





WASTE NOT, BUILD WITH

01

ADV VI | David Benjamin

Waste Collection & Management System  
located on the outskirt of Nusantara,  
Kalimantan, Indonesia

A(TTIC)ECTURE

02

ADV V | Wonne Ickx

Adaptive re-use project, transforming a  
formerly known First Army Administration  
building, into a Center for Architecture

BLUE BLOOD OF  
JAMAICA BAY

03

CORE II | Benjamin Cadena

A model of reform for the biomedical  
industry, featuring conservational and  
educational programs on Horseshoe Carbs

LIFE WITHIN  
THE ‘GAPS’

04

CORE III | Eric Bunge

An affordable housing project with given  
focuses on ‘Diversity & Collectivity,’ garden,  
and adaptive re-use

PHRAGMITICIDE

05

ADV IV | Feifei Zhou

A multi-phased interventions that addresses  
the dominance of an invasive plant species,  
Phragmites Australis

THE AUTONOMY OF A FEMALE  
BODY IN A SPACE

06

Speculative City | David E. Moon

Research and Reproductive healthcare  
clinic prototype that addresses the  
ever-shifting geography of abortion access

REVERSE  
GENTRIFICATION

07

CORE I | Carlyle Fraser

A critique of historical preservation  
standard and a reimagining of how they can  
be leveraged to resist gentrification and the  
displacement of communities of color.



01

## WASTE NOT, BUILD WITH

PROTOTYPE FOR WASTE MANAGEMENT SYSTEM

INDONESIA | OUTSKIRT OF NUSANTARA, KALIMANTAN

ADV VI STUDIO : VITAL (SP'25)

CRITIC : DAVID BENJAMIN

The Center: Waste Not, Build With tackles Indonesia's waste management challenges in low-income villages by transforming local waste into building materials. Each prototype is tailored to its region, using locally sourced waste to create familiar materials and encourage community adoption. For instance, the first prototype, located in the newly relocated capital city of Nusantara, Kalimantan, repurposes Palm Kernel Shell (PKS) from the palm oil industry into [P]MU Blocks, inspired by CMU Blocks.

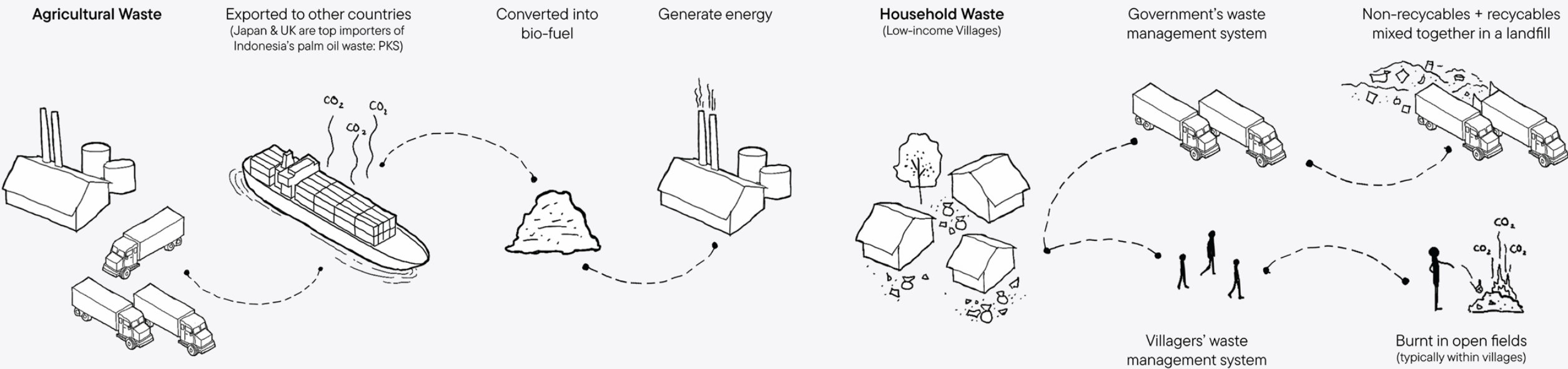
Beyond waste collection, through local material innovation, localized structural system and construction methods, the Center demonstrates possibilities in forms, assembly, and the future of Indonesia's contemporary architectural identity.

By tapping into the country's agricultural and manufacturing strengths, transforming raw waste into functional, familiar materials, this project reimagines how architecture can be deeply rooted in local place, culture, and sustainability.

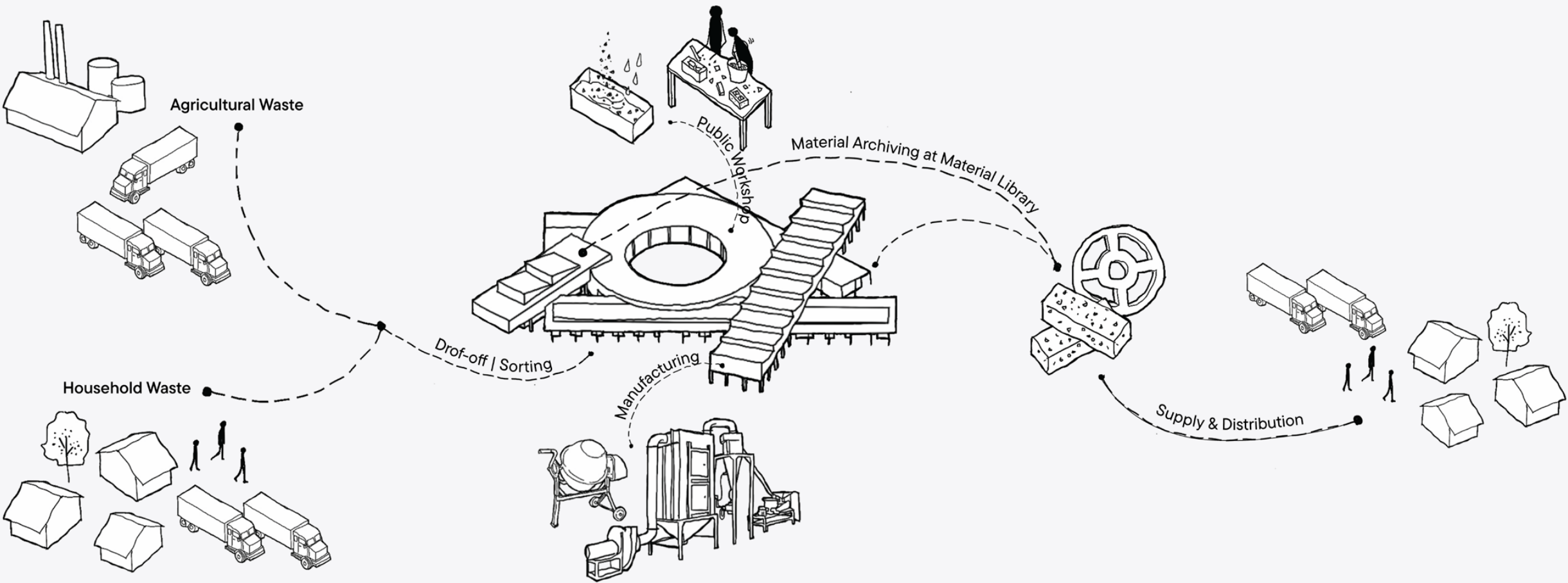




Current Waste Management System



The Center's Waste Management System

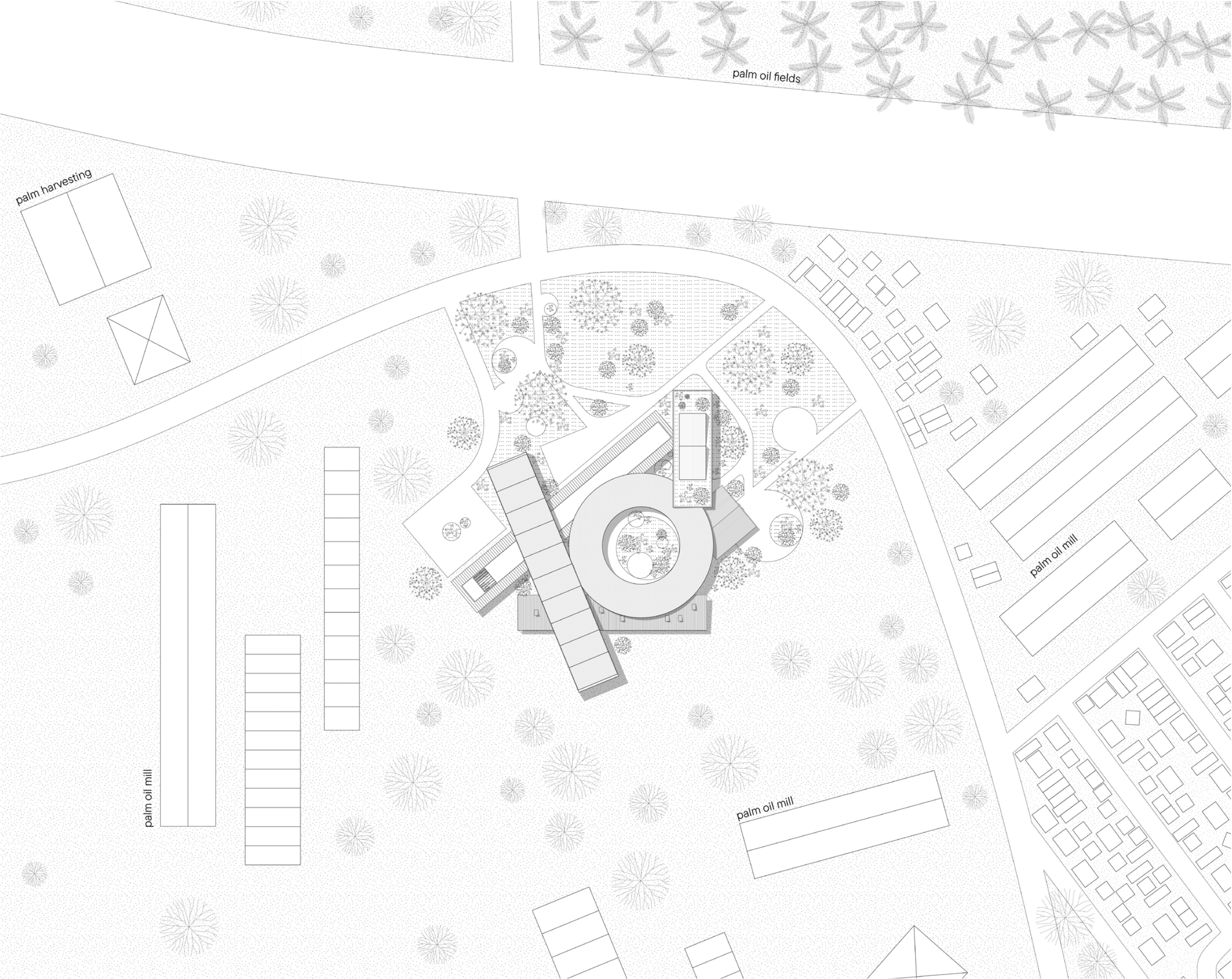


Old vs New Waste Management System Diagram

Indonesia is one of the largest agricultural producers in the world and, as the fourth most populous country, is also a major generator of food and other waste. The center aims to transform the inefficient and environmentally harmful waste management system by incentivizing low-income communities with building materials, thereby increasing participation in waste management.

At the center, agricultural and household waste can be dropped off, processed either by the center or the public themselves, and then redistributed for use.





**Site Plan**  
Outskirt of Nusantara, Kalimantan

With the relocation of Indonesia's capital from Jakarta to Nusantara, the first center prototype is strategically located on the outskirts of the new capital, surrounded by palm oil plantations, mills, factories, and low-income villages, where many residents are employed in the palm oil industry. The center's location ensures easy access for local communities and facilitates the efficient transport of palm oil mill waste to the facility.



**Palm Oil Waste to [P]MU Blocks**

With 2 billion tons of palm oil waste produced annually, there's a huge opportunity to repurpose this waste in response to population growth and the capital city's relocation to Kalimantan. By mixing palm kernel shells with plaster, this waste can be molded into [P]MU Blocks, a locally accepted building material inspired by the traditional CMU block. With such a high amount of PKS Waste in a year, it will generate roughly 2 billion blocks, yielding around 800 thousand houses of 2,500 sq ft.

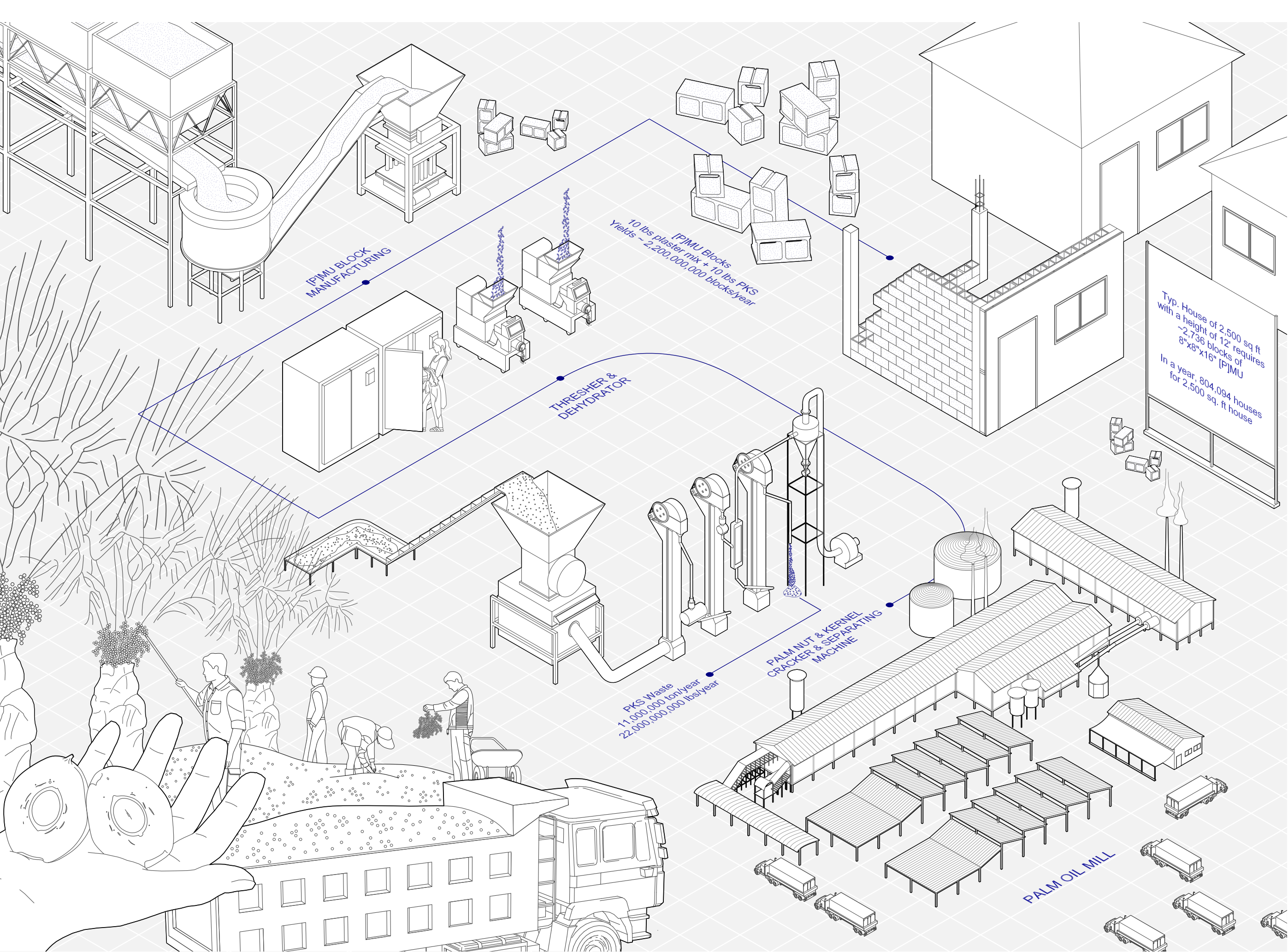






Image 1 - Material Prototype Models

Material Prototype Models

- 01/ Ground Shrimp Shell + Plaster | Structural Integrity Test Models
- 02/ Roselle Tea Dye + Ground Shrimp Shell + Plaster
- 03/ Ground Tobacco Leaves and Stalks + Plaster
- 04/ Palm Kernel Shell (PKS) + Plaster | Structural Integrity Test Models
- 05/ Palm Kernel Shell (PKS) + Plaster
- 06/ Rice Husk + Plaster

PKS + Plaster to [P]MU Blocks

[P]MU blocks serve as the primary structural elements of a building, and can be combined with various other waste-derived materials. Images 2 and 3 illustrate how [P]MU blocks function as the main structural components, paired with rice husk insulation and cladded in materials such as rosin + roselle tea waste, bio-based resin + blue pea tea waste, and acacia wood. Unlike traditional Concrete Masonry Infill construction, these [P]MU blocks can be assembled as PKS + Plaster Masonry Infill and can also be stacked and filled with grout and reinforcement.

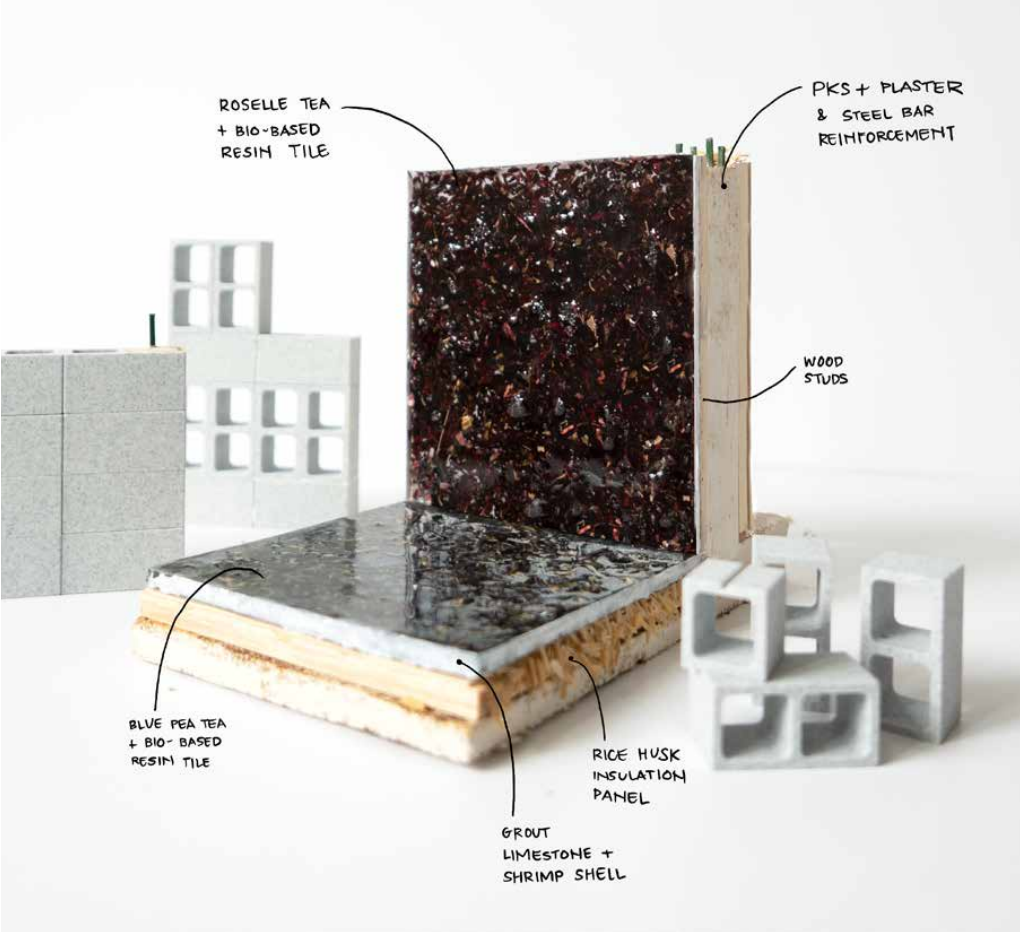


Image 2 Wall Section Model

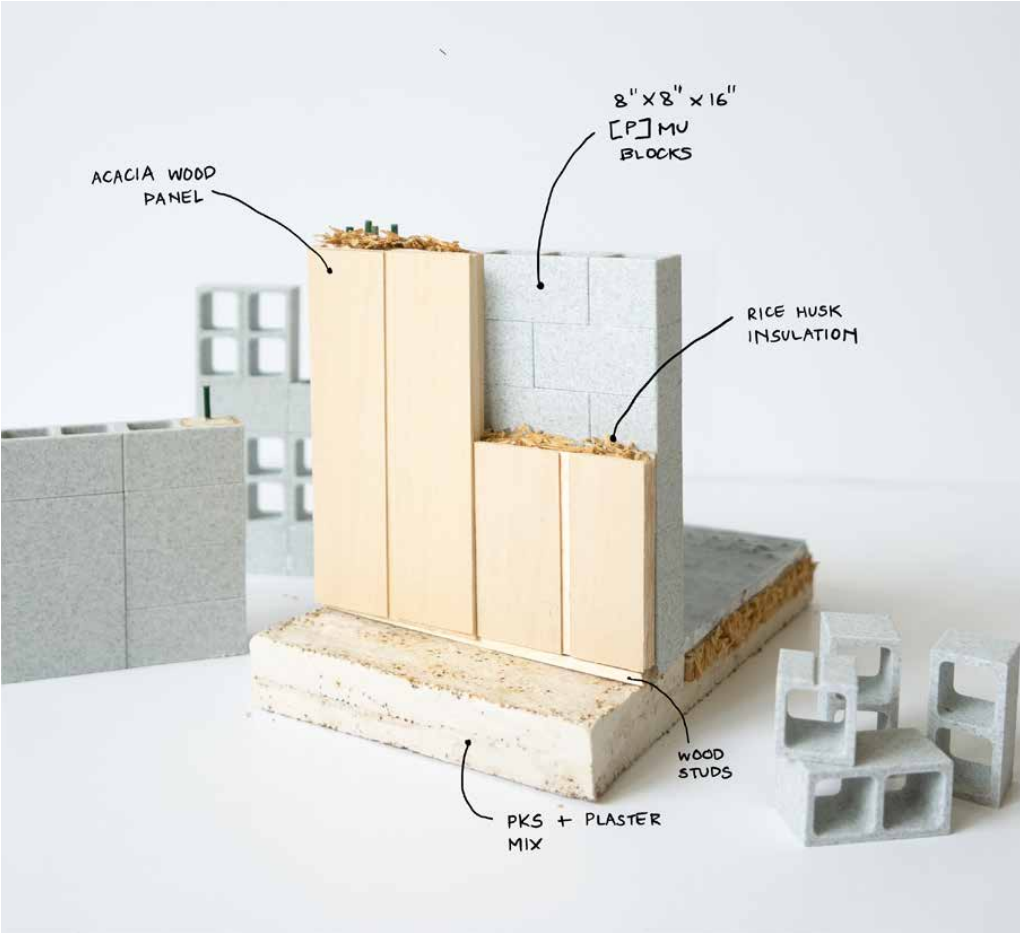


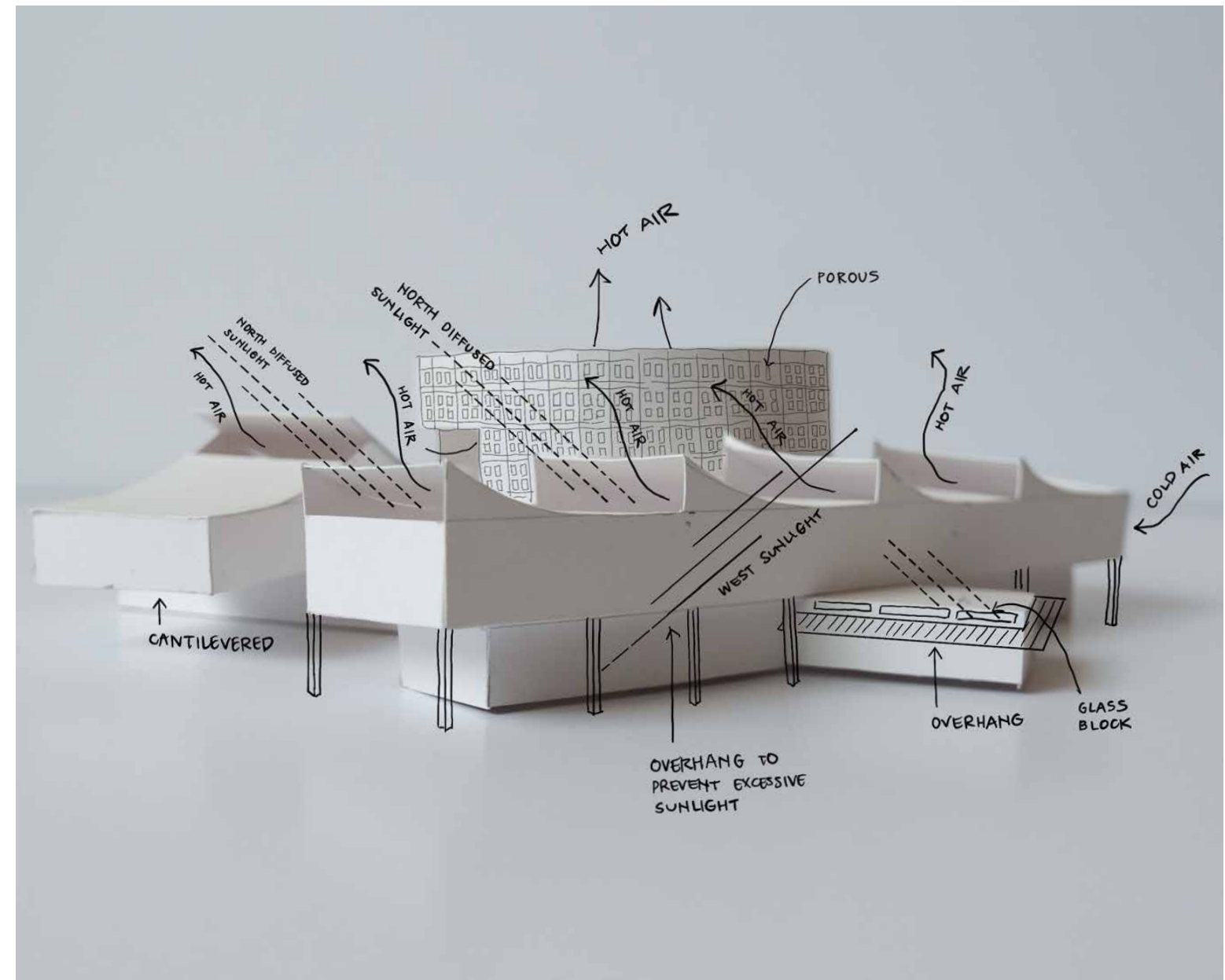
Image 3 Wall Section Model



## Reinterpreting Indonesia's Architectural Identity

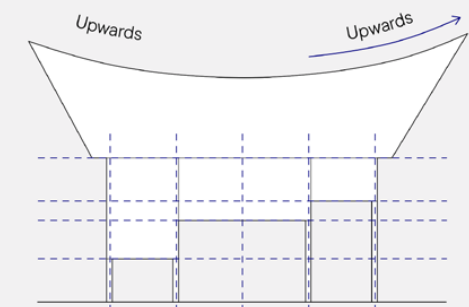
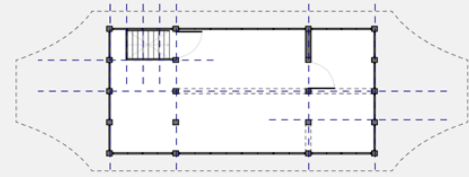
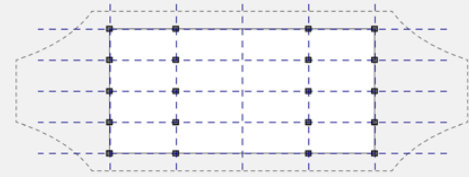
Instilling a Sense of Pride and Identity

