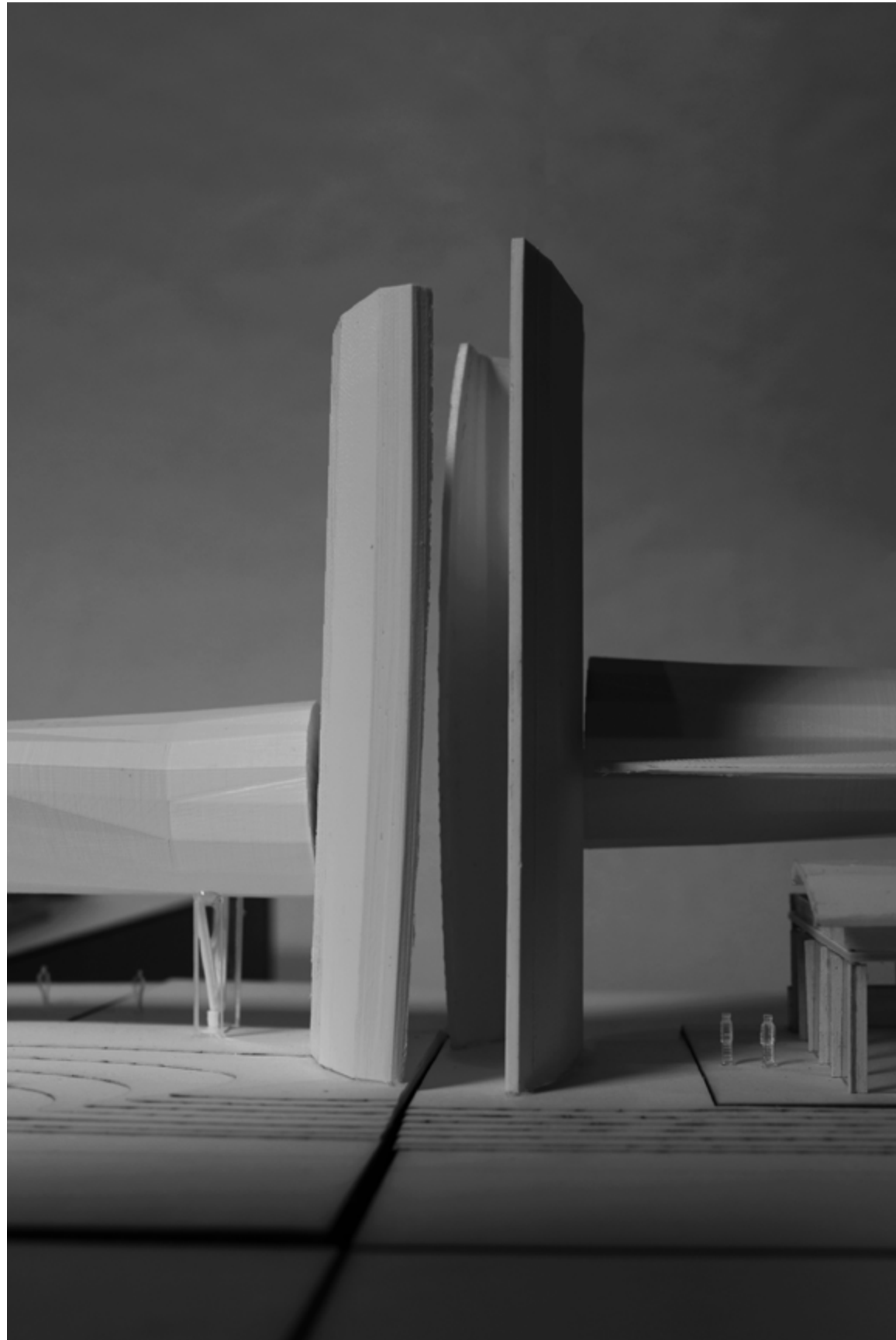
0.7 Blade Transformations



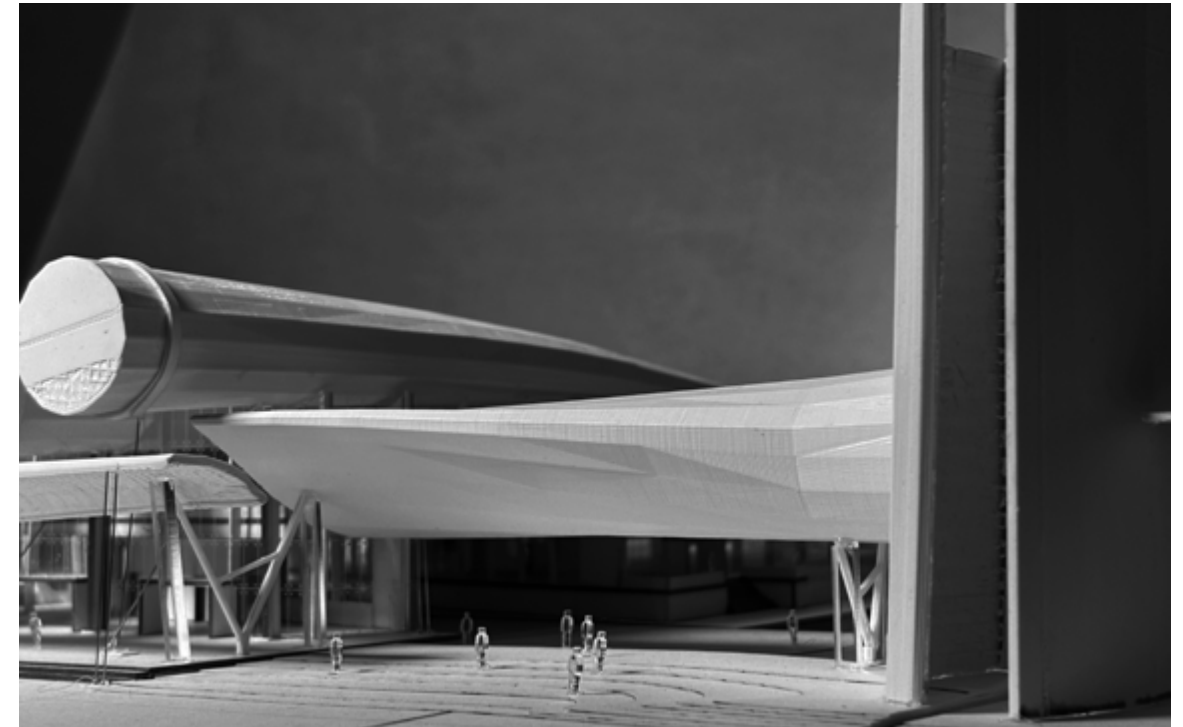
0.8 Ground Plan 



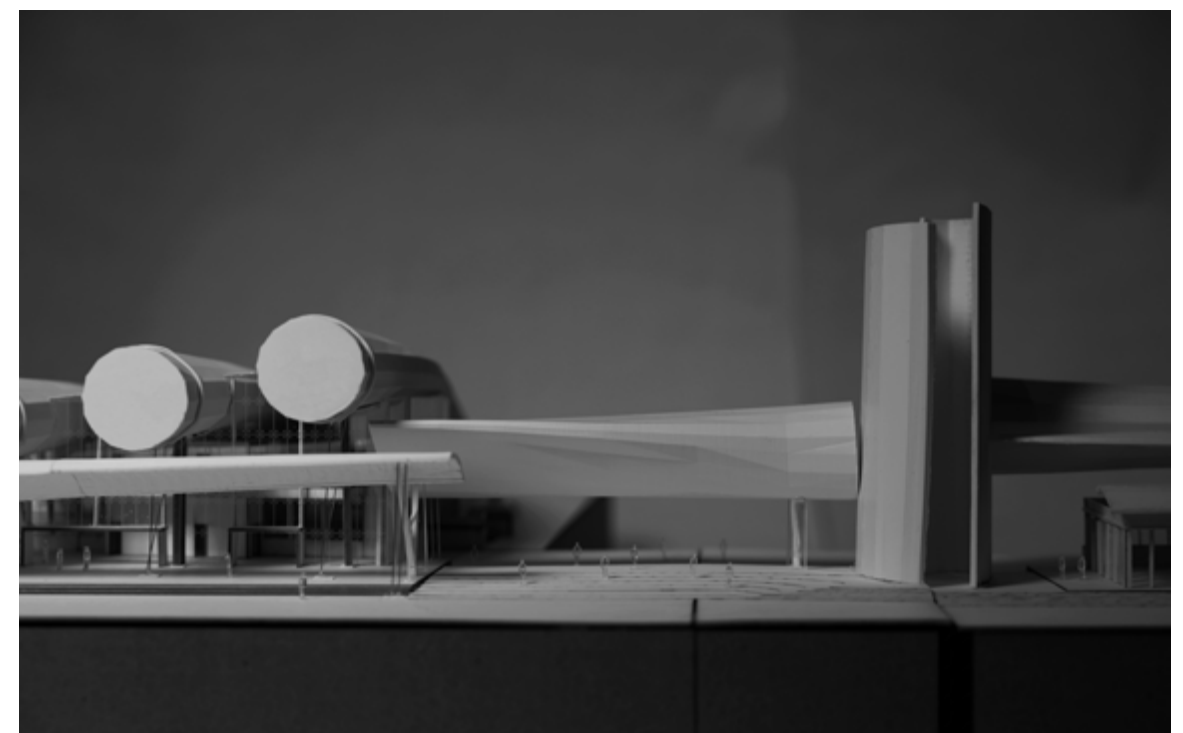
0.9 Second Floor ↻



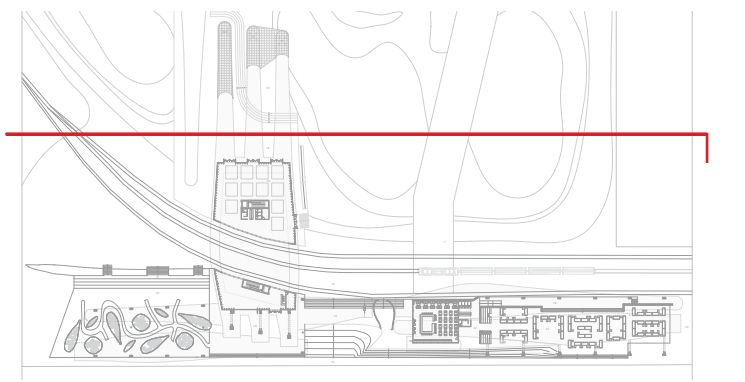
