



TEMPORALITY

## *Temporality*

*With each stride embarked, I plant my seed,  
Mindful of the path my steps will lead.  
As a designer, my strokes weave a thread,  
Echoing tales of past, present, and what's ahead.*

*Not solely for the present, but for time's flow,  
In the transient tapestry where all things grow.  
Conscious of land, labor, materials, and souls,  
Impacting the journey as the story unfolds.*

*No enduring monument or grand decree,  
But a gentle imprint upon time's sea.  
Aiding a few, yet igniting the flame,  
In the eternal dance where moments claim their name.*

## MARIAM JACOB

*A designer deeply intrigued by temporal notions of people, material, place and space.*

Working across different scales, her creative endeavours often center on (re)collecting, and (re)presenting temporal narratives and history through speculative futures, critically engaging with and adapting to cultural intricacies while collaborating with diverse communities.

### Themes



Living History  
Reparation  
Memory



Material Ecologies  
Labor & Maintenance  
Biogenic Streams



Land + Ecology  
Reuse  
Sentient Beings



Living  
Inter-generational  
Communities



Participatory Design  
Post Occupancy  
1:1 Learning



Health & Well being  
Space  
Performance



Visual Identity  
Critique  
Exploration





# ONCE UPON A MINE

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All drawings showcased done by author.

ADV VI Spring 2024

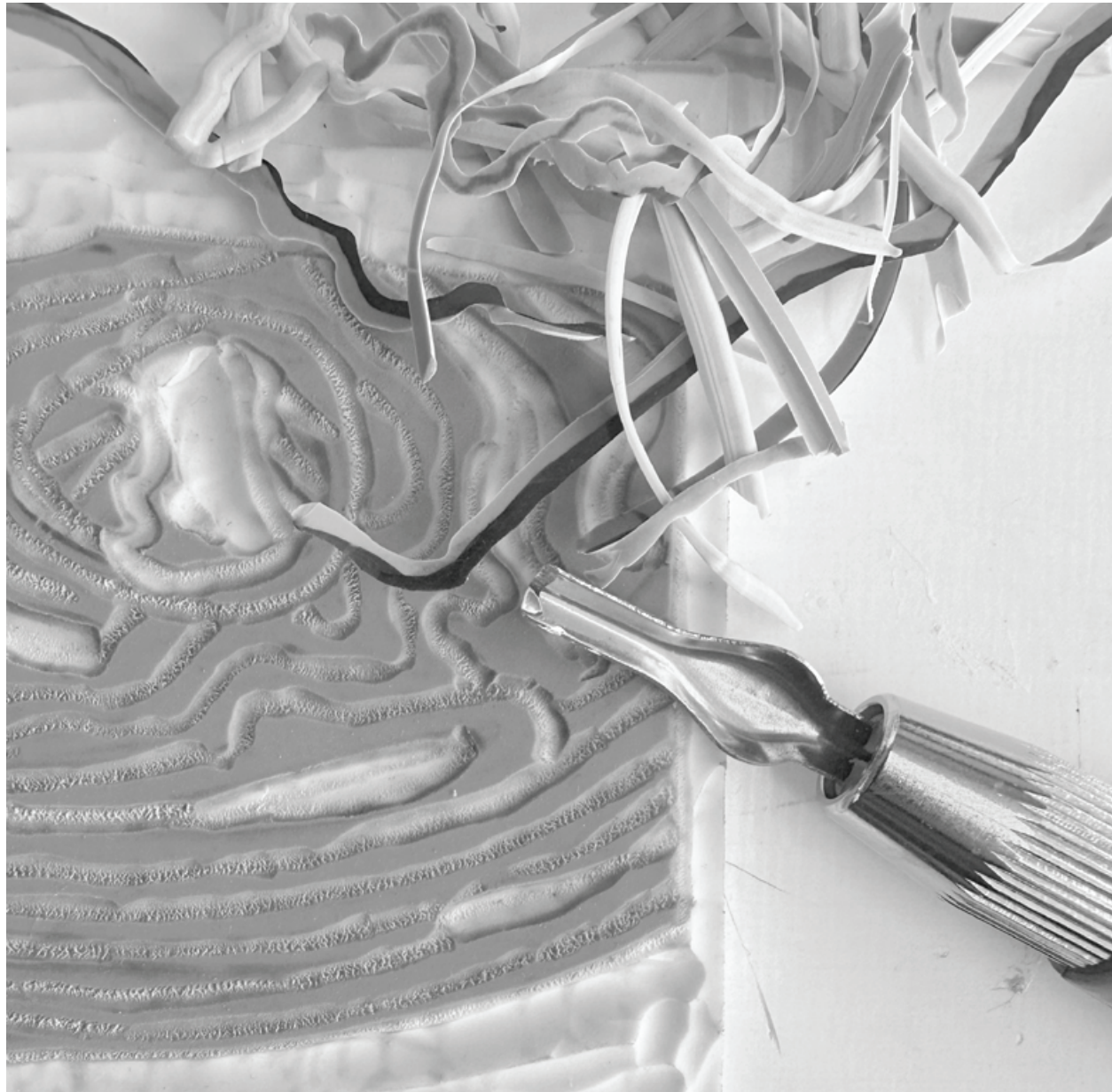
Instructor: Chris T. Cornelius  
& Adeline Chum

During my mapping journey, I came across the vast impacts of uranium mining on the Navajo reservation and its communities. Existing portrayals of the Nation often sensationalize their plight, overshadowing their resilience and agency in addressing environmental racism.

Through further research I found out more about The Red Water Pond Road Community in Church Rock, NM which has endured uranium impacts since the 1950s, leading to significant health and environmental impacts. Despite the closure of mines, the legacy of uranium contamination persists within the nation, affecting multiple generations. The valley land has been scraped and eroded through disposal and stereotypical remediation efforts.

Since storytelling is integral to the Navajo way of living, I used the speculative tale titled, “Once Upon a Mine” involving characters rooted within the community of Red Water Pond as a lens to imagine a futuristic alternate reality. The graphic novel set in 2070 becomes an avenue to talk about the past in a new way and challenge the present remediation strategies through the lens of a changed future. A future that doesn’t dwell on the injustices that occurred but indeed works collectively from within to move forward.





Process - Lino Carving of extractive sites in Navajo Nation

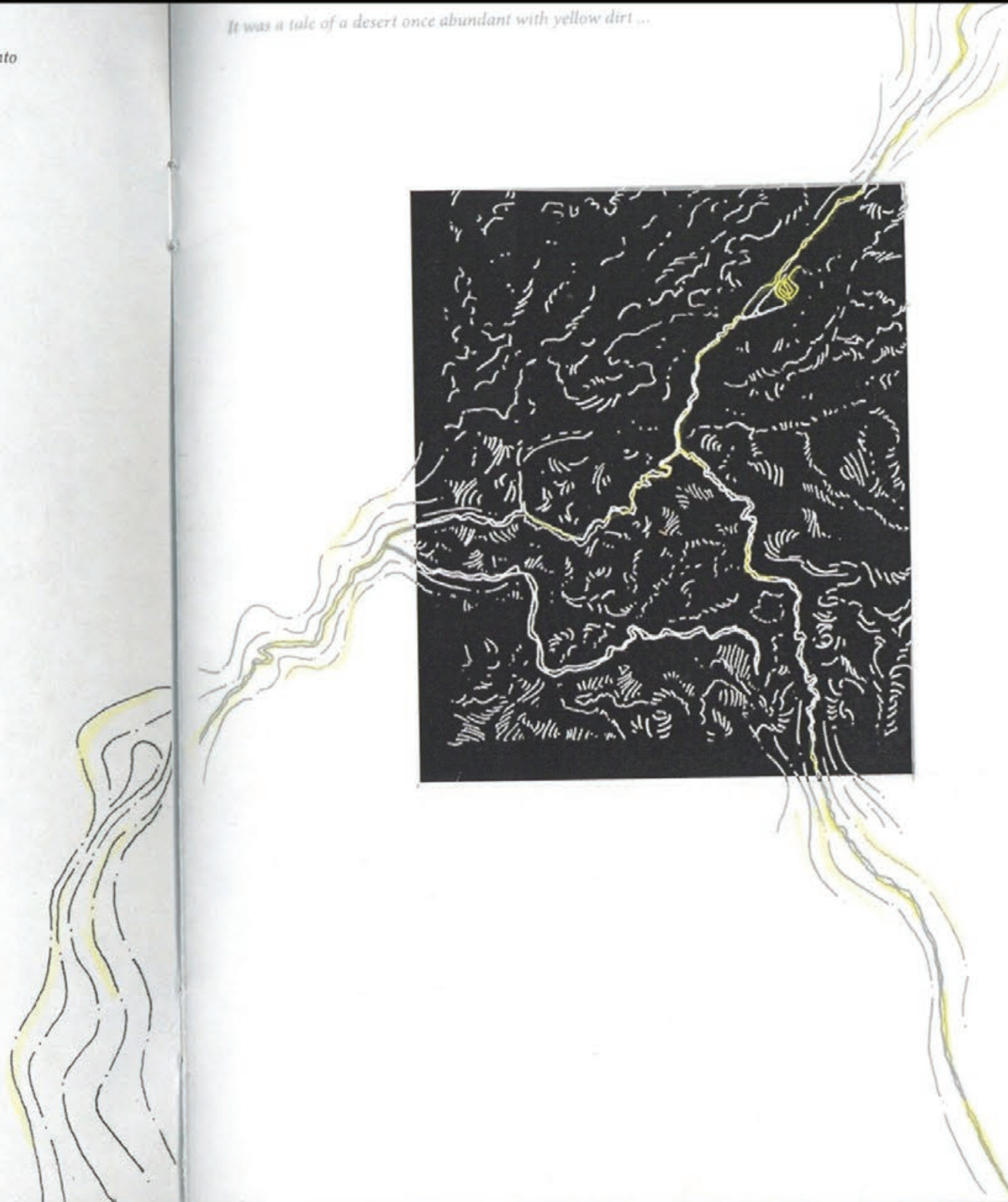


Mapping drawing of extractive sites

*On the steps of her house, Bertha braided Mesa's hair as they prepared to head to the Hozho center. Bertha began to narrate a story explaining the remaining agenda, weaving it like the strands of hair into Mesa's awareness.*

