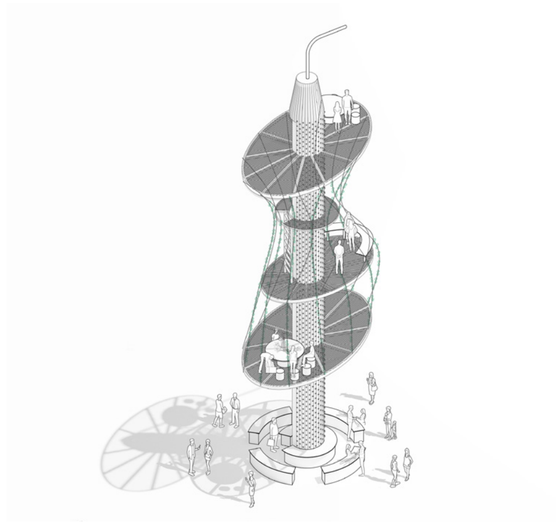
Architecture

PORTFOLIO

Harshil Shah
Columbia University I MSAAD

CONTENT

The portfolio is a compilation of selected works from 2023 - 2024.



THE WORLD OF TOMORROW

Fall 2023
Studio Tutor: Mark Tsurumaki

Constructive Entropy
Site:Flushing Meadows, New York City

By 2050, with a projected 10 billion people, a 25% drop in crop production due to climate change is anticipated. Long journeys for vegetables, spanning 2400 km, decrease their nutritional value due to pesticides. Vertical farming is a promising solution that consumes 90% less water than traditional farming, offering efficiency, sustainability, and freedom from pesticides. Consequently, vertical farming becomes a pivotal component in shaping the future of agriculture. Inspired by Flushing Meadows' history as an experimental ground, the vision aims to repurpose the New York State Pavilion into an energy-efficient & sustainable hub for tomorrow's food production. It fosters a comprehensive and sustainable community environment.

1800 **SALT MARSH** - The area was a **rich habitat** with an integral role in the food chain for some of the city's wildlife, especially fiddler crabs and mussels, which in turn contributed to the thriving salt marsh ecosystem.

1870 Due to the Industrial Revolution, the **wetlands became an ash dump** at the turn of the 20th century. Since it was so far away from the developed parts of New York, the land was considered almost **worthless**.

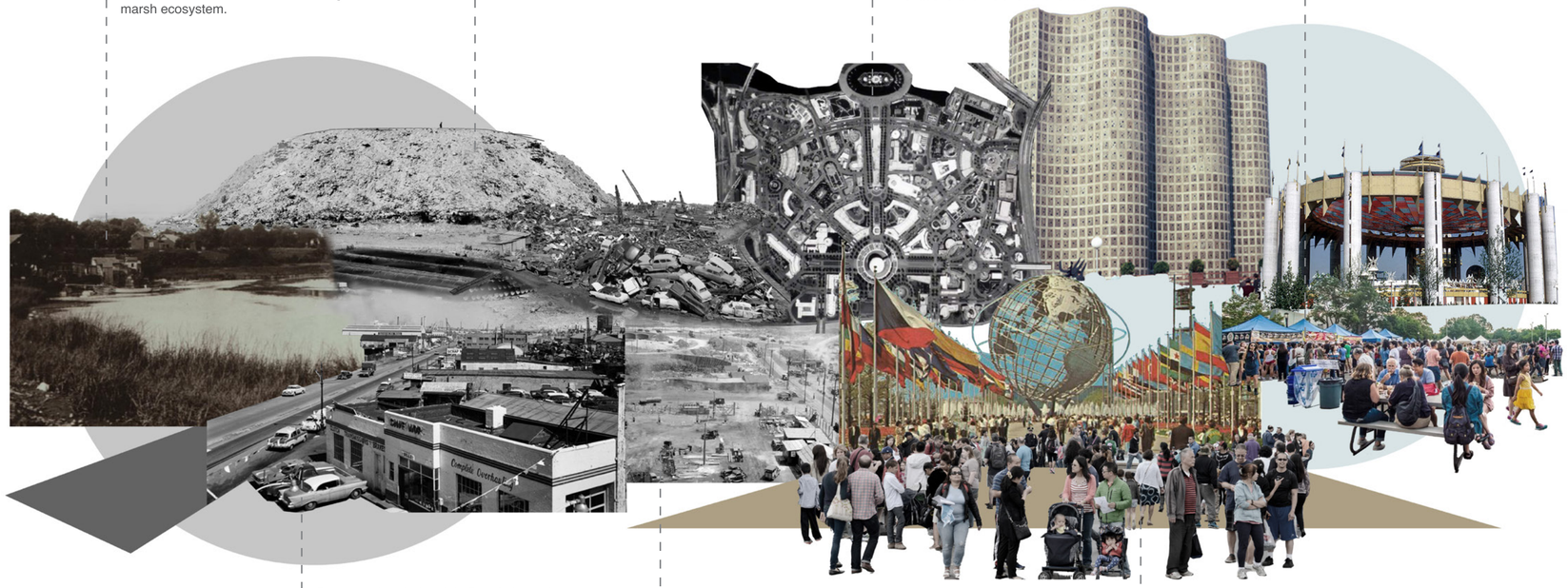
1934 The Ash Company turned what was originally a biodiverse marsh, and is today Flushing Meadows-Corona Park, into the **"Valley of Ashes."**

1936 Robert Moses, started the **transformation** of the dump land into park.

1939 **The World's Fair** was a huge worldwide event, meant to showcase the various achievements of nations. The theme was **"The World of Tomorrow,"** showcasing technological innovations and visions for the future.

1964 The park was selected to host another World's Fair, the theme this time was **"Peace Through Understanding."**

2015 Some of the iconic structures from the World Fair are site of attractions. The park started the **Queen's Night Market** that attracts people from entire city.



History of Flushing Meadows - Corona Park

Flushing Meadows has had a long and interesting history. Historically, the site was marshland with a rich habitat with an integral role in the food chain for some of the city's wildlife.It transformed from dumping site to park to host World Fair. While most pavilions were brought down, few still stand on the site. Some are in use, while some are abandoned. The park also hosts the famous Queens Night Market.

HONG KONG STREET FOOD (2015)
She wanted to introduce her cuisine to the people of NY and start her own buisness. Her passion to cook food brought her to the market.

EMEYE ETHIOPIAN CUISINE (2022)
She lives in Queens and did not find authentic Ethiopian Injera and wanted to introduce people to it. She sources it from Califorina and serves it to the people.

LA CARNADA (2019)
They live in Brooklyn. Her mom's owned a restaurant but it closed. They wanted to continue her mom's buisness that led them here.

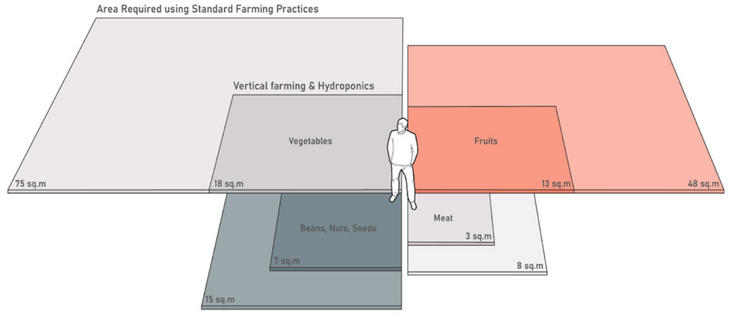
AY CACHAPAS (2022)
They live in Corona. They wanted to introduce the dish they grew up eathing to the city. Their passion to cook food brings them here.

Interviews from Queens Night Market

Food vendors come from diverse communities and are passionate about introducing their food culture to the city. Majority of these vendors live in nearby neighborhoods and set up stalls over the weekends.

Site Photos

Dubbed the "Tent of Tomorrow," the New York State Pavilion from World Fair dazzled and delighted fairgoers. By 1976, the tent's iconic roof was declared unstable and removed, leaving the Pavilion's future in question. The pavilion stands abandoned even today.



Standard farming practices v/s Regenerative farming

As compared to conventional farming, aquaponics uses less argricultural area, 90% less water, is more efficient, sustainable, and free from pesticides.

RAINWATER

NUTRIENT-RICH WATER
HARVEST WASTE

AQUAPONICS &
MARKET

WASTE

COMPOST

FISH

FISH FOOD
(PELLETS)

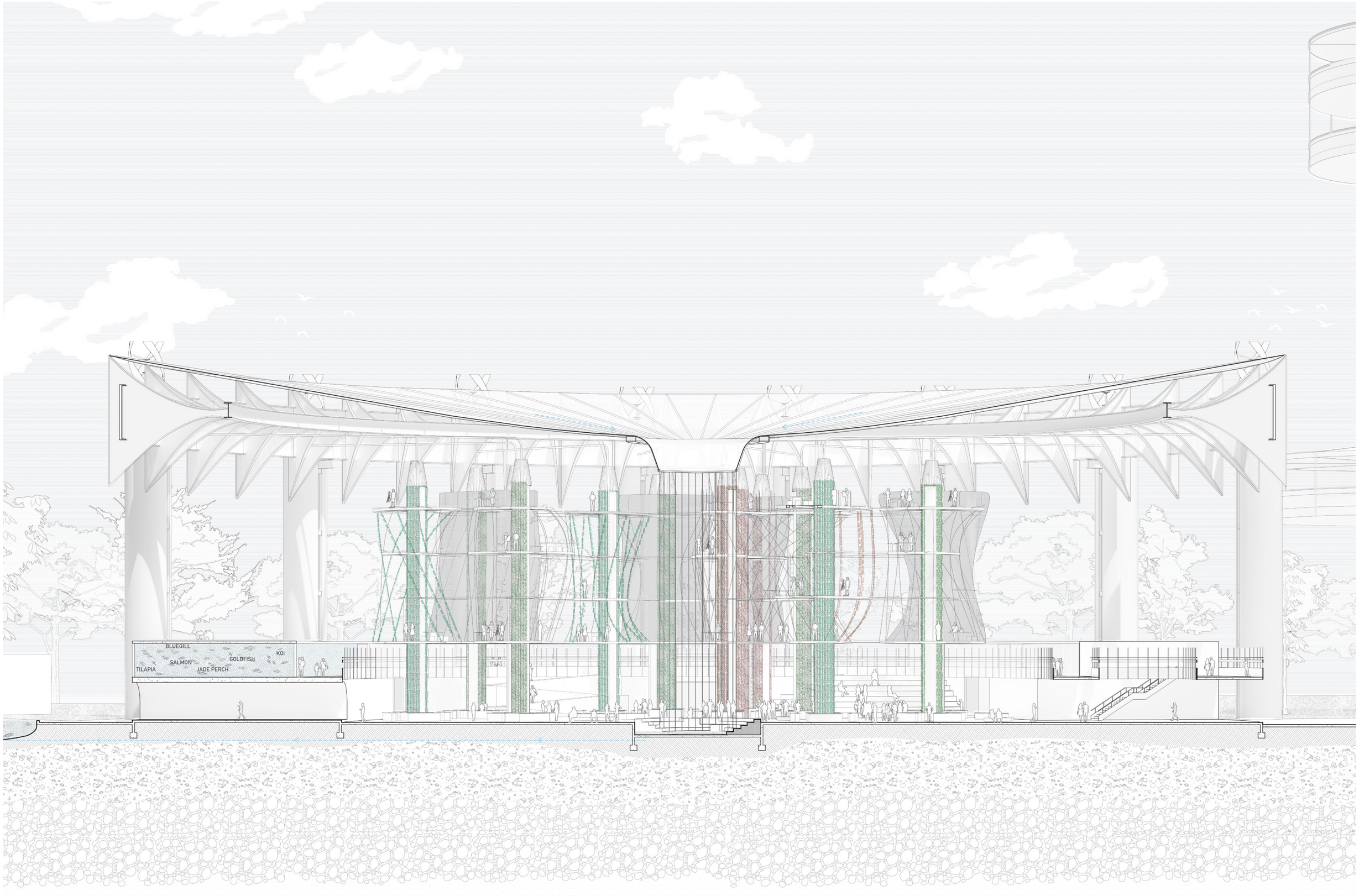
INSECTS &
WORMS

HOME FOR INSECTS & WORMS

FERTILIZER FOR PLANTS

PLANTS

01 NY State Pavilion - Aquaponics & Market
02 Fish Tank
03 Algae Production
04 Compost
05 Cloud Kitchen
06 Plant - based Meat / Research
07 Farm-to-Table Restaurant