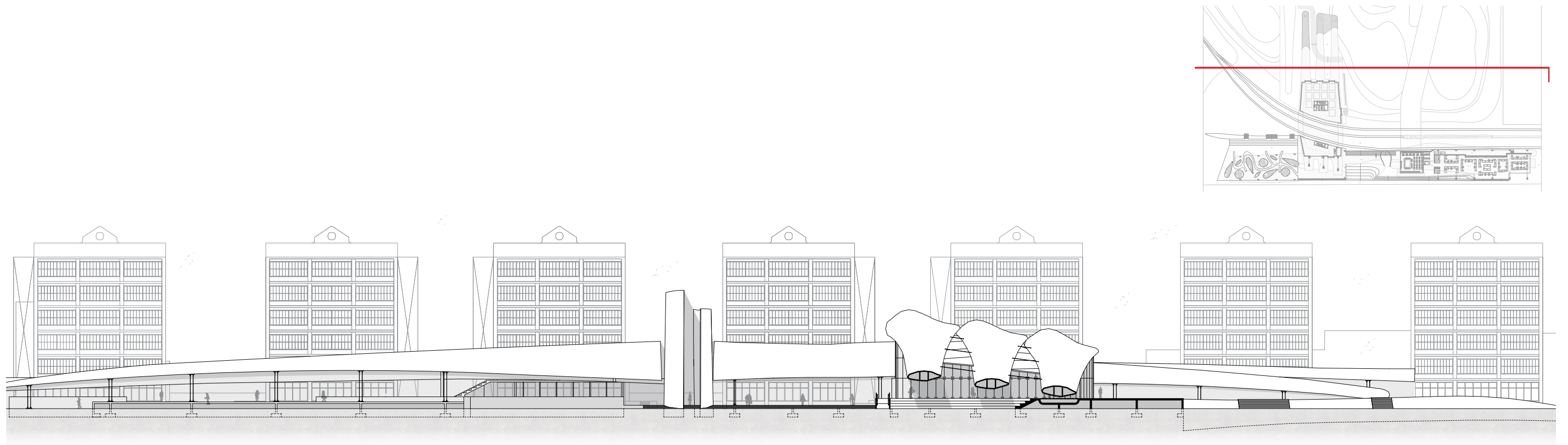
0.10 Vertical Blade Acting as Wayfinder



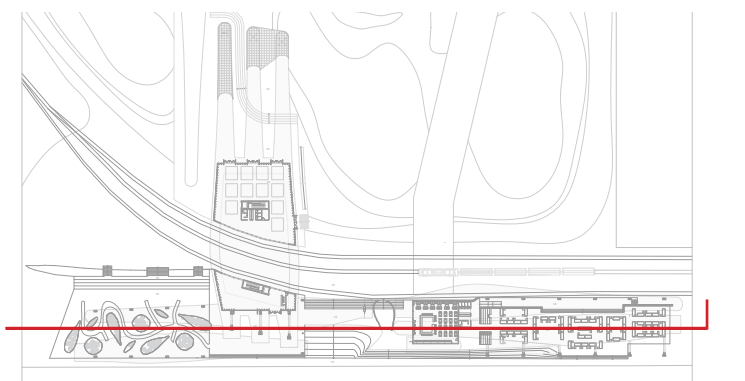
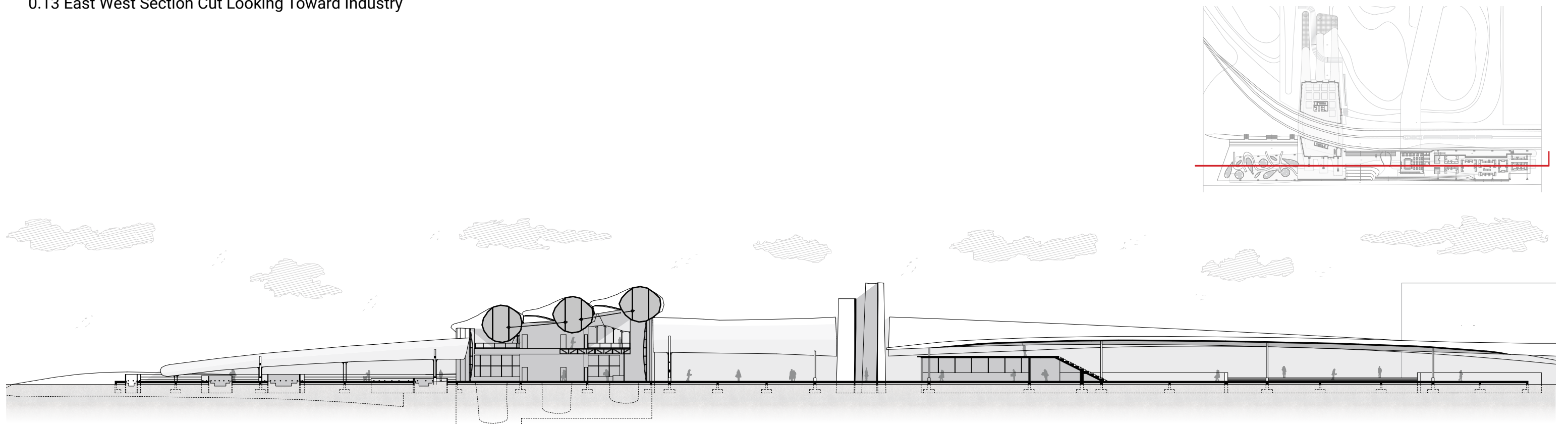
0.11 Main Entrance Onto Site