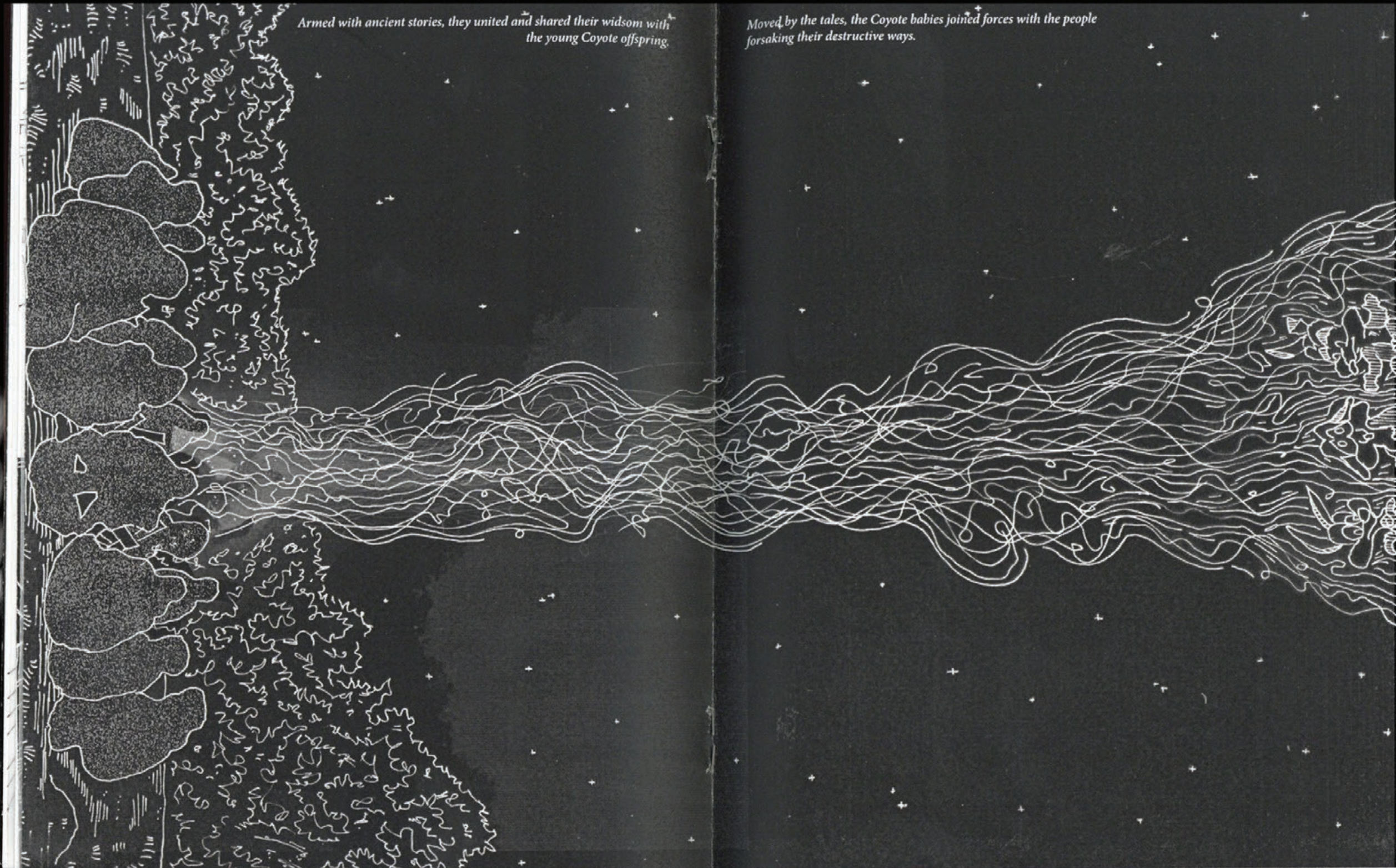


*It was a tale of a desert once abundant with yellow dirt ...*



Armed with ancient stories, they united and shared their wisdom with the young Coyote offspring.

Moved by the tales, the Coyote babies joined forces with the people forsaking their destructive ways.





Extractive sites lino prints



Carved Lino Tapestry



As they drove down the road, Mesa glanced out the window, struck by the vastness of the landscape.



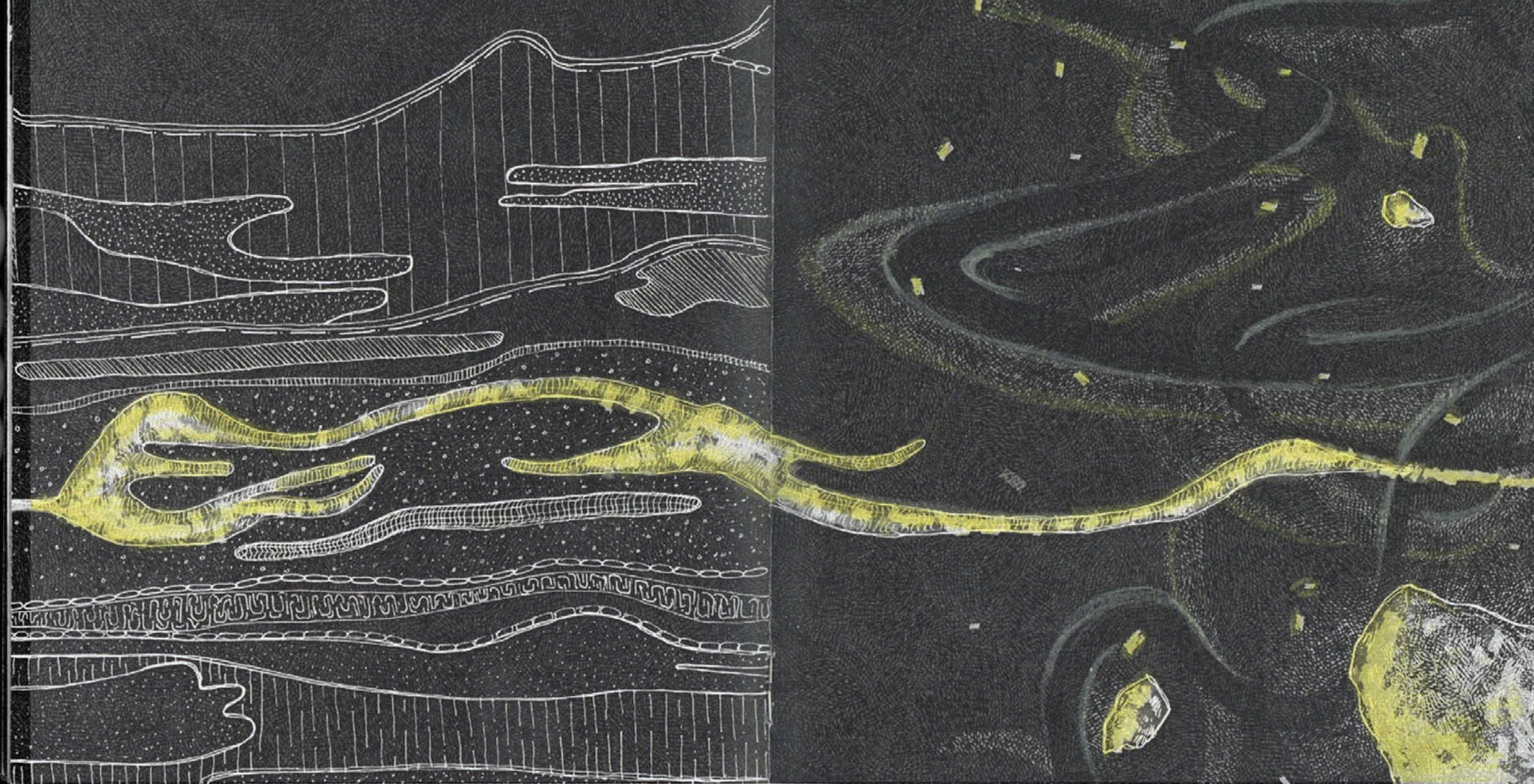
Before her eyes, the mining town of Kerr-Mc Gee and United Nuclear Corporation materialized ...