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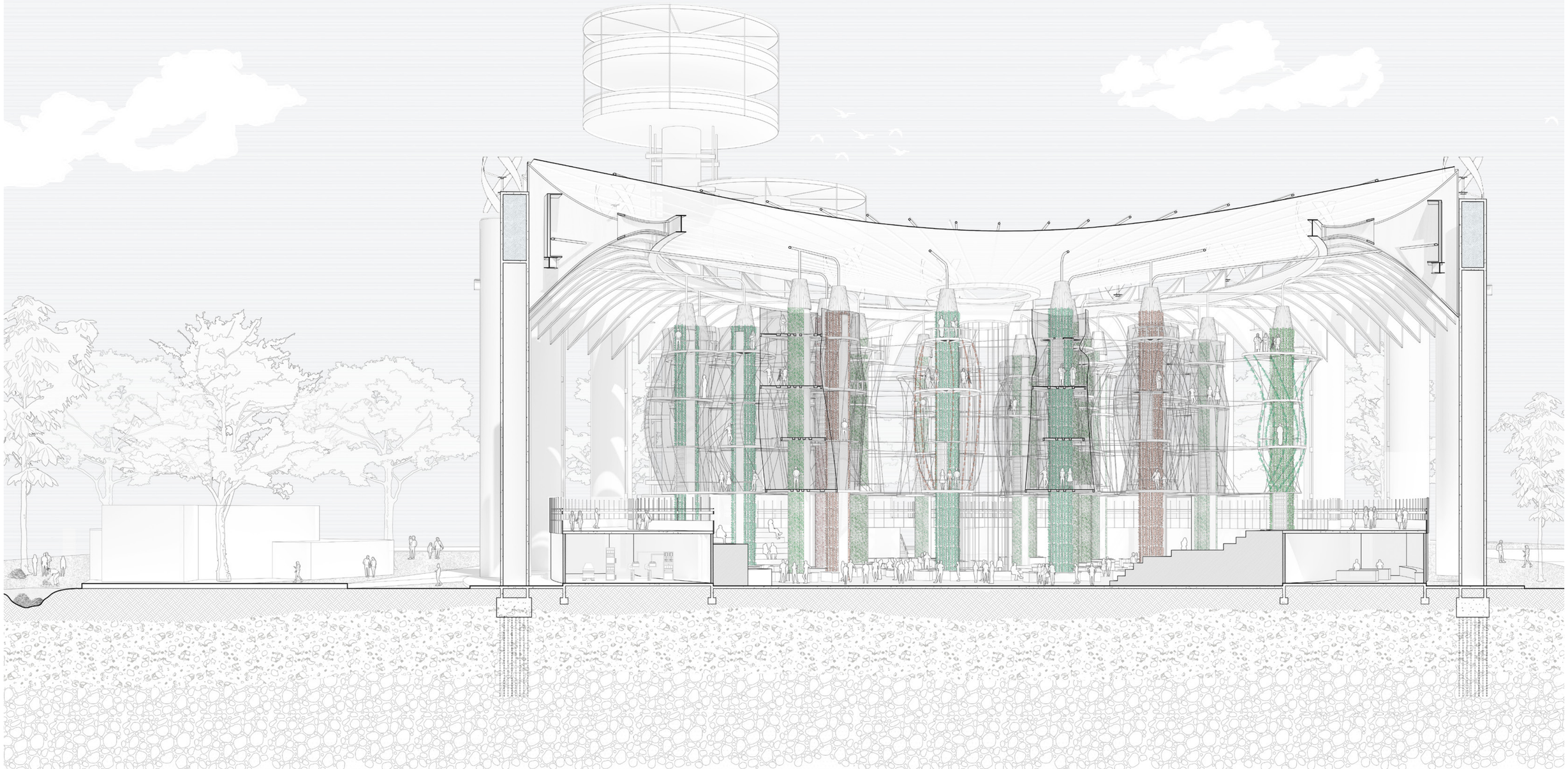

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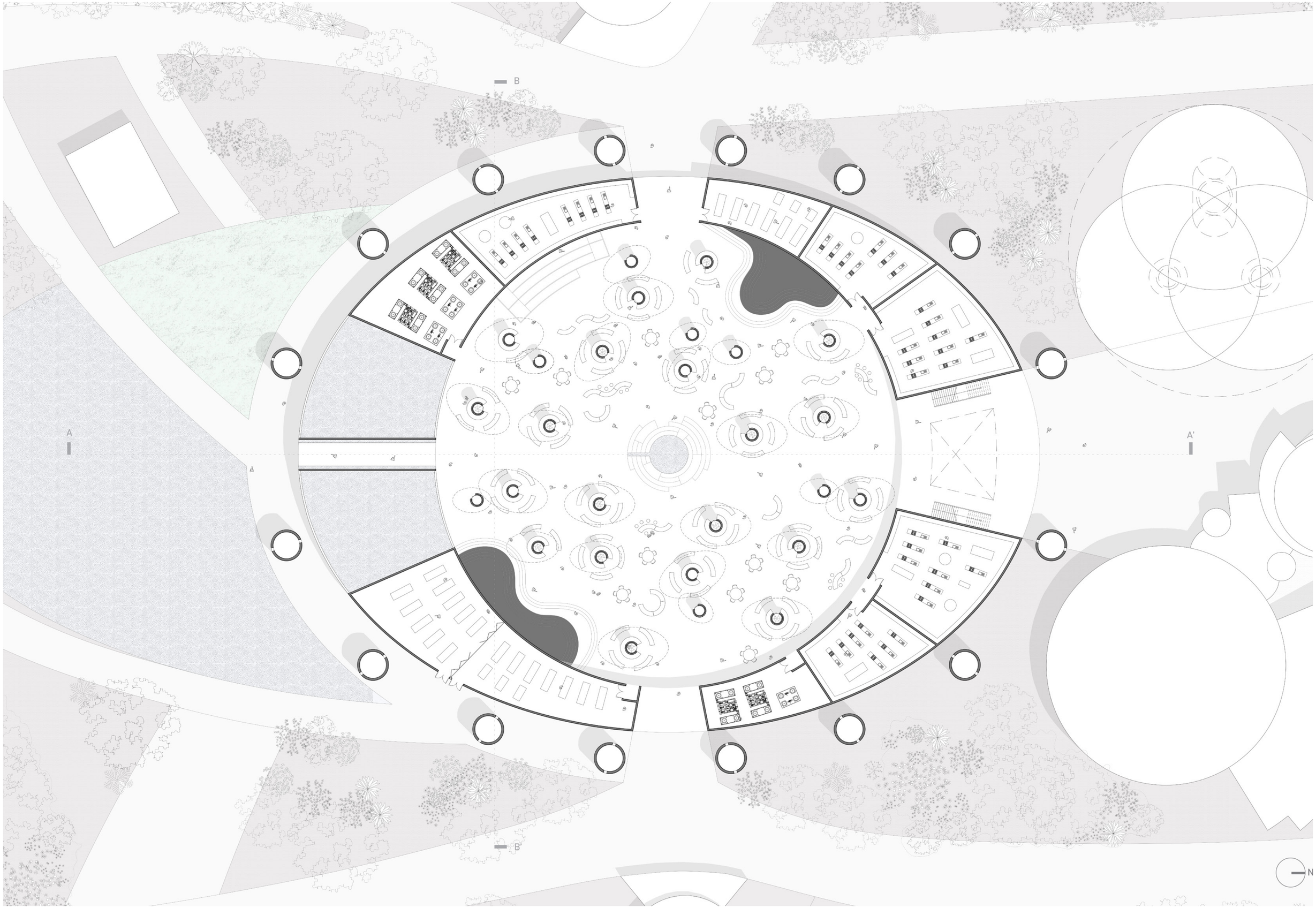
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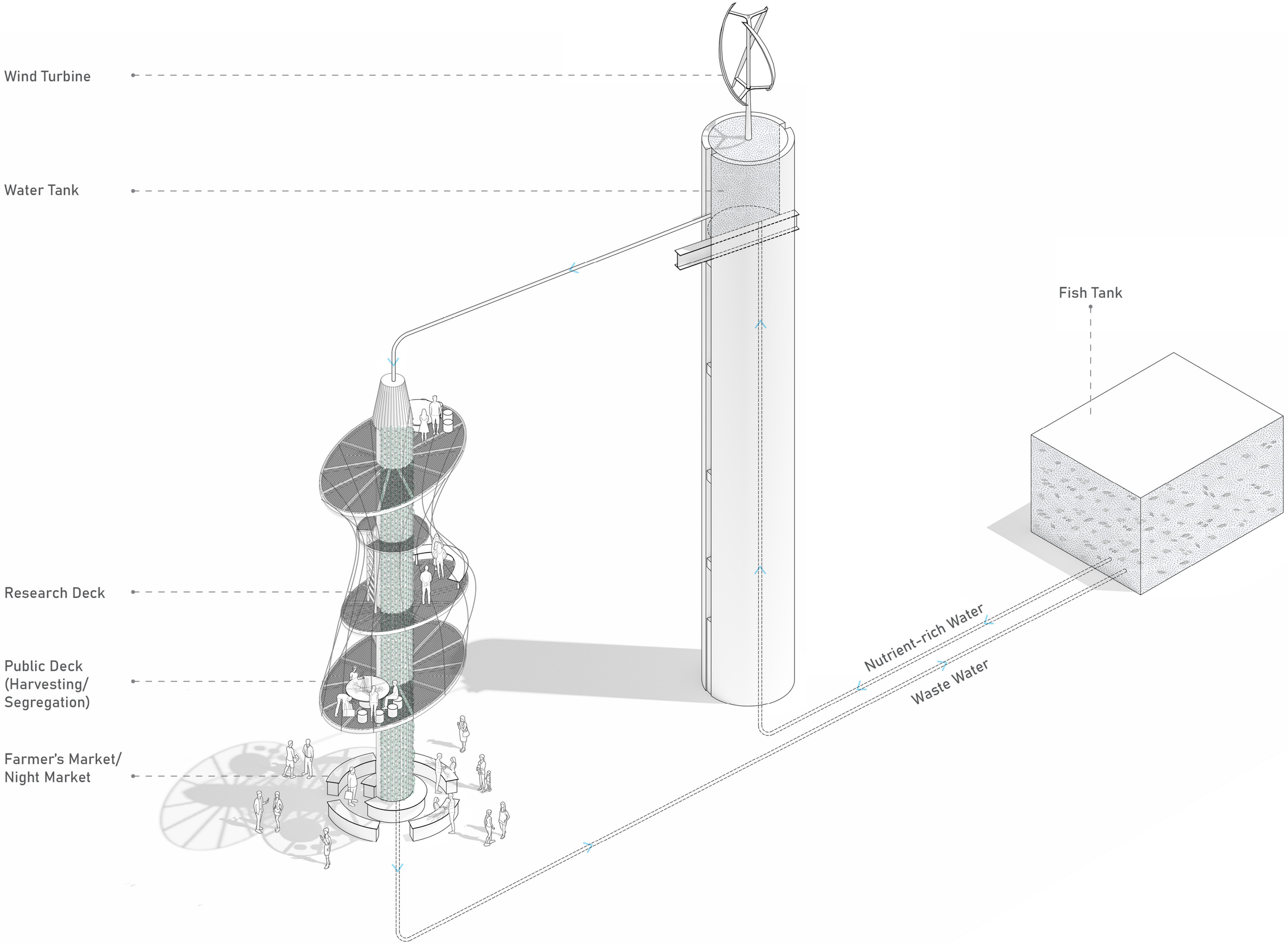
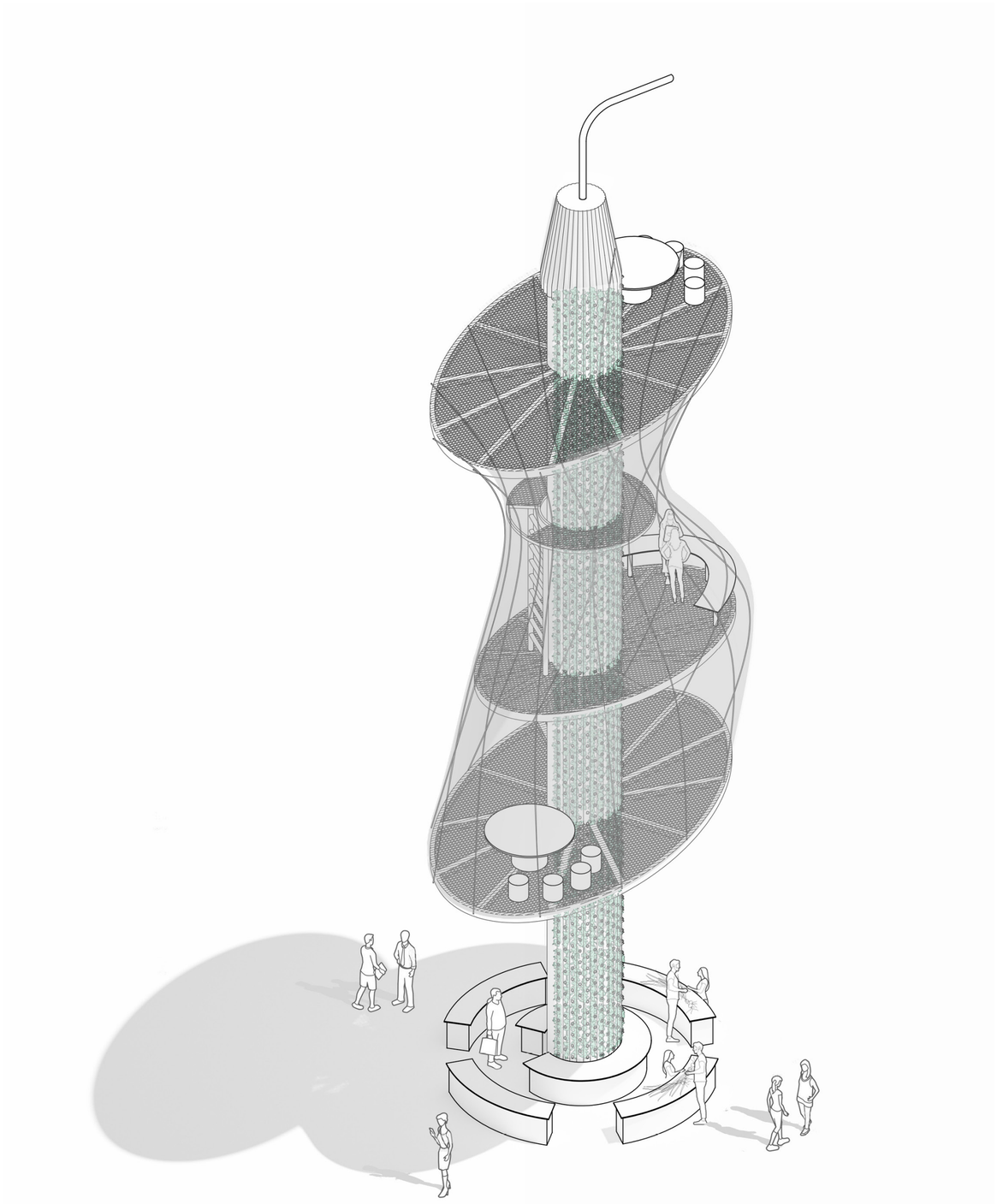
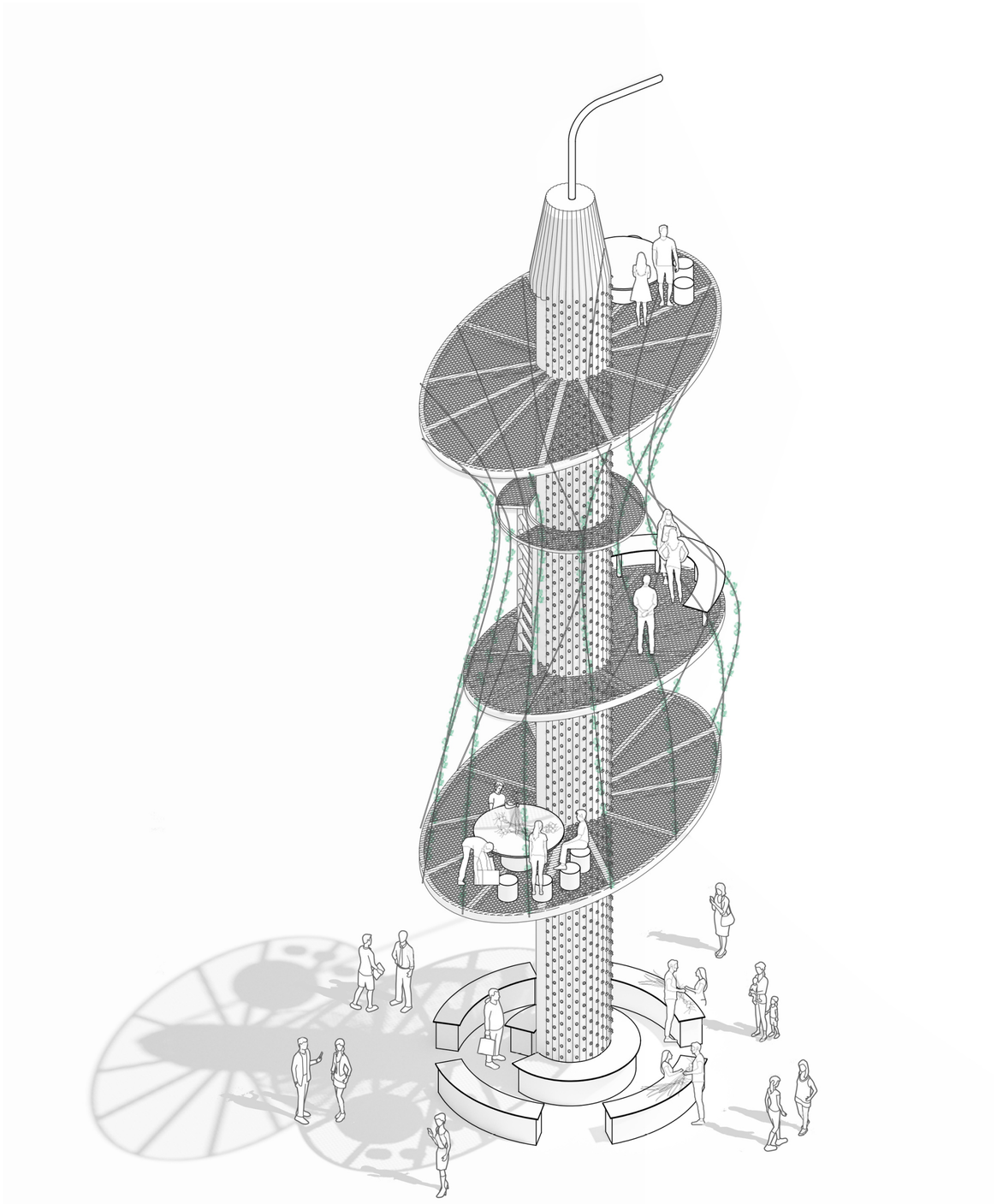
A'
B'
N