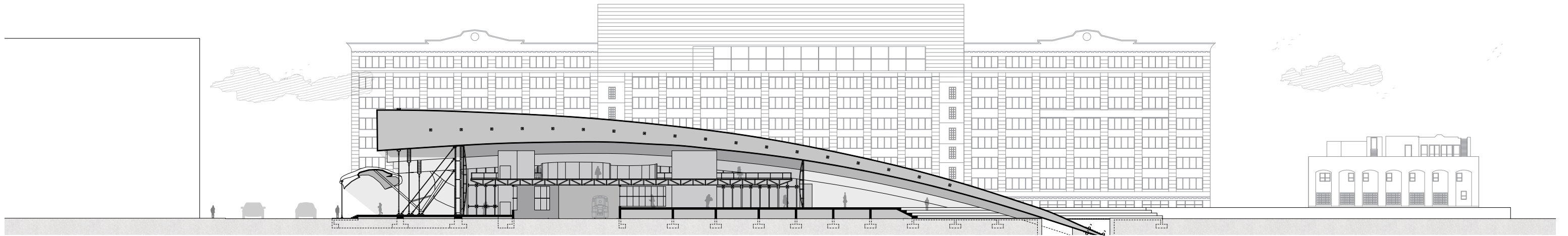
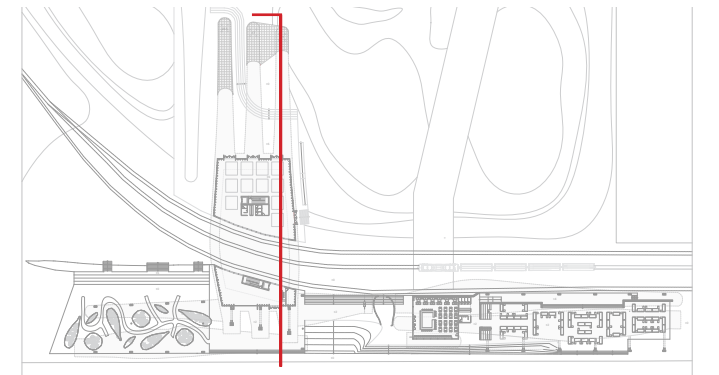
0.12 Front View of Entrance Onto Site



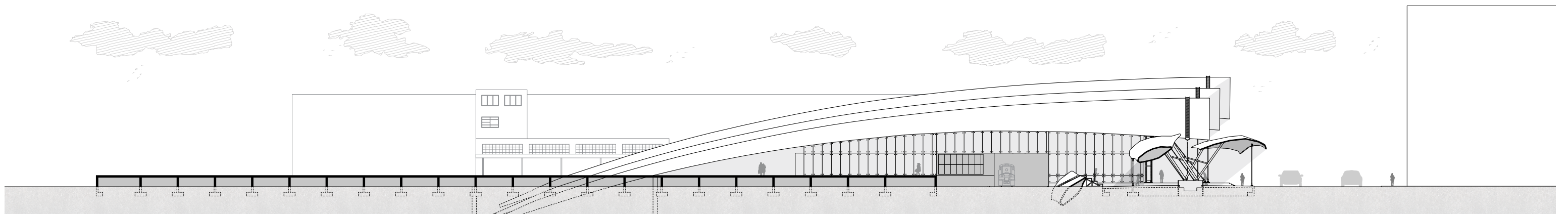
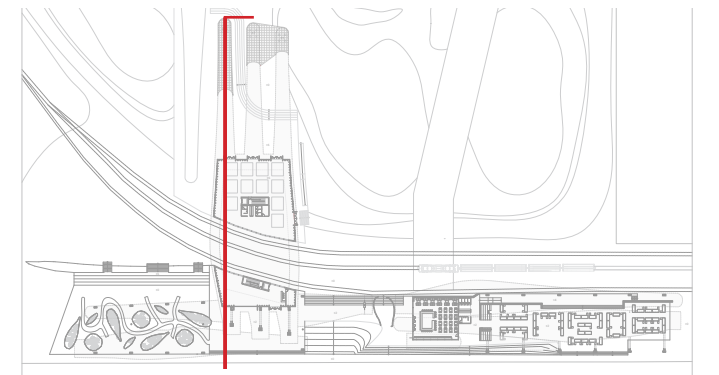
0.13 East West Section Cut Looking Toward Industry