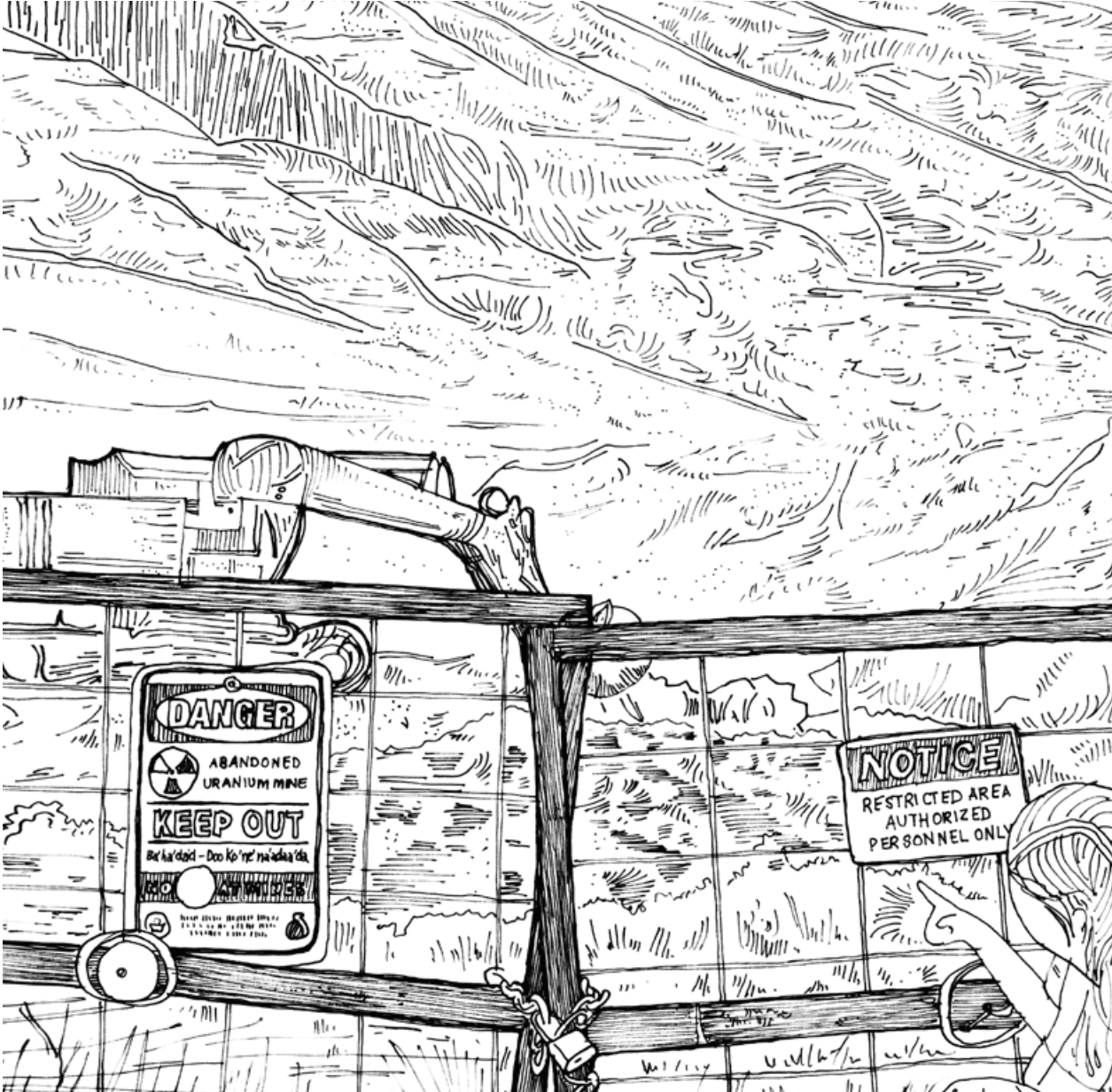


Before her eyes, the mining town of Kerr-Mc Gee and United Nuclear Corporation materialized ...

*"They existed on a geological timescale. Look at how the ore forms, do you see those stripes? Bertha explained.*

*When you dynamite the wall of a rock ridge these ancient 'snakes' from the beginning of time emerge."*





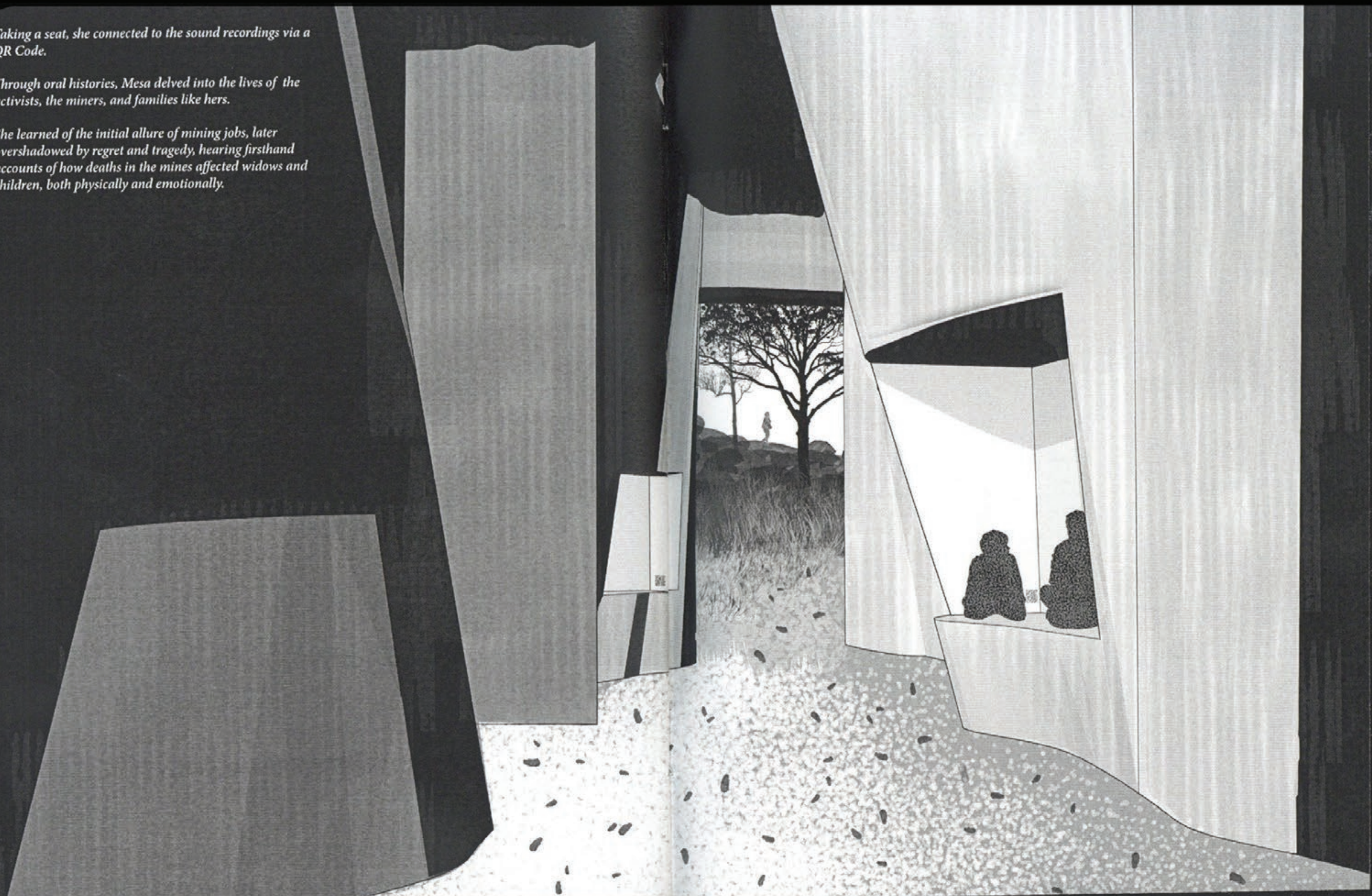
Something that was part of her life, and her ancestors ...

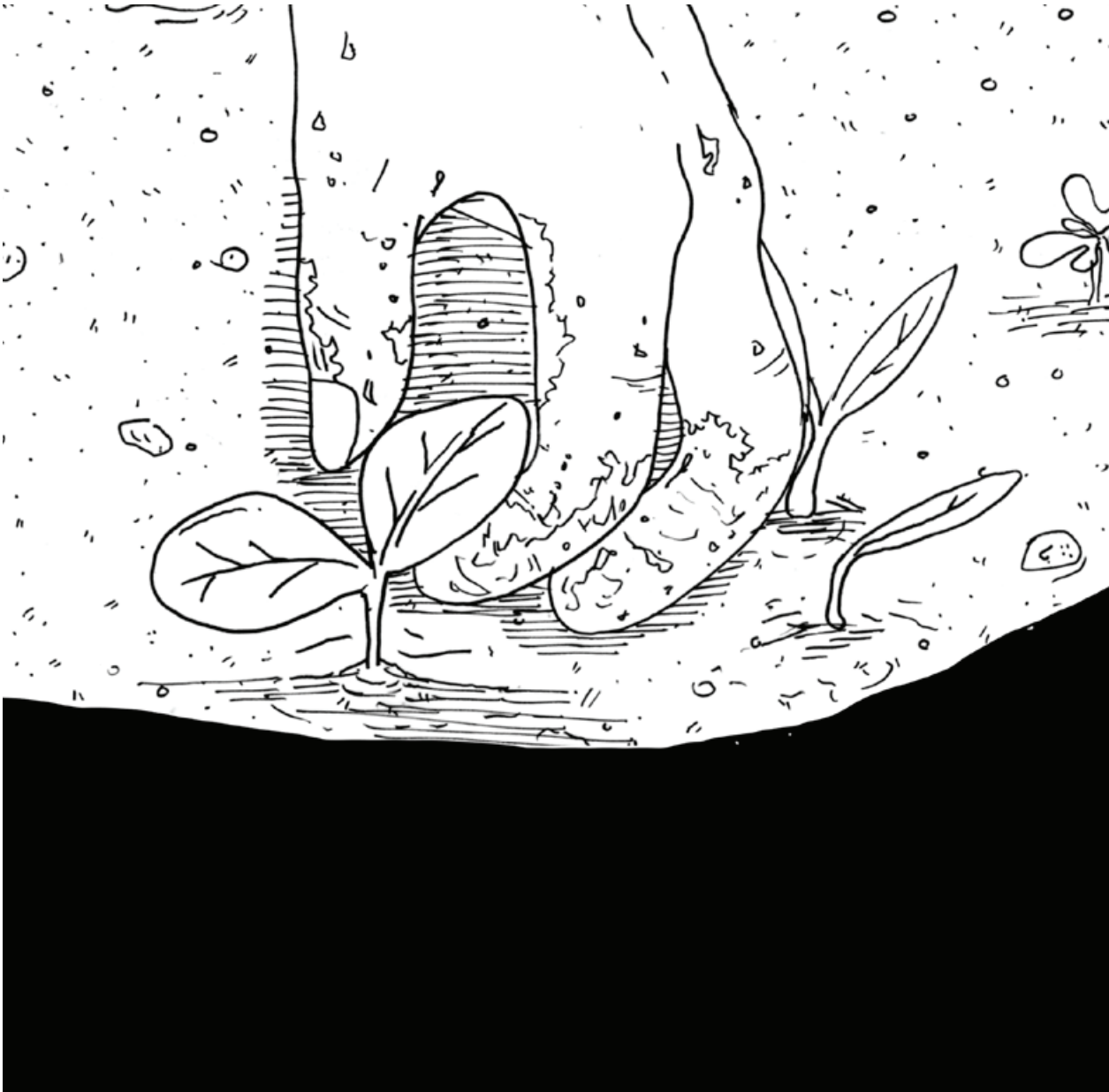


*Taking a seat, she connected to the sound recordings via a QR Code.*

*Through oral histories, Mesa delved into the lives of the activists, the miners, and families like hers.*

*She learned of the initial allure of mining jobs, later overshadowed by regret and tragedy, hearing firsthand accounts of how deaths in the mines affected widows and children, both physically and emotionally.*