Beyond redefining Indonesia's regional material identity, the Center also aims to re-establish the country's architectural identity. In response to the enduring colonial mindset, the Center seeks to set a precedent for contemporary architecture that is distinctly Indonesian. Through the analysis and reinterpretation of traditional Indonesian architectural characteristics, it becomes clear that these designs were shaped by regional climate, religious beliefs about vertical movement towards heaven, and cultural and ethnic exchanges. Key elements include large overhangs, dramatic soaring roof forms, and elevated living spaces. The Center reinterprets these features by adapting them to the properties of [P]MU Blocks, bamboo, and wood structures—materials commonly used in today's Indonesian society—while responding to the region's climate and the building's functional needs.

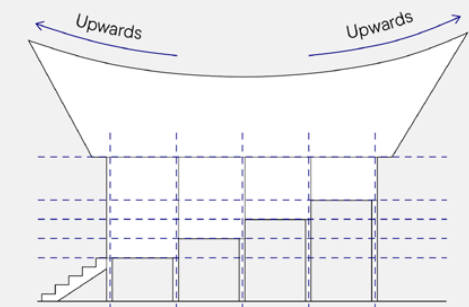




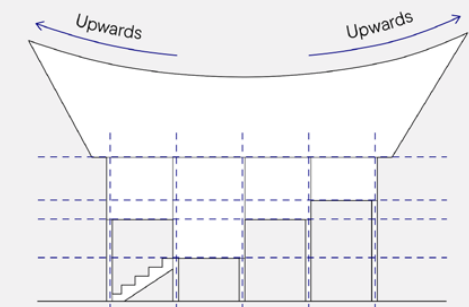
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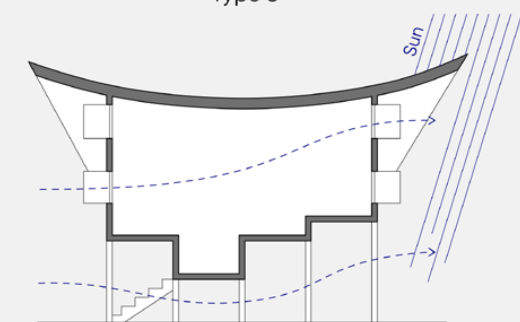
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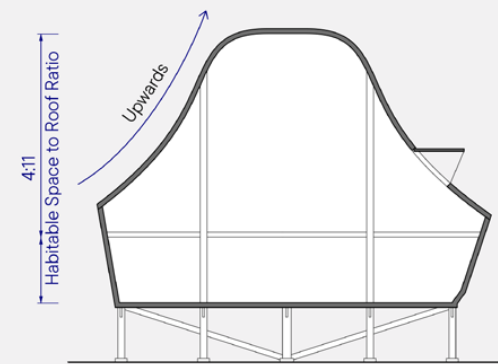
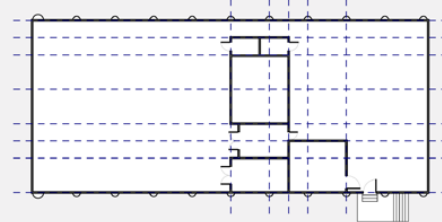
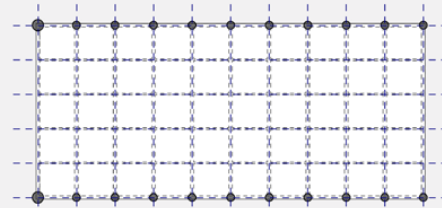
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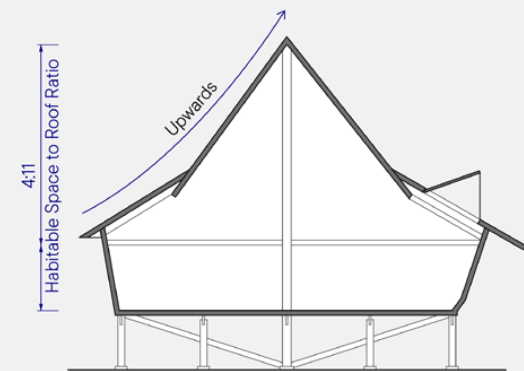
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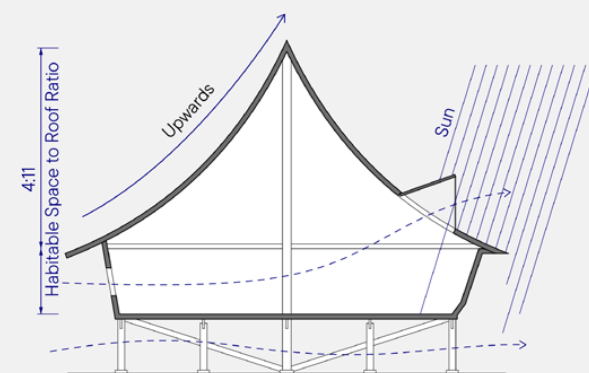
House of Nias



Type 1

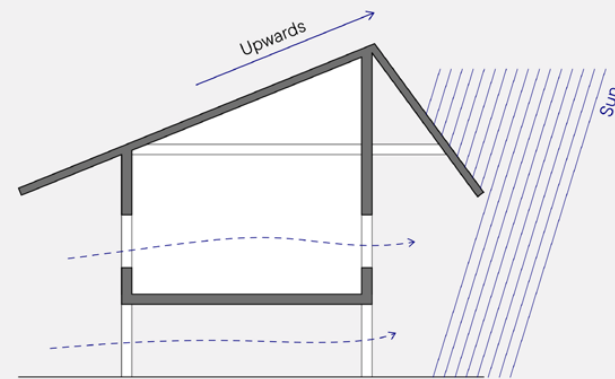
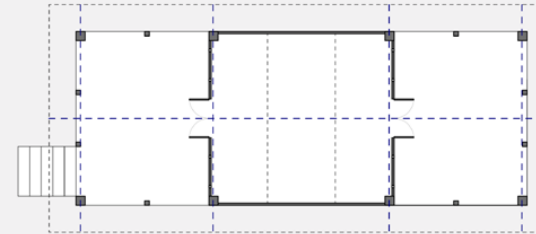


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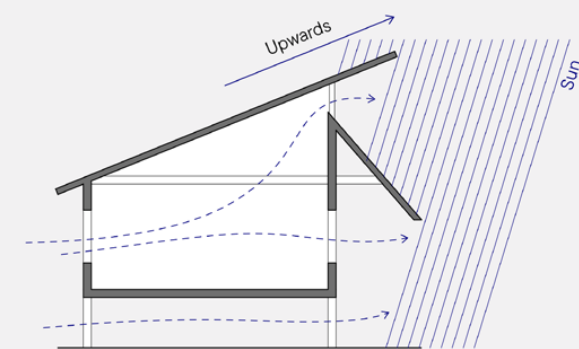


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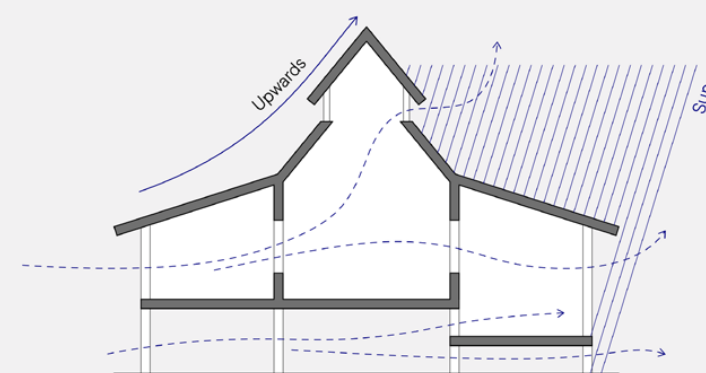
Keraton



Type 1

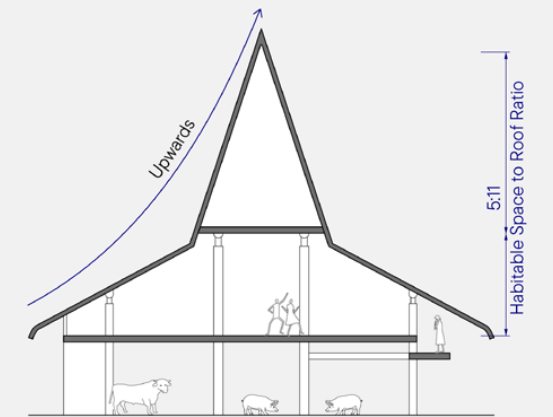
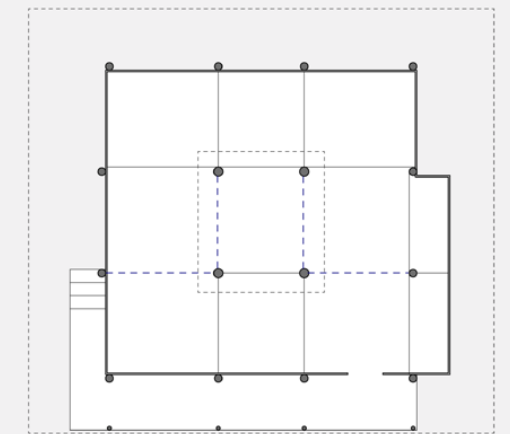
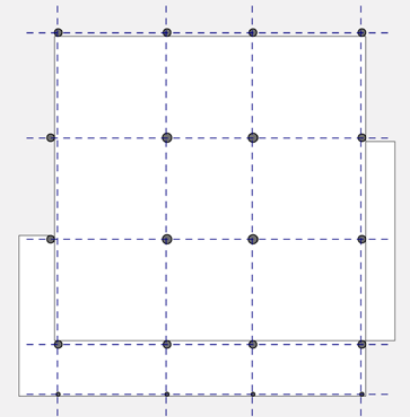


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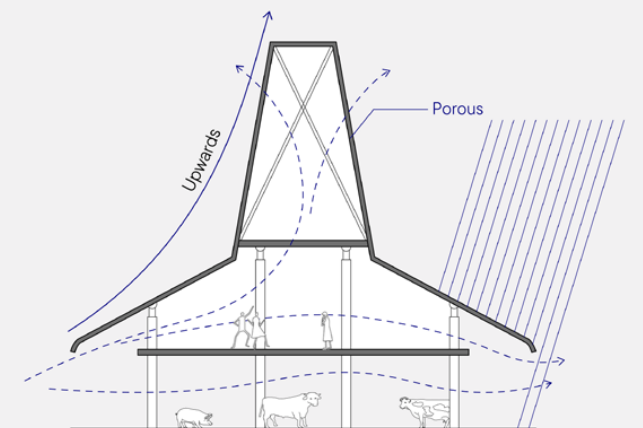


Type 3

Sumbanese House

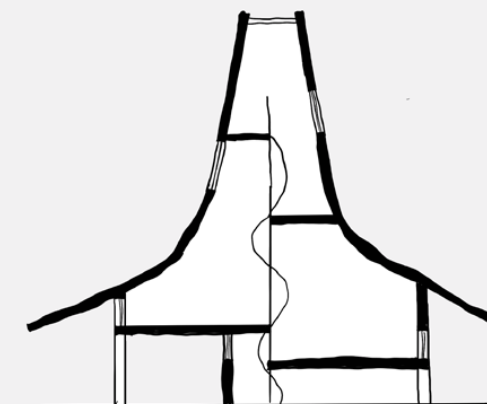
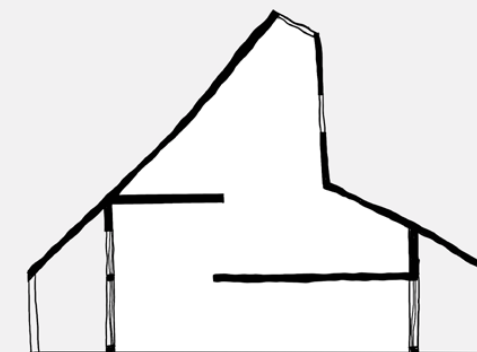
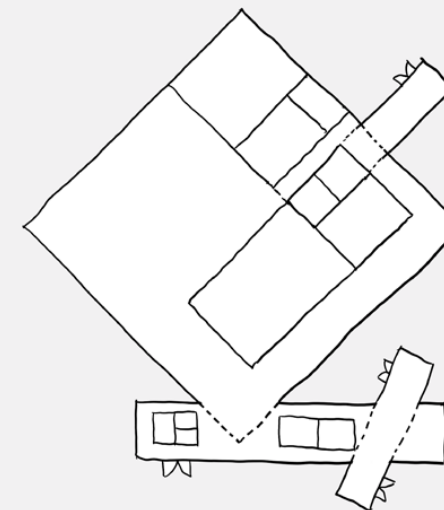
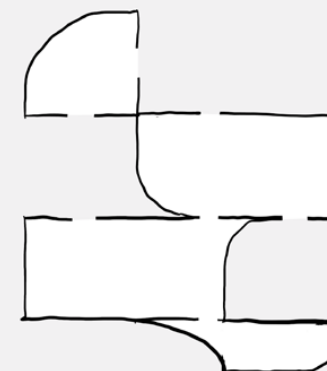
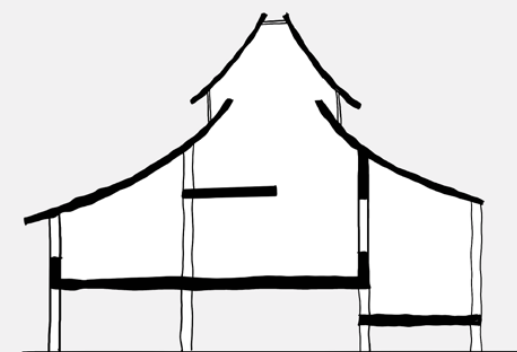
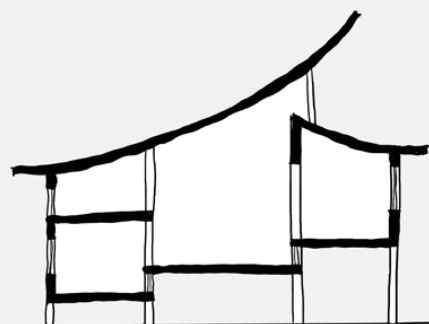
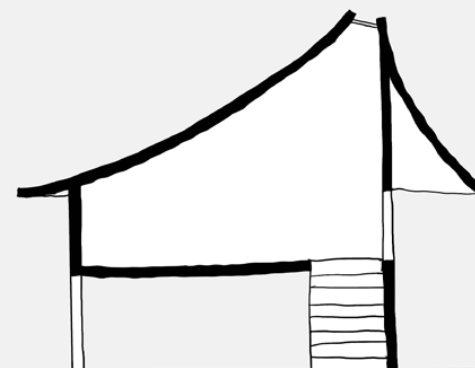
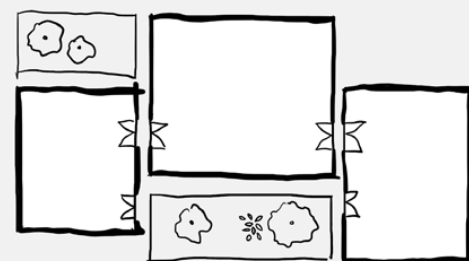
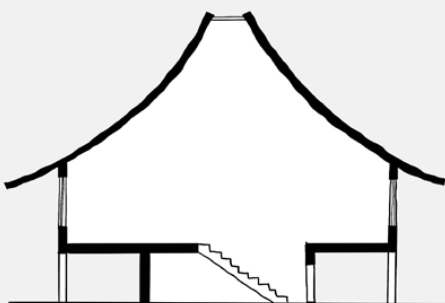
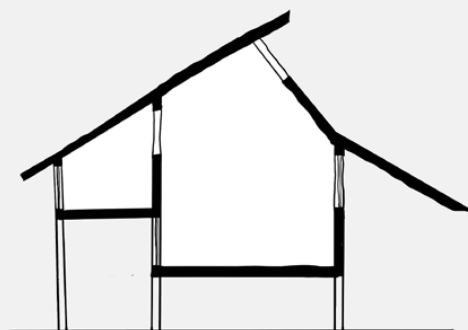
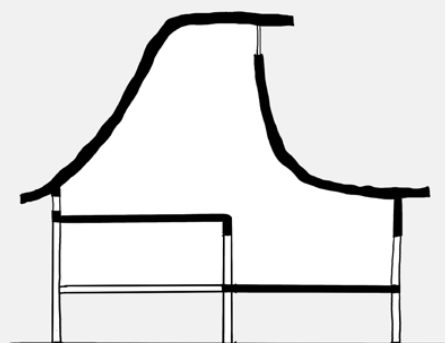
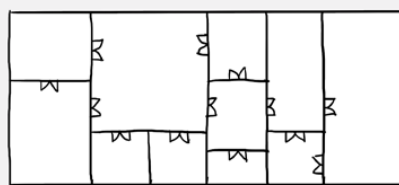
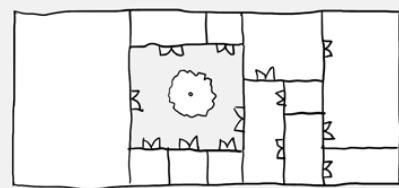
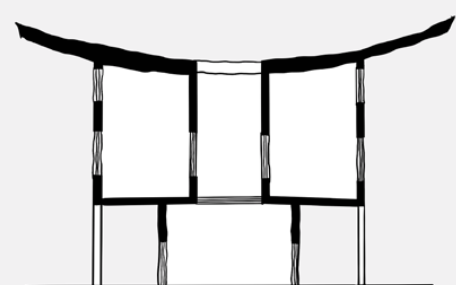
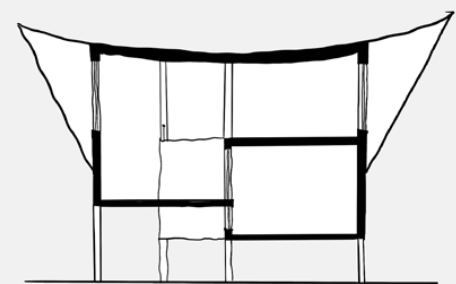
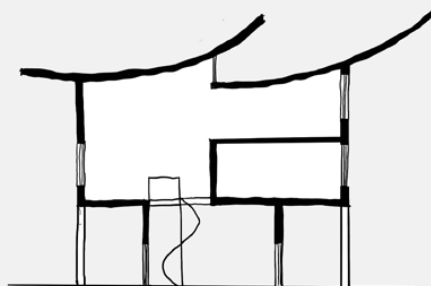
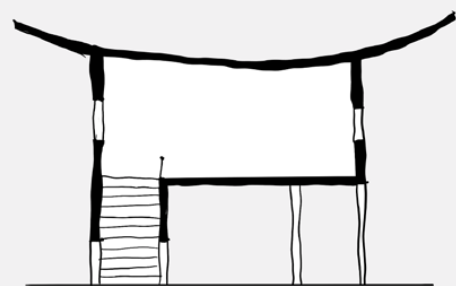


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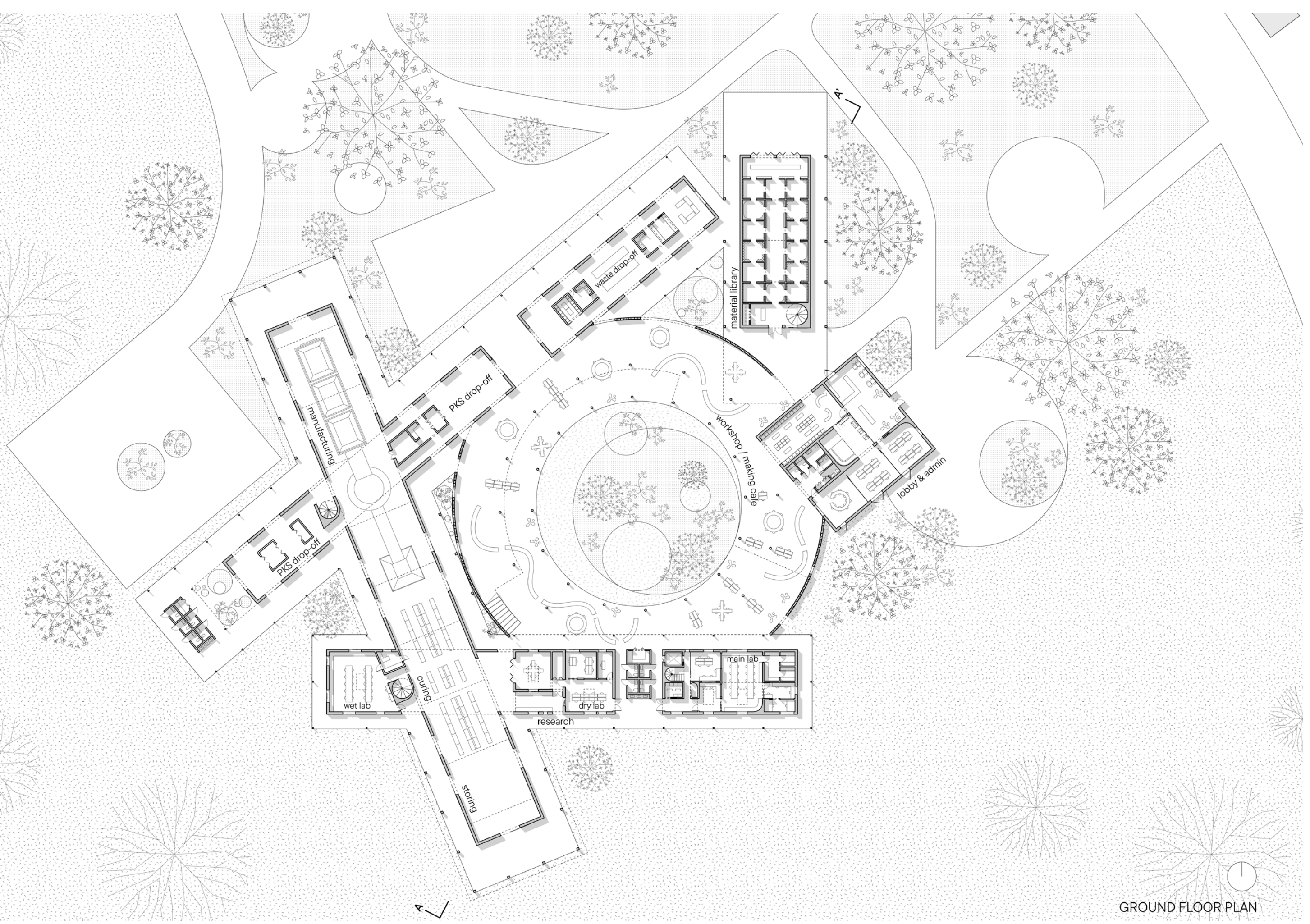