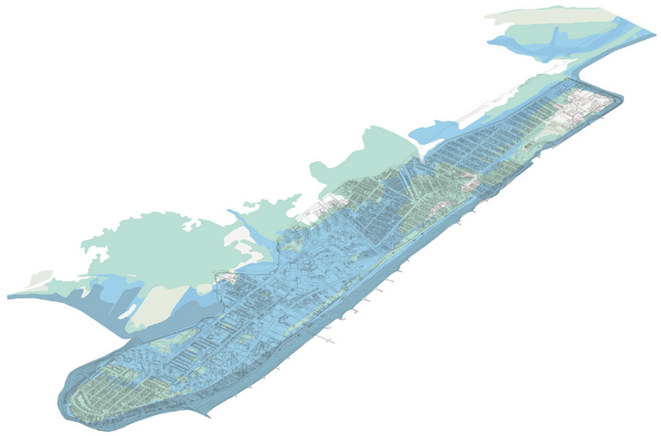

Wind Turbine
Water Tank
Research Deck
Public Deck
(Harvesting/
Segregation)
Farmer's Market/
Night Market
Fish Tank
Nutrient-rich Water
Waste Water



Enclosed environment during growing period



Open during harvest period

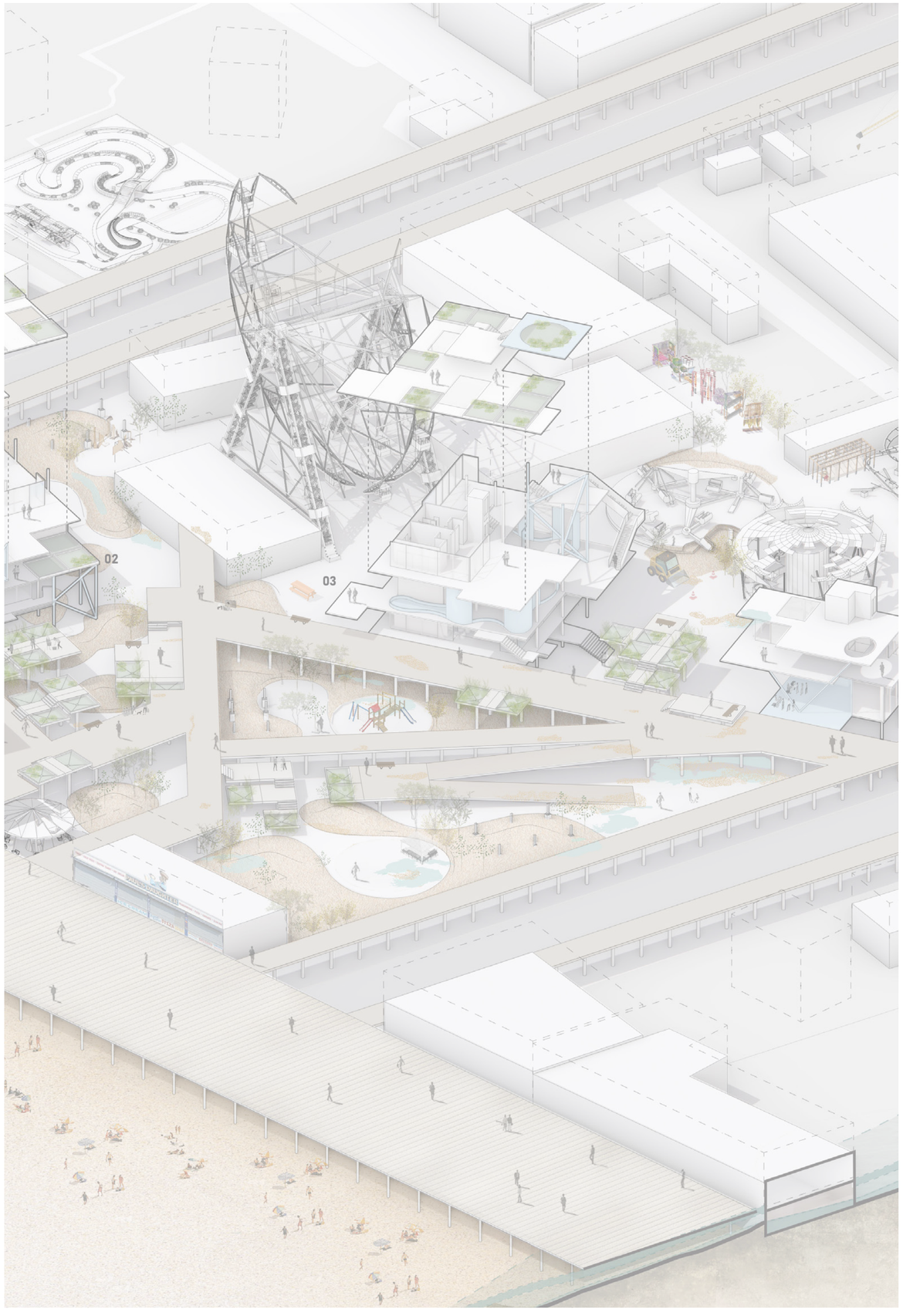


GALE OF CREATIVE DESTRUCTION

Summer 2023
Studio Tutor:David Eugin Moon

The City Island
Speculative Islands Of The City
Site:Coney Island, New York

Coney Island, a site of speculation and historical significance, embraced the spectacle with a storied history of experimentation, subversion, tragedy, and failed visionary proposals. It is steeped in the history of both the construction and destruction of amusement parks, stands as a cherished weekend retreat for the residents of New York. However, beneath its vibrant facade lies an impending peril - the looming threat of submersion within the next two decades. In the tapestry woven from the threads of challenges, innovation, and architectural vision, the narrative of the Oceanic Research and Education Centre on Coney Island unfurled as a testament to the transformative might of design. The synthesis of nature, architectural design, and human activities forms a dynamic equilibrium, mirroring the rhythm of the tides.



CONEY ISLAND - THE GALE OF CREATVE DESTRUCTION

1877
Manhattan Hotel, the first luxury hotel, opens at Coney's far eastern end

1880
The New Iron Pier is built to handle arriving steamships from Manhattan

1884
World's first roller coaster the Switchback Railway opened

1895
Sea Lion amusement park opens

1897
Steeplechase amusement park opens

1903
Luna Park opens and the Bowery burns

1904
The last park built was called Dreamland, and it was the largest and most luxurious of the three

1907
Steeplechase amusement park burns

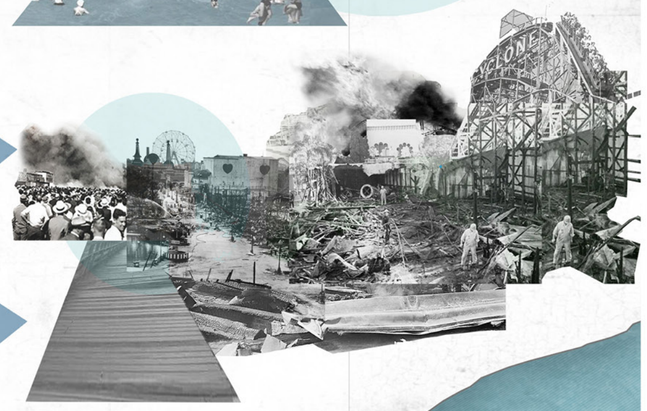
1911
Dreamland amusement park burns

1923
The Boardwalk opens and 175 businesses razed to widen Coney's streets

1927
The Cyclone roller coaster, the world's most famous roller coaster opens

1939
TheParachuteJumpwasoriginally built for New York World's Fair

1944
Luna Park burns in a fire

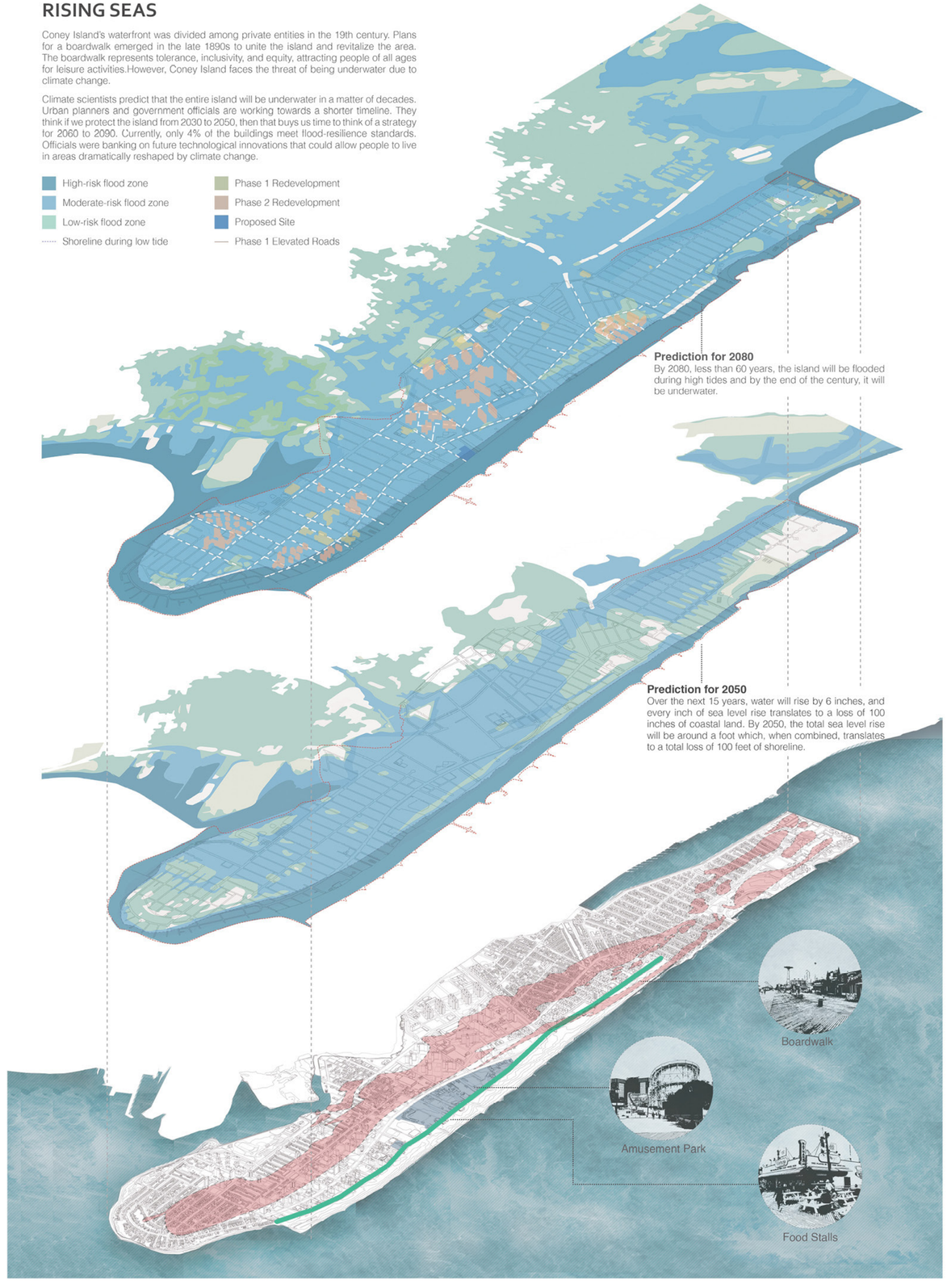


RISING SEAS

Coney Island's waterfront was divided among private entities in the 19th century. Plans for a boardwalk emerged in the late 1890s to unite the island and revitalize the area. The boardwalk represents tolerance, inclusivity, and equity, attracting people of all ages for leisure activities.However, Coney Island faces the threat of being underwater due to climate change.