0.14 East West Section Cut Looking Toward Site



0.15 North South Section Looking Towards The West



0.15 North South Section Looking Towards The East







# 02 MOUNTAIN AVEN HOUSE

Passive Cooling With Water  
Advanced Architectural Design Studio

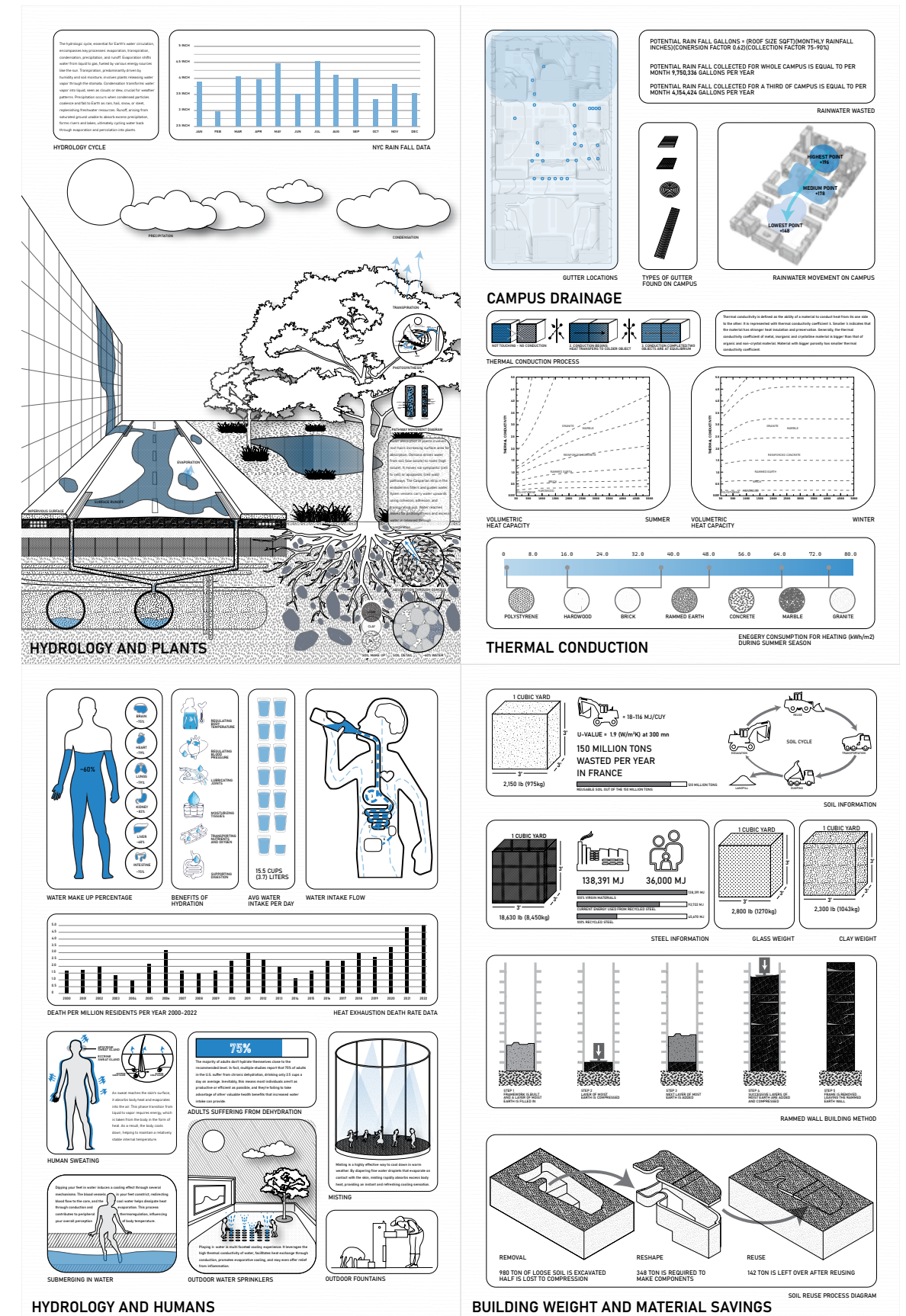
Instructor: Philip Rham, Mariami Maghlakelideze

Year: Fall 23'

Location: Columbia University Campus, New York

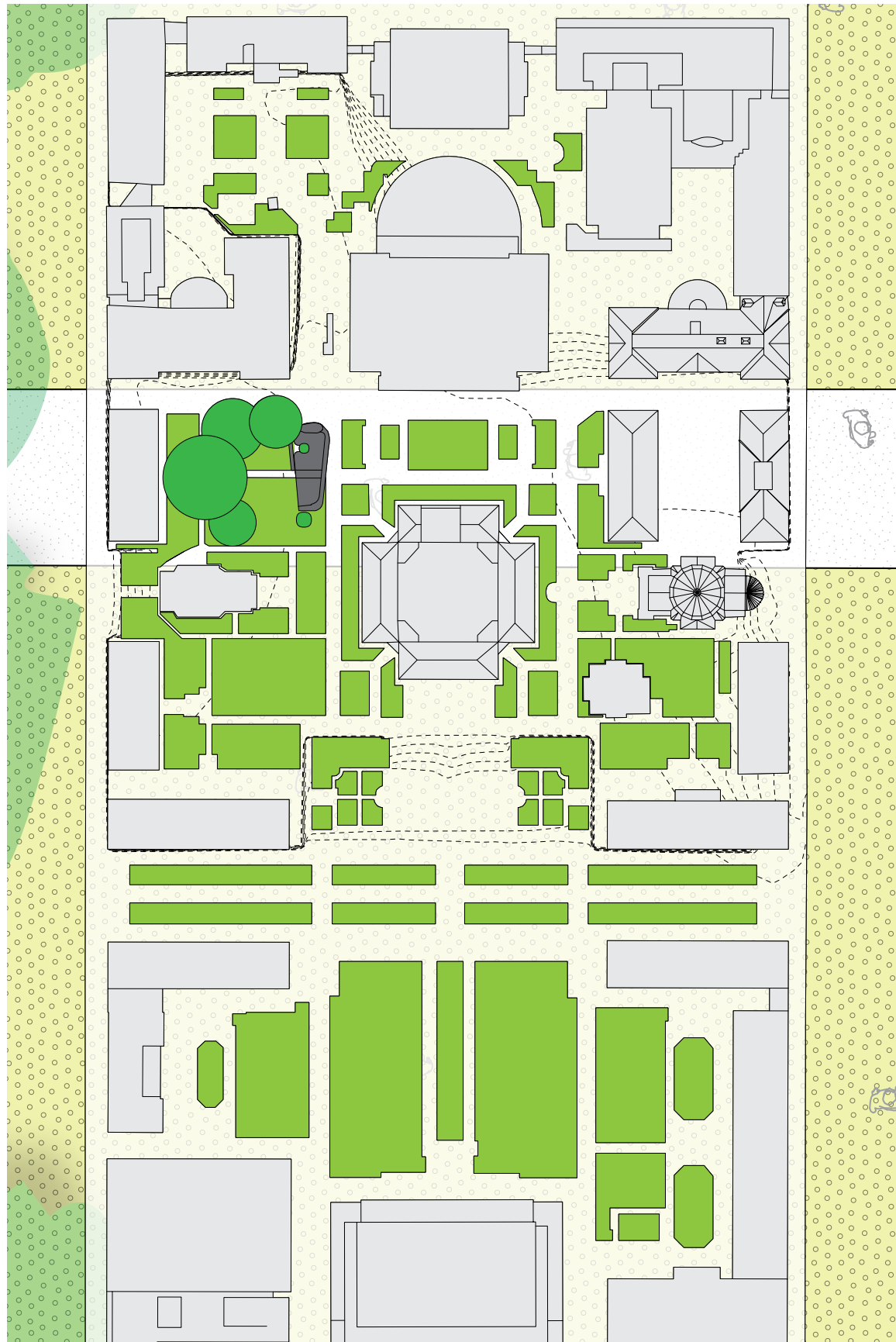
## Description

The main focus of the project was to create a micro climate within a space that would prove cold enough for plants that would typically need a colder climate to survive. The cooling had to be done passively without the intervention of air condition as we are trying to combat global warming instead of aiding it. The project utilizes the rain water that would be wasted and recycles it through the building to cool down the atmosphere within the structure.