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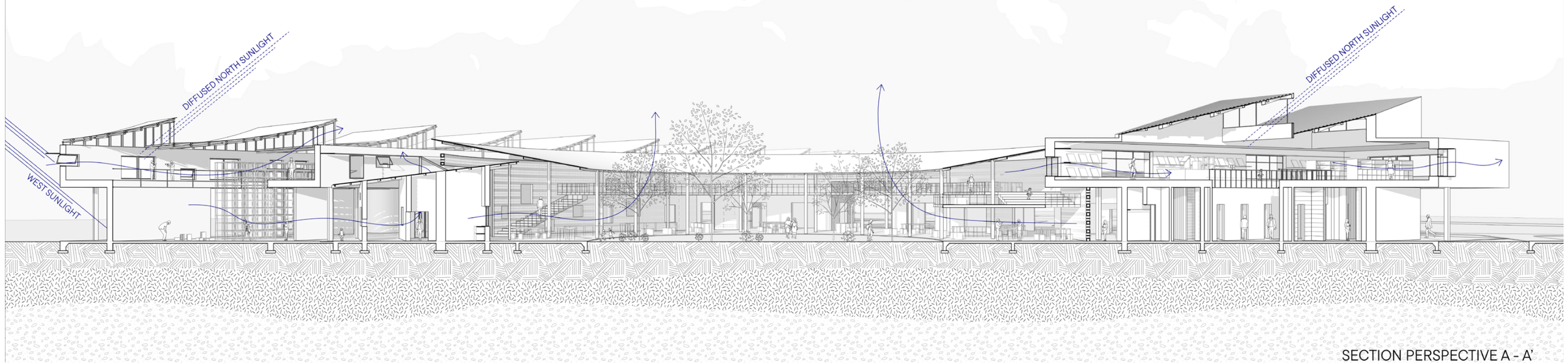
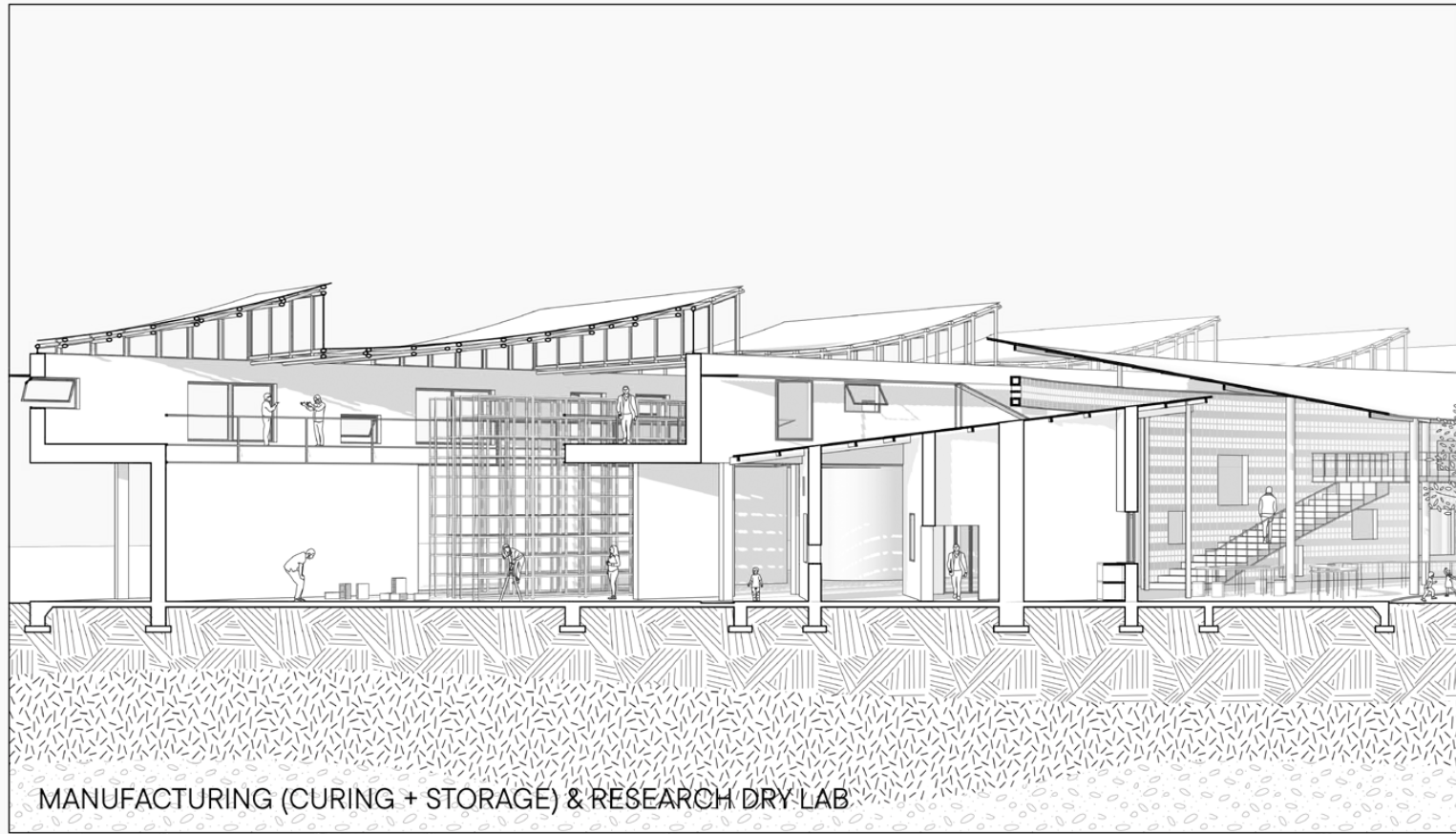




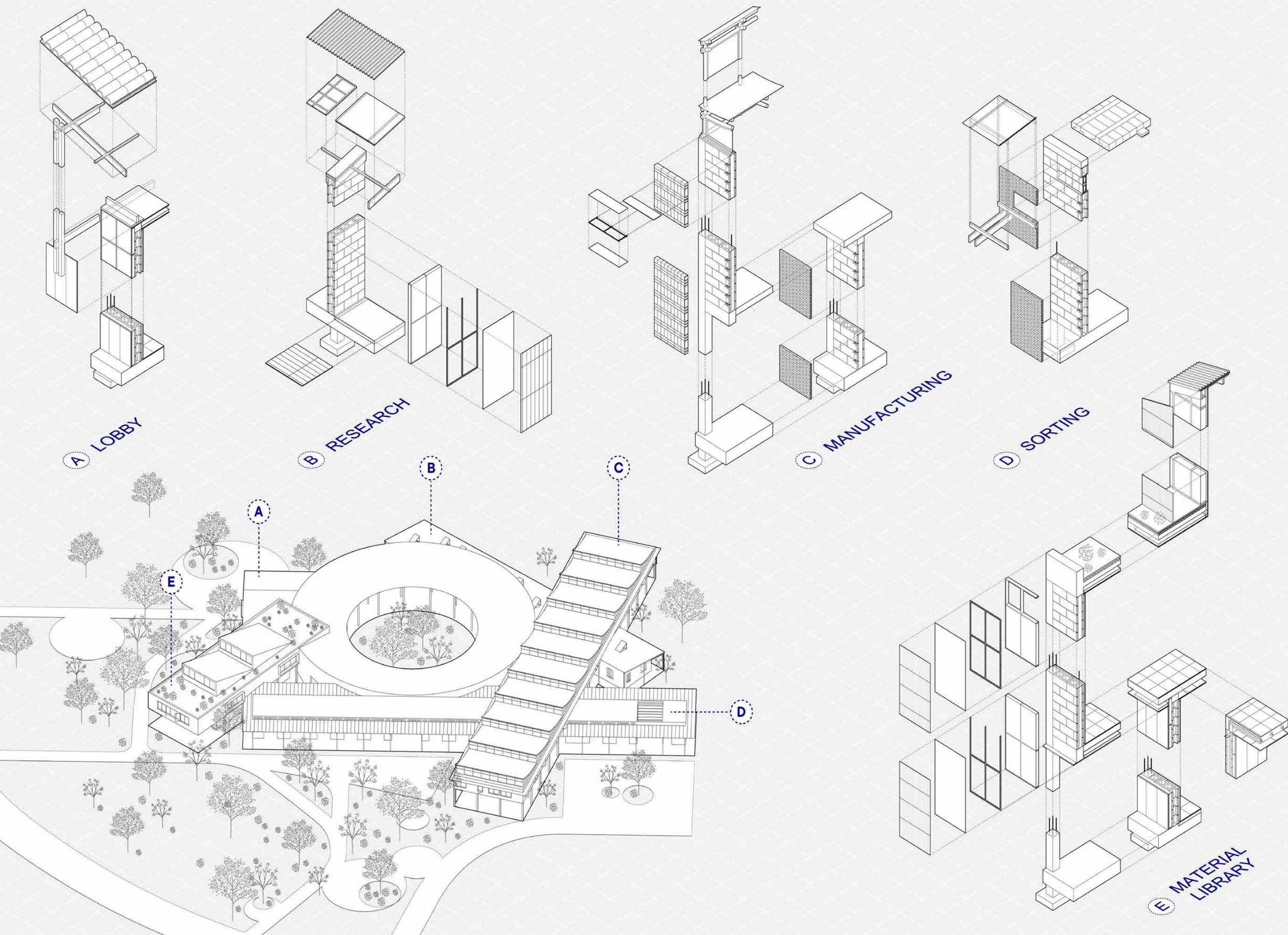


GROUND FLOOR PLAN









### A Demonstration, Precedent, and Possibility

Driven by the goal of redefining identity and exploring new possibilities within Indonesia's material and architectural language, the Center integrates a variety of materials and localized structural systems across its distinct massings, highlighting local building techniques and craftsmanship.

The material library massing alone demonstrates the potential of the [P]MU block, assembled in plaster + PKS masonry infill and paired with steel bar reinforcement for cantilevering and green roof construction. The building transcends its role as merely a waste collection and management hub; it serves as a demonstration, a precedent, and living proof of the possibilities for Indonesian society, especially in light of the recent relocation of the capital from Jakarta to Nusantara.







# A(TTIC)TECTURE

ADAPTIVE REUSE | CENTER FOR ARCHITECTURE - Archive, Library, Exhibition

GOVERNOR ISLAND | 125 GOVERNOR ISLAND, NY 10004

ADV V STUDIO : BUILDINGS ON BUILDING (FA'24)

CRITIC : WONNE ICKX

PARTNER : YIU LUN (ANSON) LEE

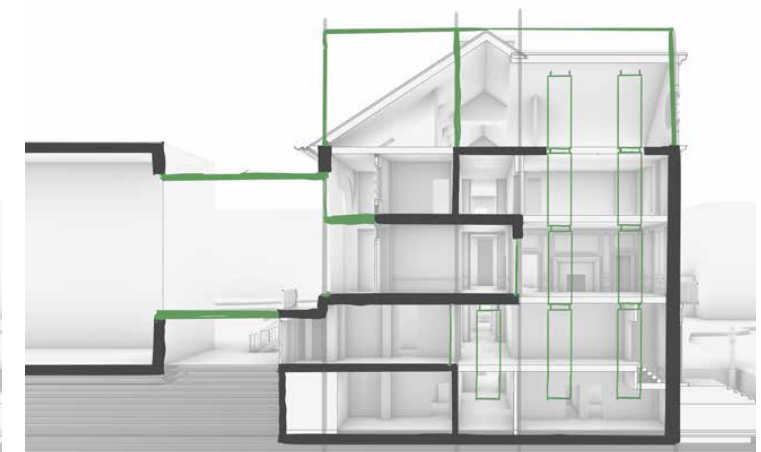
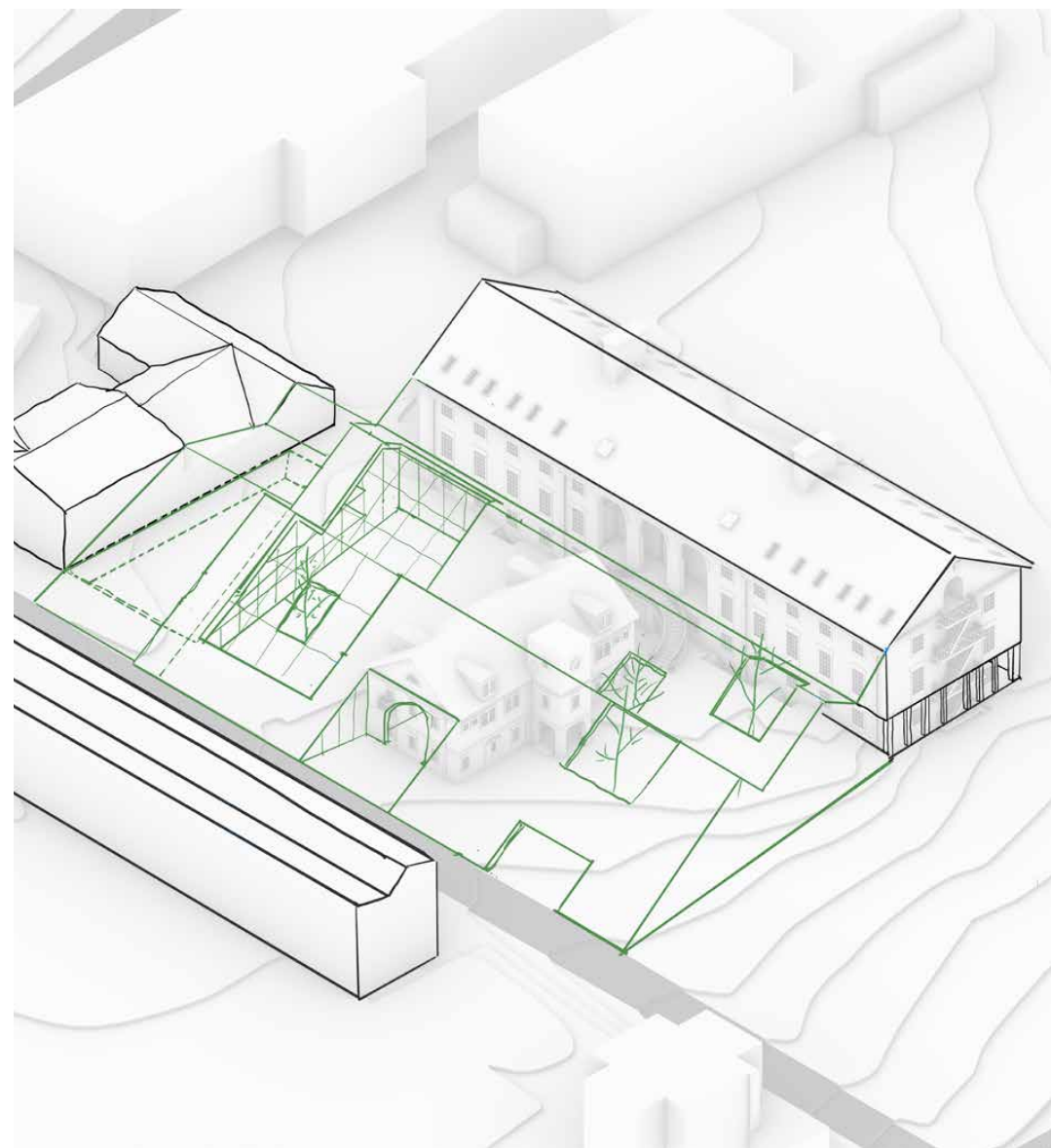
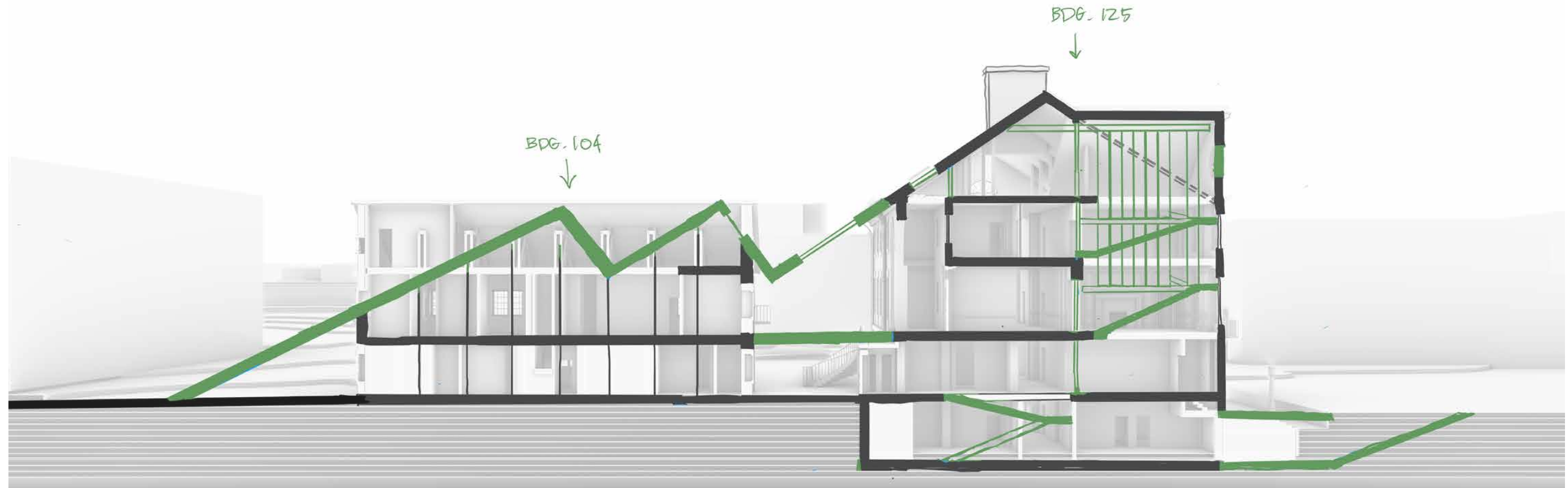
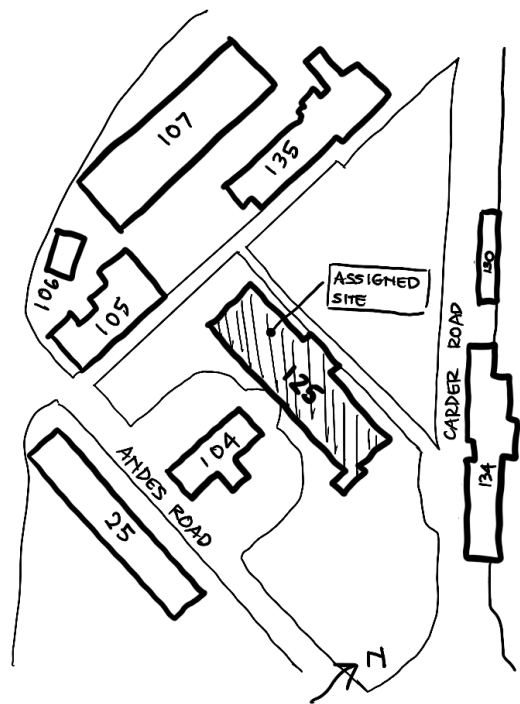
A(ttic)tecture transforms building 125, a former First Army Administration building, into a Center for Architecture. Right across building 125, a storagehouse, building 104 exists, obstructing direct entry access to the building 125. This unique condition accompanied by the different programmatic phases of the project are weaved together through extending the building 125's roof and its

structural framework, encapsulating building 104 and creating diverse attic or 'under-the-roof' experiences for the building users. Contrary to building 125's former functions, safeguarding information, A(ttic)tecture creates access to information and knowledge through varying degrees of visibility as well as remnants of architectural past of the building 125 and 104.



PERMANENT EXHIBITION PLATFORM | Building 104 is on the right, while Building 125 is on the left





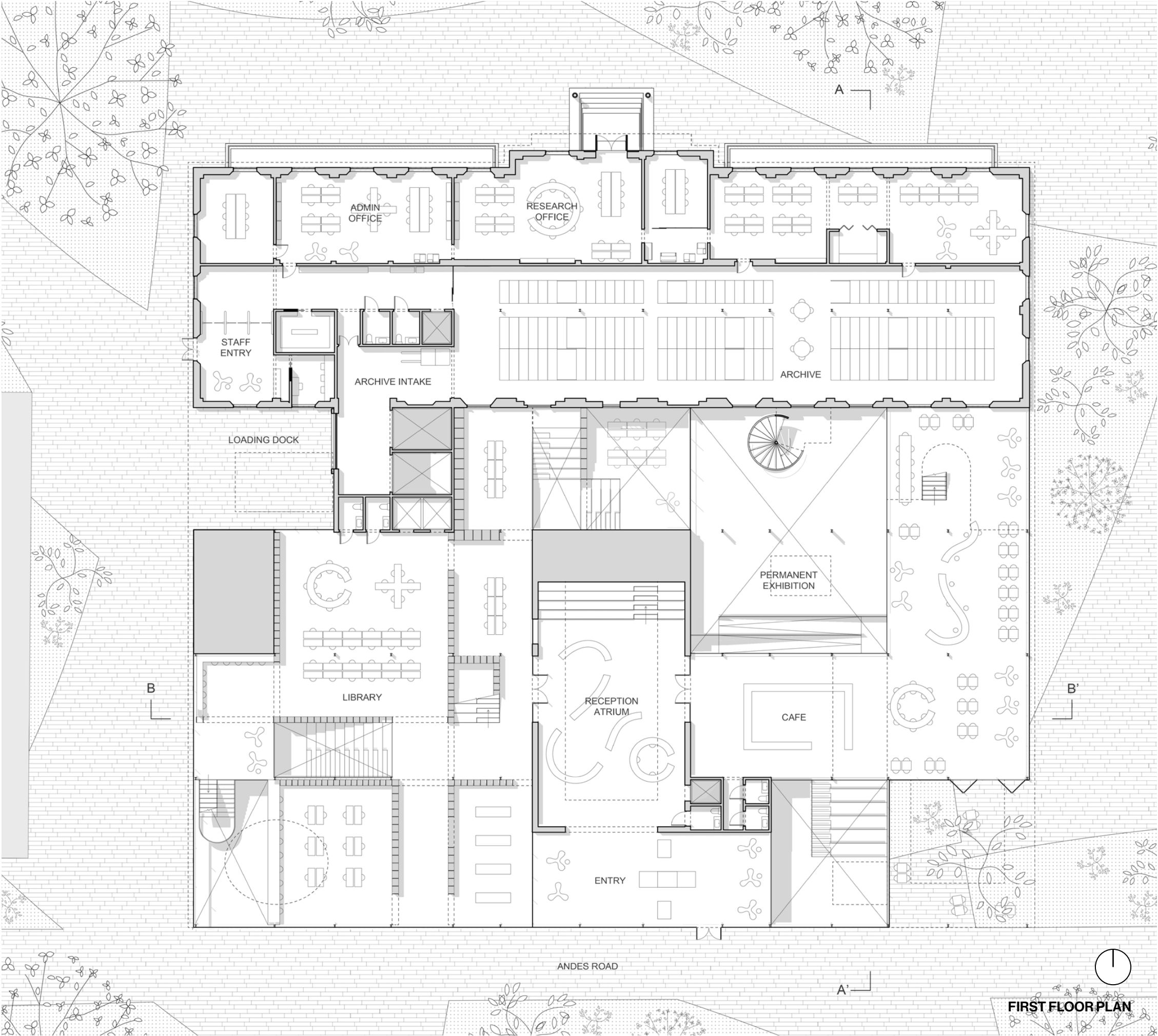
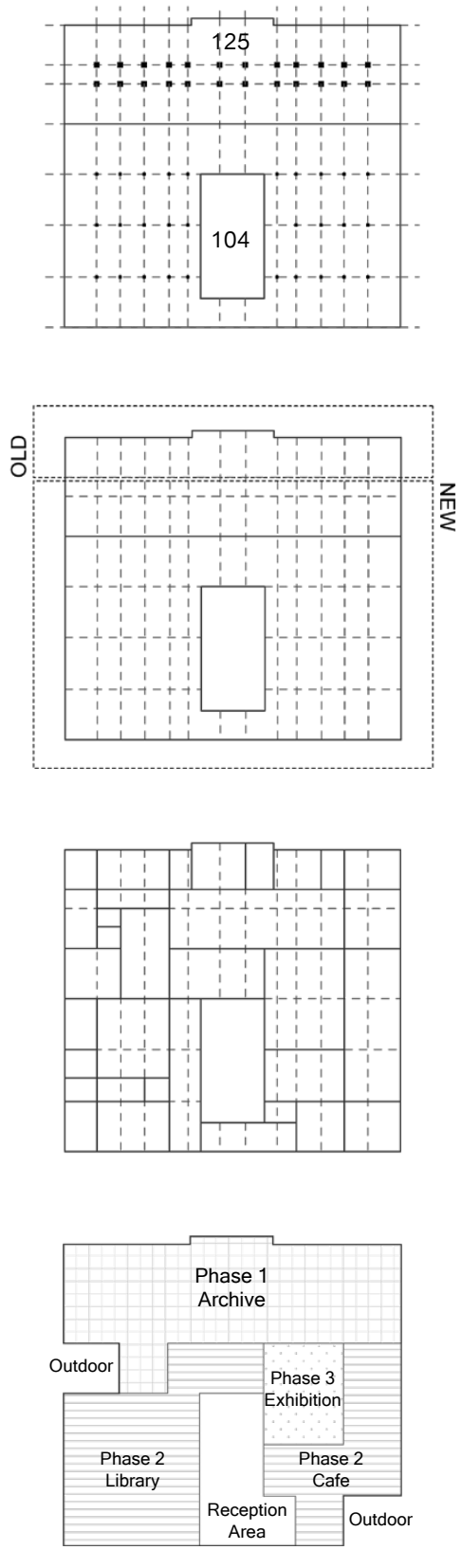
## CONCEPTUAL & SPATIAL IDEATION

Initial conceptual and spatial ideation aimed to unify the buildings surrounding Building 125, particularly Building 104, which obscured the main entrance of Building 125.