Climate scientists predict that the entire island will be underwater in a matter of decades. Urban planners and government officials are working towards a shorter timeline. They think if we protect the island from 2030 to 2050, then that buys us time to think of a strategy for 2060 to 2090. Currently, only 4% of the buildings meet flood-resilience standards. Officials were banking on future technological innovations that could allow people to live in areas dramatically reshaped by climate change.

- High-risk flood zone
- Moderate-risk flood zone
- Low-risk flood zone
- Shoreline during low tide
- Phase 1 Redevelopment
- Phase 2 Redevelopment
- Proposed Site
- Phase 1 Elevated Roads



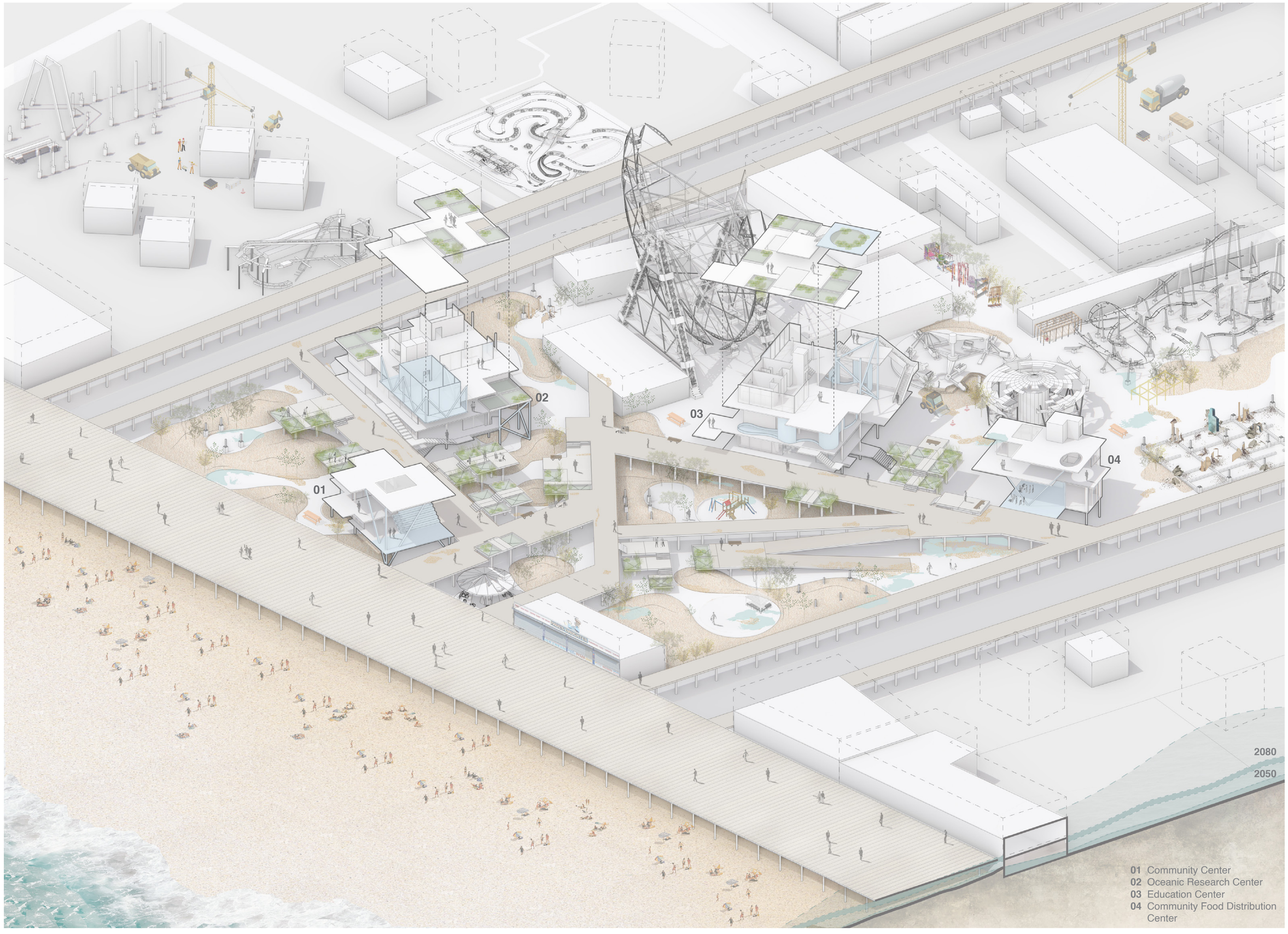
Prediction for 2080
By 2080, less than 60 years, the island will be flooded during high tides and by the end of the century, it will be underwater.

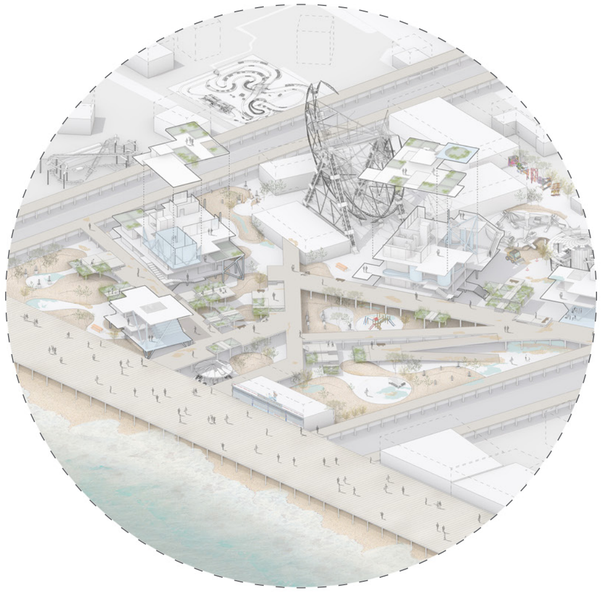
Prediction for 2050
Over the next 15 years, water will rise by 6 inches, and every inch of sea level rise translates to a loss of 100 inches of coastal land. By 2050, the total sea level rise will be around a foot which, when combined, translates to a total loss of 100 feet of shoreline.

Boardwalk

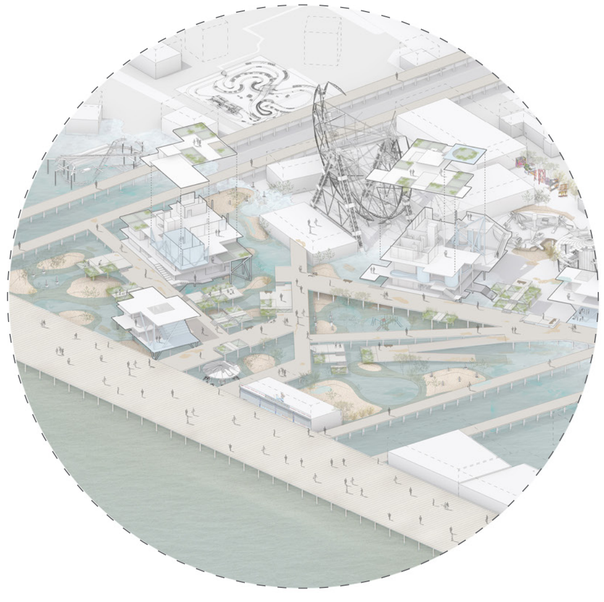
Amusement Park

Food Stalls

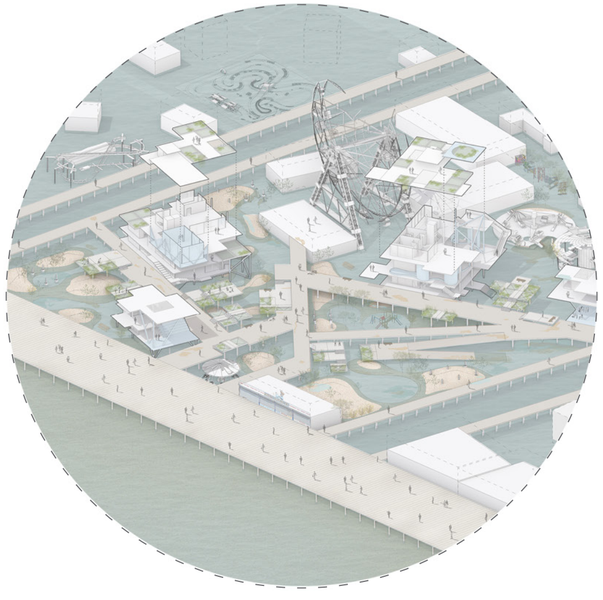

02
03
04
01
2080
2050
01 Community Center
02 Oceanic Research Center
03 Education Center
04 Community Food Distribution Center



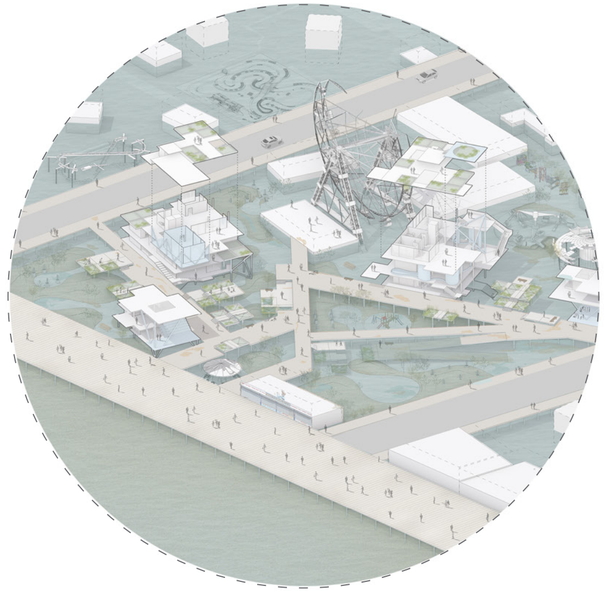
2050



2050 - High Tide



2050 - High Tide



2080

Transformation of place w.r.t. tides

The sequence shows how during high tides, an elevated boardwalk emerges as a symbolic “new ground level,” accommodating the influx of water while enabling a seamless continuity of activities.

Interior view of Educational Center

The Education Center is a space where people learn about the rich and tragic history of Coney Island. At the same time, they also look at how the climate change is going to affect the island and what measures need to be taken to adapt with the transforming island.

View of the ground level with temporary activities.

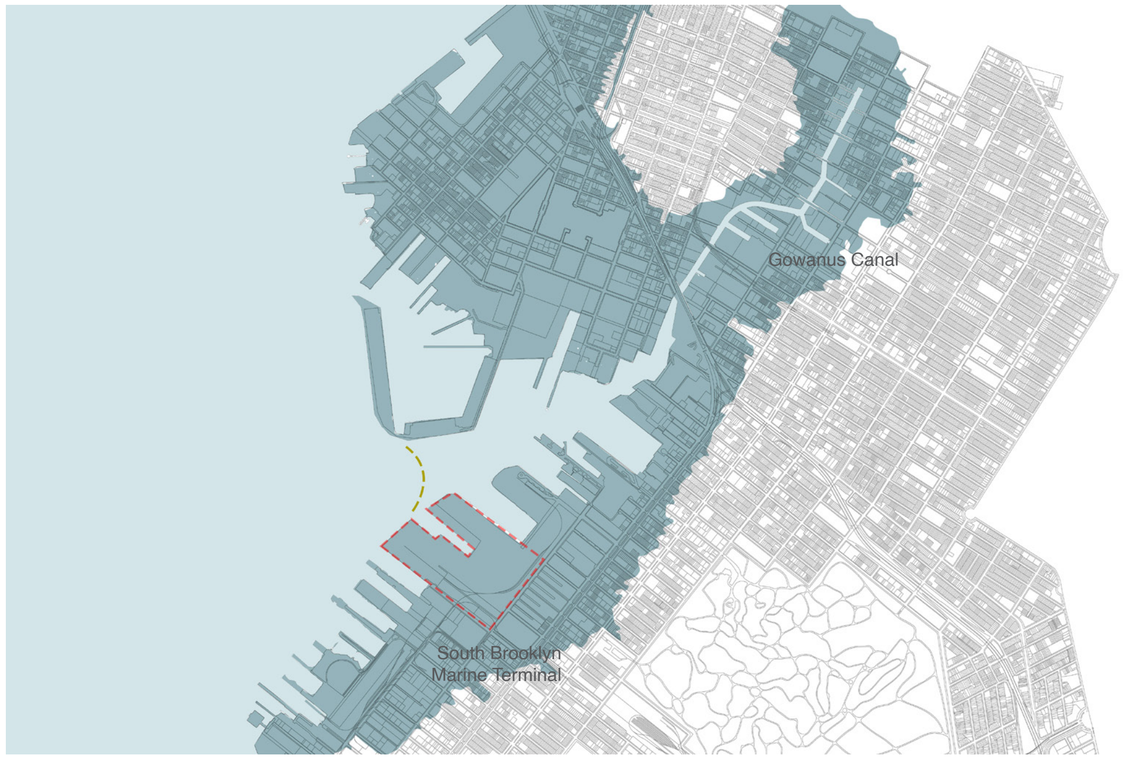
The view shows different temporary activites that can take place during low tides. The sand dunes act as landscape elements while the ruins of the rides remind people of the past and the new intervention gives hope for the future.