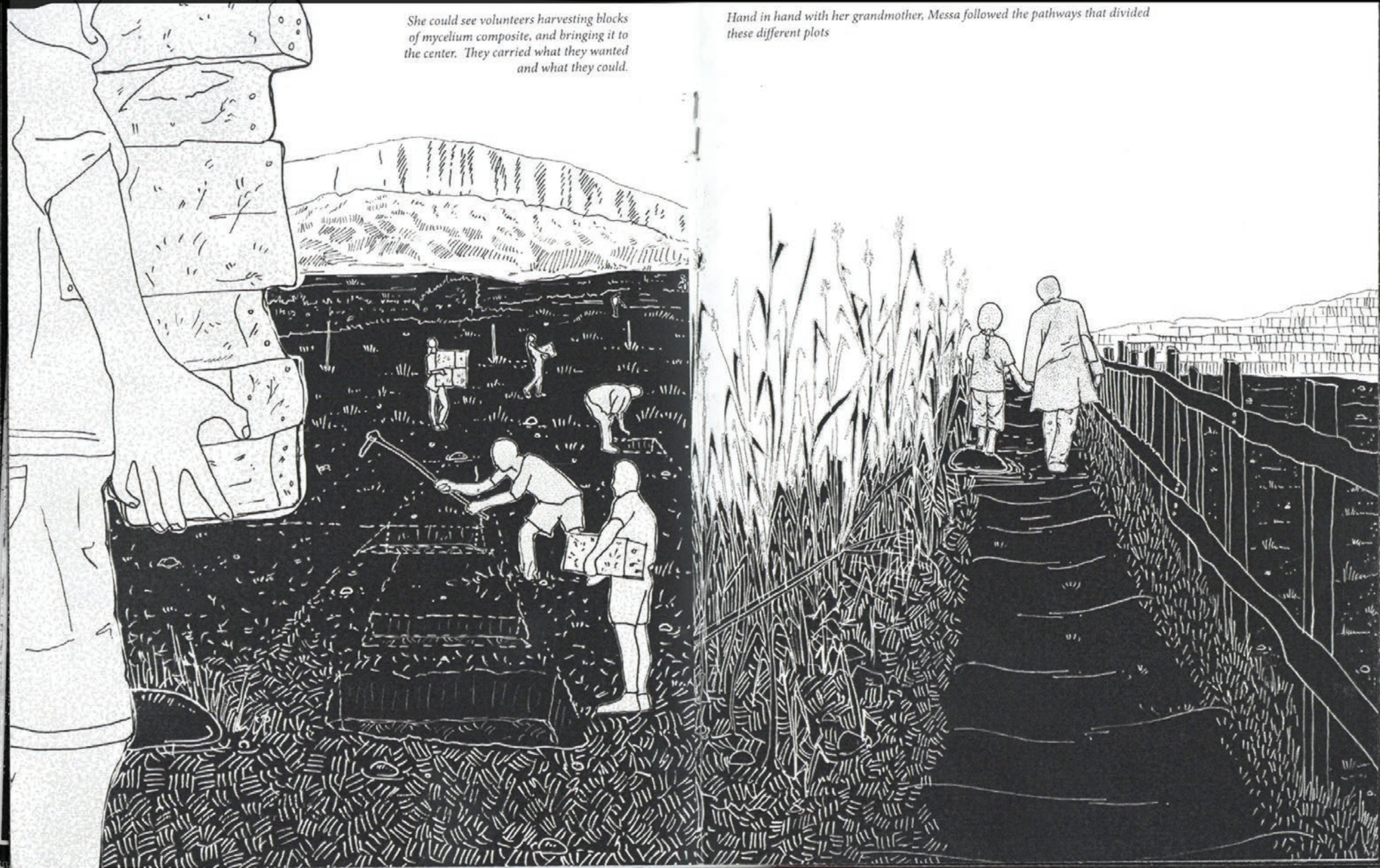




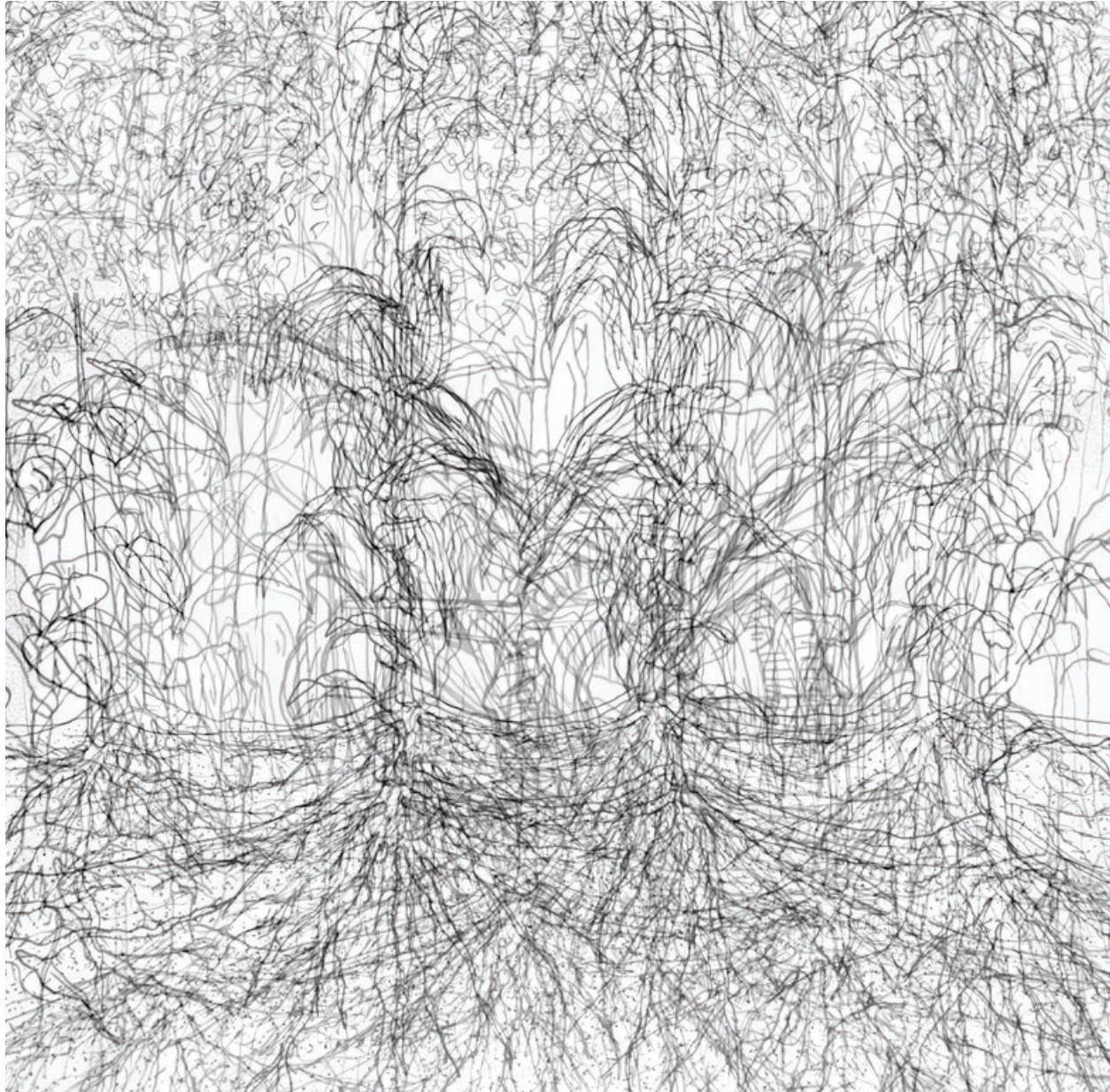


*She could see volunteers harvesting blocks of mycelium composite, and bringing it to the center. They carried what they wanted and what they could.*

*Hand in hand with her grandmother, Messa followed the pathways that divided these different plots*









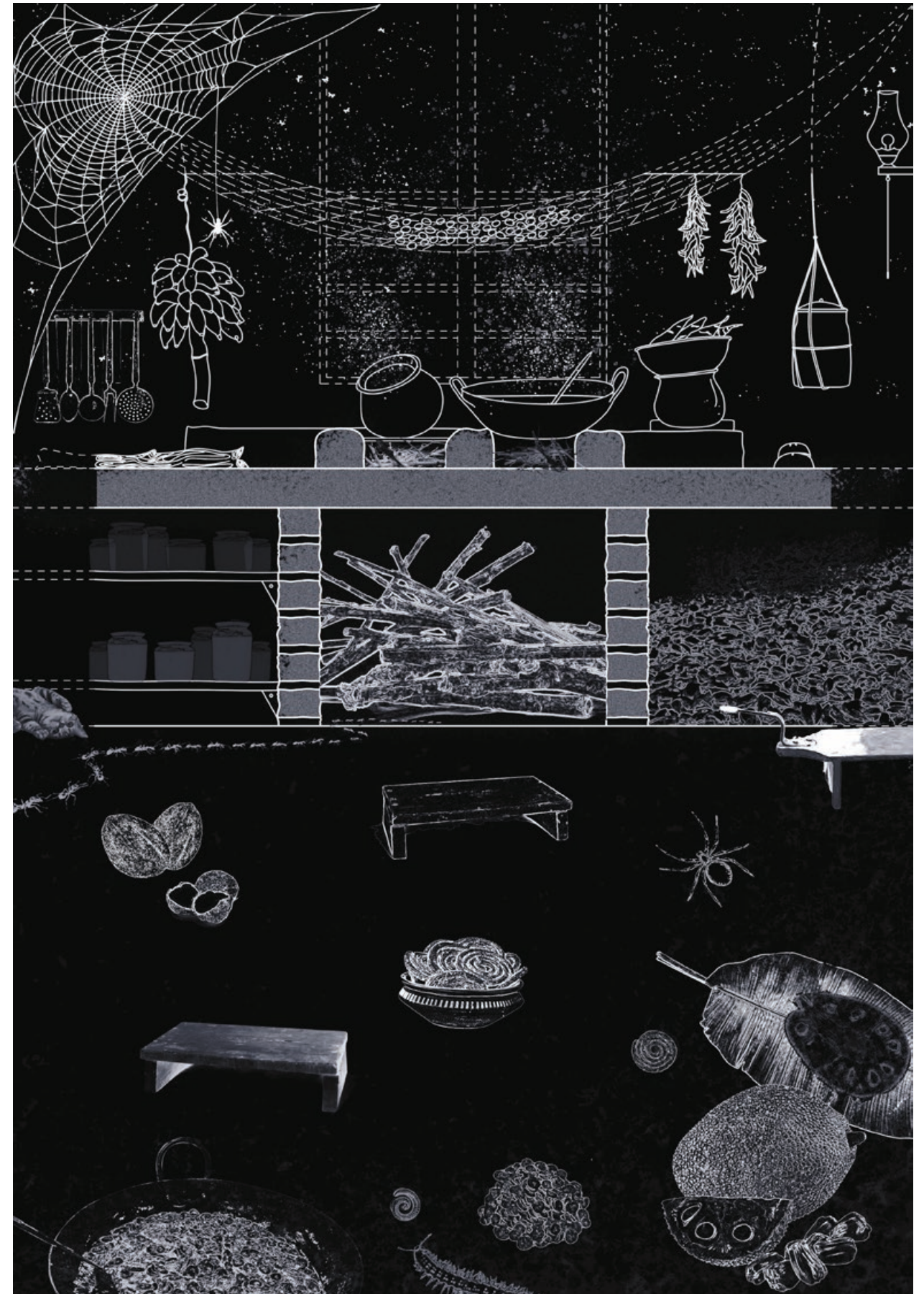
# AMMACHI'S KITCHEN

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All drawings showcased done by author.