1.1 Different Research Done on the Topic Of Hydrology

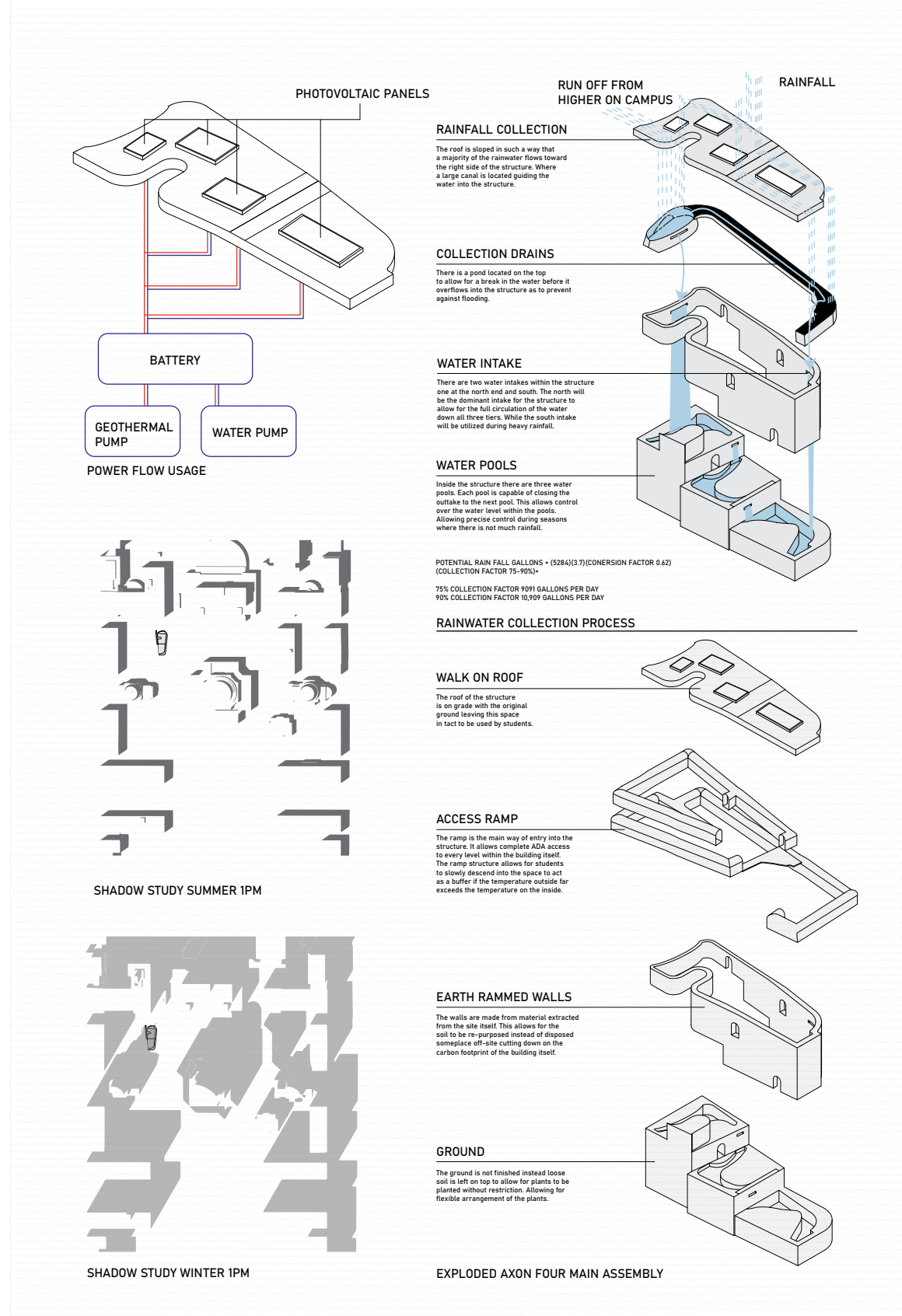




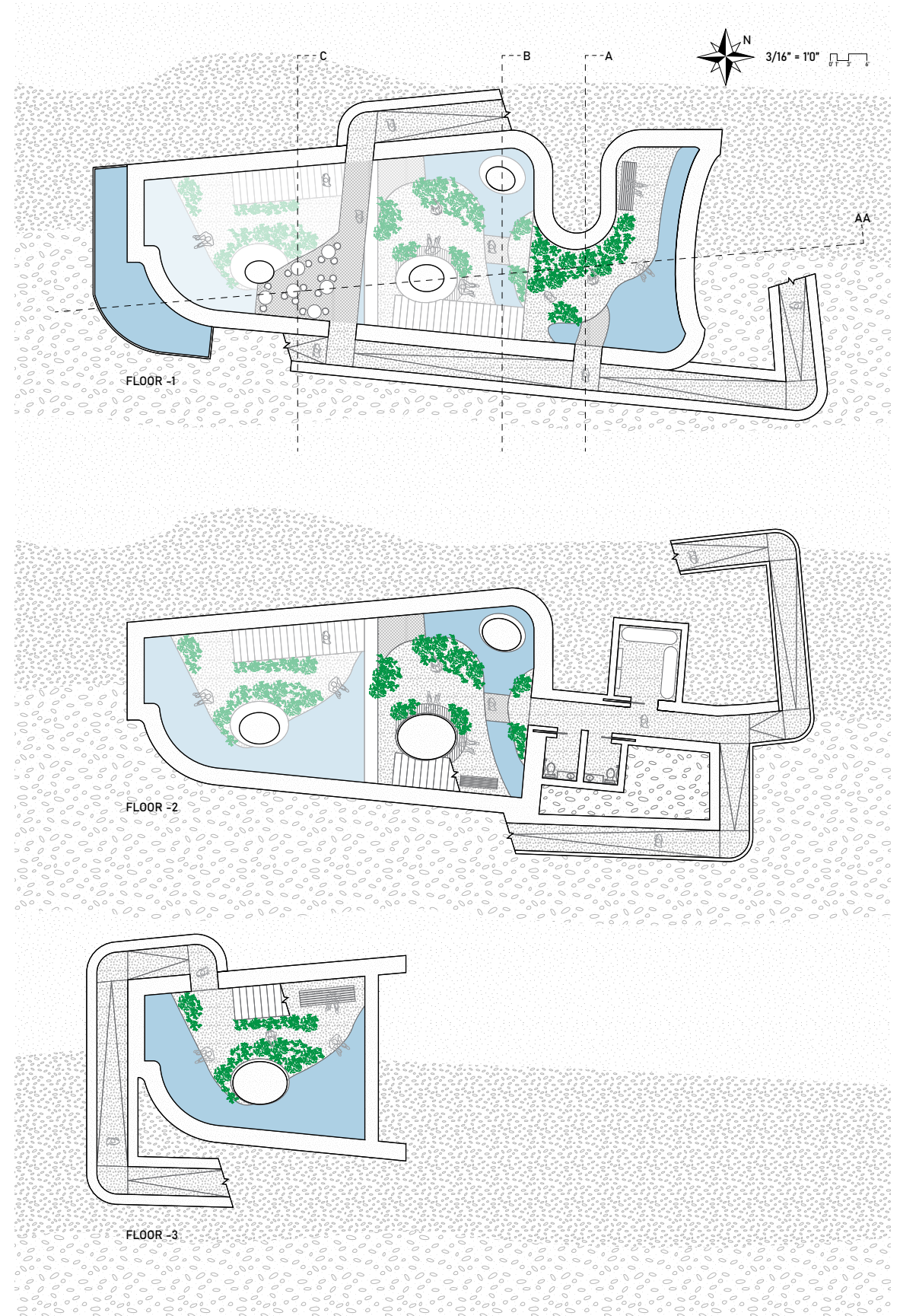
1.2 Site Plan



1.3 Ground Plan

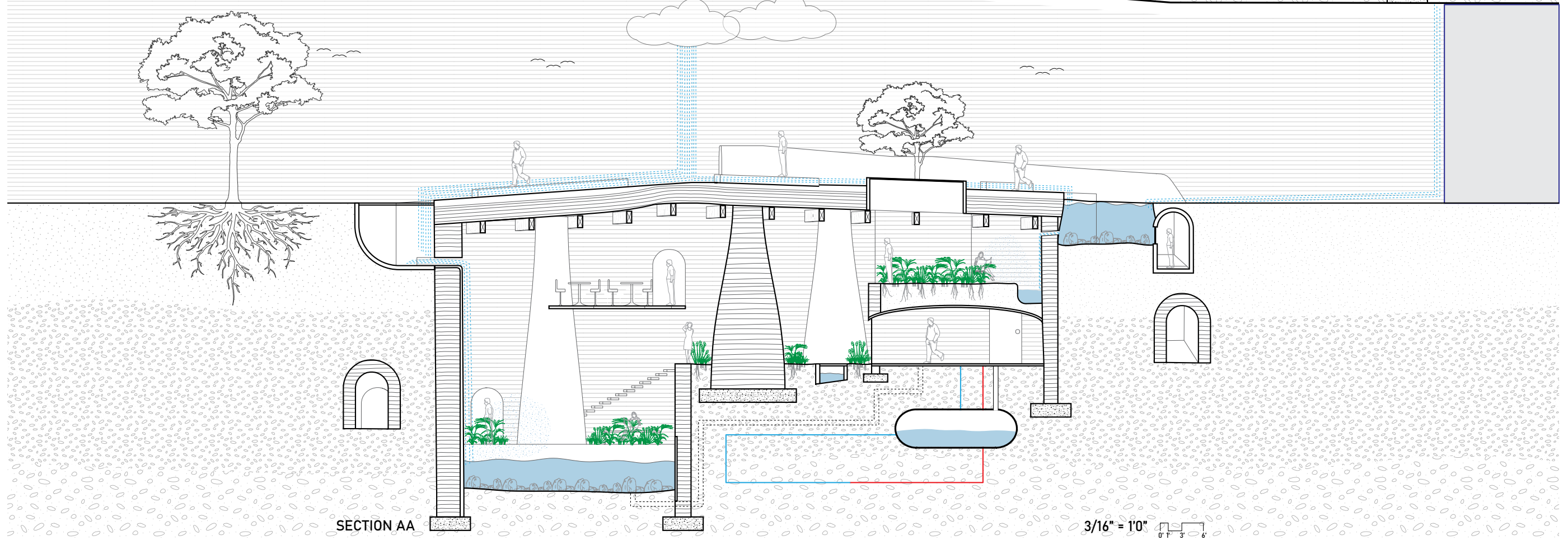
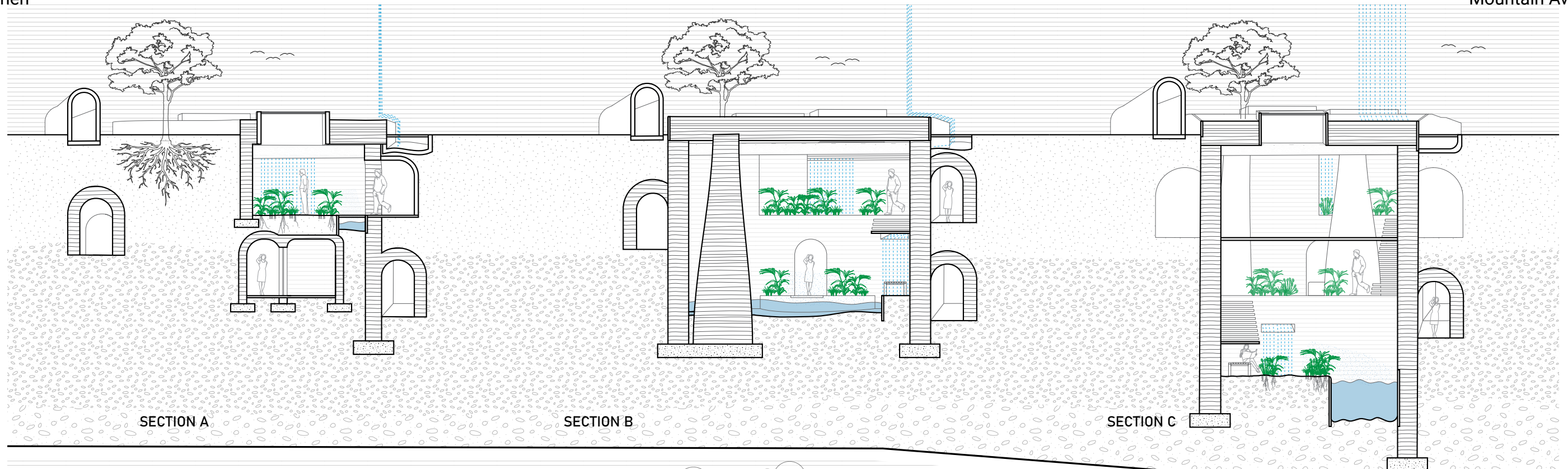


1.4 Design Breakdown



1.5 Plans







## 03 RELIFE

*Untethered Object Within The Ocean*  
Advanced Architectural Design Studio

Instructor: Michael Loverich, Antonio Torres

Year: Summer 23

Location: N/A

### Description

This was a conceptual project where the task was to create a complete untethered floating island in the middle of the ocean. My project had two main focuses one was on the ability to rise and lower the whole island allowing for different typologies to happen depending on the height of the island. The other was the factor of time. How through the time would the structure hold up. What time would do to the different man made systems if left to its own demise.