FLOOD.FARM.FLOW

Spring 2024
Studio Tutor:Lauire Hawkinson

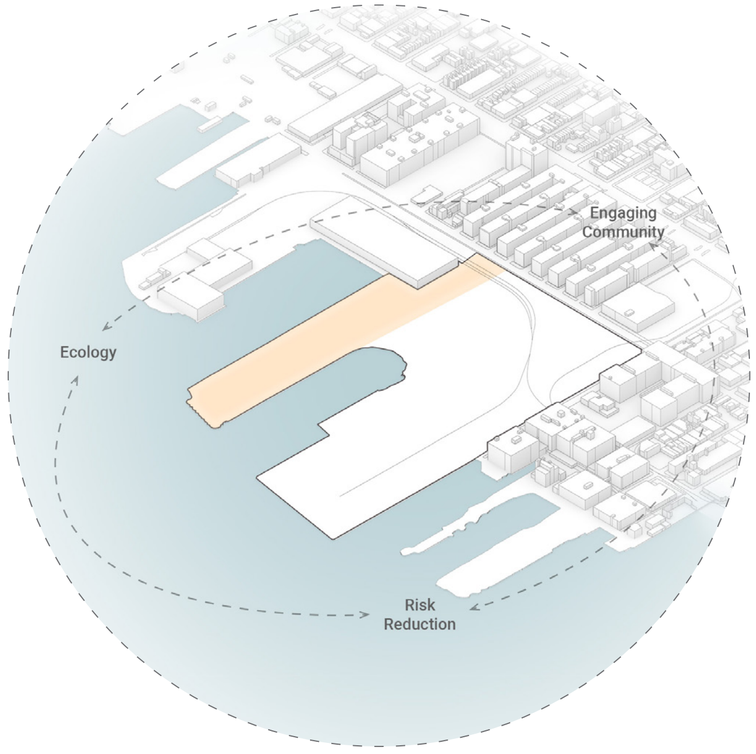
Floating NY
Site: South Brooklyn Matine Terminal,NY

The Sunset Park Community has been wanting access to the waterfront for a long time now. The flood-resilient development aims to provide more than just a green space. The goal is to offer the community access to the waterfront and a deeper ecological connection. An elevated walkway is proposed to guide visitors from the city towards the water's edge, offering an immersive experience. The pier would serve as a hub for farming fresh produce and educating people about the city's natural ecology. The site is divided into four ecological zones, showcasing the natural transition of species and vegetation. An event space serves as a communal anchor, hosting various activities from weekly markets to large gatherings. The elevated path weaves through these zones, enriching the journey towards the water.

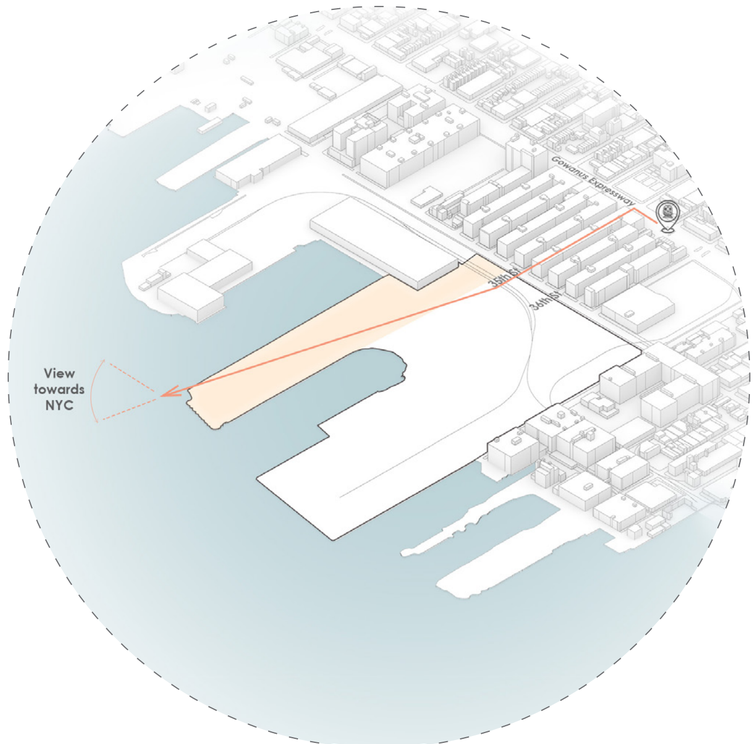


The project site, South Brooklyn Marine Terminal, is located at the mouth of the Gowanus Canal, making it a crucial location for flood-resilient development that benefits the Sunset Park community and people living along the canal.

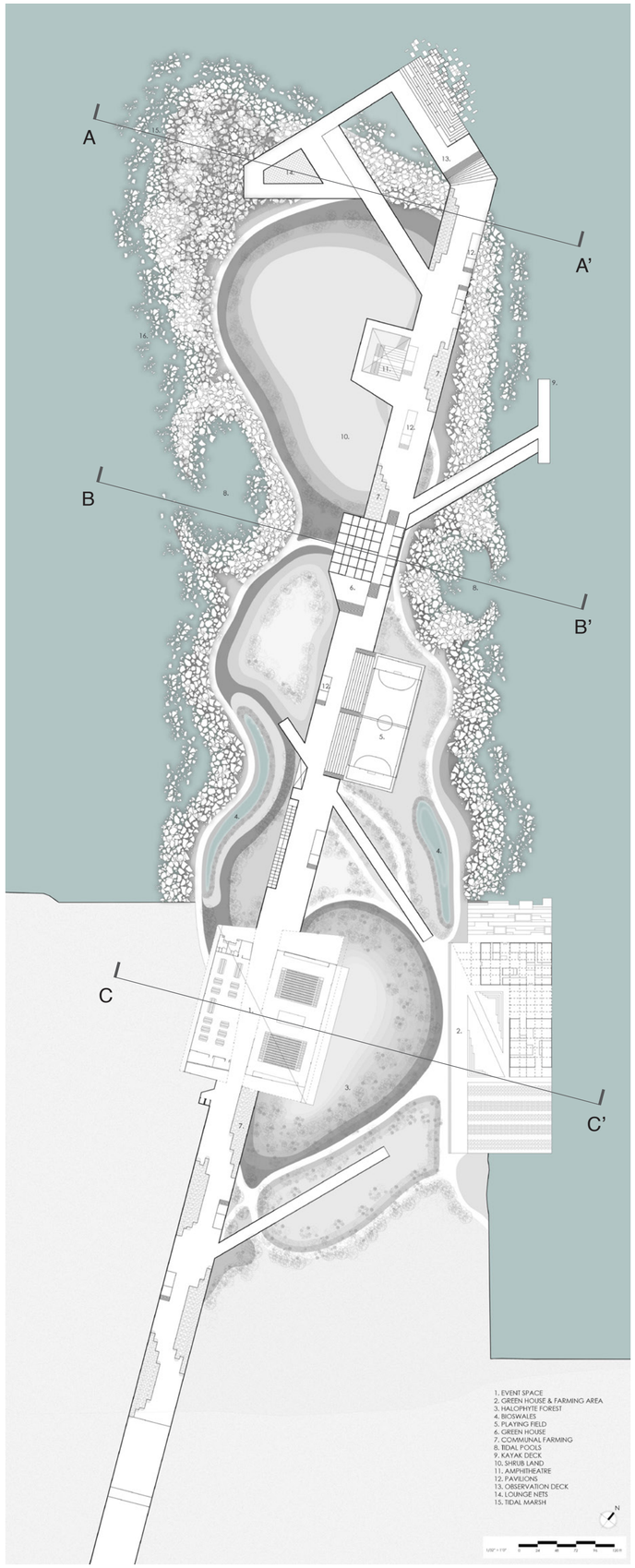
Taking inspiration from Brooklyn Grange, a rooftop farming buisness, the pier extends the the idea of communal farming and bring the diverse community together.



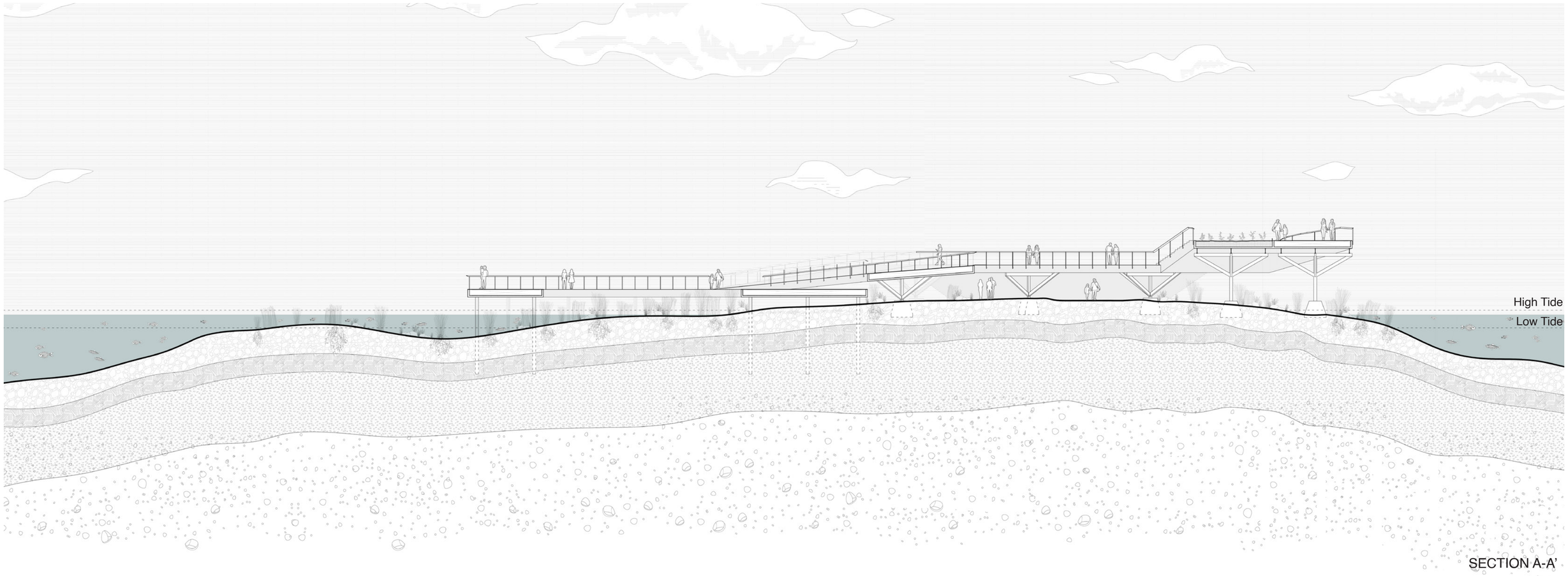
The diagram shows the three anchors of the design - Risk reduction, Ecology and Engaging community. The project aims to tackle the issue of rising seas and bring the community together through farming and ecology.



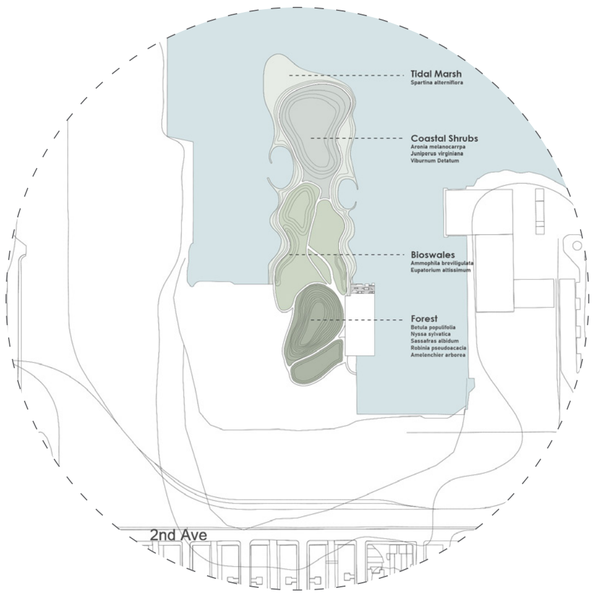
The project gives access to the waterfront through an elevated walkway that takes one through different ecological zones, and the destination is an observation deck that looks towards New York City.


A
A'
B
B'
C
C'
1. EVENT SPACE
2. GREEN HOUSE & FARMING AREA
3. HALOPHYTE FOREST
4. BIOSWALES
5. PLAYING FIELD
6. GREEN HOUSE
7. COMMUNAL FARMING
8. TIDAL POOLS
9. KAYAK DECK
10. SHRUB LAND
11. AMPHITHEATRE
12. PAVILIONS
13. OBSERVATION DECK
14. LOUNGE NETS
15. TIDAL MARSH

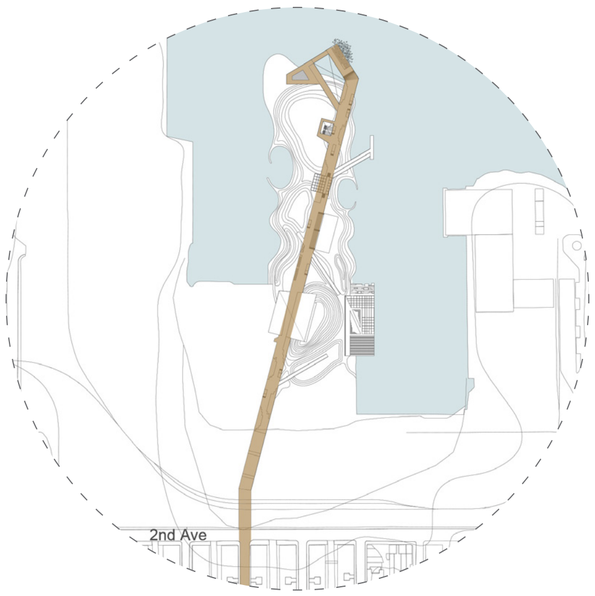

Event Space
Communal Farms
Play Fields
Communal Greenhouse
Forest
Amphitheatre
Bioswales
Tidal Pools
Coastal Shrubs
Tidal Marsh



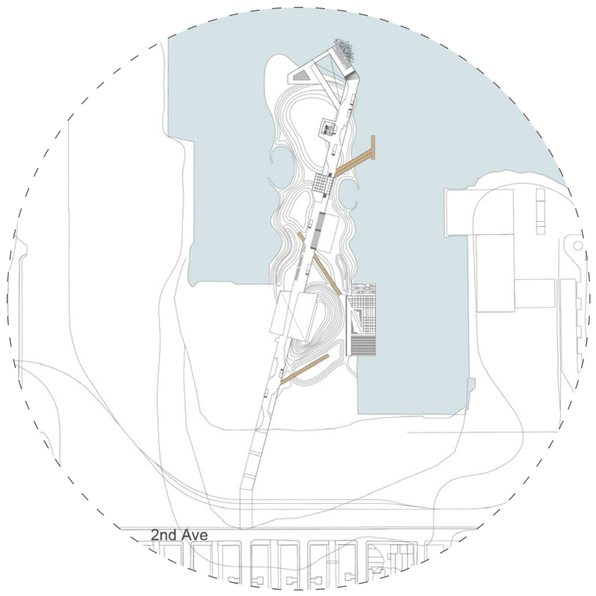
SECTION A-A'