Fasting & Feasting Spring 2024  
Instructor: Ateya A Khorakiwala

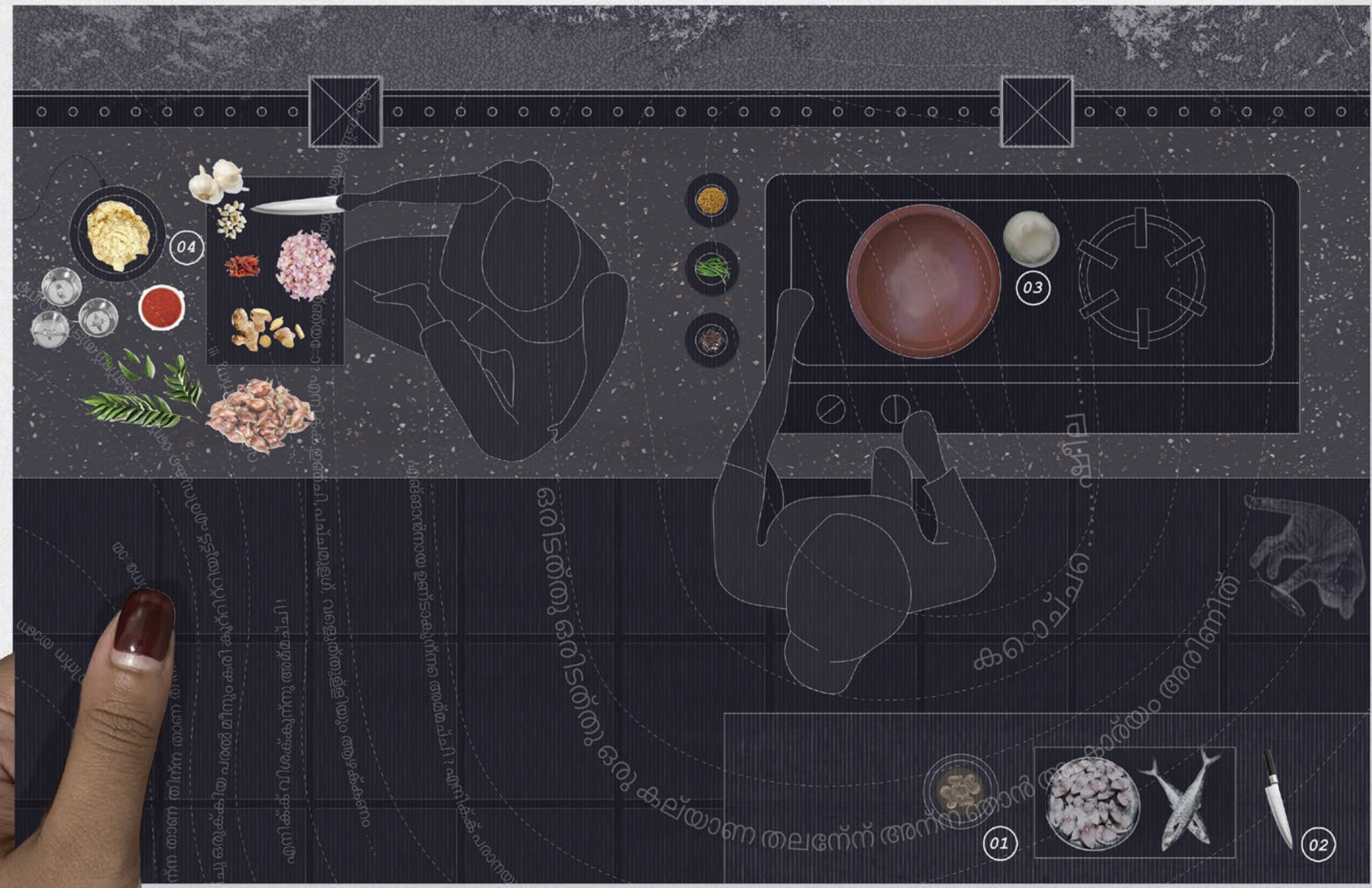
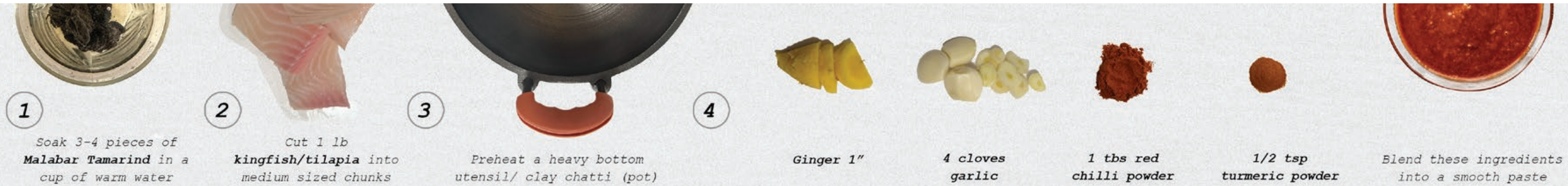
The *Ootupura* - an outdoor kitchen that served as an extension of our home. It was a sacred space, a threshold between worlds, where my six-year-old self found solace on a humble *korandi* (stool), gazing into the dark depths illuminated by the dancing flames of the *adippu*. The stove, fueled by firewood or coconut husks, transformed into a mesmerizing display of golden red embers. Seated on the veranda like a vigilant guardian, I observed ammachi and sahodhari chechi in a perpetual ballet, their movements orchestrated by the syncopated rhythm of their daily routines.

The kitchen was a beacon, a haven for fried banana chips crafted from plantains ripened in its embrace, and a sanctuary for drying the delicate red aril from nutmegs gathered by my sister and me in Ammachi's backyard. Within this hallowed space, a kerosene lamp flickered, casting ephemeral shadows upon cobwebs and mummified moths, a theater of the macabre that both intrigued and repelled me. Now, the *Ootupura* is no more, a relic of the past demolished in the relentless march of time. Yet, its essence is etched into my temporal imagination, a treasure trove of flavors and fragrances that persist for time immemorial.



Material artefacts that make up the memory of the kitchen

PORTALS from one countertop to another



# Kerala Fish Curry

6

Once the oil is hot, add the mustard, fenugreek and curry leaves.



8

Then add blended paste and saute for 30 seconds. Smell it, and keep going until the spices are less intense.

9

Add in the soaked tamarind with the water and add salt.



11

Rotate the pan to mix the curry, do NOT use a spatula as the fish will flake.

7

Once you hear the POP, add the shallots and green chillies. Cook this until the ingredients soften.

10

Once the gravy boils, add the pieces of fish and let it cook covered for 15-20 mins in low flame.

12

Once the gravy thickens add a sprig of curry leaves and switch off the heat. Serve it with rice or tapioca, but if you want to wait trust me it tastes better the next day!



# THE NEW HEARTH

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All drawings showcased done by author.

ADV IV Spring 2023

Instructor: Nina Cooke John

*Received BWBR Diversity and Inclusion in Design Scholarship Award 2023*

In free black communities, the hearth was seen as a space of individual refuge, a communal space, a sacred space, as well as a portal that was susceptible to communication with their ancestors. This has been inferred through several spiritual concealments and inscribed cosmograms upon hearthstones.

The cosmogram is based upon the different stages of individual life such as new beginnings, youth, and elder ship as well as the collective ideology between the living and the ancestors.

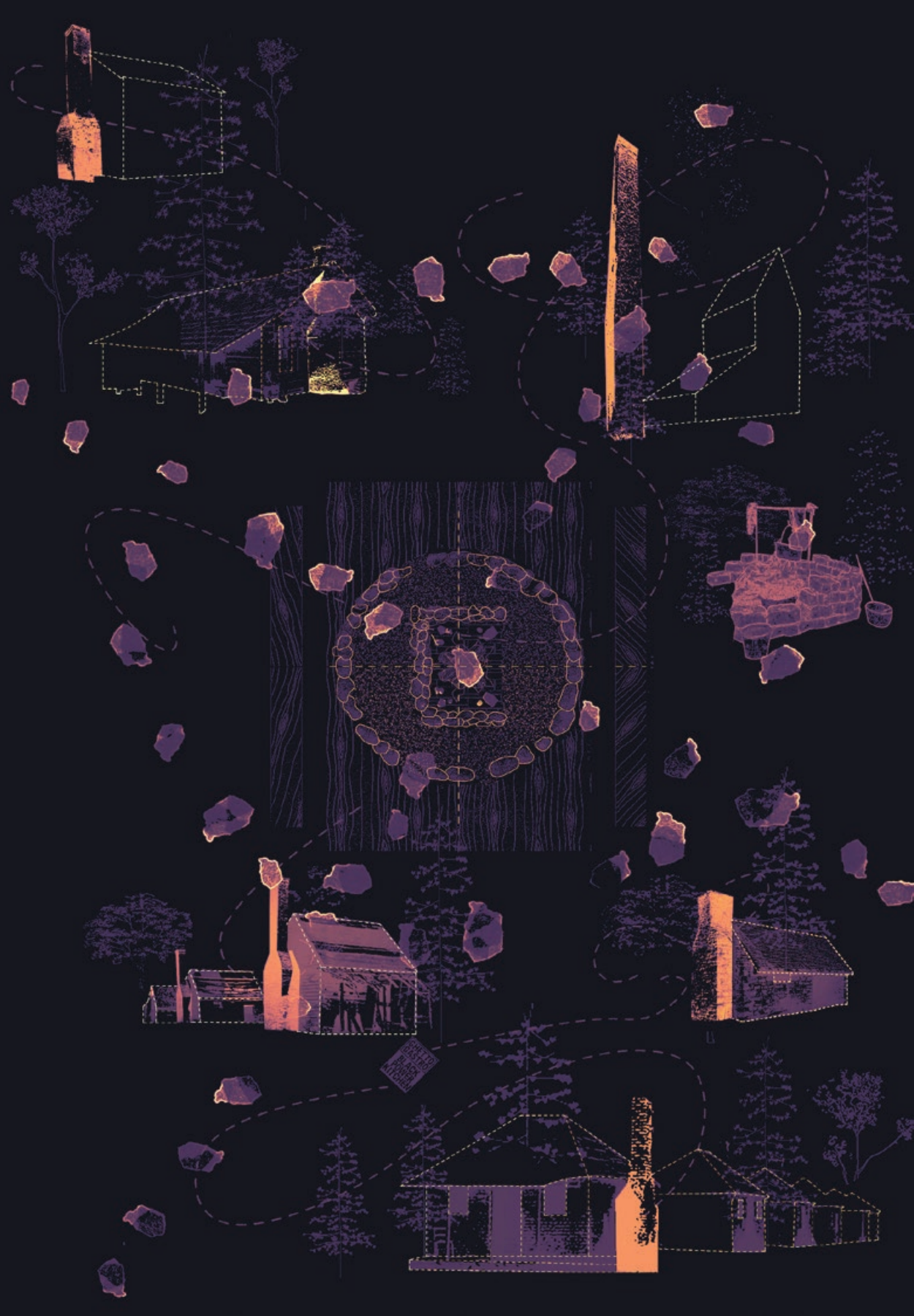
Culinary historian Jessica B. Harris, eloquently expresses how food can be a source of memory that can be used for healing and caters to nostalgia and connection between the present and our ancestors.