FORMAL AND SPATIAL DIAGRAMS

By extending the existing structural framework of Building 125, the project introduces grids that encapsulate Building 104. While retaining the existing rooms on the Northern side of Building 125, its Southern part employs open-plan spaces that operate within the introduced grids, creating 'grid within grid' and 'buildings in a building.'







ATRIUM & RECEPTION | Building 104, facing permanent exhibition space of Building 125



**BUILDING 104 AS A CONNECTOR**

Building 104 is reimagined as a reception area, guiding visitors and connecting them to the public programs: the Library (to the left), the Café (to the right), and the Exhibition spaces (located directly behind, right after the stair).



SECTION B - B'



ARCHITECTURAL REMNANTS OF THE PAST

By retaining the shells of Buildings 104 and 125, they become parts of the architectural archive and exhibition. The adjacent exhibition space, with its quadrupled height, offers visitors an opportunity to engage closely with these building shells.



SECTION A - A'



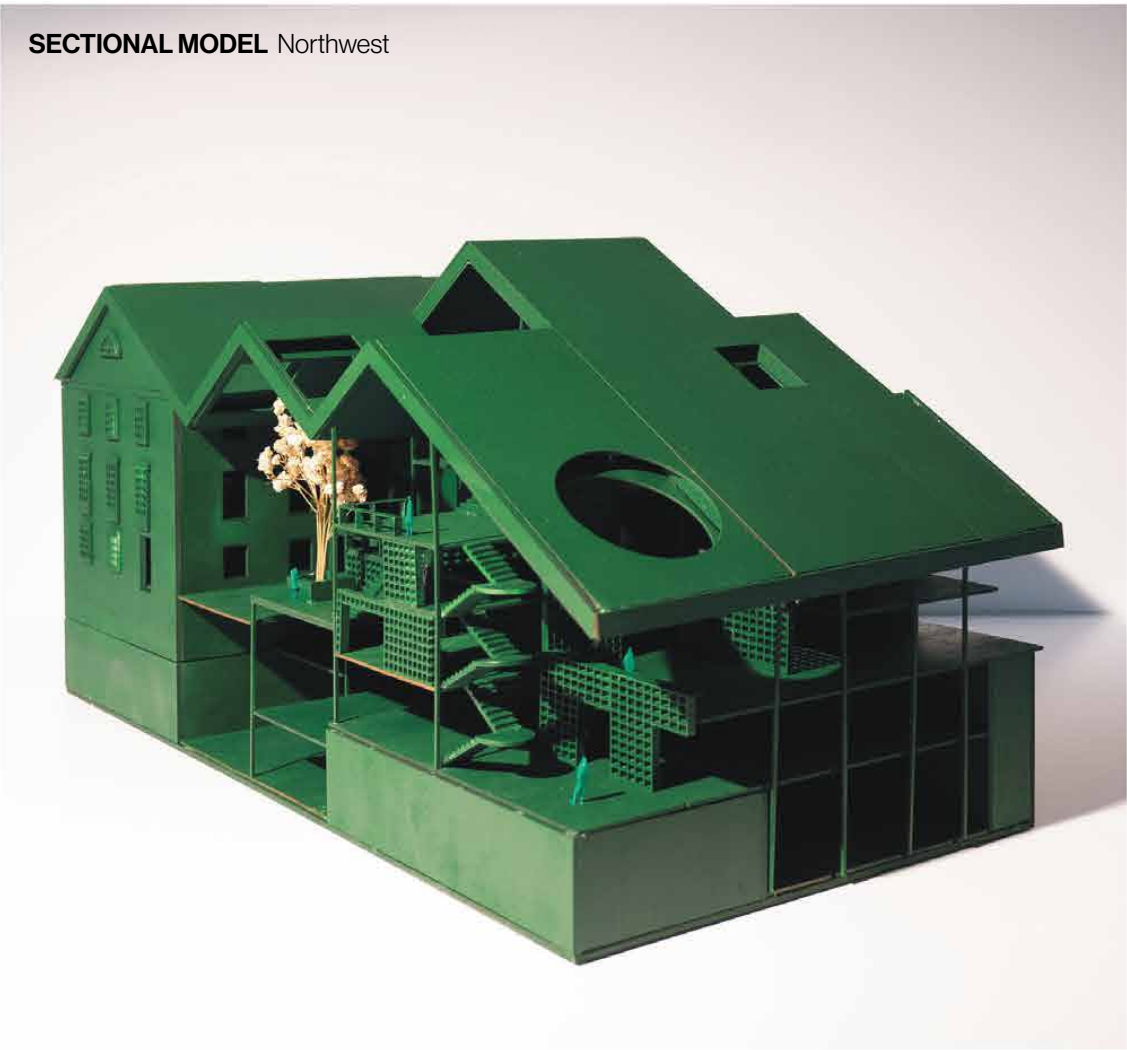


#### ATTIC EXPERIENCES

The "attic" experiences throughout the building are shaped by the varying heights from the floor to the underside of the roof, as well as the changing quality of light that enters the spaces, creating diverse connections between the users and the roof.



SECTIONAL MODEL Northwest





## BLUE BLOOD OF JAMAICA BAY

MODEL OF REFORM FOR BIOMEDICAL INDUSTRY

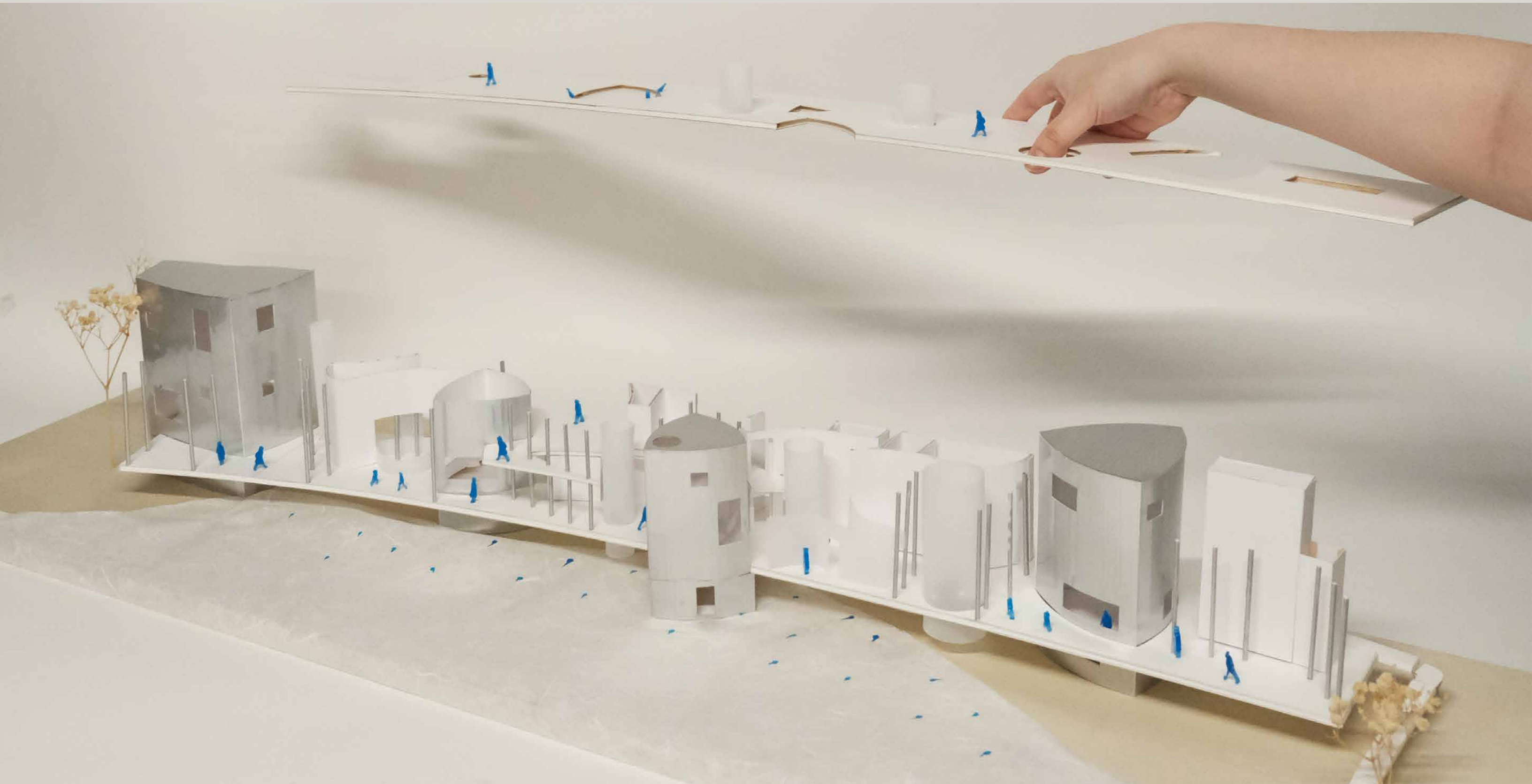
JAMAICA BAY | QUEENS, NY 11693

CORE III STUDIO : DAMAGE CONTROL (SP'23)

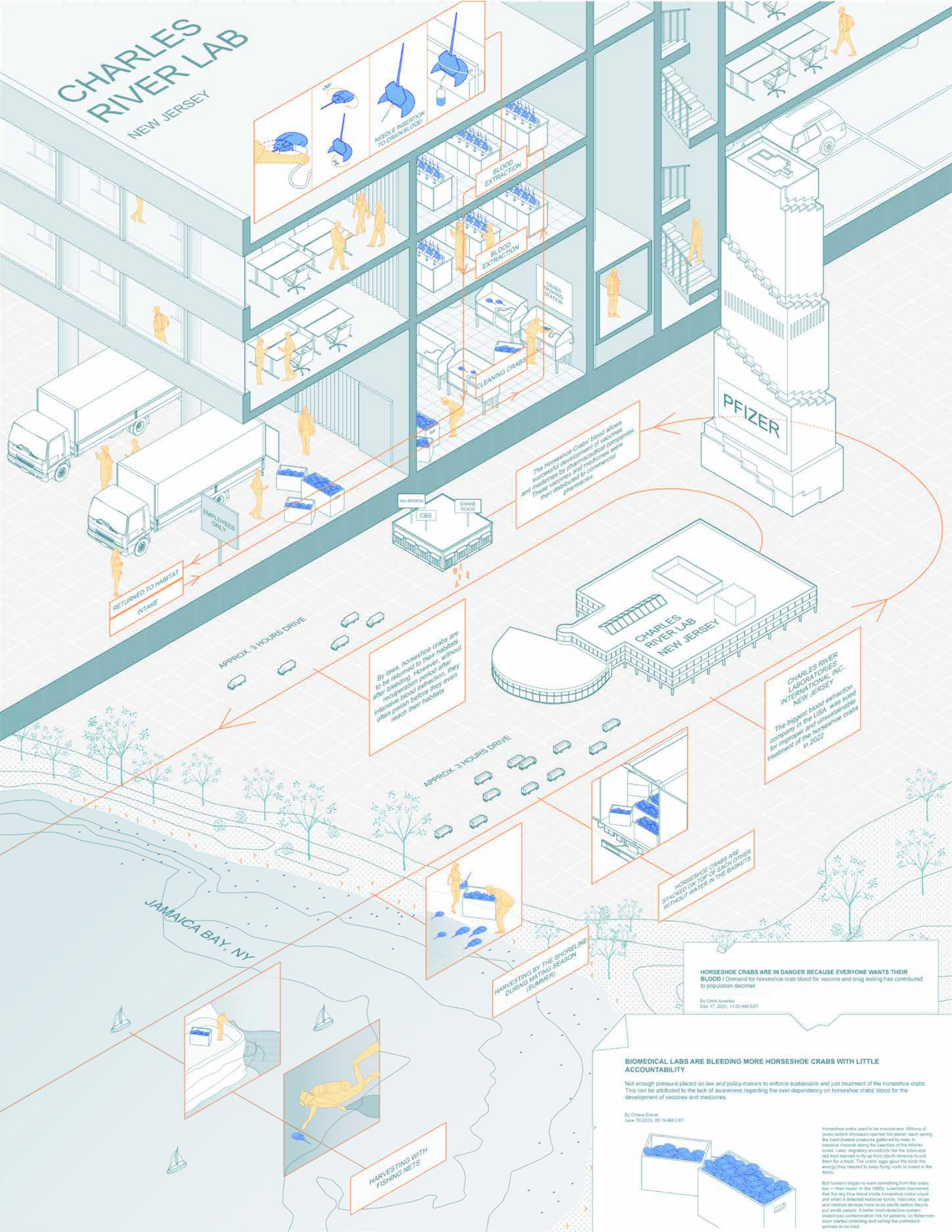
CRITIC : BENJAMIN CADENA

Situated in the Crossbay of Jamaica Bay, New York, the project serves as a beacon for reform in the biomedical industry. It features an educational program committed to highlighting the horseshoe crab's pivotal role in medicine and research. The center also advocates for responsible bleeding practices through conservational programs, and provides refuge for the crabs during mating

season. Architecturally, the facility resonates with the edges of water and man-made infrastructure, asserting its presence to deter poaching, while within, the formal design intersects and collides, creating seamless and informal boundaries among the biomedical, educational, and conservation programs.





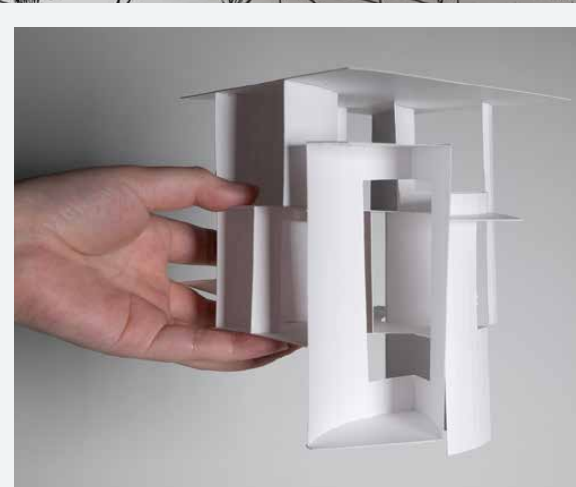
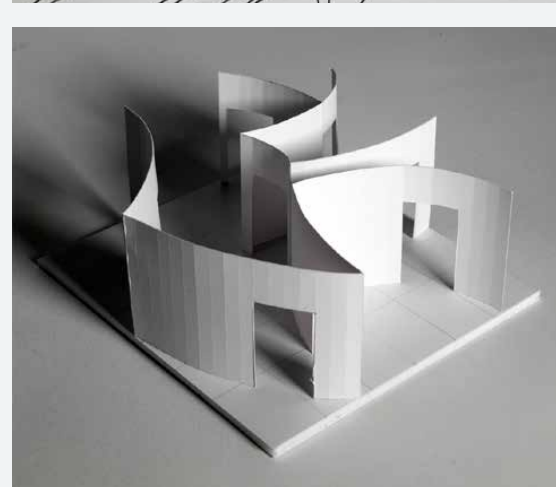


# Fatalities in Horseshoe Crab Blood Harvesting Practices:

Profit Over Sustainable Practice

Horseshoe Crab harvesting primarily occurs during mating season, involving long and overcrowded journeys to distant biomedical facilities. This transportation results in some crabs surviving while others perish before reaching their destination. Local regulations mandate their return to their habitat, but there is no requirement for a safe return. As a result, many crabs are hastily released without a proper recuperation period, leading to further mortality. On the other hand, mega-rich biomedical companies continue to profit from horseshoe crab's blue blood without facing any repercussions. This issue is attributed due to a lack of public awareness and insufficient local regulations.





## PROCESS MODELS

The presence of horseshoe crabs in medicine development provokes unexpectedness. Coupled with the edge conditions of their harvesting and mating, the study model explores formal and spatial configurations through the intersection and collision of curves to create formal and informal edges that provoke anticipation.

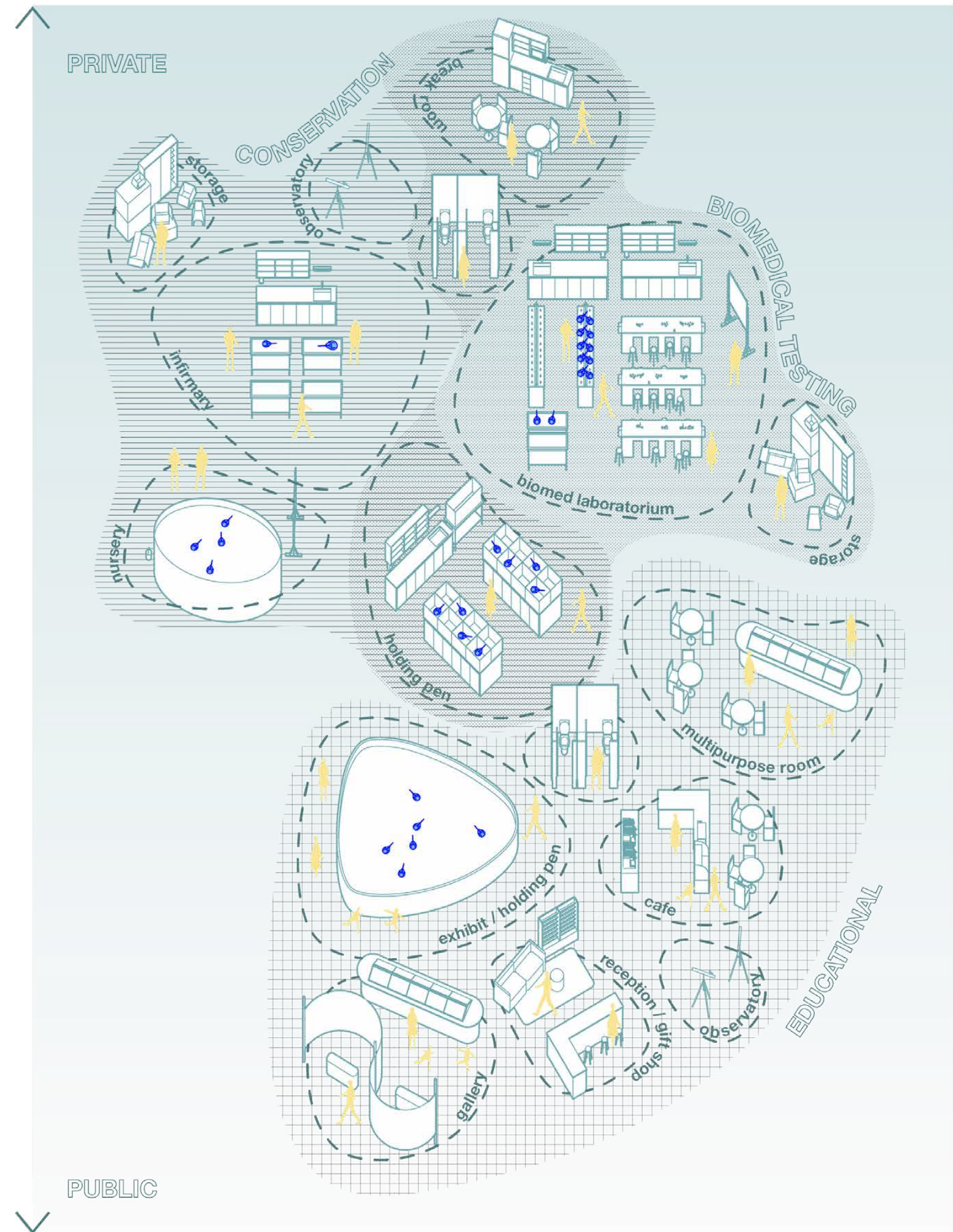
GIF Link : <https://fspace.site/pages#blue-blood-of-jamaica-bay>



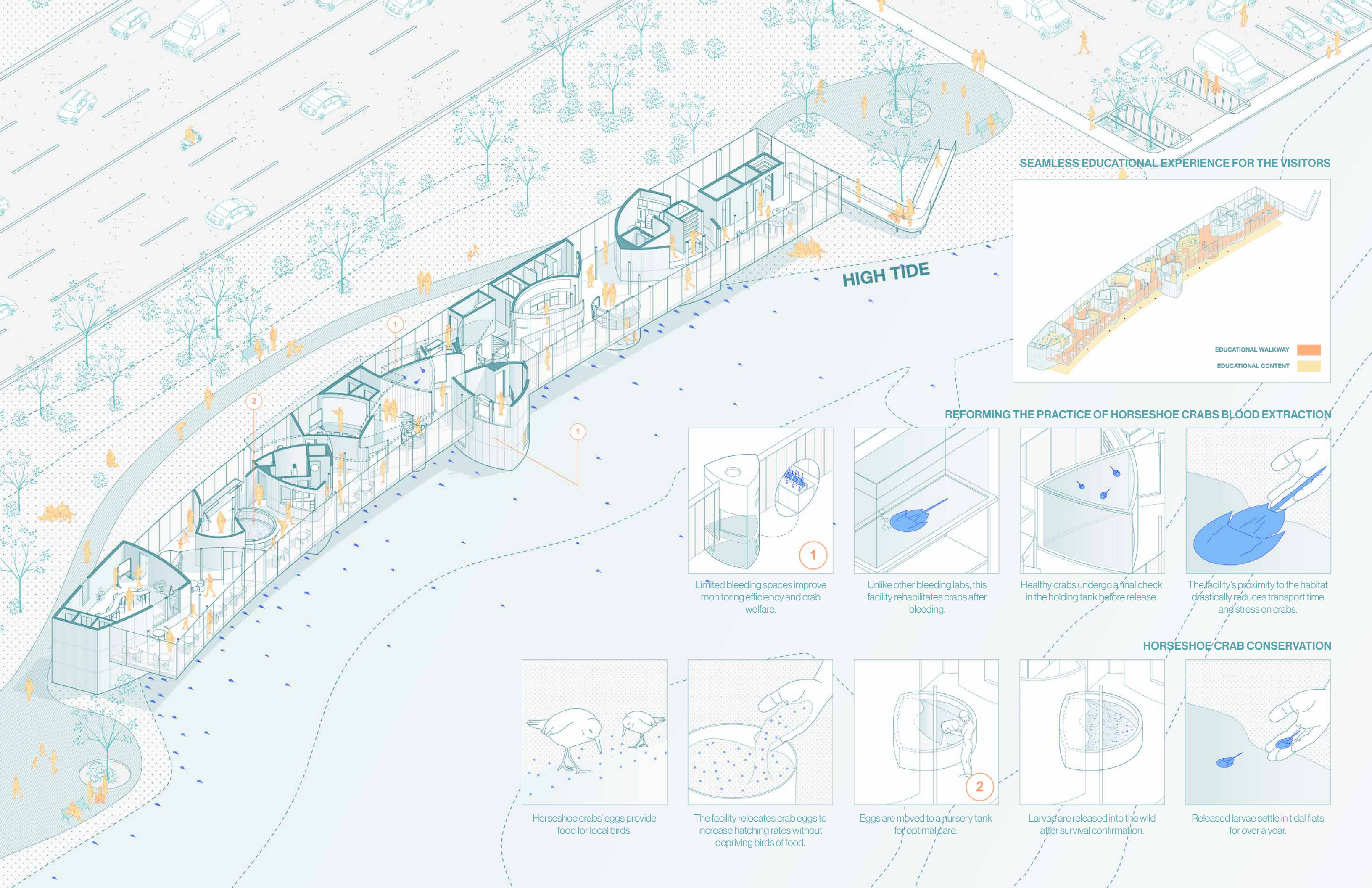
## Integrating Diverse Programs:

Recreational-Educational, Conservational, and  
Reformed Biomedical Programs

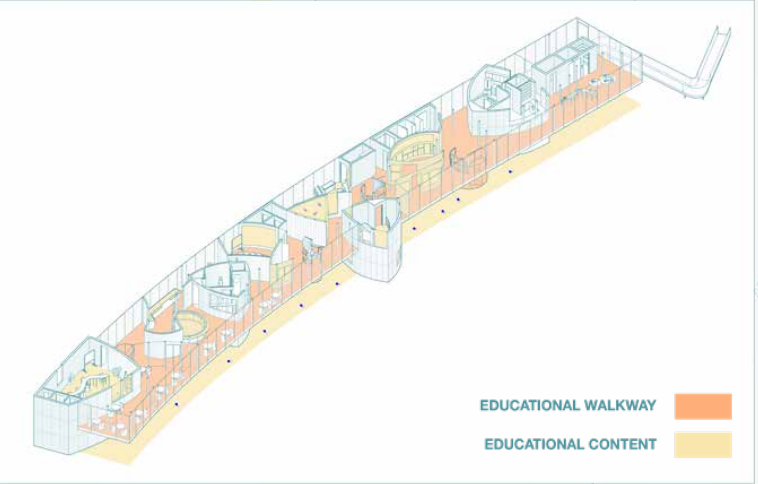
Within the facility, the formal design intersects and merges, creating fluid, informal boundaries between the recreational-educational, conservational, and reformed biomedical programs. These boundaries were shaped by program adjacency, private vs public access, and the seamless integration of components. To educate the public and promote responsible breeding practices, the building employs varying levels of transparency, allowing visitors to observe and experience all of the activities within while maintaining oversight and ensuring responsible practice.