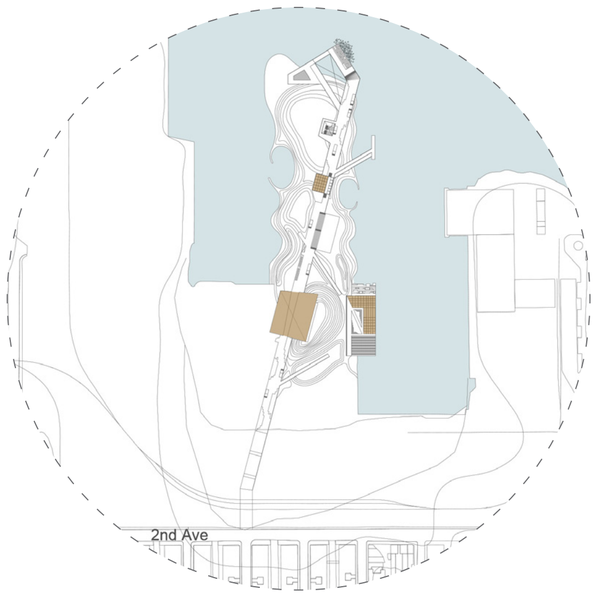
Ecological Zones



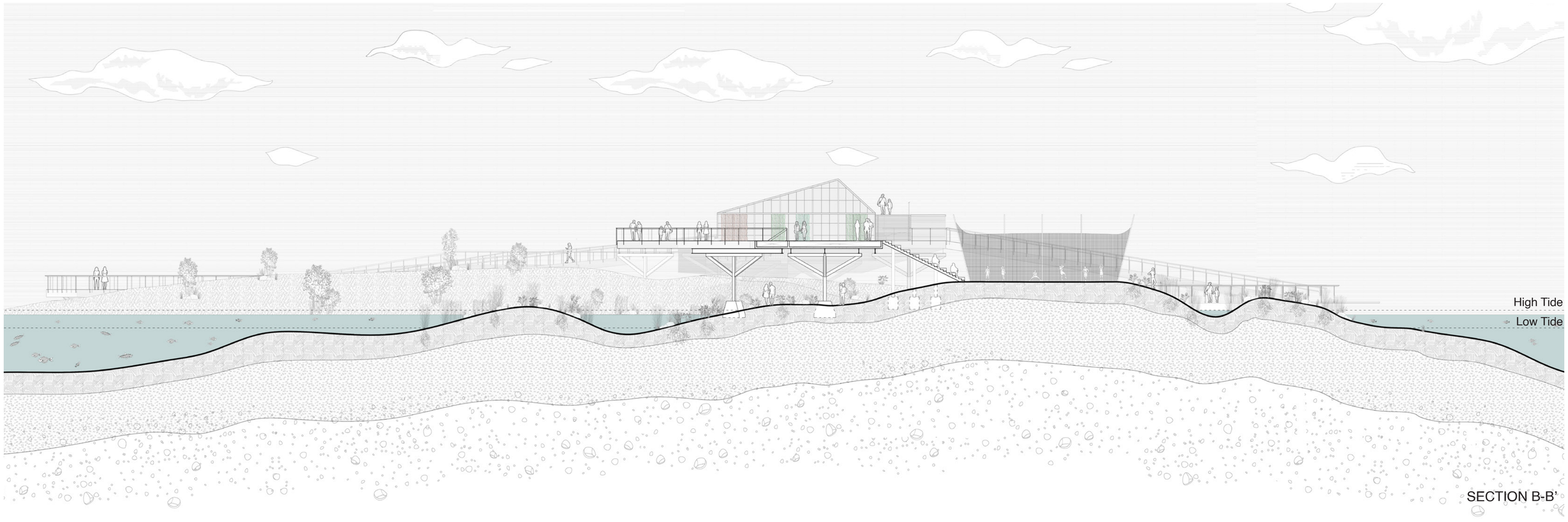
The Spine

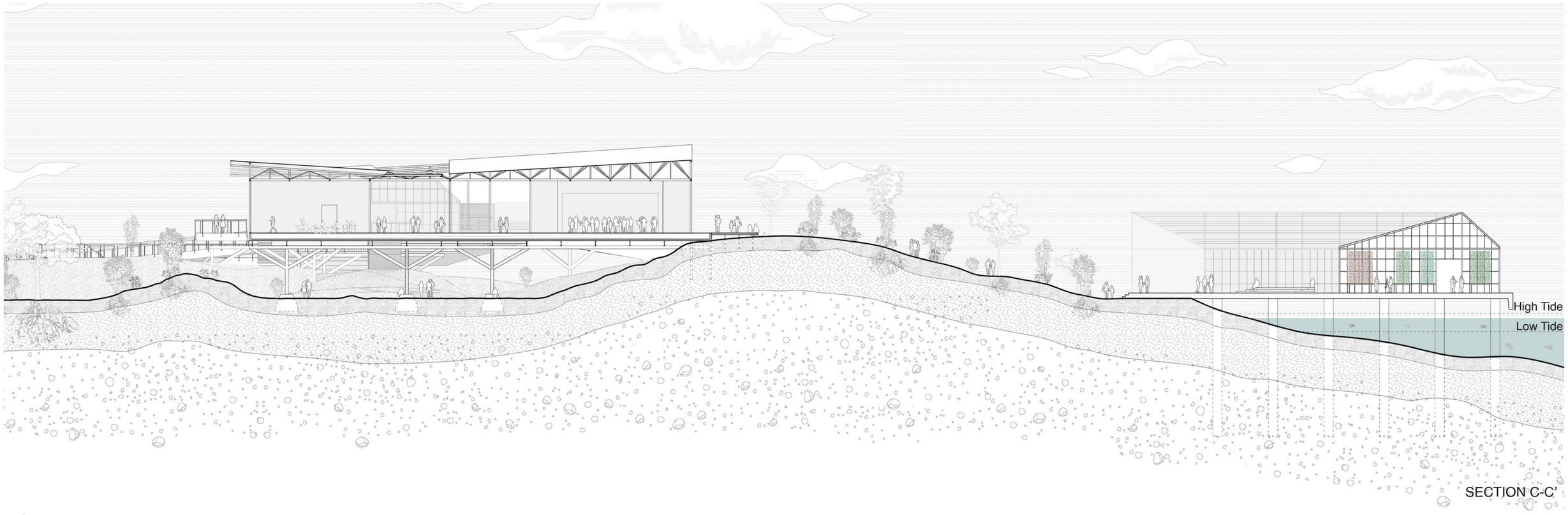


Secondary Paths



Spaces


High Tide
Low Tide
SECTION B-B’

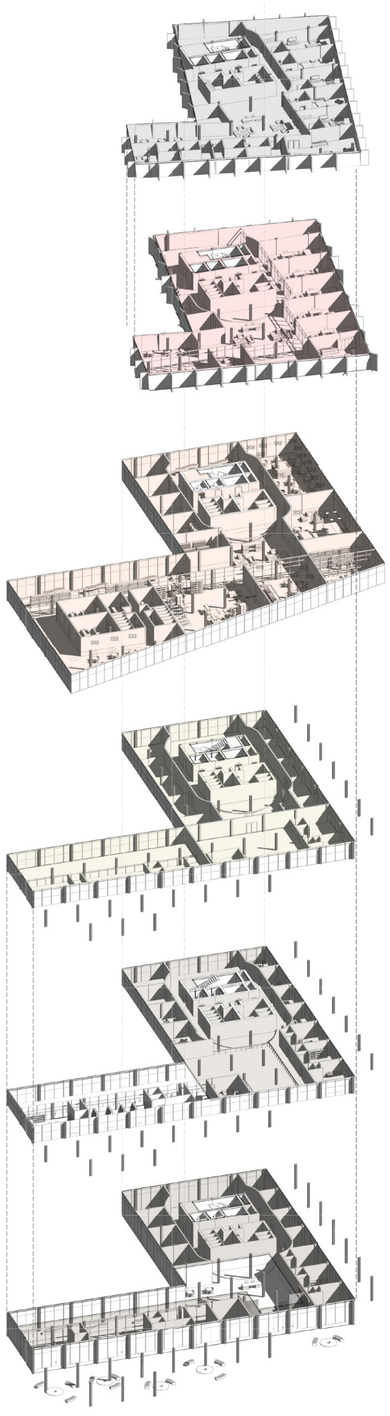

High Tide
Low Tide
SECTION C-C’

RETHINKING BIM

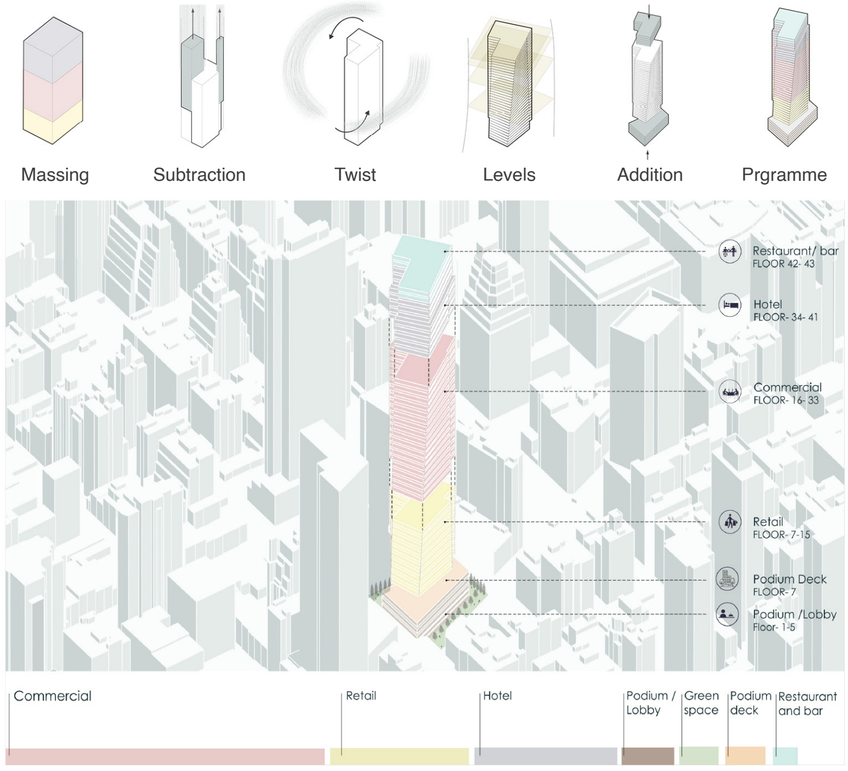
Fall 2023
Guided by: Joseph Brennan

Site: New York,New York

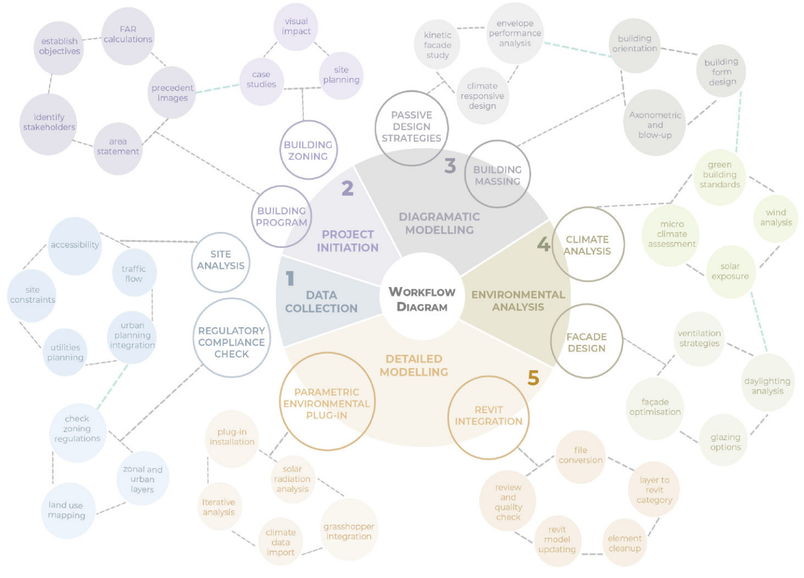
Rethinking BIM challenged me to explore different methods of leveraging BIM to enhance all processes within our industry. Grasshopper, Rhino and Revit were used to streamline the workflow between and exchange information seamlessly. Collaborating with other members of the development, architecture, engineering, and construction industry gives a better understanding of how these related disciplines function. BIM was leveraged to drive better-informed design for site study, program development, detailing, climate analysis, and more.