The new hearth hopes to expand upon a fluid understanding of space and time intergenerationally through the power of food. It hopes to provide a space for learning and gathering, a space to reflect and reconnect, and a space to nourish and rest .



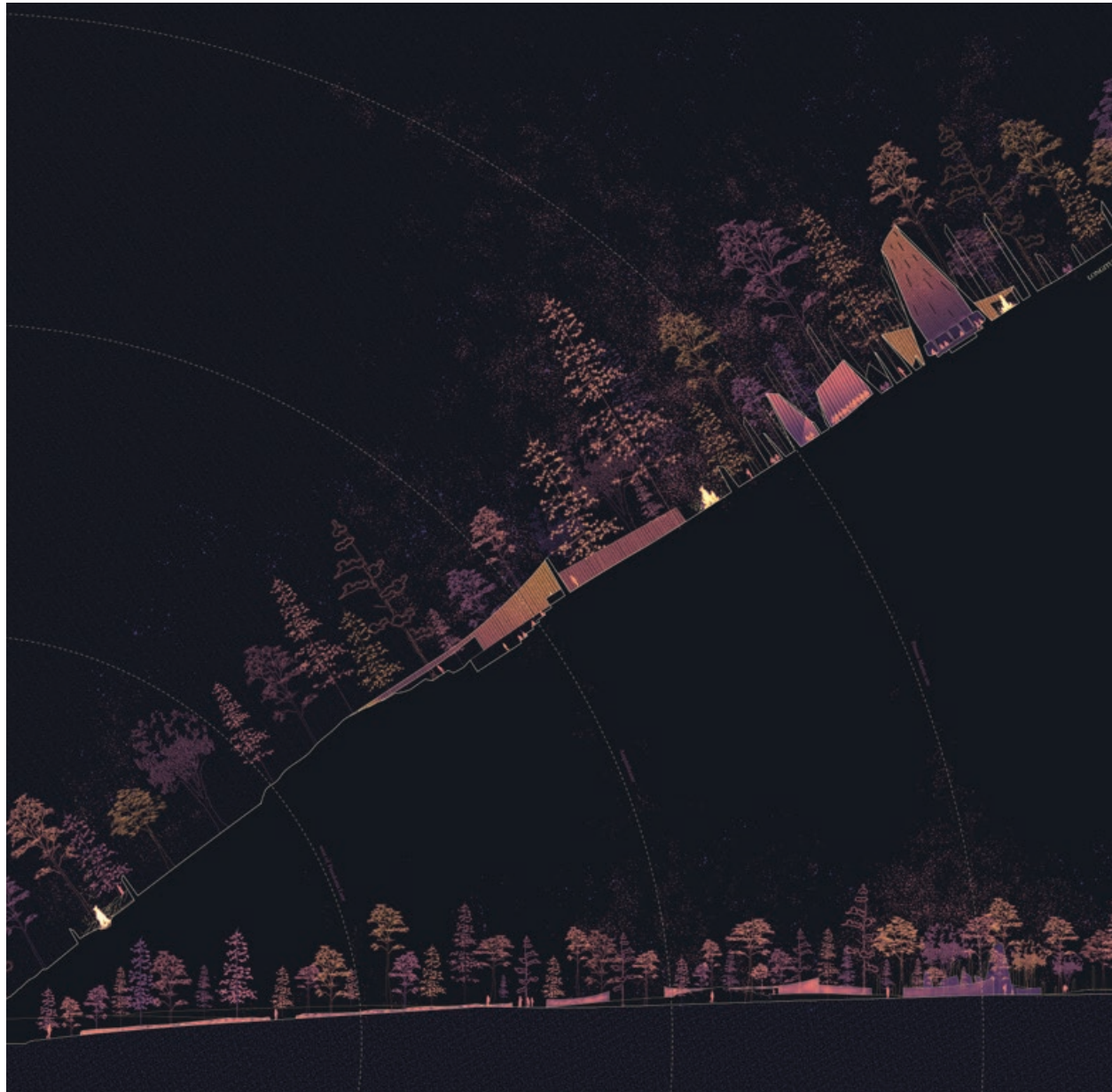


Conceptual model iterations



Compilation of external and internal hearths





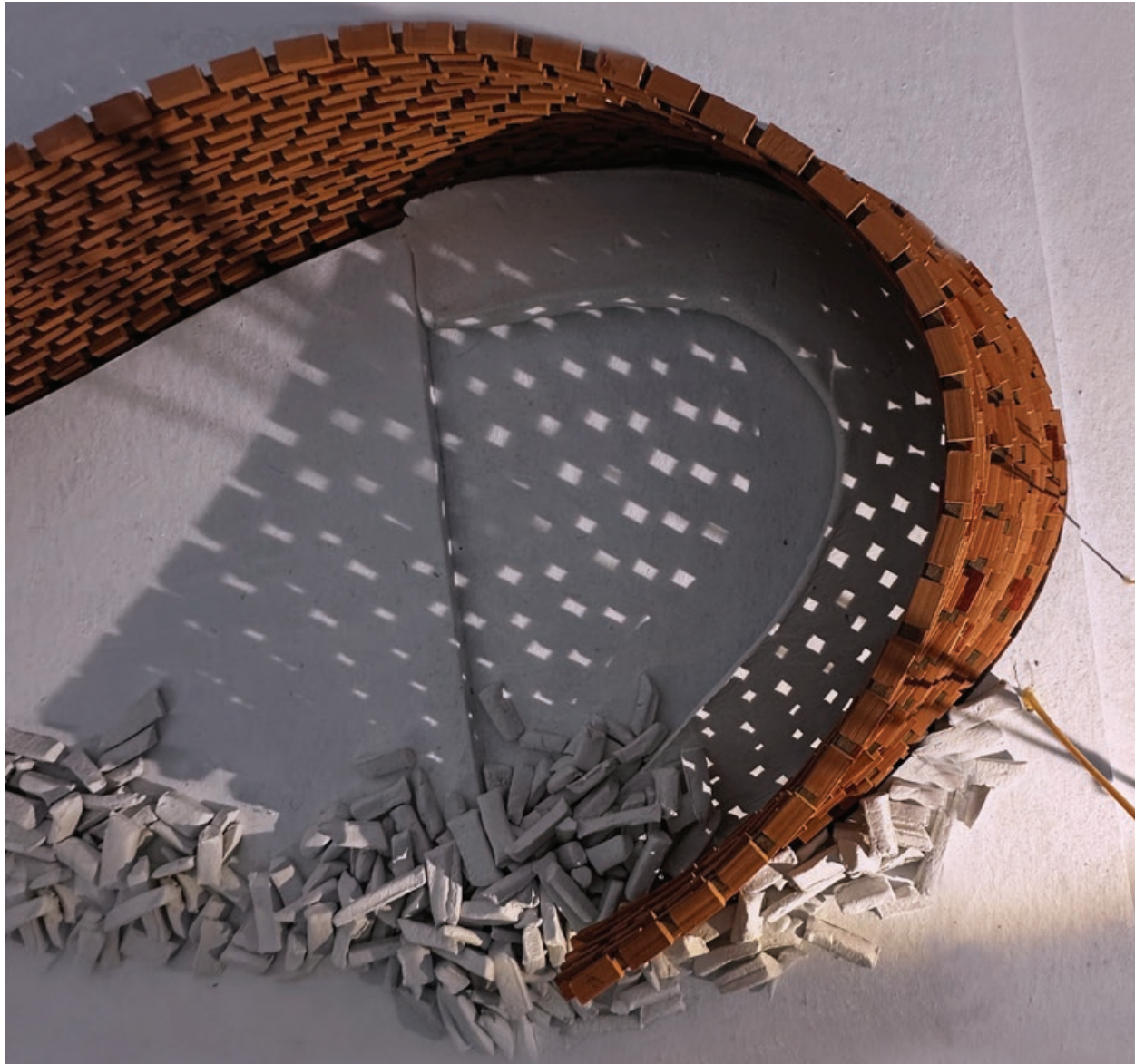
Unfolded Section and Elevation along Freedonia