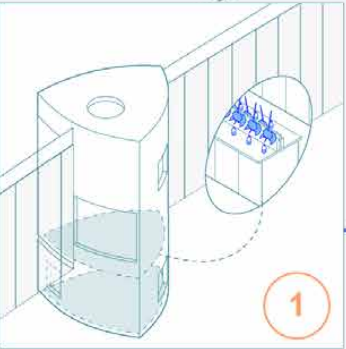




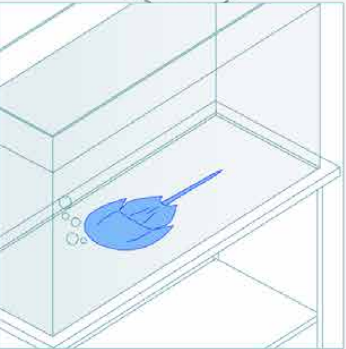
SEAMLESS EDUCATIONAL EXPERIENCE FOR THE VISITORS



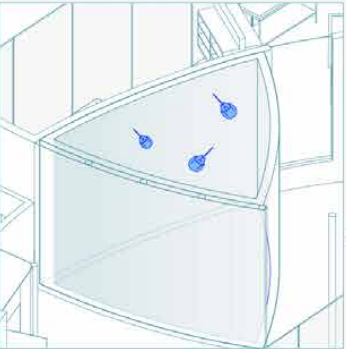
REFORMING THE PRACTICE OF HORSESHOE CRABS BLOOD EXTRACTION



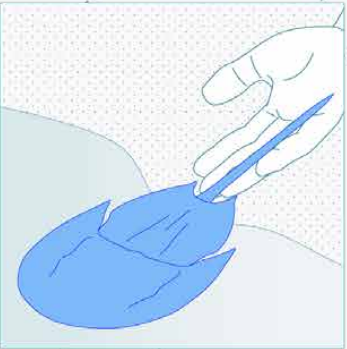
Limited bleeding spaces improve monitoring efficiency and crab welfare.



Unlike other bleeding labs, this facility rehabilitates crabs after bleeding.

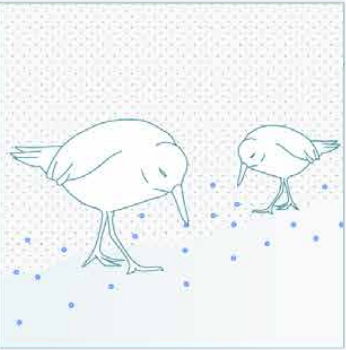


Healthy crabs undergo a final check in the holding tank before release.

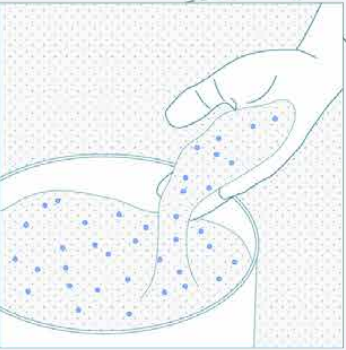


The facility's proximity to the habitat drastically reduces transport time and stress on crabs.

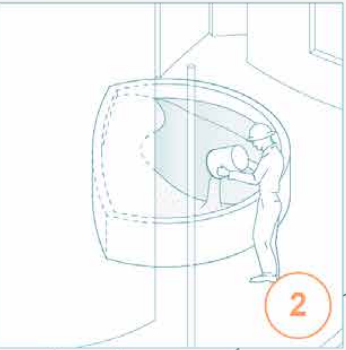
HORSESHOE CRAB CONSERVATION



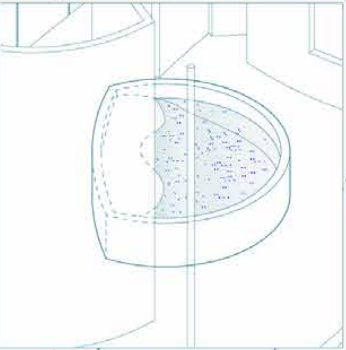
Horseshoe crabs' eggs provide food for local birds.



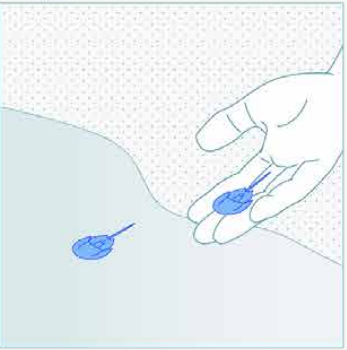
The facility relocates crab eggs to increase hatching rates without depriving birds of food.



Eggs are moved to a nursery tank for optimal care.



Larvae are released into the wild after survival confirmation.

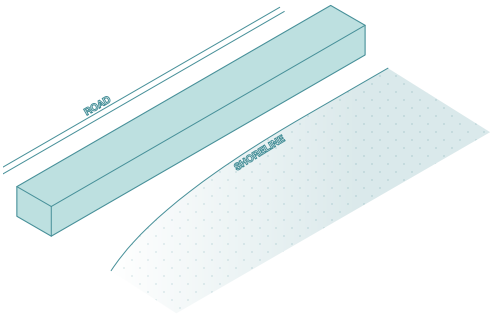


Released larvae settle in tidal flats for over a year.

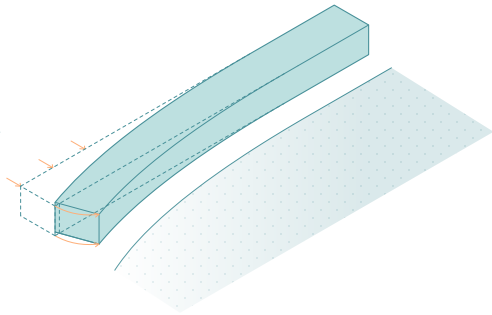


FORM AND SPATIAL GENERATION DIAGRAMS

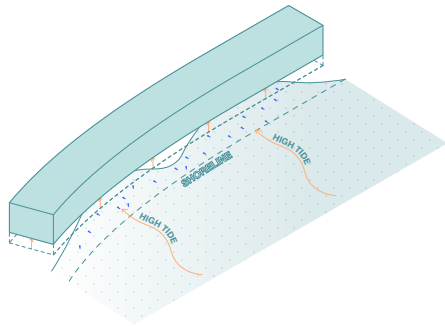
As a whole, the overall form of the facility resonates with the water and man-made infrastructure. It provides refuge for the crabs during mating season, seamlessly integrates the diverse programmatic spaces, and asserts a strong presence within the site to help deter poaching.



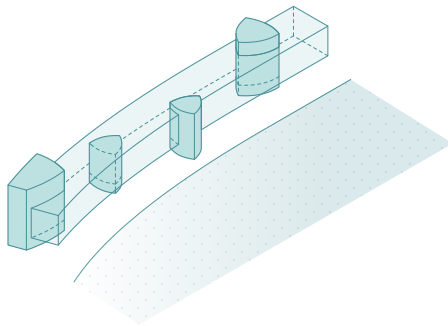
01  
Massing in between man-made infrastructure and water edge



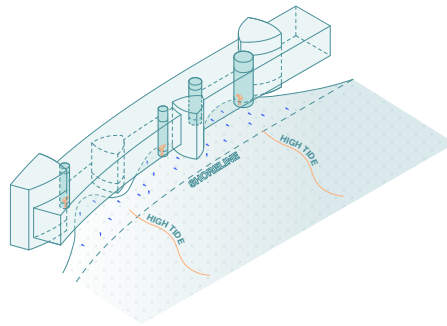
02  
Emulating the water edge



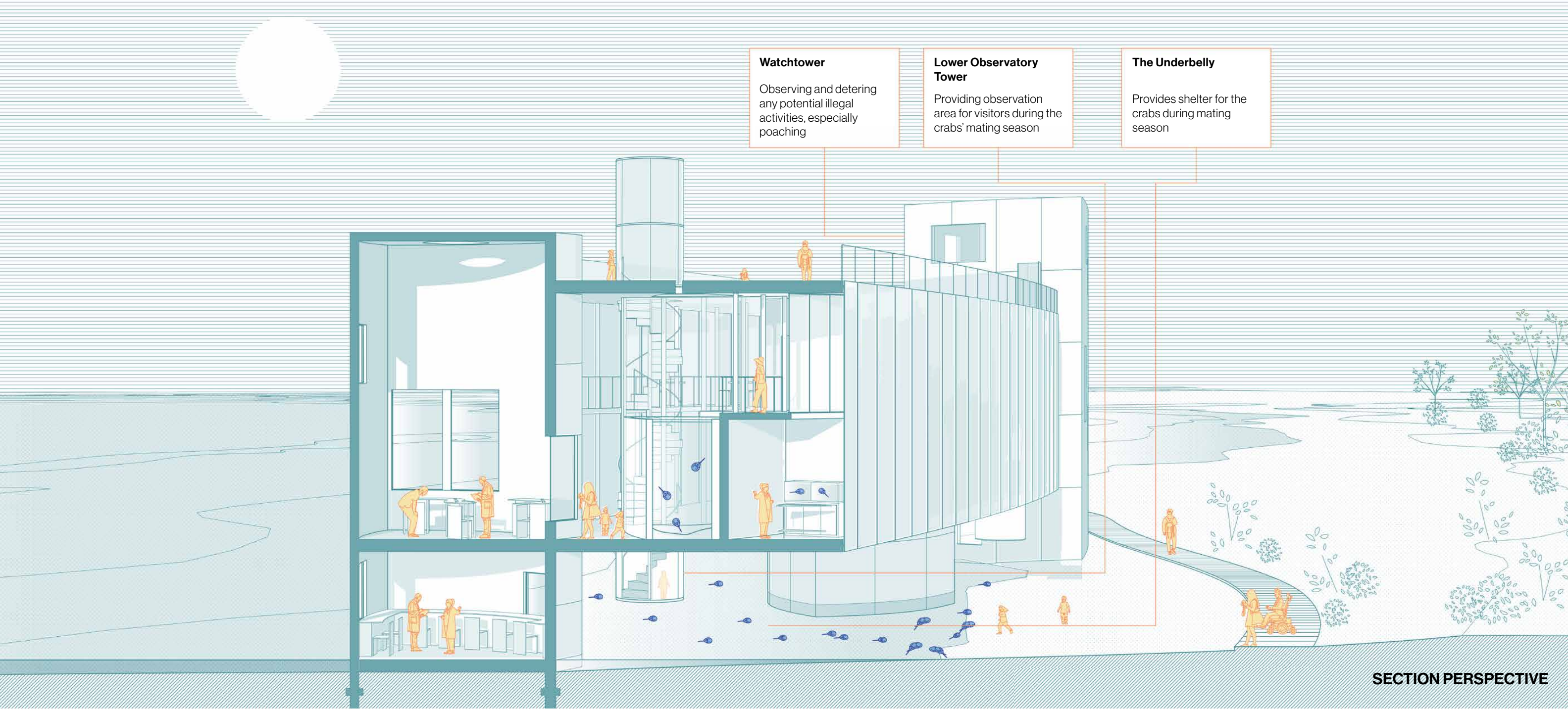
03  
Elevated mass to provide refuge for the crabs during mating season



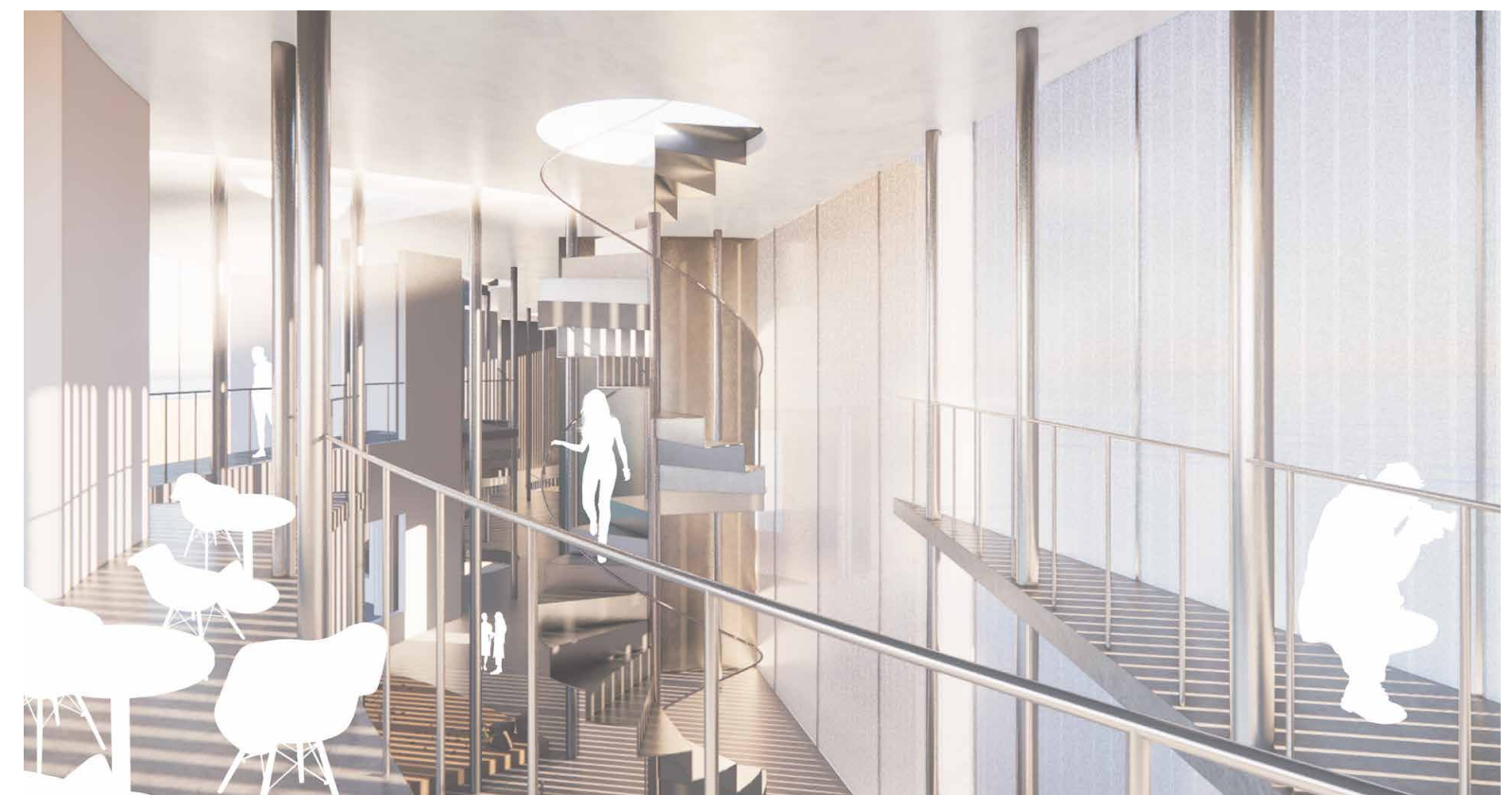
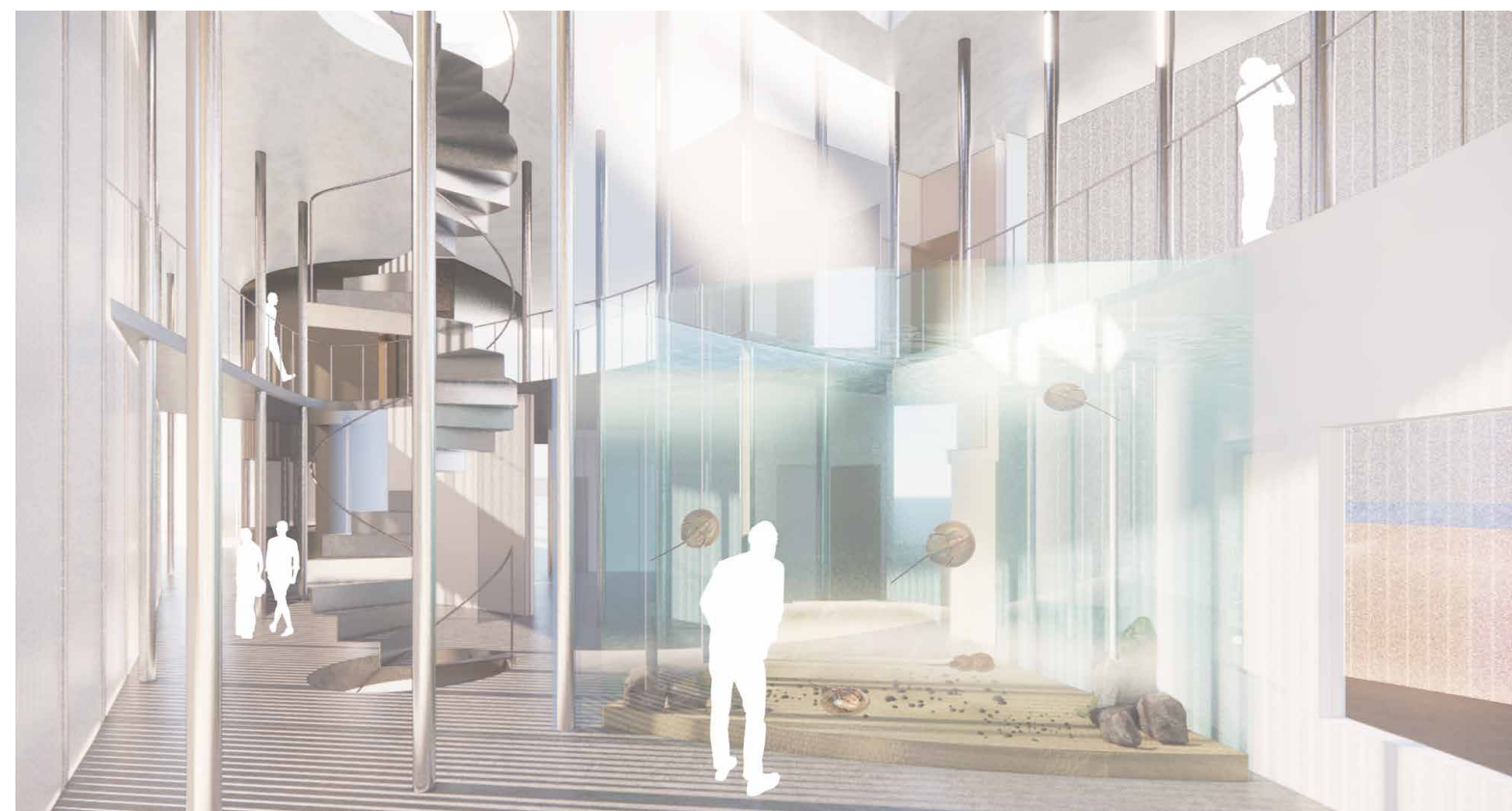
04  
Introducing Cores for private programs and structural needs



05  
Hanging transparent shafts to observe the crabs in their habitats









## LIFE WITHIN THE 'GAPS'

AFFORDABLE HOUSING & ADAPTIVE RE-USE

MANHATTAN | 16 CONVENT AVE, NY 10027

CORE III STUDIO : AFFORDABLE HOUSING & ADAPTIVE RE-USE (FA'23)

CRITIC : ERIC BUNGE

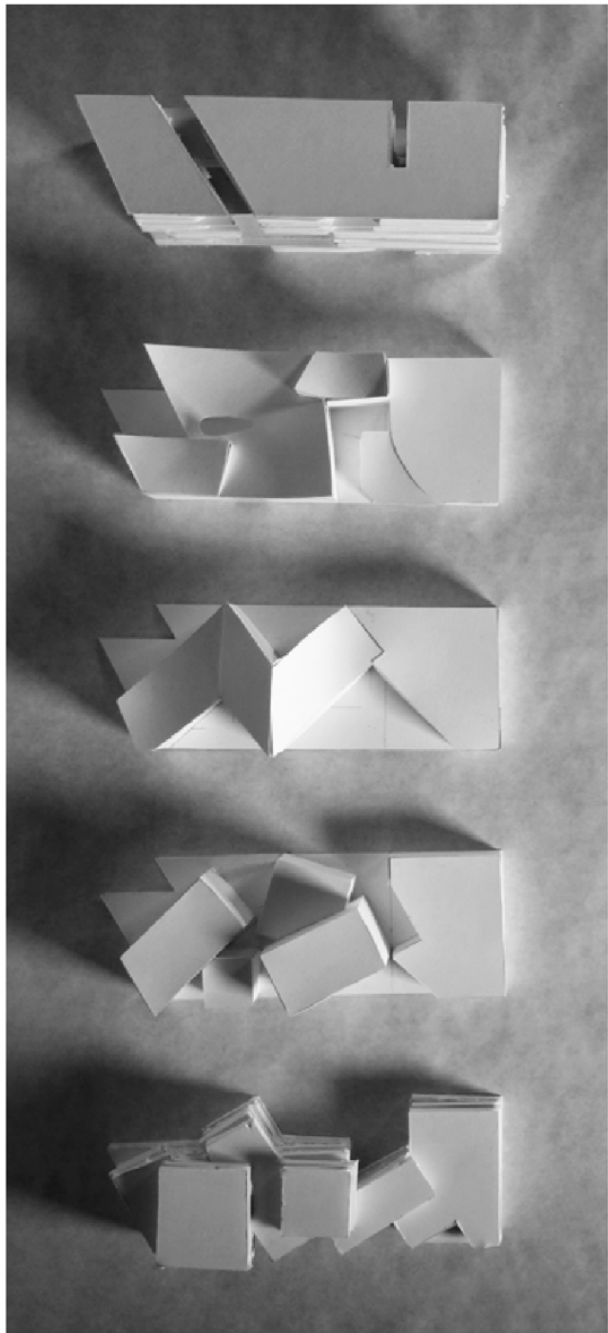
PARTNER : MAGGIE SU

Life Within The 'Gaps' is an affordable housing that weaves a narrative of social and economic empowerment through its tapestry of programs and spaces, such as fabrication workshops, nestled in or near the 'gaps' of the community. Situated in a low-income neighborhood in Manhattanville, New York, the proposed workshops not only serve as vibrant hubs for creativity and innovation

but also act as bridges, linking the outer and inner realms of the housing project. By integrating the existing building with the new building, and preserving the characteristic of the neighborhood, the initiative fosters a strong sense of community cohesion and belonging, enriching the lives of both residents and visitors.