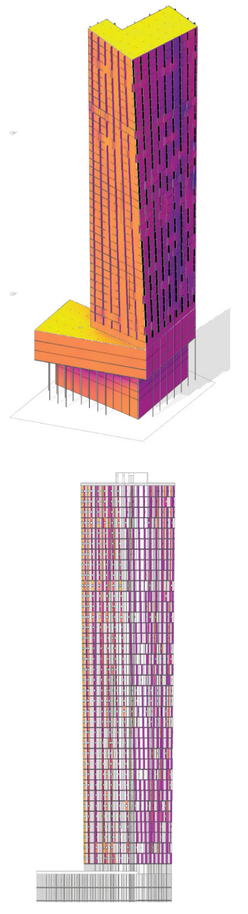
Exploded Axonomtric Diagram



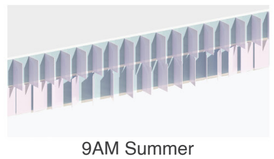
Concept Development & Programme



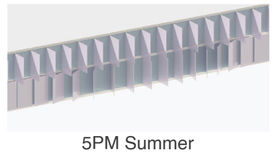
Workflow Diagram



Facade Radiation Study

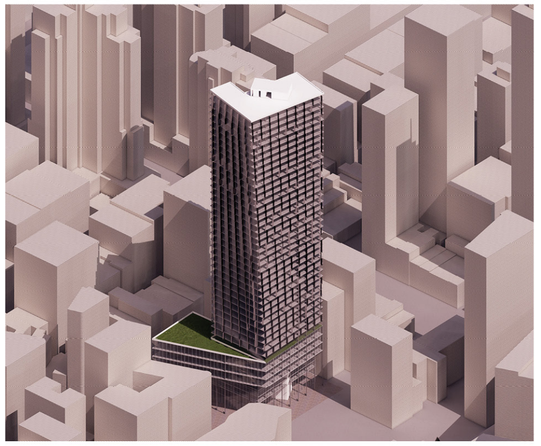


9AM Summer



5PM Summer

Facade Shadow Study



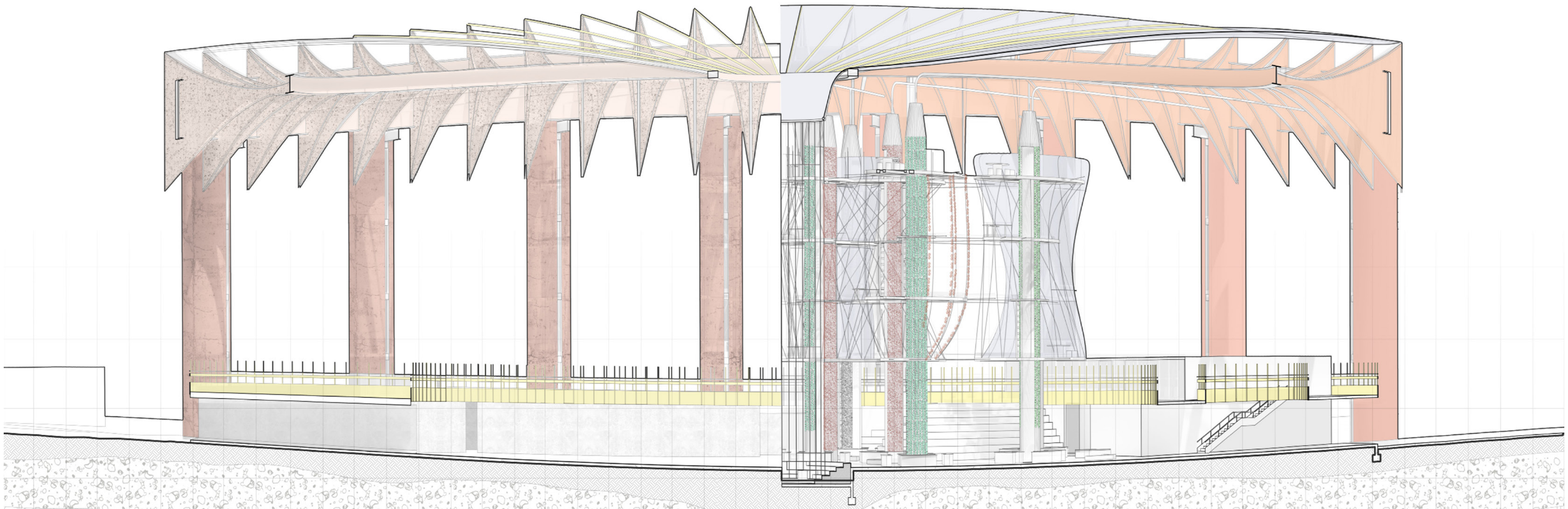
Rendered Views

FOOTPRINT: CARBON & DESIGN

Spring 2024
Guided by: David Benjamin

Site: New York,New York

Through this seminar, I gained in-depth knowledge of carbon accounting and its interconnectedness with various environmental measurement systems. The Building Material and Construction industry contributes approximately 40% of the world's overall carbon emissions through operational and embodied carbon. To mitigate this, a potential solution is to reuse the existing buildings. Repurposed buildings typically generate 50-70% less carbon emission than new construction. The NY State Pavillion is repurposed into an urban farm to reduce its carbon footprint by avoiding new construction. I also refined my ability to critically evaluate and contribute to discussions on architectural footprints and environmental impact.

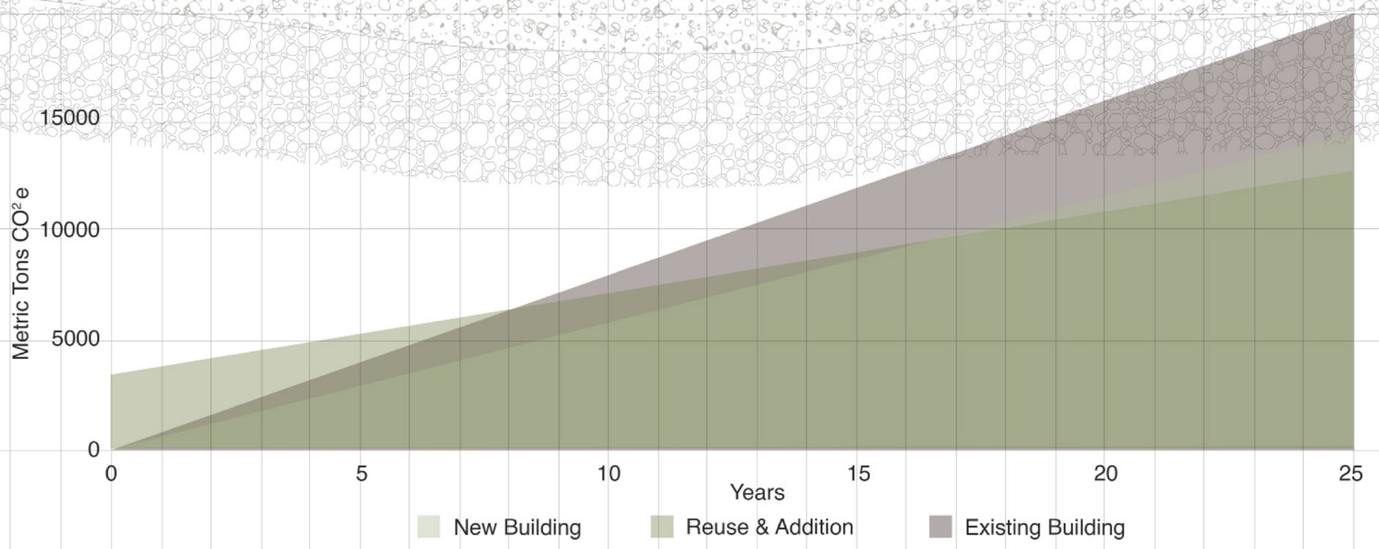


Building Data

Total Floor Area	: 93850 ft²
Floors above grade	: 1
Type of structure	: Steel & Concrete
Modeled Time Frame	: 25

Operational Emissions Intensity

Existing	: 6.1 kgCO²e/ft²-yr
Reuse	: 25.2 kgCO²e/ft²-yr
New	: 46.5 kgCO²e/ft²-yr



Cumulative Emissions Over Time

- Keep Existing - Columns
- Repair & Reuse - Main steel structure 90% reused with minor repairs
- Repair & Reuse - Secondary structure 80% tension cables (roof) replaced existing reused as cables to bring down rainwater
- New Addition - ETFE roof & enclosure

EMERGING OPTIMISM

Spring 2024
Guided by: Sean Gallagher

Site: New York,New York

This project thoroughly studied strategies for meeting human civilization's growing resource and infrastructure demands. Tapping into the emerging offshore wind industry, I focused on the waste that will be generated from it. This seemingly clean energy source will generate millions of tons of waste, which currently end up in landfills. This research led to finding ways to reuse the waste generated from these wind blades. The sections of the blades can be used as building material. This research leads to a more holistic approach that ties the relationship between people, industry, and ecology for sustainable development within the planet's constraints.

The United States possesses significant potential for offshore wind energy on a global scale. Despite being a **clean energy** source, wind turbine blades have a limited lifespan of **20-25 years** and often end up in landfills as waste. Recycling the blades poses challenges due to their composition of **non-recycleable** materials such as fibreglass. By the year 2050, it is projected that approximately 43 million metric tons of blade waste will accumulate.

Wind Turbine Blades by the Numbers

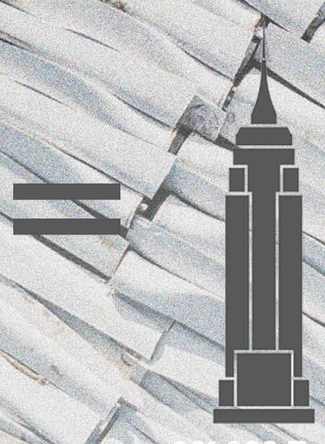
~6%
Percentage of the world's electricity generated by wind energy in 2020

>110m
Length of longest wind turbine blades

10,000-20,000
Number of wind turbine blades to be retired in the US annually from 2030 to 2040

43 million metric tons
cummulative mass of all blades to be decomissioned by 2050

43 Million
Metric Tons



331,000 Tons
130 Empire
State Buildings

FROM LANDFILL TO BUILDINGS

The proposed implementation strategy serves as a roadmap for policymakers, industry stakeholders, and communities seeking to advance offshore wind projects. It aims to **repurpose** various components of the turbine blades as **building materials**, offering a novel approach to reimagining the concept of reuse and recycling.

BALANCING FORM, FUNCTION & NATURE: CASE OF THE ZHUHAI HUAFA CONTEMPORARY ART MUSEUM

Summer 2023
Tutor: Bart-Jan Polman

Transscalarities : Arenas of Design

The research examined how architectural devices transition through spatial, material, and temporal scales, influencing diverse settings and impacting various domains such as microbiology, mineralogy, atmospherics, ecosystems, genetics, and planetary science. Operating within relational and material paradigms, the research explored how architectural devices create interdependencies and intersectionality across economies, biology, technologies, and cultures. It identified architecture as a diverse ecosystem of methodologies, traditions, and positions. By operating from relational and material paradigms, the research characterizes architectural devices as entities that build interdependencies with other systems, including economies, institutions, societies, biology, and ecologies. Analyzing the embedded characteristics and trajectories of these devices, confronting differing methodologies and positions within the rich ecosystem of architectural design.

The relationship between form and function in architecture has long been debated. Louis Sullivan's famous axiom, "form follows function," has served as a touchstone for many architects, suggesting that the design of a building should be dictated by its intended purpose. However, some argue against this notion, asserting that form and function are inseparable and should be considered together. The Zhuhai Huafa Contemporary Art Museum provides an intriguing example of how form and function intertwine to create a unique architectural expression.The design sought to introduce a tension between the solid and closed nature appropriate for museum spaces and the desire to generate an open-air, festive atmosphere capable of extending beyond the building itself. Located in Zhuhai, an emerging city, which transformed into one of China's first Special Economic Zone that attracts many tourists from China, Hong Kong, and Macau, the museum plays a role in transforming the city into a prominent centre of social change.

The museum's design demonstrates how various aspects, from the overall massing and territorial placement to the intricate construction details, profoundly impact the city, its residents, and its visitors. It reflects the culture and technological advancements of the nation. It is a cultural landmark and tourist destination, attracting domestic and international travellers and young and older people to reside. The project's success not only lies in its architectural design but also in its ability to shape the perception of the city and its people. It's crucial that these new landmarks also address ecological problems and climate change rather than solely focus on form and function. These landmark buildings are essential in forming a new culture in emerging cities like Zhuhai, known for its resorts, golf courses and Pearl River Delta. Smaller decisions on materials, biomimicry, form and function significantly impact the architecture of other buildings and communities.

Aerial view of the museum

The project not only focuses on the functional aspects of the museum but also considers the larger context of human interaction and cultural significance. The tree canopies in the central courtyard, inspired by the origins of humans gathering in circles around a tree, are examples of well-executed biomimicry. It provides shade from harsh sunlight, ensuring comfortable climate conditions for visitors, along with capturing rainwater and dew that flow down through hollow pipes into a reservoir below. However, considering the current climate crisis and the emphasis on sustainable architecture, it is crucial to use materials wisely. Instead of mimicking the form and function of trees with steel canopies, planting natural trees would have enhanced the connection between people and nature. Currently, the courtyard lacks the softness created by nature, impacting how people interact with nature.

In conclusion, the Zhuhai Huafa Contemporary Art Museum exemplifies the harmonious integration of form and function in architecture. The symbiotic relationship between form and function is evident in the decision to biomimic a tree to address the climatic conditions and provide a space for informal events in the central plaza. The project showcases how architecture can transform spaces and impact society by considering the interplay between physical design, functionality, cultural significance, and environmental context. However, it's essential to incorporate sustainable practices and materials so that future architectural endeavours can contribute to a more environmentally conscious and resilient world.

QUEST OF BLURRED BOUNDARIES BETWEEN NATURE AND ARCHITECTURE: EXPLORING JUNYA ISHIGAMI'S WORKS

Summer 2023
Tutor: Xiaoxi Chen

Arguments

The essay investigates how architectural devices and practices achieve collective relevance by participating in a range of alliances, disputes, and controversies within environmental, technological, and representational domains. By exploring these dynamics, the essay aims to understand how architecture contributes to shaping the evolution of societies and ecosystems around the world. By critically examining the interplay between architecture and broader issues, the essay offers insights into the forms of political engagement and influence that architectural practices can contribute to in shaping the world. Through this interdisciplinary approach, we gain a deeper understanding of the complex and transformative role architecture plays in contemporary society.

In a world devoid of conventional buildings, where modernist and brutalist designs cease to exist, where the skyline remains unadorned by skyscrapers and the landscape free from conventional homes, what would life look like? Such is the realm that Junya Ishigami beckons us to explore. Through his architectural endeavors, Ishigami seeks to redefine the relationship between built environments and nature, blurring the boundaries between indoor and outdoor spaces. Junya Ishigami has been trying to create a new architecture where structures mimic natural phenomena and challenge traditional notions of architectural form. How does one balance nature, building, and the pragmatic challenges of creating new architecture?

Junya Ishigami's artistic voyage has led him to conceive an architectural aesthetic that derives inspiration from the intricate beauty of nature itself. His goal is not merely to construct buildings but to engender environments that feel like an extension of the natural world. This concept comes to life in his creations, where white steel ribbons dangle from ceilings like vines, and gossamer-thin rooftops sweep over subterranean space like a clingfilm over a bowl or concrete caves that rest on knobbly legs. Within these spaces, half laboratory and part creche, that Ishigami's imagination thrives.

One of Ishigami's innovative approaches to redefining spatial dynamics is exemplified in his design for the Kanagawa Institute of Technology workshop in Japan. Rejecting the typical approach of erecting a huge shed supported by countless steel columns, Ishigami opted for a glass-sided structure that mimics the organic chaos of a jungle. He sought to create an enclosed yet inviting space for solitary work, a personal haven within the expanse of an open hall. Ishigami's philosophy is committed: regardless of a room's size, it should always cater to the individual's scale. This poses an interesting question about how this sensitiveness towards designing evolved while working with SANAA or during his education.