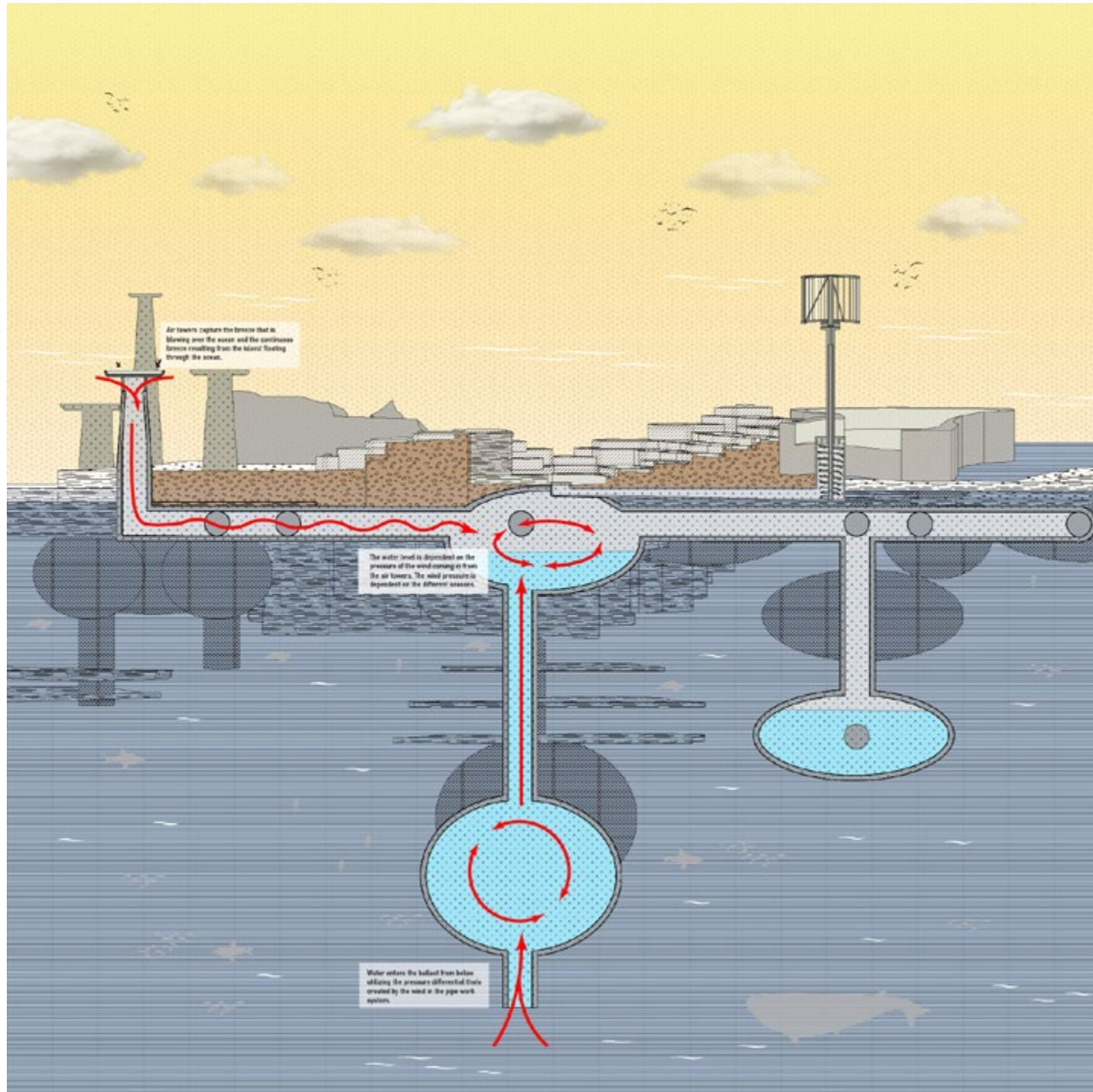


2.1 Plan

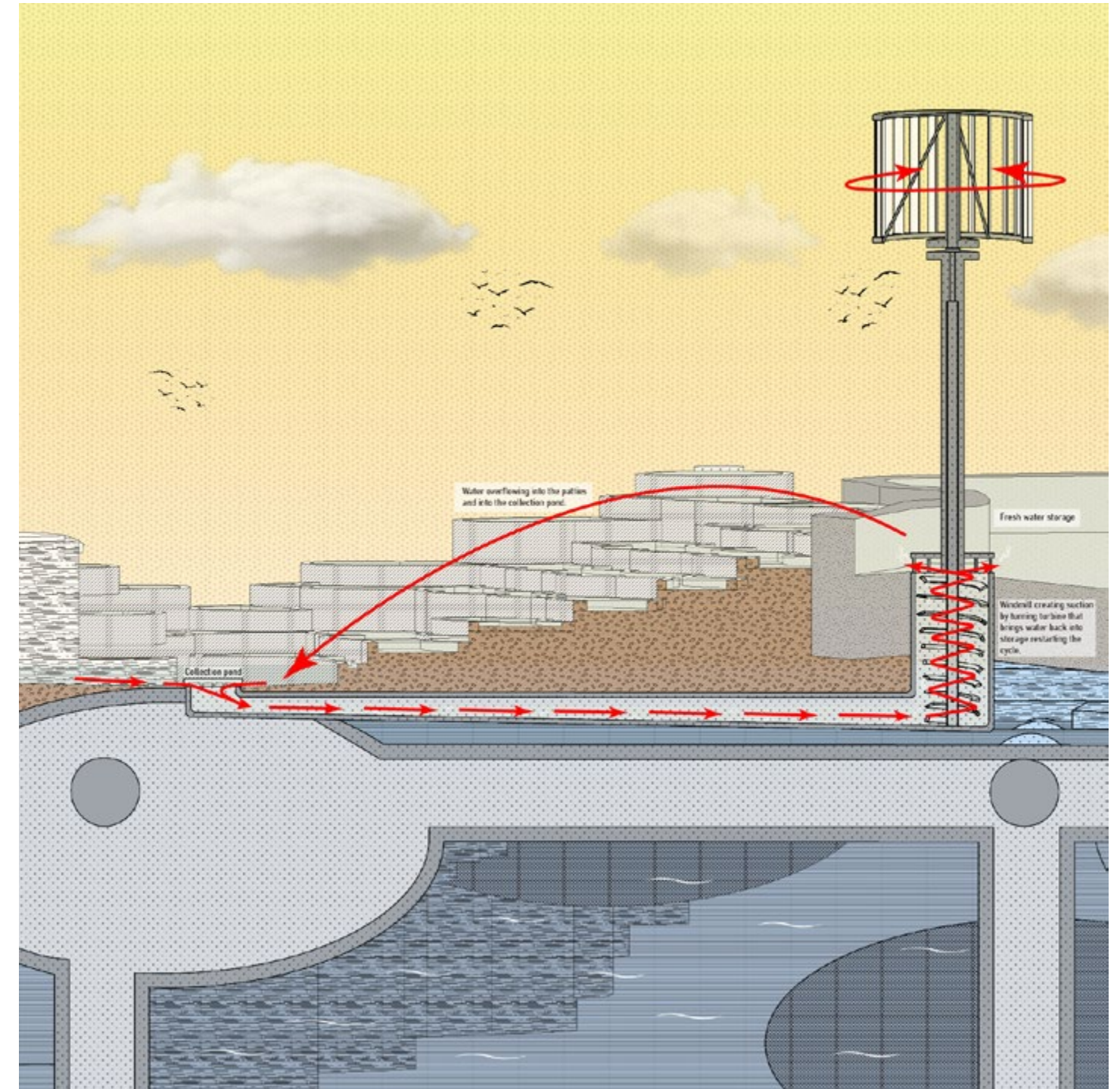


2.2 Underbelly Plan



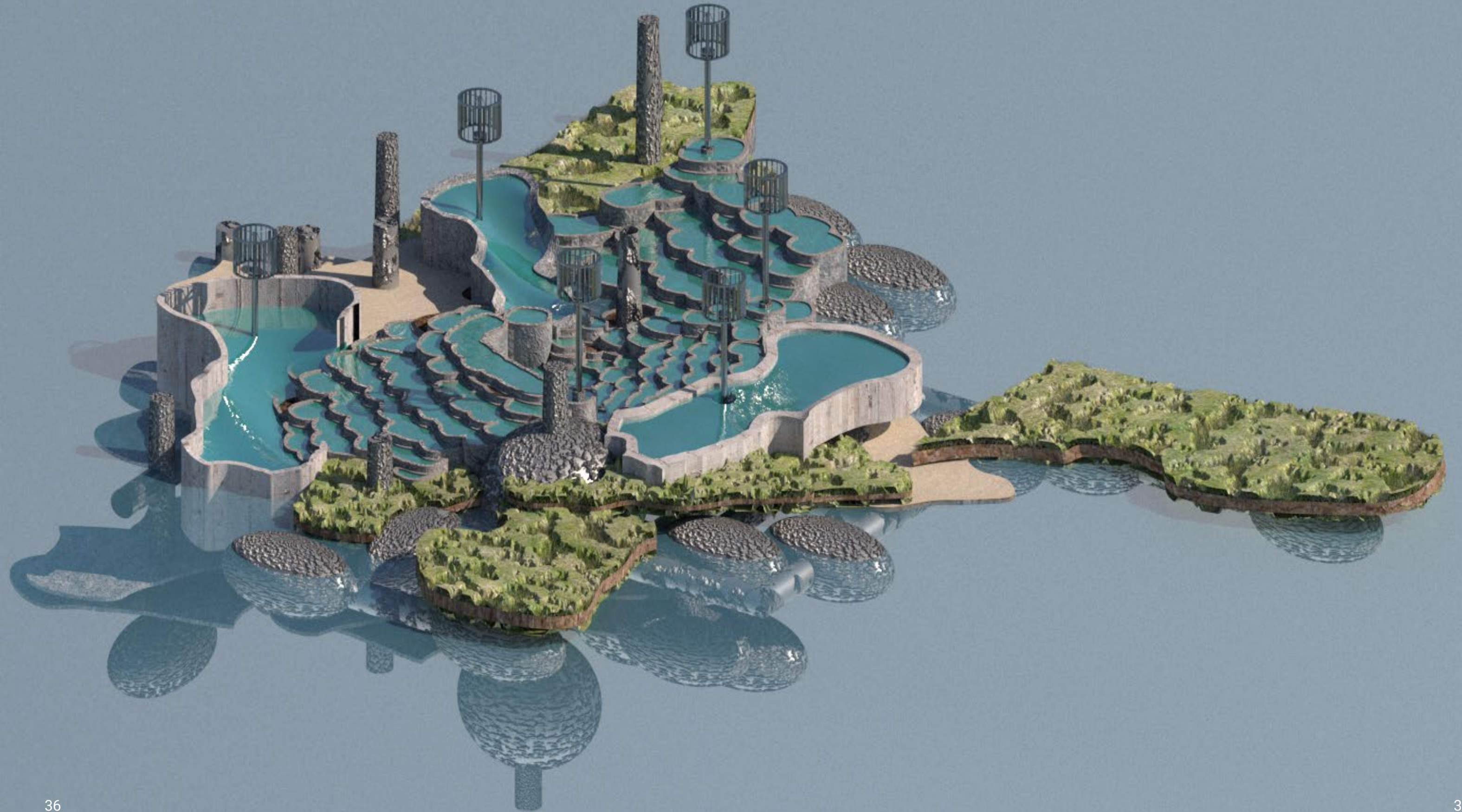


2.3 Section Explaining How the Ballistics Works



2.4 Section Explaining How the Water is Moved





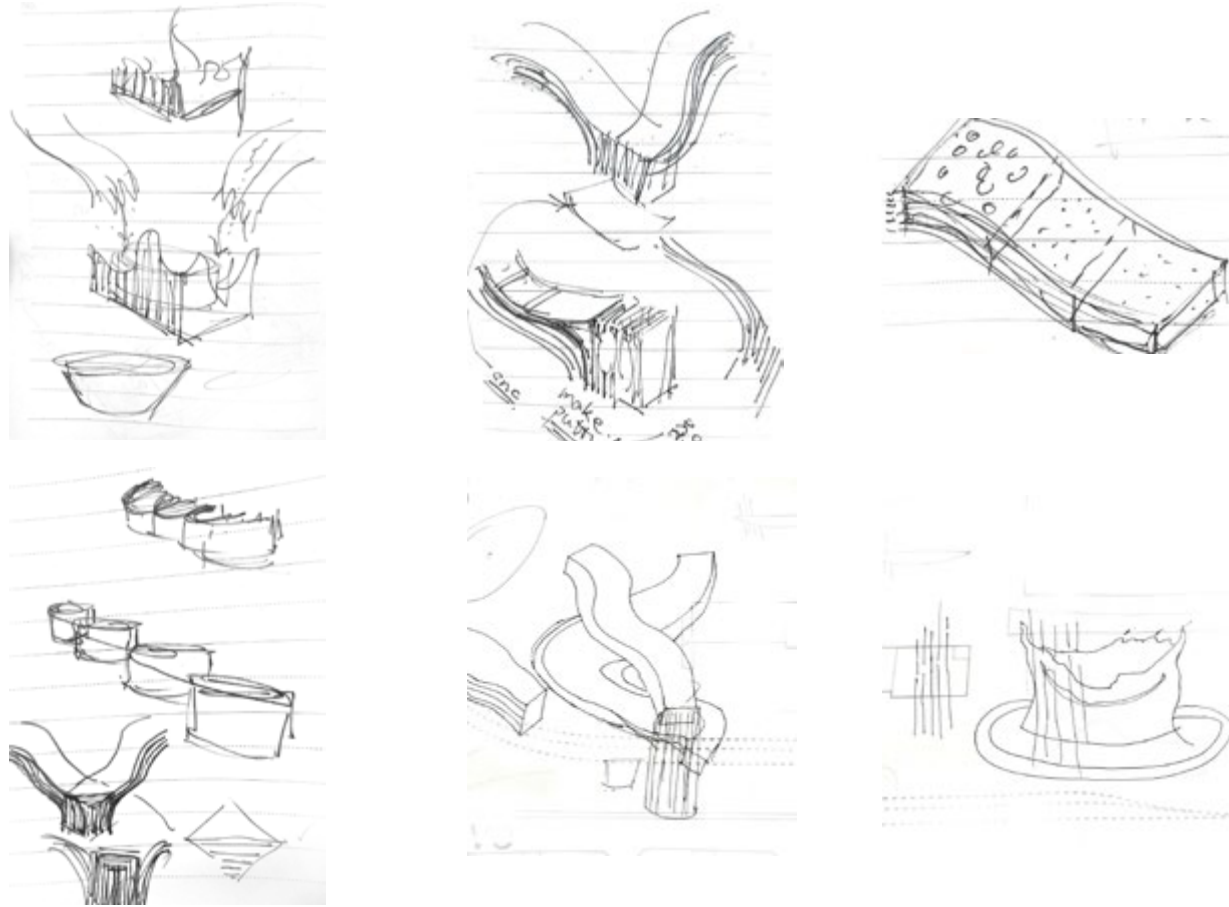












## 04 OBSCURED PATHS

*Cultural Pathfinding Through An*

Elective: Subject Object

**Instructor:** Suchi Reddy

**Year:** Spring 24'

**Location:** N/A

### Description

This was a team project in pairs. The visual elective's goal was to pick two objects and explore a subject through the two of them. The main subject we were exploring is the internal process one encounters when navigating through more than one cultural identity growing up. And how that process would look if it was visualized into an object. For our project, we started with coffee and tea. We picked these two objects because they can both be traced back to two distinctive cultures. We picked them not to directly compare the cultures to one another but to use them as analogies to demonstrate two different cultural identities within a person.







3.1 Front Face



3.2 Right Face





3.3 Back Face



3.2 Angle View