Site plan showcasing movement and hotspots



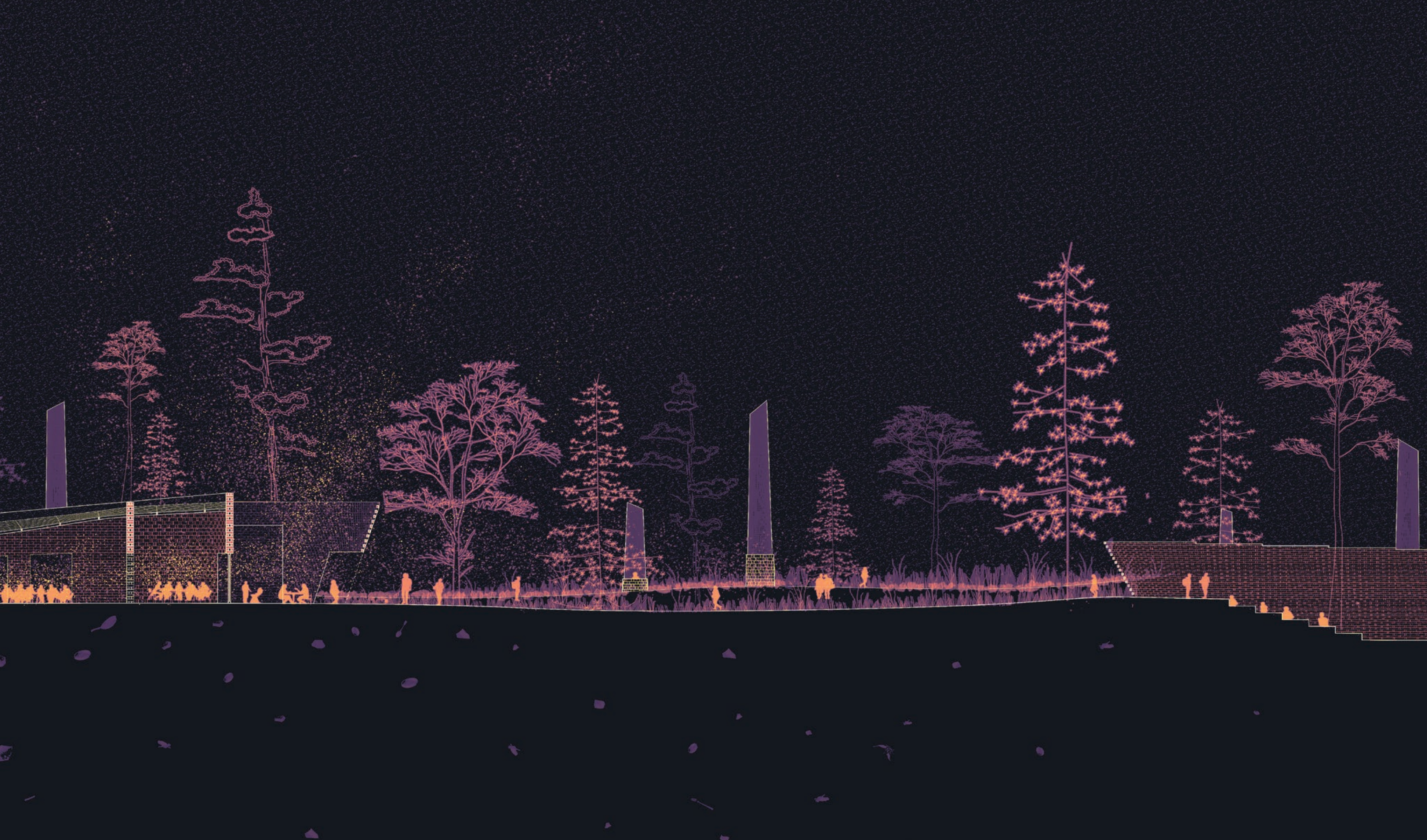




Model 1/4" = 1'-0" Teracotta Bricks & Air Dry Clay



Families and Kids engaging with New Hearth in Fall







# ECOLOGIES OF LABOUR & CARE

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In collaboration with Ken Ferris  
& Juliana Yang

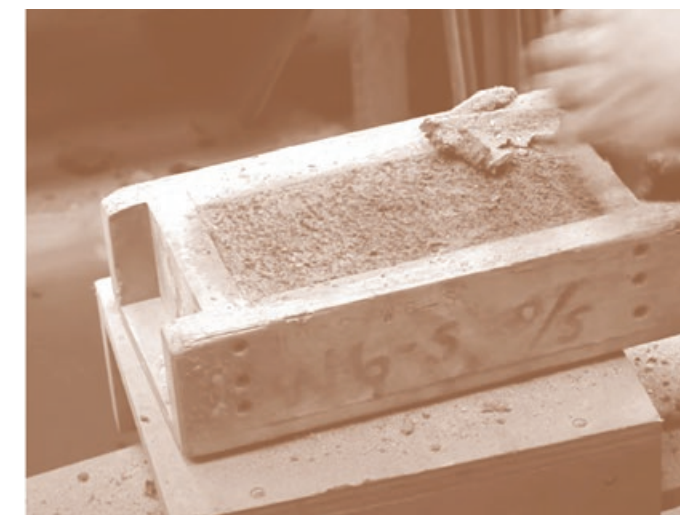
AT V Spring 2023

Instructor: Lola Ben Alon

We are interested in carefully articulating the provenance, processing, and post-building life of the materials, as well as the quality of labour that goes in to each of these stages.

The brick screen of the balcony is supported by threaded steel rods which are connected to anchors in the precast concrete lintel. The handmade, two part bricks, are fixed to clips threaded onto the steel rods. These are replaced as needed over the period of use.

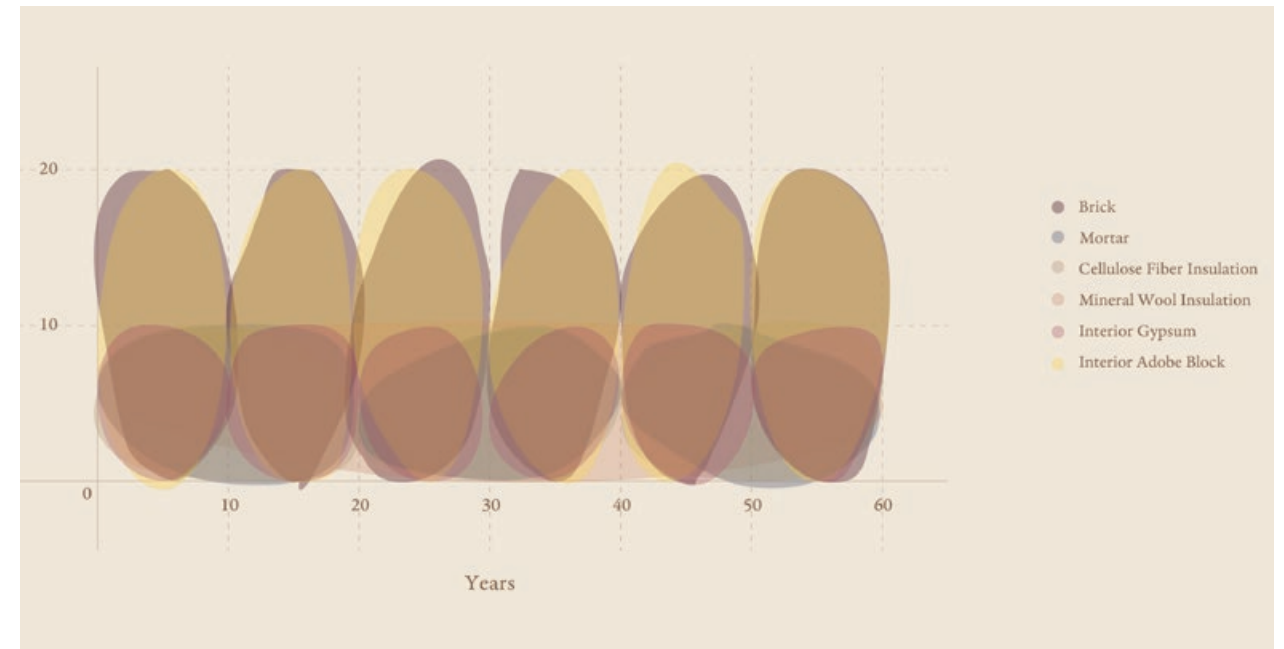
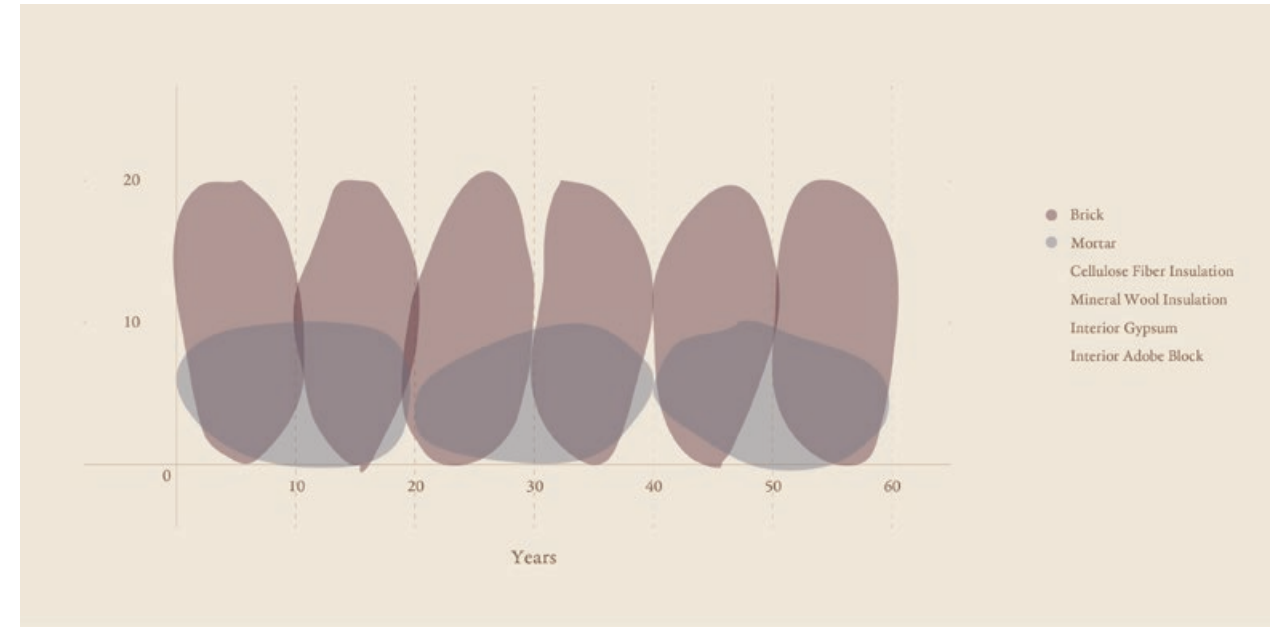
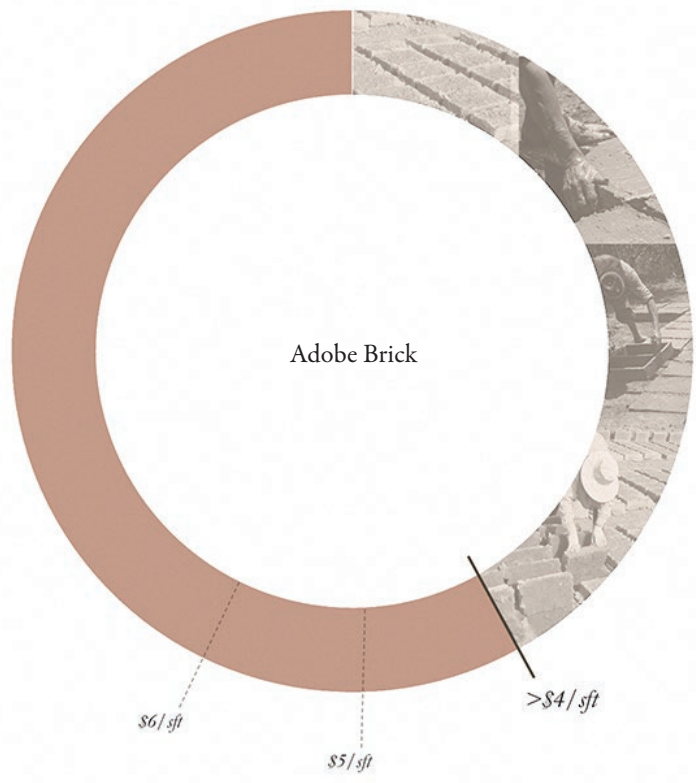
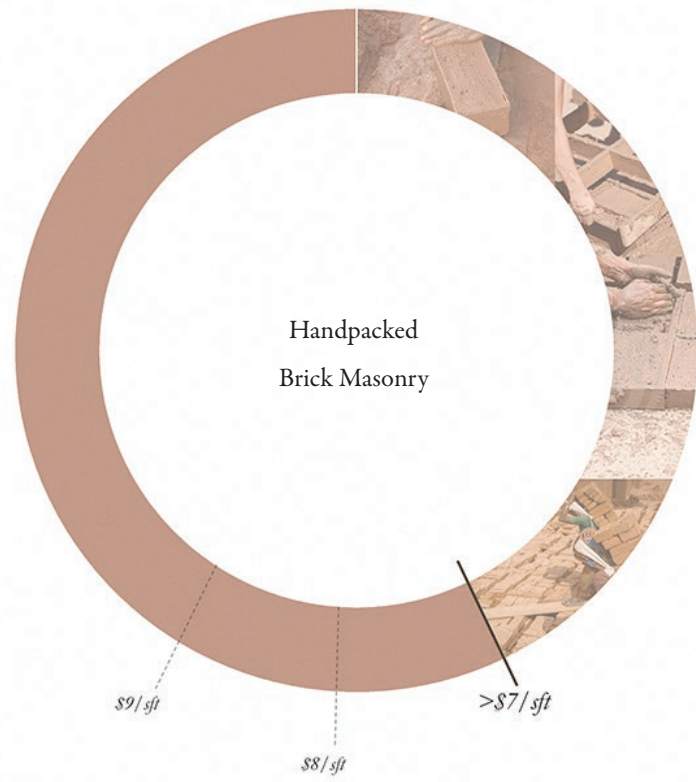
The forming of the brick, which would typically be done by an extruding machine, is pressed by hand individually. Using only a small wooden formwork and human labour, the clay is thrown and pressed into shape, resulting in unique, idiosyncratic bricks.