Adjacent to the workshop lies a multipurpose space that pays homage to the sky's vastness. Here, a 120mm-thick continuous steel panel spans an impressive 110 meters in length and 70 meters in width without a single intervening column. This daring feat of engineering interacts dynamically with temperature changes, causing the steel to expand and contract, altering the volume's height by 2-3 meters. The idea of the sky meeting the horizon is achieved through the shallow bowl-like floor that meets the steel plate at the ends, while the square cut-outs allow light and rain to enter the interior. Despite residing in an earthquake-prone zone, Ishigami's design defies conventional light construction and flexible joints at intervals to counter seismic shocks. This sparks the curiosity of how the structural forces are taken care of in such a large spanning column-less space and how the building reacts during earthquakes.

One of his recent works, a cave-like subterranean restaurant, appears as a giant worm that has meticulously carved its dwelling from the earth's innards. Seven years of planning and execution gave rise to this surreal space, wherein concrete was cast within dug-out voids, and later, soil was removed to create space. The project's evolution showcases the on-site labor-intensive work as well as numerous unexpected back-and-forth changes. Today, timeline plays a vital role in each project as every delay costs money and resources, and that's one of the main reasons clients want their projects to be constructed at the earliest. An uncharted territory emerges – would clients readily invest time and resources from the project's inception? What was the architect's struggle to enlist stakeholders, including clients and construction engineers, while adhering to building safety codes?

The notion of weight takes on symbolic significance in Ishigami's work, as the client's directive to make the building as "heavy" as possible. In an unconventional twist, the architect sculpted a structure that seemingly emerges from the earth's depths, its fat, curvy columns evoking a sense of ancient space. While his work is about taking inspiration from nature, ironically, concrete is introduced into the ecosystem. The decision prompts questions: what considerations guided the architect's path, and how does sustainability intersect with the broader architectural narrative? While it's important to change how architecture is practised, it's equally important to consider the nature and impacts of materials we introduce to the ecosystem. Ishigami responds, revealing proximity to concrete factories as a means to diminish carbon footprint. He highlights his focus on finding an equilibrium between architecture and sustainability and not focusing only on sustainability. The "heavy" and rigid structure also raises questions about the impacts of seismic activities as the structure lacks lightness and flexible junctions.

The apparent simplicity of Ishigami's architectural concept, the seamless fusion of wall and ceiling into singular mass, faces intricate challenges. This simplicity invites pragmatic concerns, as the unsealed joints between the surface and glass bring potential water seepage and insect intrusion. Additionally, each glass is cut differently to match the surface, which raises concerns over the maintenance of the building in the long run. Striking the balance between design concept and practical functionality unveils curiosity about Ishigami's nuanced decision-making process.

A common thread that weaves through Ishigami's diverse projects is the inspiration drawn from nature's nuanced nuances. His architectural palette transforms dramatically with each endeavor, encapsulating the essence of each site he engages with. As he embraces nature's delicateness that resonates in his creations, fostering spaces that reflect the harmonious coexistence of human ingenuity and nature's aesthetic. Junya Ishigami's visionary work is a bold exploration wherein the boundaries of a conventional building are defied, and the essence of nature interweaves seamlessly with human creation. While his designs manifest as ethereal experiences, urging us to rethink our relationship with the built environment and forcing us to reimagine a world beyond conventional architecture, it raises concerns about pragmatic and sustainable challenges.

VASTU VIDYA - INDIAN ARCHITECTURAL THEORY

Fall 2023
Tutor: Mark Wigley

The History of Architecture Theory

This paper delves into the passionate debates that drive the field of architecture, revealing how theory influences every aspect of design. Spanning from Vitruvius to contemporary social media, we see how architectural discourse evolves over time while maintaining persistent themes. By studying the interplay of interlocking institutions, we see how various claims about architecture have been established, preserved, or changed throughout history. Each session pays close attention to how architectural theory shapes notions of privilege and subordination, affecting racial, gender, class, and sexual dynamics within the field. By situating architectural theory in a complex web of fear, desire, power, pleasure, prohibition, and transgression, the paper offers a critical lens on how architecture can perpetuate or challenge existing societal structures. Through this nuanced exploration, we gain a deeper understanding of the transformative potential of architectural discourse and its impact on society.

"From the eastern direction, I summon a blessing to the glory of this House. Praise to the Gods, the praiseworthy, forever and ever! From the southern direction, from the western direction, from the northern direction, from the depths below, from the heights above, I summon a blessing to the glory of this House. Praise to the Gods, the praiseworthy, forever and ever!"

In India, it is a common tradition for people to seek a special blessing before moving into a new home. This blessing is often associated with Vastu Vidya, also known as Vastu Shastra, an ancient Indian architectural and design practice. The term "Vastu" translates to "building" or "dwelling," while "Vidya" means "knowledge" or "science." Vastu Vidya is built upon the concept of creating a harmonious design that aligns with both cosmic and natural forces. Central to Vastu Vidya is the belief that the physical and metaphysical elements of a building exert a significant influence on the lives of its occupants. This approach strongly emphasises aligning the structure with the cardinal directions, cosmic energy, and natural elements. According to Vastu Vidya, the layout, orientation, and design of a building play a crucial role in promoting wealth, harmony, and overall well-being. It's essential to consider the placement of rooms and entrances in accordance with Vastu principles. For centuries, Vastu Vidya has been integrated into the architecture of homes, temples, and other structures, primarily in India. While its origins are rooted in Hinduism, its relevance in modern construction remains controversial. Some believe it may be less applicable in today's society, while others view it as a valuable guide for design. In this essay, we will analyze how this ancient theory functions and what it signifies in contemporary times, as described by Vibhuti Chakrabarti in the book 'Indian Architectural Theory: Contemporary Uses of Vastu Vidya. In this book, she explores Vastu in terms of its secular uses at the levels of both theory and contemporary practice. It is a medium to understand the meaning of the established knowledge, its practical application, and her perspective on it.

The central question surrounding Vastu Vidya revolves around its nature: was it prescriptive or descriptive? Did it aim to dictate and guide architectural development, or did it seek to rationalize and codify what already existed? The quest for answers involves examining correlations between texts and actual buildings and addressing discrepancies. Those advocating the prescriptive viewpoint consider correlations as evidence of adherence while dismissing discrepancies as products of ignorance. On the other hand, proponents of the descriptive view use differences to argue that texts did not strictly guide craftsmen, and they explain correlations as writers describing what they observed. It's crucial to recognize that writing and construction are intertwined; while a system is necessary for building, documenting actual processes is equally vital. Vastu Vidya transcends being solely a system of accepted principles or a mere explanation of constructed shapes; instead, it encompasses both prescription and description. It serves as a theory about architecture, akin to grammar's role in language. Understanding this duality is critical to comprehending historical structures, yet art historians often minimise or overlook this aspect.
The ancient Indian architectural knowledge, Vastu Vidya, finds its roots in the Vedas, dating back to 1500–1000 BC. The earliest written evidence of Vastu Vidya can be traced to the Rig Veda, where Vastospati, the guardian of the house, is invoked. While its existence as a specialized architectural discipline is believed to predate the first century AD, it had achieved significant technological development by then. Unfortunately, much of the content from the sixth century BC to the sixth century AD has been lost, with only fragments surviving and being incorporated into later works on Vastu Vidya. To comprehend the fundamental principles of Vastu Vidya and explore its design system, the author of this text has relied on primary sources for their research. The enduring relevance and applicability of Vastu Vidya in the contemporary era are not solely derived from a single Shastra or text but from the complete reservoir of knowledge, the Vidya, which has adapted to geographical, social, and political variations encountered throughout history. This text reflects the era and context in which it was written, leading to variations in its application, ranging from temple architecture to Indian royal and defense architecture. Regardless of whether they are compilations based on multiple texts or recensions of older works, Vastu Vidya texts maintain a consistent structure and arrangement of their contents. This enduring structure has allowed Vastu Vidya to evolve and remain influential, offering insights into architectural design while adapting to changing circumstances.

The author underscores the importance of engaging in scholarly dialogue about the current applications of Vastu Vidya. They argue that a misinterpretation of this tradition and its historical purpose underlies the belief that modifications are needed due to societal or technological advancements. Moreover, this also raises questions about where and by whom this transformation is being perceived. They note that traditional craftsmanship has seen fewer changes compared to contemporary buildings. It is crucial to evaluate traditional artisans' value before dismissing their skills as outdated. We should also encourage reflecting on how the architectural profession may contribute to changes that may not be as significant as initially perceived.

The text by Dr Chakrabarti shows that tradition must evolve beyond the limited interpretations imposed by contemporary designers who do not have a deep connection to the tradition if it is to endure as a comprehensive architectural system. Its utilization should transcend being a mere solution to life's challenges or a foundation for mystical beliefs. What truly matters is how these traditions are practically applied in architectural design rather than the theoretical justifications behind them. For example, whether the preference for the northeast direction is rooted in science, astrology, or the sacred Purusha concept, what matters most is how it influences the architectural approach. In summary, the author's critique of current practitioners is grounded in scholarly foundations but carries a polemical intent. Dr Chakrabarti openly conveys her belief that Vastu Vidya should not only serve as a tool for comprehending historical architecture but also play a role in shaping future architectural practices. Its application should be deeply rooted in a holistic system rather than cherry-picking convenient details to meet contemporary needs. This perspective underscores the need for a thoughtful and integrated approach to incorporating tradition into the ever-evolving field of architecture.

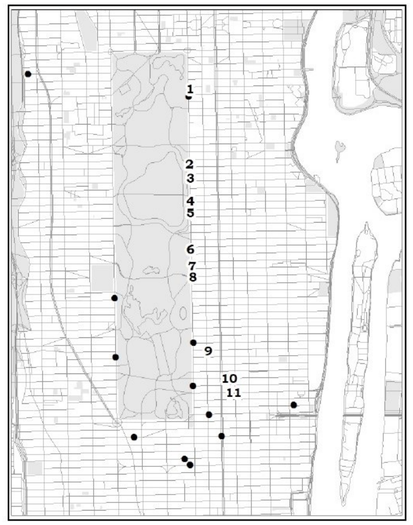
THE METROPOLITAN MIRROR: MUSEUM MILE OF NEW YORK

Fall 2023
Tutor: Kate Ascher

New York Rising: How Real Estate Shapes a City

The History of New York City Real Estate course offers a comprehensive examination of real estate development in New York City, emphasising Manhattan, covering the past four centuries. We chronologically trace New York's history from the original Dutch settlement of New Amsterdam to the present day. The essay analyzes the creation of Museum Mile by considering real estate trends, social and economic influences, and the dynamics of public-private development partnerships. It also explores the connection between civic spaces such as transportation hubs and parks and real estate development.

When one thinks of New York City, images of towering skyscrapers, the vibrant energy of Times Square, and the fast-paced lifestyle immediately come to mind. Among the city's numerous attractions, its museums stand out. New York boasts one of the highest concentrations of museums in the entire country. Museums hold a unique role in showcasing the city's rich history and its modern identity. Each museum has its own distinct story and journey. Today, they welcome a diverse range of visitors and are primarily public institutions. However, this wasn't always the case. The concept of a museum has evolved, and its history in New York is both fascinating and integral to how the city has expanded spatially and temporally. This essay delves into the development of museums in the city, with a particular focus on those along Museum Mile. It explores how these cultural institutions have influenced their neighborhoods and the city at large, examining the real estate, social, community, and economic forces that have shaped them over the past century. The inquiry will encompass understanding why museums became sought-after destinations and how they attracted people from various backgrounds. We'll also investigate the criteria for selecting their locations. Did they aim to cater to specific social classes or racial groups, or did they acquire land through donations or at discounted rates? Among the intriguing topics we'll explore is the concentration of museums along Upper Fifth Avenue, known as Museum Mile. Is this due to their proximity to affluent residential areas, adjacency to Central Park, or repurposing of abandoned mansions, among other factors? In essence, the essay unravels the complex and captivating story of how New York's museums have shaped the city's cultural landscape, reflecting its past and contributing to its dynamic present.



1	El Museo Del Barrio	1977
2	International Center for Photography	1974
3	Jewish Museum	1963
4	National Academy of Design	1942
5	Guggenheim Museum	1959
6	Goethe-Institut	1969
7	American Irish Historical Society	1940
8	Ukrainian Institute of America	1955
9	Whitney Museum of American Art	1966
10	China Institute	1944
11	Museum of American Illustration	1980

Upper East Side museums and their founding dates

Museums are expected to serve a multitude of roles, encompassing education, collection, preservation, inspiration, entertainment, and more. Their overarching purpose is to offer solace and joy to people from diverse backgrounds while upholding the value of abstract cultural ideals. However, it's a complex challenge for a single institution to seamlessly fulfill all these roles simultaneously. Museum locations, their patrons, and financial resources have evolved in response to their changing responsibilities over time. Today's museum landscape grapples with two competing objectives: the aspiration to grow into upscale cultural landmarks in revitalized areas and the need to increase diverse attendance through popular programming and marketing. These objectives may sometimes clash, particularly when museum directors design exhibits that appeal to a wide range of visitors. Still, the museums are situated in areas where frequent museum visits can be challenging. Experts anticipate that this transformative moment in the museum sector marks the dawn of a new era for these institutions. As they strive to become more integrated into their communities and shed their traditional image, museums are actively cultivating audiences that better reflect today's world's diversity, technological sophistication, and responsiveness.

Museums act as insightful indicators of the neighborhoods they call home. These cultural institutions not only display artwork and historical artifacts but also symbolise the dynamic changes taking place in their surroundings. As barometers, museums offer valuable insights into the life and character of a community. The attributes of a neighborhood play a significant role in determining whether a museum can be situated there. Still, conversely, a museum's presence can influence the area's characteristics. Museums actively participate in reshaping urban landscapes. While individual organizations and audience trends have historically driven museum location decisions, these choices have, in turn, shaped the museum environments. Certain areas, like New York's Museum Mile, have seen the clustering of formal cultural resources. Communities and their residents experience both positive and negative effects as they benefit from these social, economic, and cultural treasures. Serving as mirrors that reflect a community's past, present, and future aspirations, museums are vital barometers for understanding the communities they serve.

HARSHIL SHAH