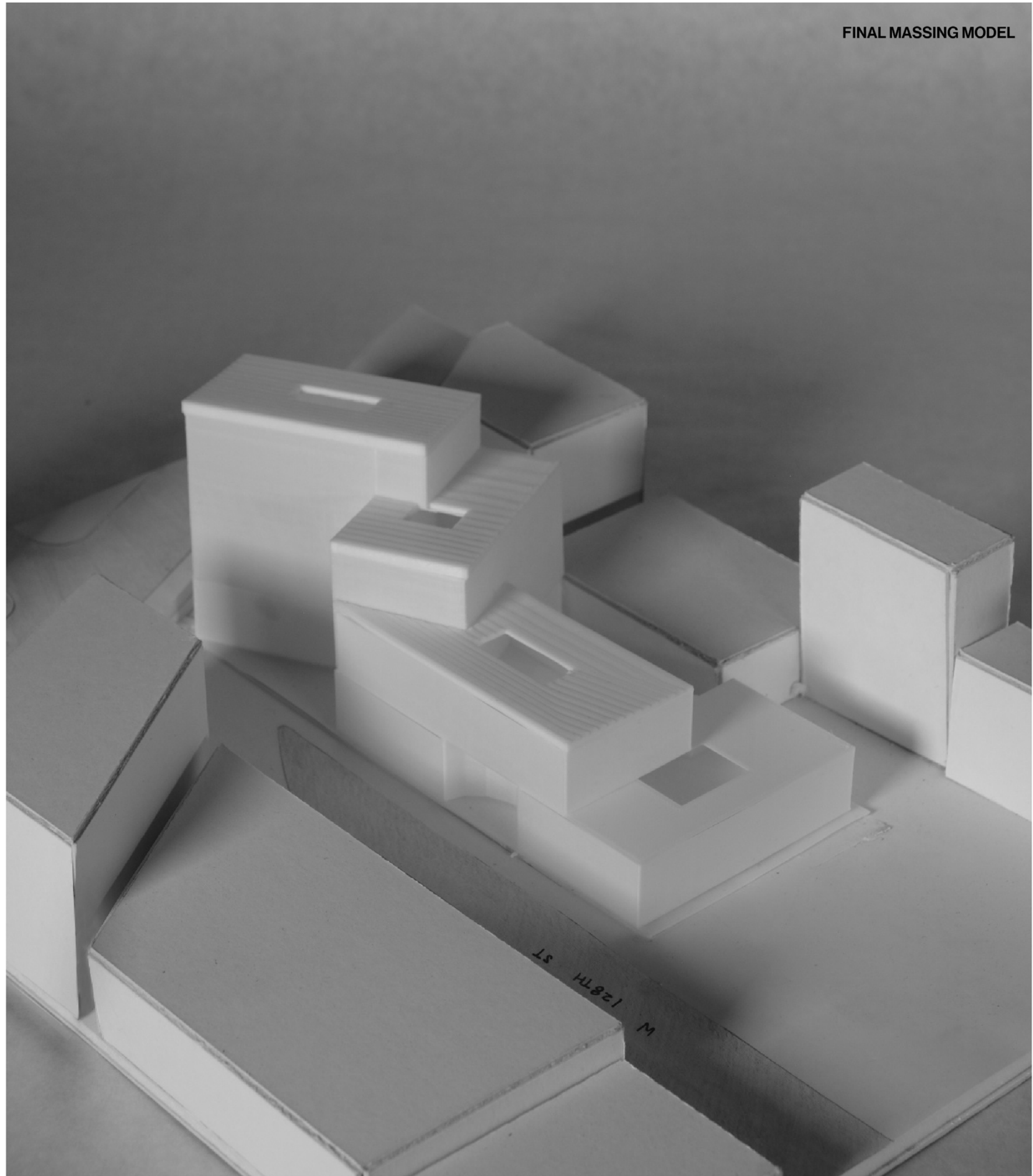
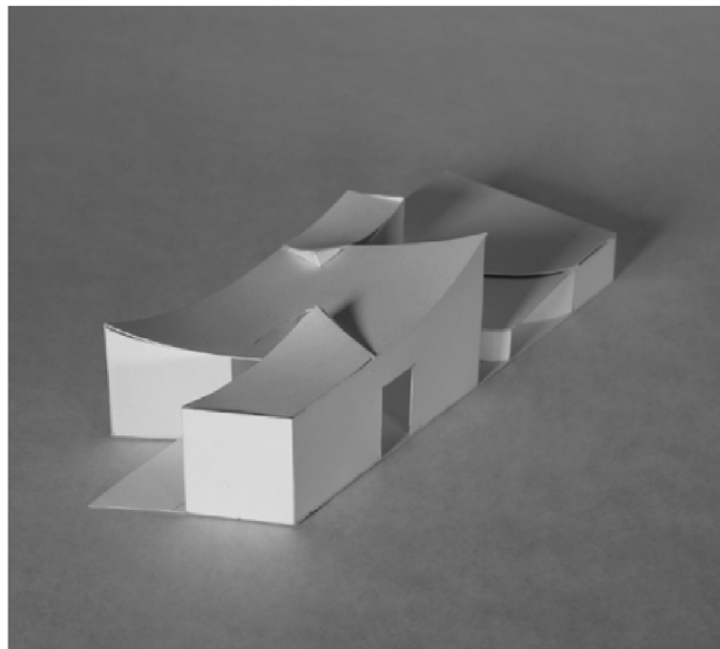
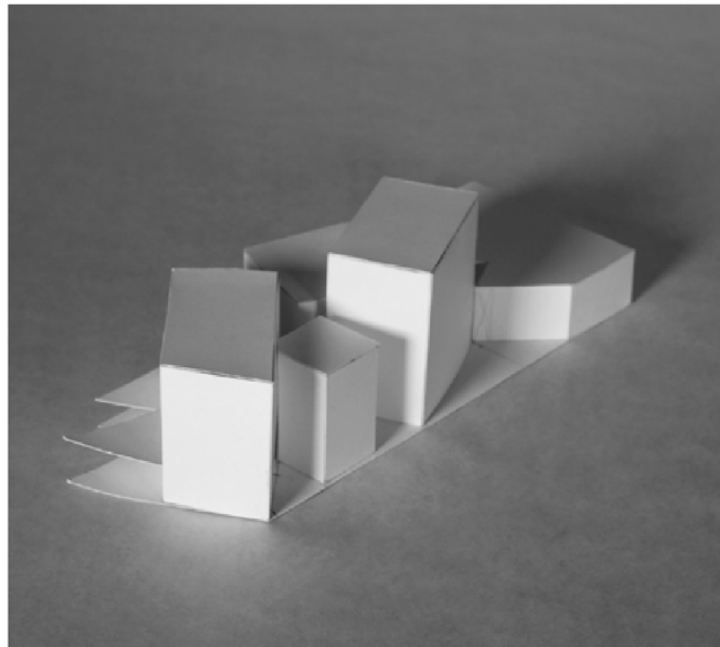




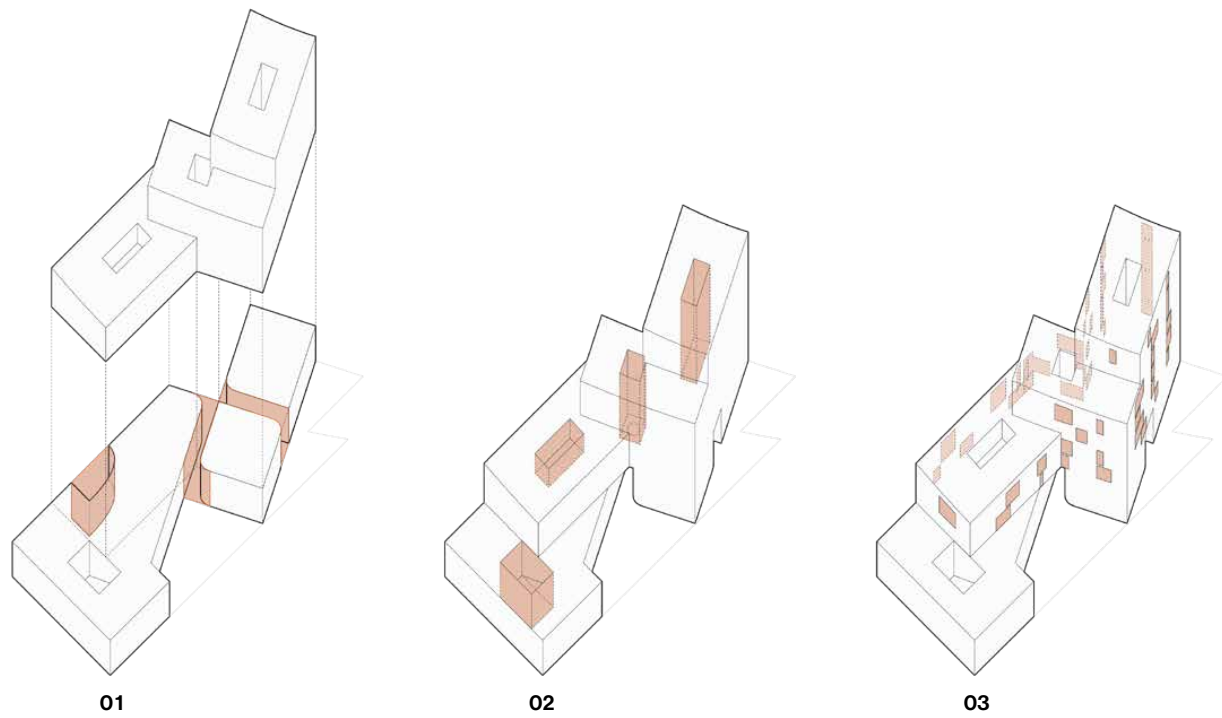


## CONCEPTUAL & MASSING IDEATION

The initial concept and massing strategy aimed to integrate the existing building with the new addition while creating a variety of open spaces with different levels of intimacy.







## 'GAP' DIAGRAMS

### 01 / PRIMARY 'GAP' - PORTAL

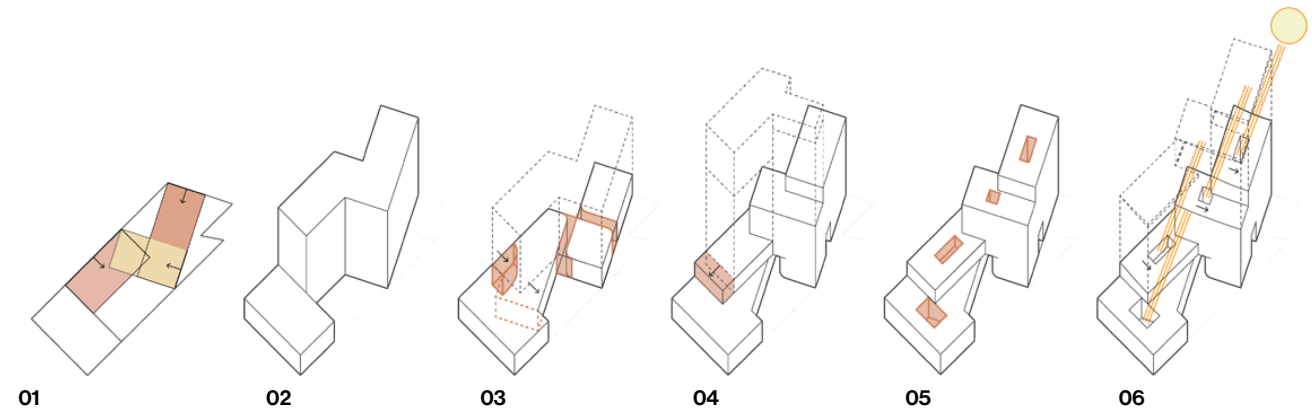
Gap serves as portals, guiding visitors from the outer garden to inner spaces filled with communal programs on either sides of the portals. Transparency of these programs are emphasized solid louvres.

### 02 / SECONDARY 'GAP' - VERTICAL PORTAL

Vertical gaps with connections to inner central gardens and vertical gardens. The boundaries of the gaps are defined by terracotta louvres.

### 03 / TERTIARY 'GAP' - SHARED AMENITIES

Gaps between units, connecting one unit to another through shared amenities such as laundry, kitchen, and shared gardening or planter areas.



## FORM GENERATION DIAGRAM

01 / Projecting Property Line

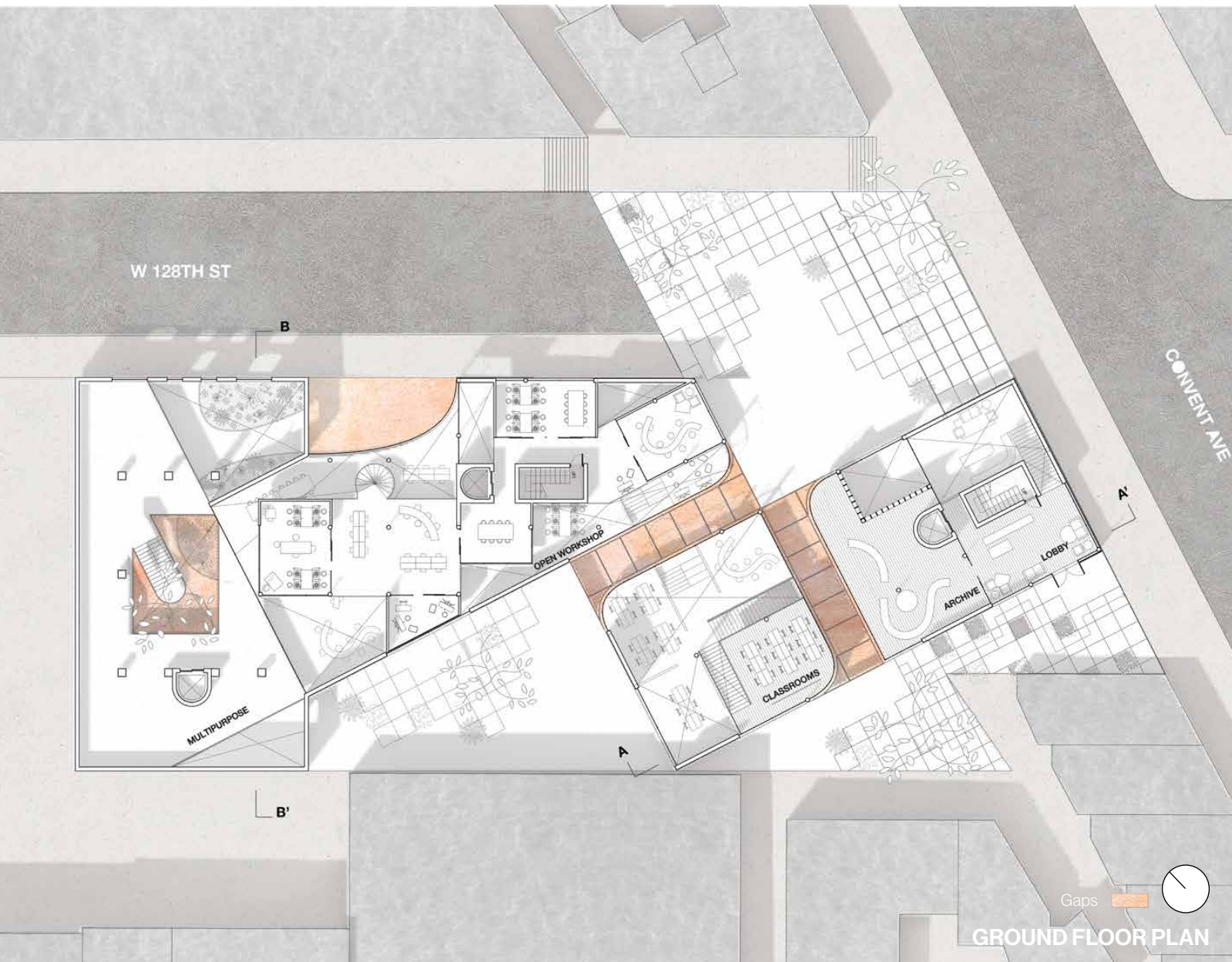
02 / Extrusion

03 / 'Gaps' Introduction & Adaptive Re-use

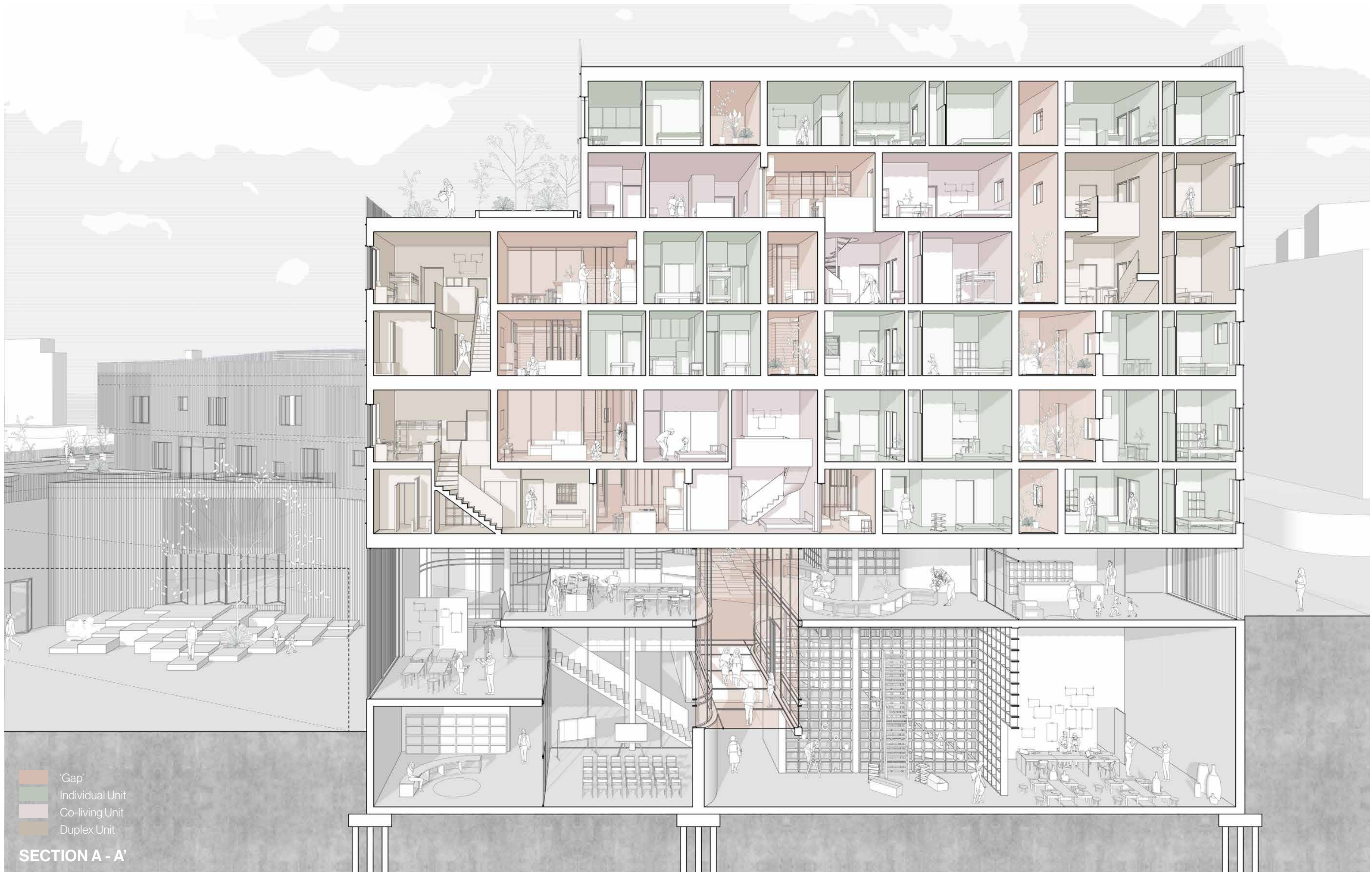
04 / Interlocking

05 / Vertical 'Gaps'

06 / Sloped Roof & Daylighting











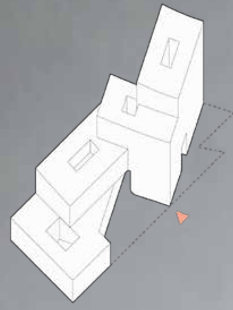




## Activating Spaces

Beyond providing affordable housing, Life Within The Gaps aims to activate underutilized spaces, transforming the site into a vibrant communal hub. A series of ground-floor gardens, varying in size, invite the public in and create different levels of intimacy and experience. The primary “gaps” - portals at ground level channel users from the outer garden space to the inner garden spaces. Through a range of communal programs, such as open-plan fabrication workshops, a rooftop garden, and smaller-scale shared spaces like a dining room and kitchen, the project becomes an anchor for both residents and the broader community.







05

PHRAGMITICIDE

RESTORATION MASTERPLAN

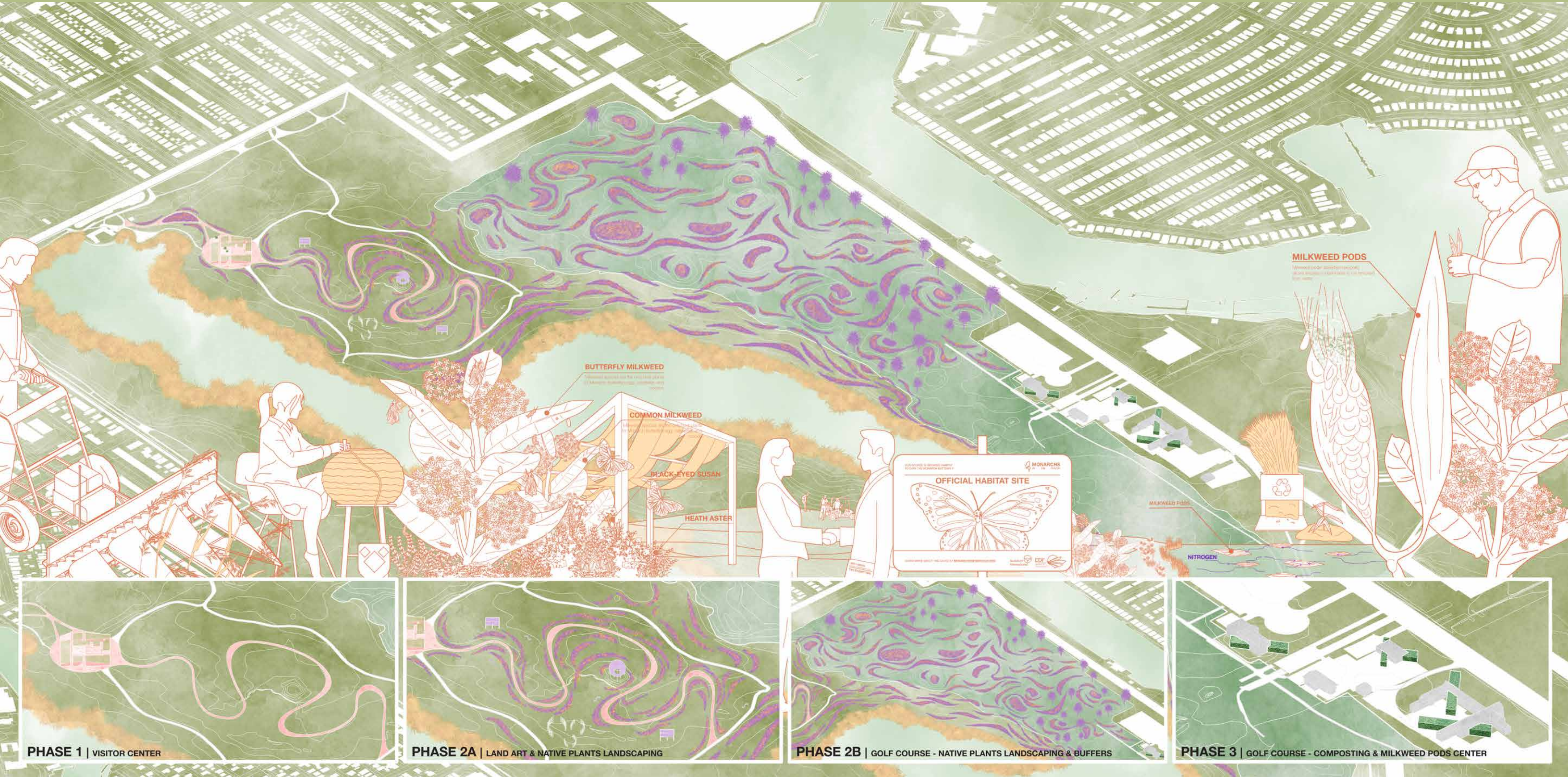
MARINE PARK, BROOKLYN | 3301 AVENUE U, NY 11234

ADV IV STUDIO : MORAL INFRASTRUCTURE (SP'24)

CRITIC : FEIFEI ZHOU

'Phragmiticide' proposes a multi-phased intervention to combat the spread of *Phragmites australis*, an invasive species exacerbated by nitrogen influx from a nearby wastewater treatment plant, herbicides used by a local golf course, and the absence of native plant competition. The plan unfolds in three phases: Phase 1 introduces a visitor center that raises ecological awareness through the use of *Phragmites* in construction and program activities. Phase 2 focuses on reintroducing native plants to outcompete *Phragmites* and collaborates with local golf courses through initiatives like the 'Monarch Preservation

Plan' and 'Monarchs in the Rough' to create habitats for monarch butterflies and strengthen ecological buffers. Phase 3 envisions the adaptive reuse of golf course buildings for composting *Phragmites* and cultivating milkweed pods, addressing both invasive plant control and nitrogen presence in the water. Through its multi-phased intervention, 'Phragmiticide' aims to foster community involvement and ecological resilience at Marine Park, activating both human and non-human bodies to reverse the ecological imbalance caused by *Phragmites Australis* dominance.







## NITROGENIZED MARINE PARK

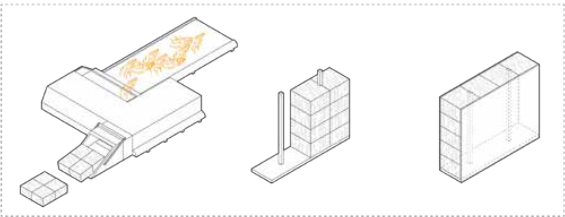
Initial Site Research & Model  
Authors: Fenella Nyoto & Maggie Su

The nitrogen influx coming from the nearby wastewater treatment plant and the adjacent golf course's use of nitrogen-rich herbicide leads to the uncontrollable growth of the invasive plant species, *Phragmites Australis*. *Phragmites'* dominance, facilitated by the absence of competing native plants and their diversity, has altered ecology, disrupting the life of native wildlife, increasing susceptibility to invasive pests, and consequently, disrupting the built environment.

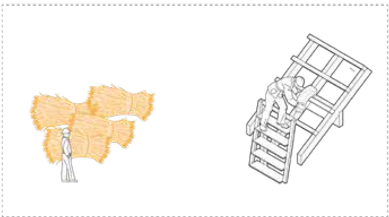


PHRAGMITES HARVEST & APPLICATION RESEARCH

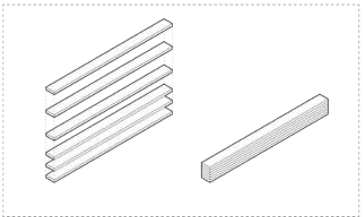
Research into the harvesting and application of phragmites informs the Phase 1 Intervention: Visitor Center's programs and activities, while constantly needing and removing the invasive plants.



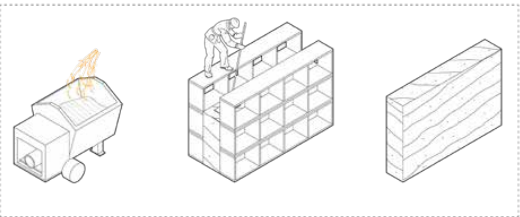
Phragmites Insulation



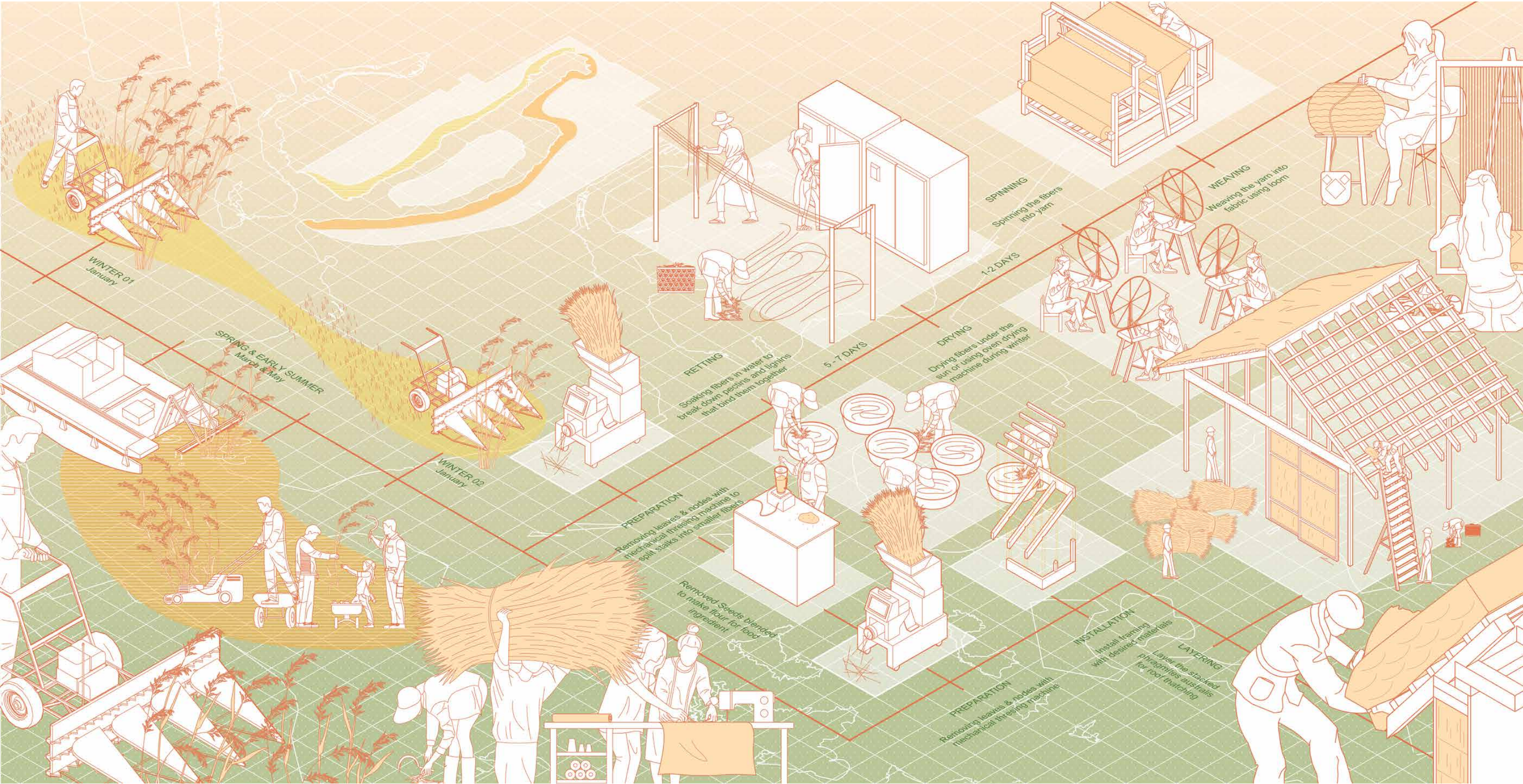
Phragmites Thatched Roof



Glulam



Phragmites + Rammed Earth

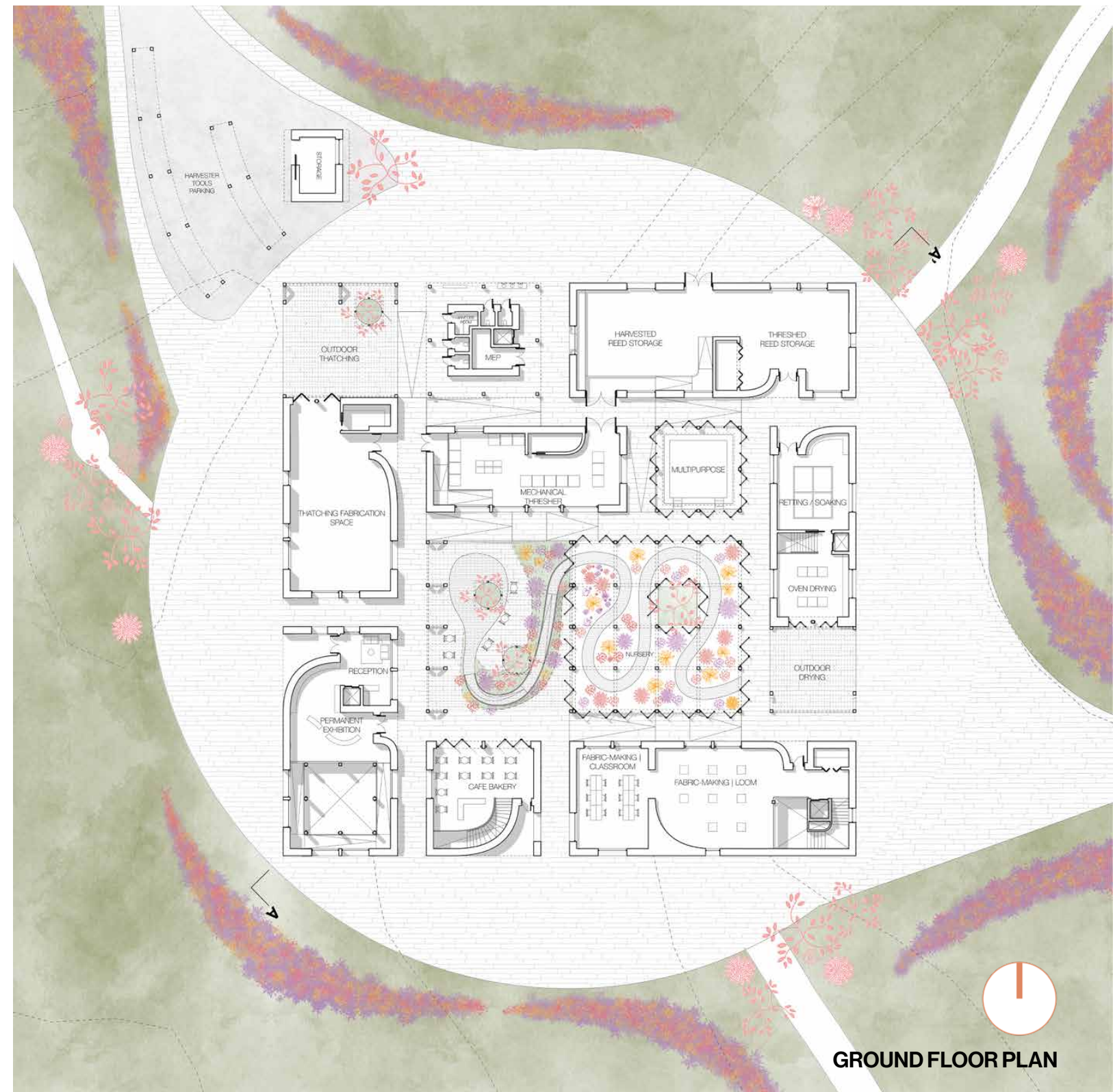




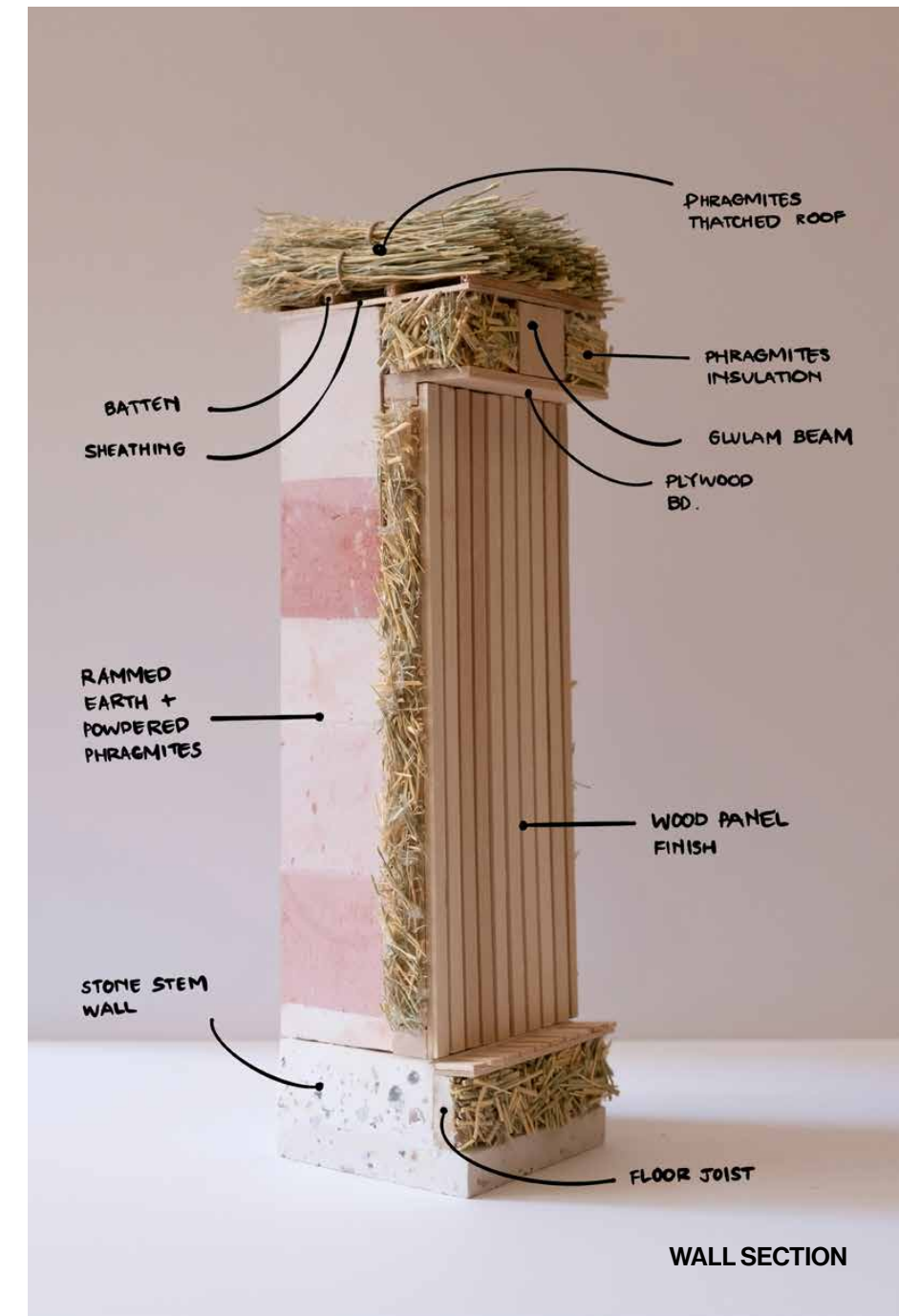


### Phase 1 Intervention: Visitor Center

The Visitor Center acts as an alternative community hub and entertainment model, aiming to eventually replace the existing golf course.







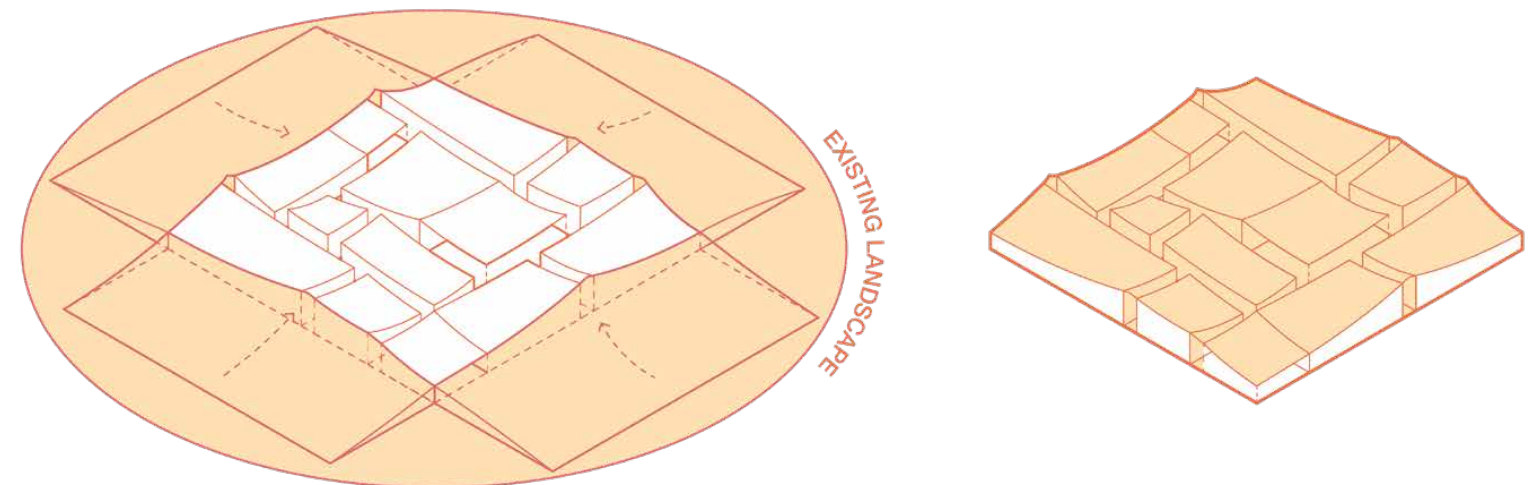
## Phase 1 Intervention: Visitor Center

### Phragmites as Solution

The versatility of phragmites is applied throughout the visitor center. Phragmites can be compressed and stacked as building insulation, and bundled to be thatched roof. They can also be grounded into powder and mixed with rammed earth to improve its compressive strength, making it structurally stronger than typical rammed earth aggregate.

### Design Concept | Part as Whole

"Parts as Whole" suggests the building to emerge out of the landscape, integrating it with the landscape and utilizing varying elevations for different programs. Although the building is broken into parts, it maintains a cohesive yet varied program and formal composition.









# THE AUTONOMY OF FEMALE BODIES IN A SPACE

## THE REFUGE

## ESSAY, RESEARCH, AND DESIGN PROTOTYPE

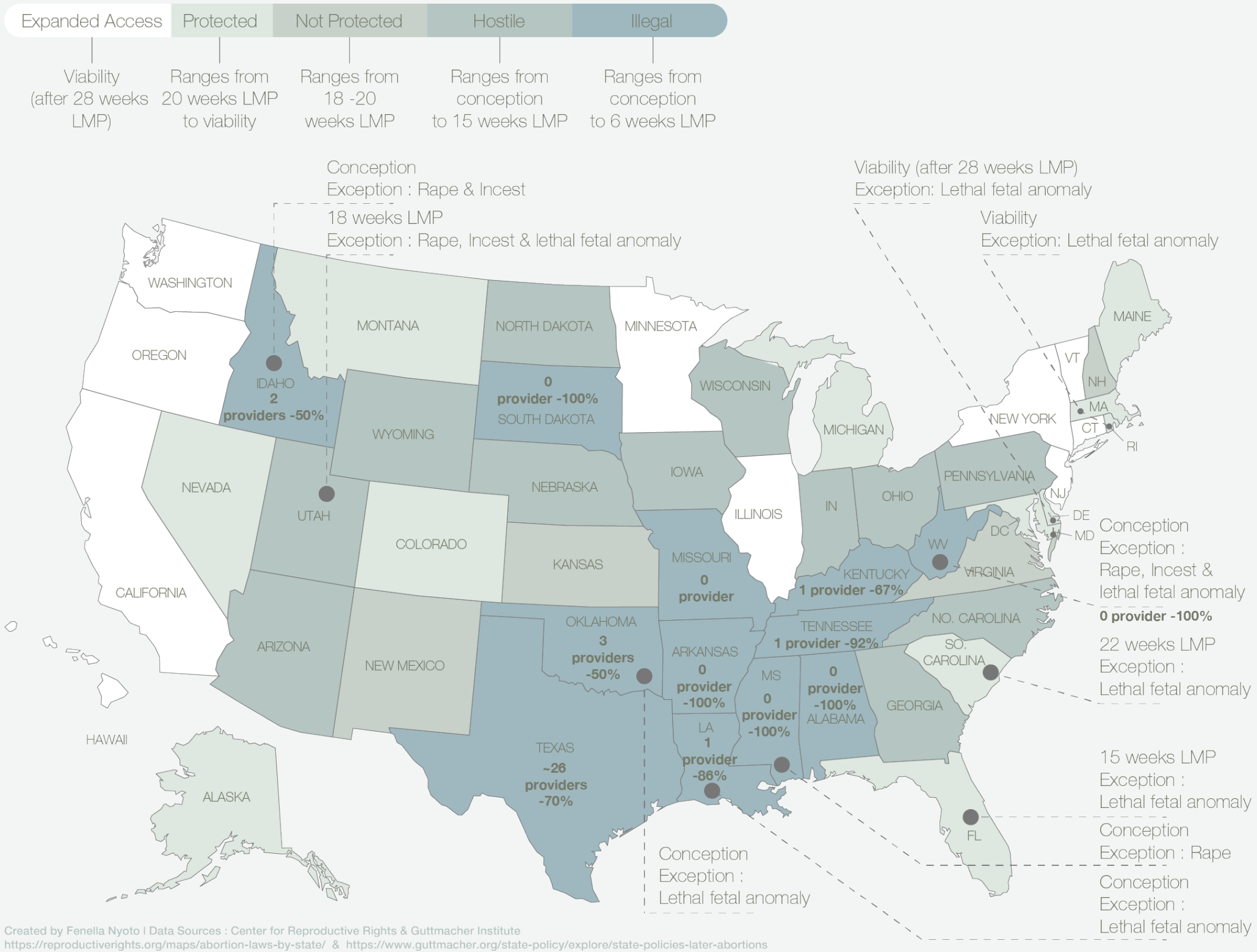
## FLUID GEOGRAPHY OF REPRODUCTIVE HEALTHCARE WITHIN THE USA

ELECTIVE : SPECULATIVE CITY(SP'23)

CRITIC : DAVID EUGIN MOON

'The Refuge,' a self-sustaining mini-city to provide safe, secure abortion care for women from states where abortion care is banned. These fortified structures are deployed throughout protected-abortion states, near the border of abortion-banning states. Since the overturn of *Roe v. Wade*, many clinics have closed, forcing women to travel long distances, adding stress and financial burden. Abortion clinics are highly contested and politicized, creating unstable environments.

The varying degrees of governmental control have produced a fluid geography of abortion access, requiring providers to employ different spatial tactics to maintain accessibility. Despite the importance of spatial strategies in the operation of abortion clinics, architecture has been largely absent in clinic design. The overturn of *Roe v. Wade* in 2022 highlighted the volatility of abortion laws, but also signaled for architects to participate in maintaining and advancing safe and equitable access to abortion care.



# After the Fall of Roe v. Wade

Abortion Providers: 2022



# Before the Fall of Roe v. Wade

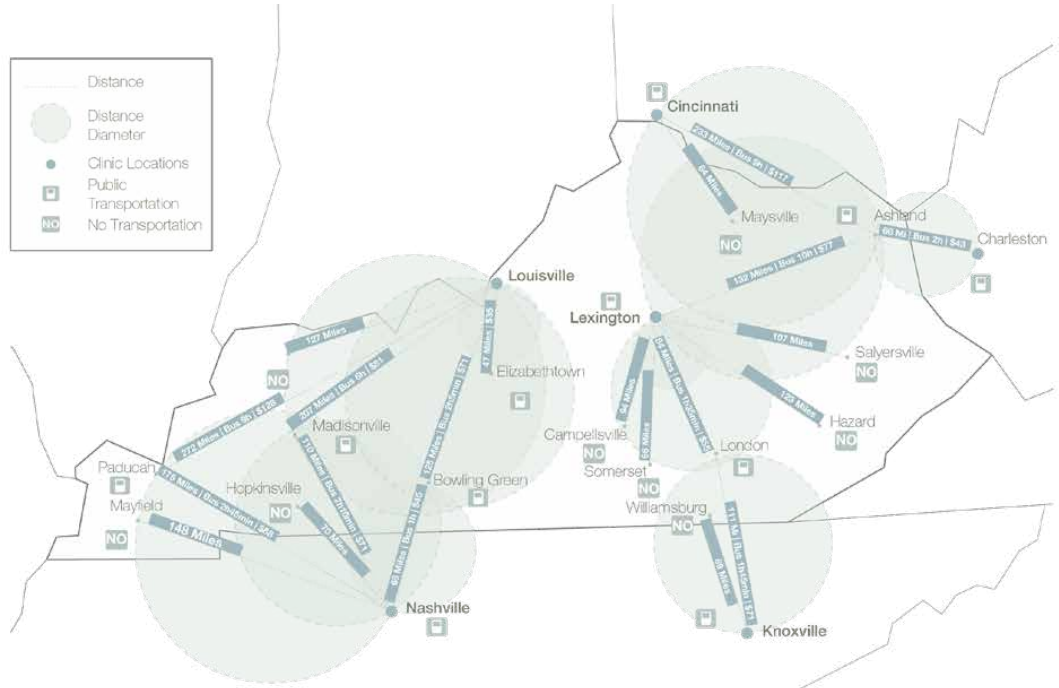
## Abortion Providers : From 2005 – 2008

Created by Fenella Nyoto | Data Sources : Center for Reproductive Rights & Guttmacher Institute  
<https://reproductiverights.org/maps/abortion-laws-by-state/> & <https://www.guttmacher.org/state-policy/explore/state-policies-later-abortions>

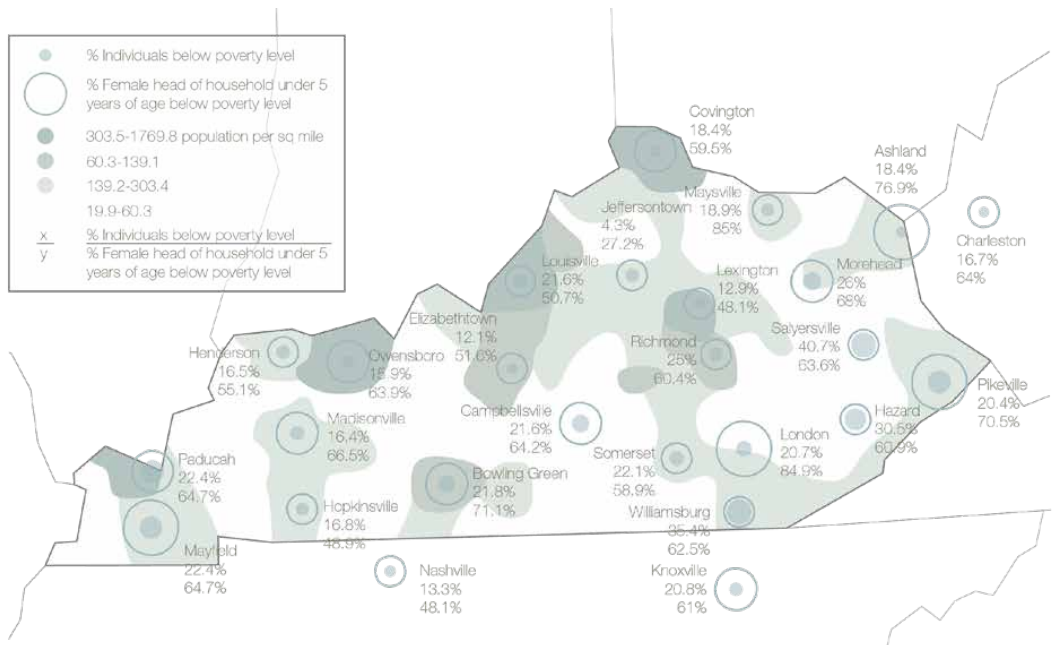


## Case Study: Kentucky

### Clinic Distance & Poverty Rates



Clinic Distance: 2013





# Designing for Reproductive Healthcare Access

## The Refuge as a Response to Shifting Legal Boundaries

To further anticipate the fluctuating geographies and restrictions on abortion clinics, 'The Refuge' intends to be adaptable and easily situated near any borders that separate protected-abortion-care states and abortion-banning states. The sites of the mini cities not only offer a certain degree of accessibility to the women from abortion-banning states, but the stranded nature of the site would also deter anti-abortion protesters from coming. At the same time, to maintain secure perimeters, the design of the cities adopts stop-gap measures as well as layers of enclosures, programs, and entrances. These strategies would greatly reduce noise level, prevent close contacts between anti-abortion protesters, and abortion providers & patients, and finally, create a safe and peaceful environment within the city itself.

In conclusion, the overturn of Roe v. Wade in 2022 has proven how volatile the laws are on abortion rights and access. However, it has also signaled the need for more architects to participate in maintaining and advancing safe and equitable access for reproductive healthcare. Although there is only a small number of architects participating in advancing and advocating for just abortion-care architecture, they have laid the essential foundations for future architects to reimagine and mitigate the ever-shifting geographies of reproductive healthcare-abortion clinics.

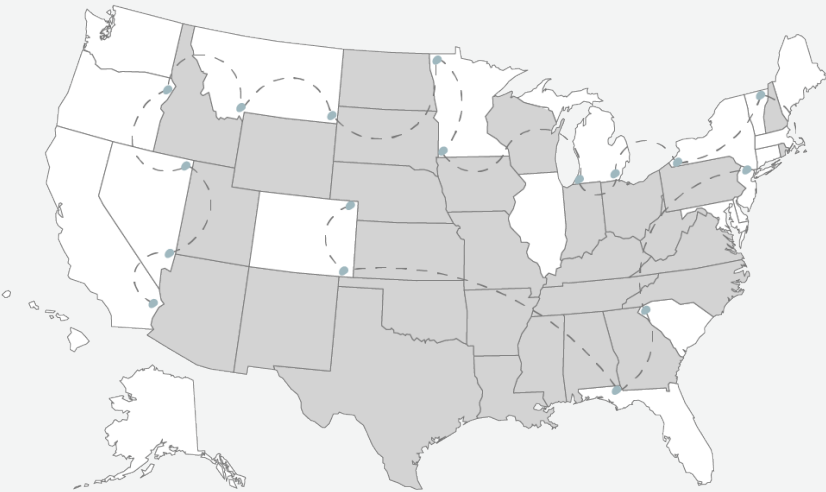


### PROGRAM & LAYERS OF 'DEFENSE' DIAGRAM

The Program Diagram illustrates layers of programs and landscaping meant to protect and move the main inner programs away from the designated protesters zone (outside of buffer zone). The diagram is also intended to show the adjacency of multiple programs, conveying how these spaces could be accessed by patients and the mini city's staffs. In addition, the location and sizes of these main programs show their hierarchies.



THE REFUGE  
POTENTIAL SITES:



The Refuge

Abortion Laws by State Legend

Protected   Illegal

Layers of 'defense' strategies:

ceramic fritted glass  
obscuring protester's views  
into the mini city

concrete  
durable and effective  
soundproofing materials

non-medical programs  
another layer of strategies  
meant to move the clinics far  
away from protester's noise  
and views

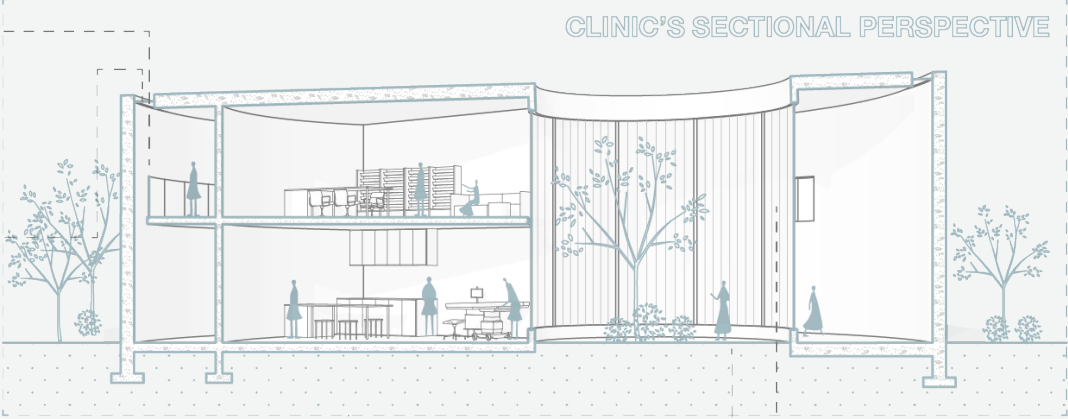
overhang  
overhang shelters parking area  
and allow hanging plants to grow,  
obscuring views into the mini city

10' fence with sprinklers  
separating the protesters zone  
from the mini city's property

THE REFUGE ON SITE

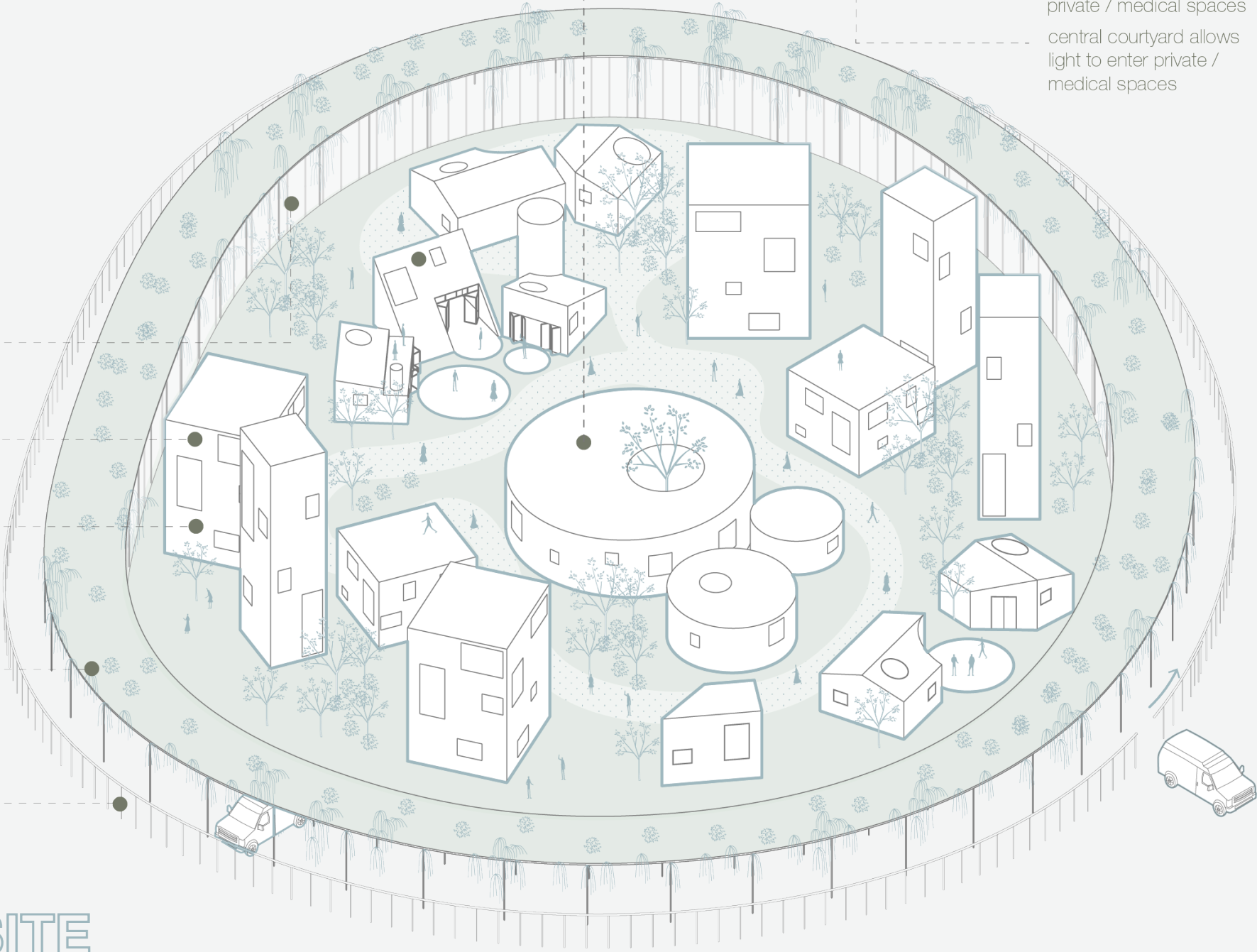
liminal spaces create  
a separation between  
medical spaces  
and the outside

preventing excessive use of  
windows on the exterior  
walls, maintaining privacy



ceramic fritted glass to  
obscure views into the  
private / medical spaces

central courtyard allows  
light to enter private /  
medical spaces



DESIGNING FOR REPRODUCTIVE  
HEALTHCARE

The Refuge is one of many ideas that can be adopted to mediate today's issues on reproductive healthcare and abortion care. Although more states may continue to restrict abortion access in the future, further eroding bodily autonomy, architectural solutions that promote equitable access to abortion care will continue to evolve.

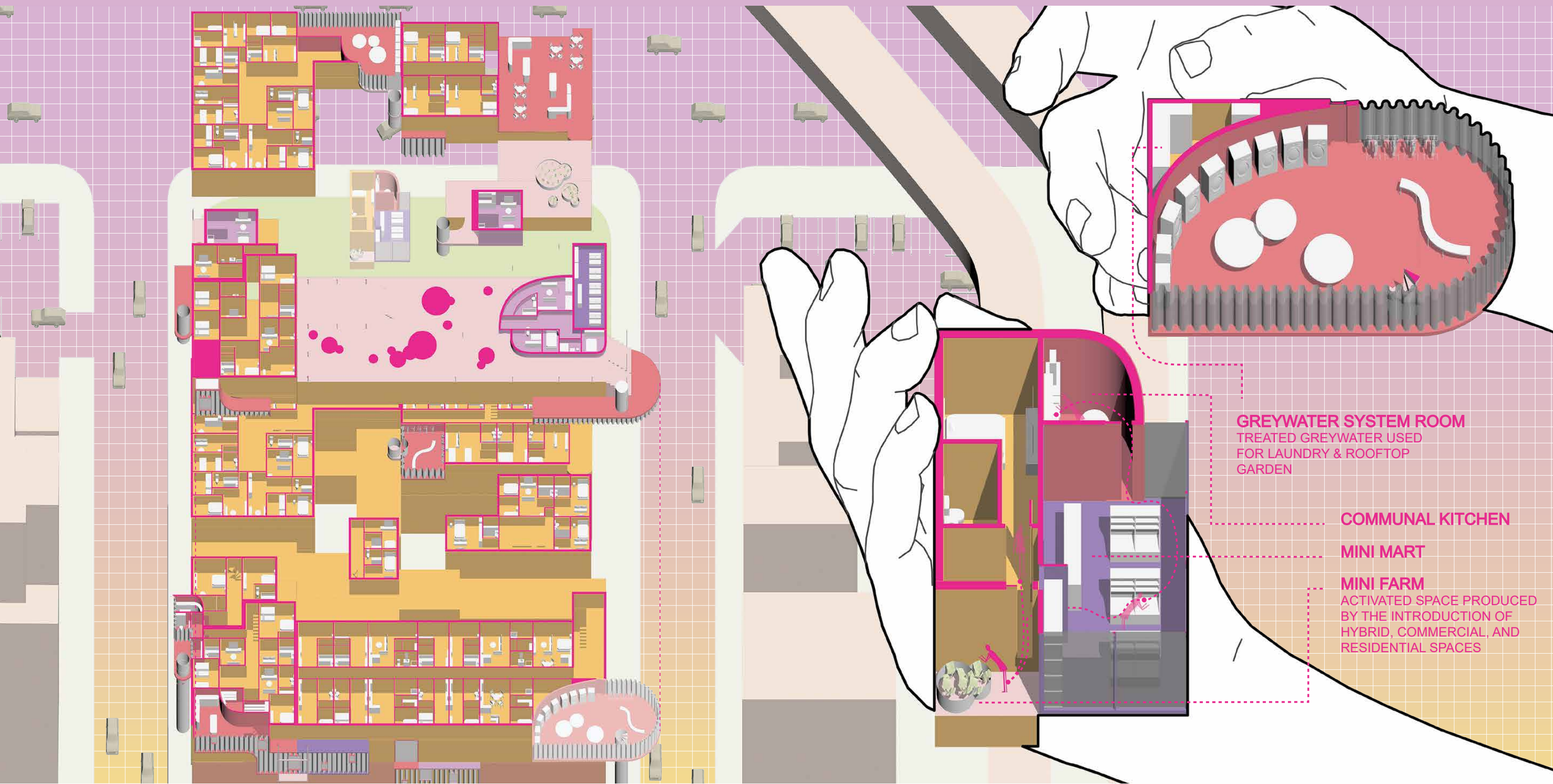


REVERSE GENTRIFICATION

HISTORICAL PRESERVATION CRITIQUE  
HELL'S KITCHEN | 523 9TH AVE, NEW YORK  
CORE | STUDIO : BROADWAY STORY (FA'22)  
CRITIC : CARLYLE FRASER

Reverse gentrification critiques and reimagines historical preservation by proposing the preservation of community-based programs. While historical preservation can slow gentrification, its emphasis on building aesthetics often disadvantages communities of color, which lack architectural identity and structural integrity, making them more vulnerable to displacement. The preservation of a community-based program within

building in a vulnerable community allows the permeation of its characters, especially programmatic identities throughout its entire block. This approach enhances the block's identity and improves residents' livelihoods by integrating the programmatic character of the preserved building into surrounding structures. This creates a community anchor, obstructing developers from gentrifying and displacing the community.

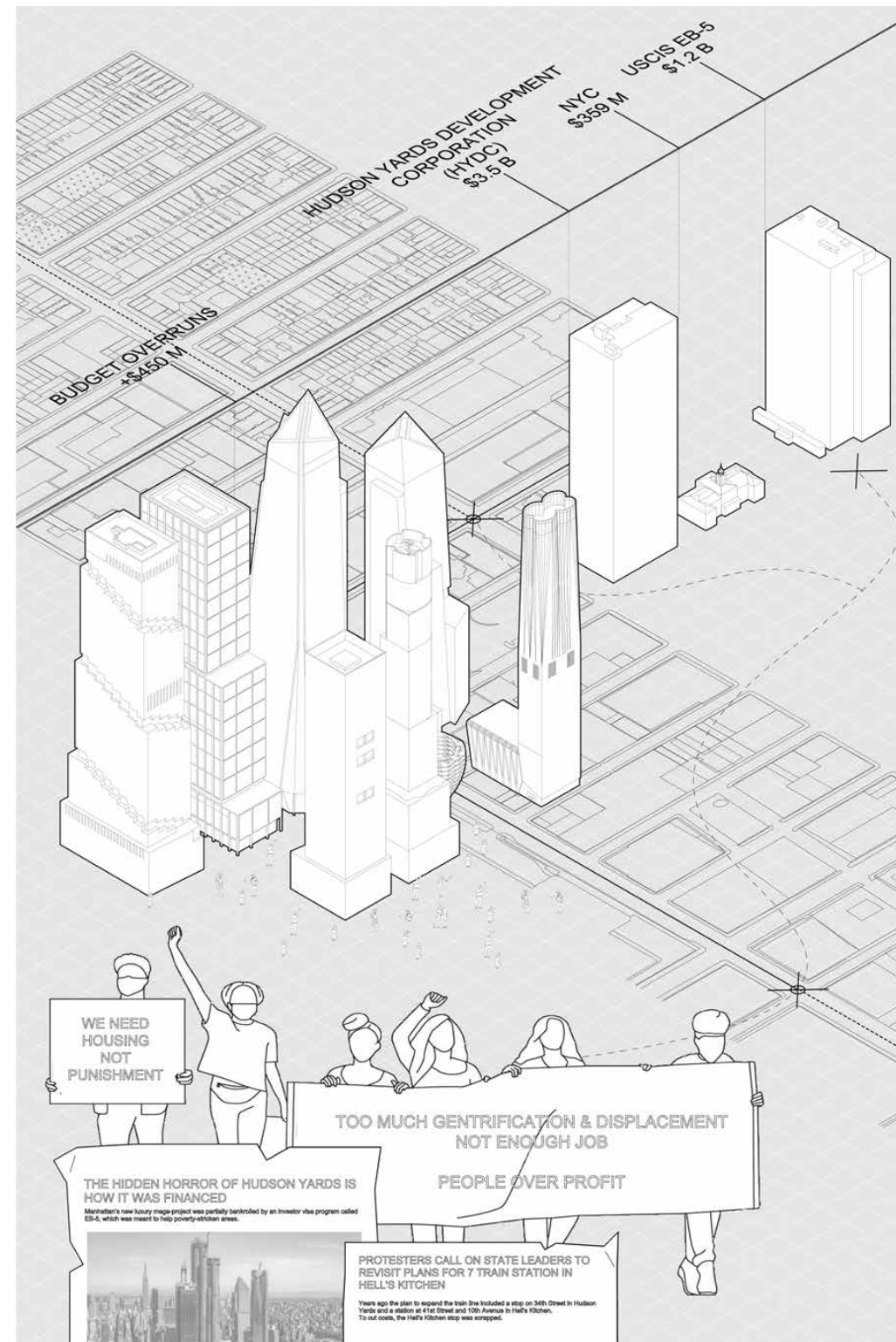






## RESEARCH & SPECULATION | Site Analysis & Context

Broadway Street is iconic, breaking the rigidity of Manhattan's grid and dividing it into the Eastern and Western sides. From 2000 to 2020, Manhattan's changes prioritized profit over people, particularly affecting the Eastern side. Historical preservation has redlined communities of color, and funds (EB-5 Visa) meant for distressed areas like Harlem were diverted to projects like Hudson Yards. With the high displacement risk in Hell's Kitchen, the capitalistic culture of Broadway's Eastern side is spreading to the Western side.



### 01 / THE MONOPOLY

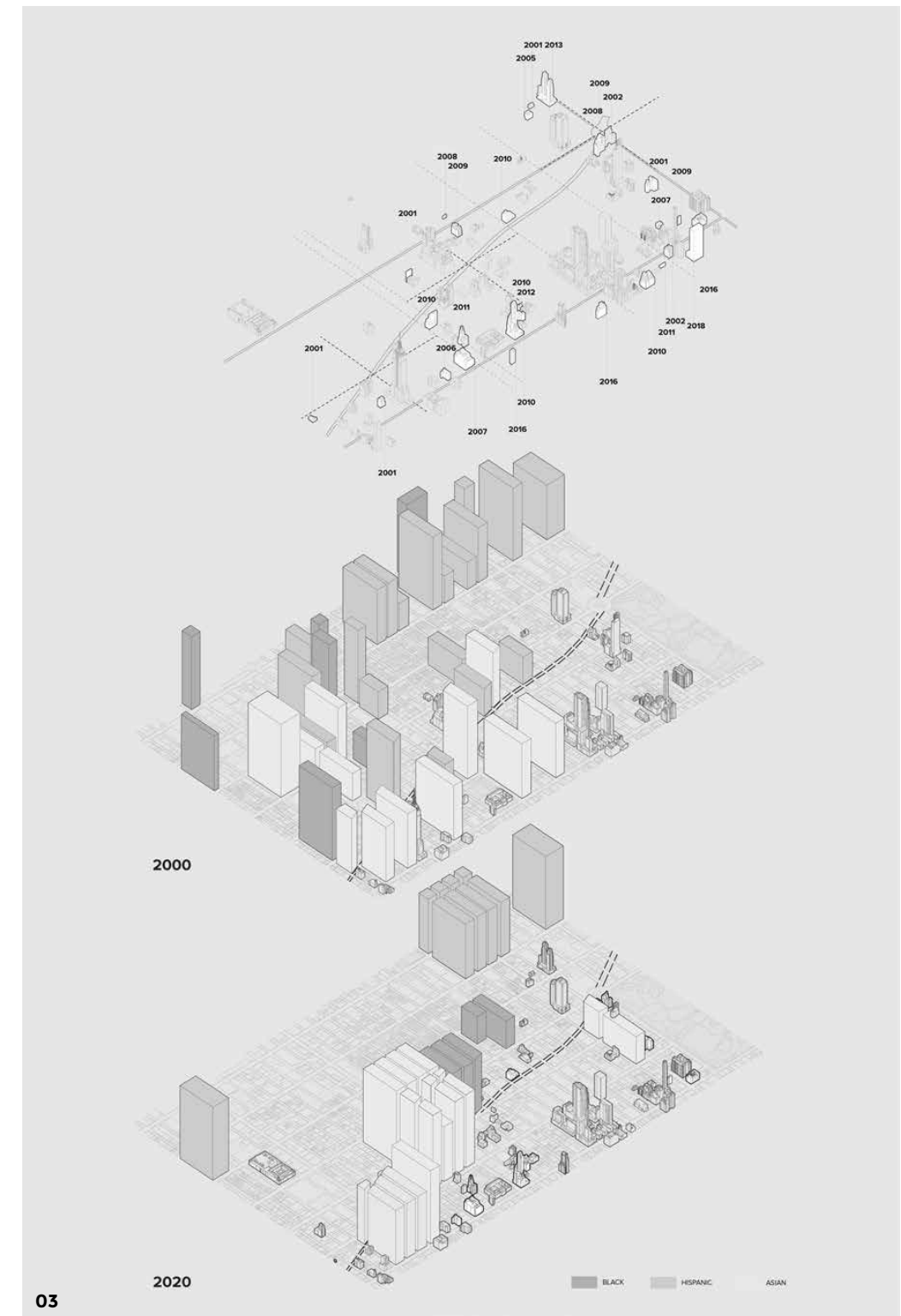
Drawing is intended to criticize and expose the permeation of capitalistic culture from the Eastern side of Broadway to the Western side, enacting displacement and gentrification

### 02 / HUDSON YARDS: THE ORIGIN

The development of Hudson Yards was made possible through the funneling of public funds

### 03 / THE JUXTAPOSITION

Over the years, with more buildings designated as preserved buildings, the racial distribution of community of color became more confined





FORM & PROGRAM  
GENERATION DIAGRAM

The preserved building's residential units, dry cleaner, restaurant, and grocery store are preserved and spread to enhance the block's character and address program gaps. To accommodate this, parts of existing buildings are removed and arranged within the block, creating new conditions for 'addition.'