Straw

Clay









# BREATHE DIFFUSE DISSIPATE

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All drawings showcased done by author.

Core II Studio Spring 2021  
Instructor : Amina Blacksher

The new K-8 school is imagined as a membrane that acts as a ventilated buffer between the city and the environment of learning.

According to Martin Rauch, “the envelope that surrounds us should be able to breathe, diffuse and dissipate in the same way as our bodies”. Hence, a carefully chosen material palette (copper, rammed earth, steel and glass) was utilized to embody this value of the school as a building whose maintenance becomes a learning tool.

Overall, the new school is a space that prioritizes the well-being of the child and aspires to transform the experience of its occupants. A space where children are not passive but active participants within their environment, who learn from, are influenced by and take part in the maintenance and upkeep of their school and their community.

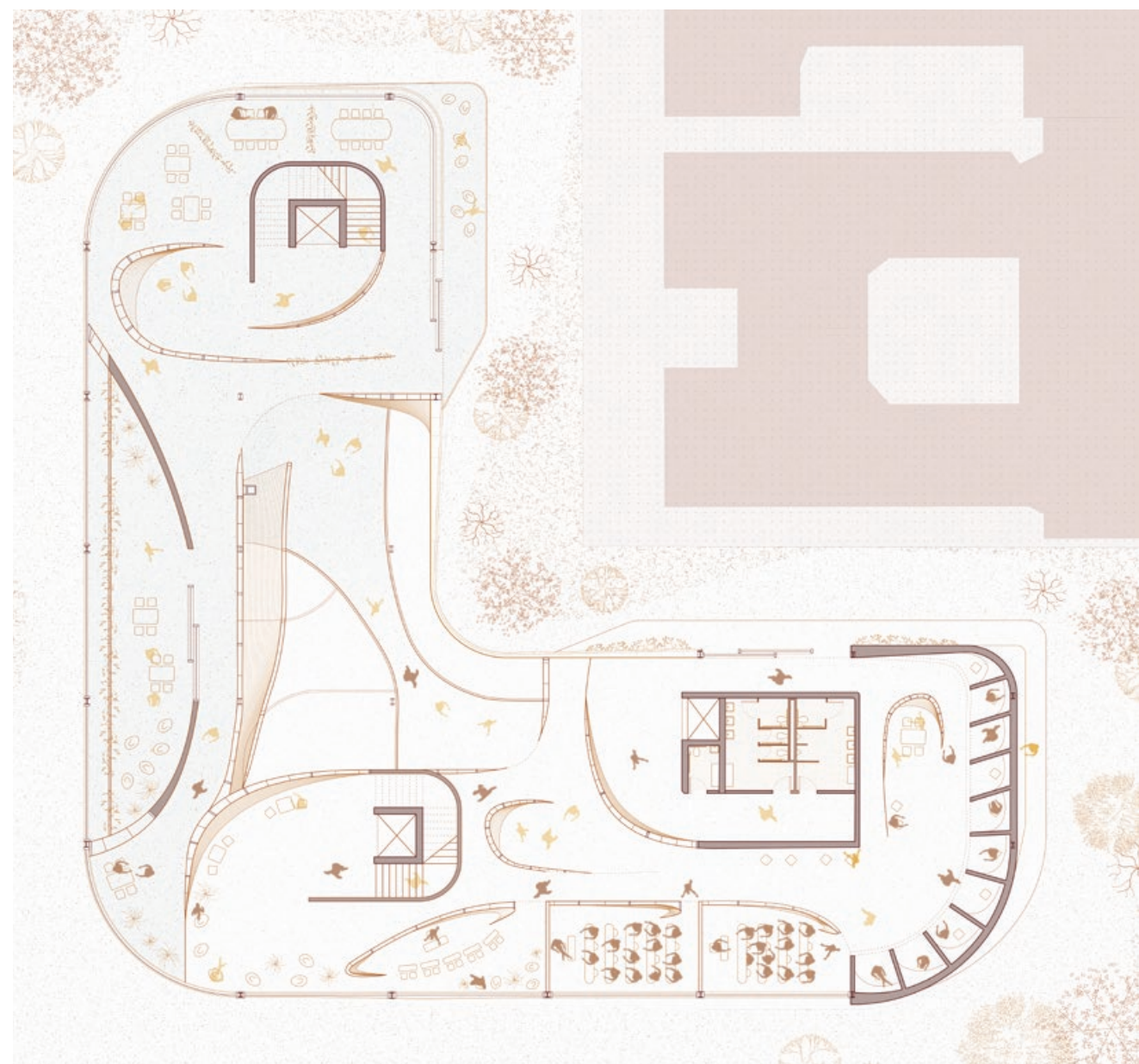
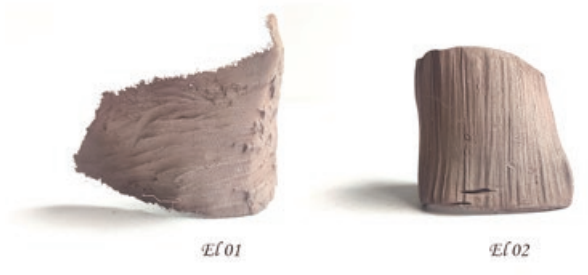
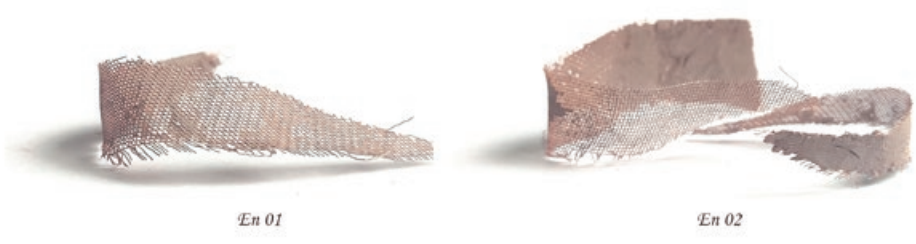
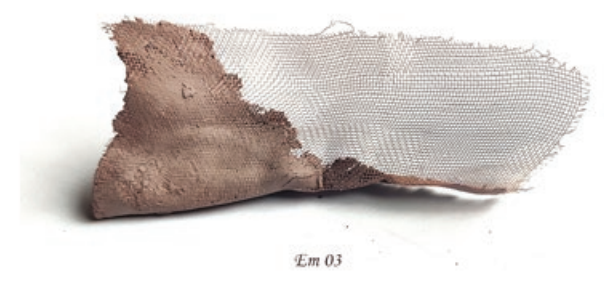




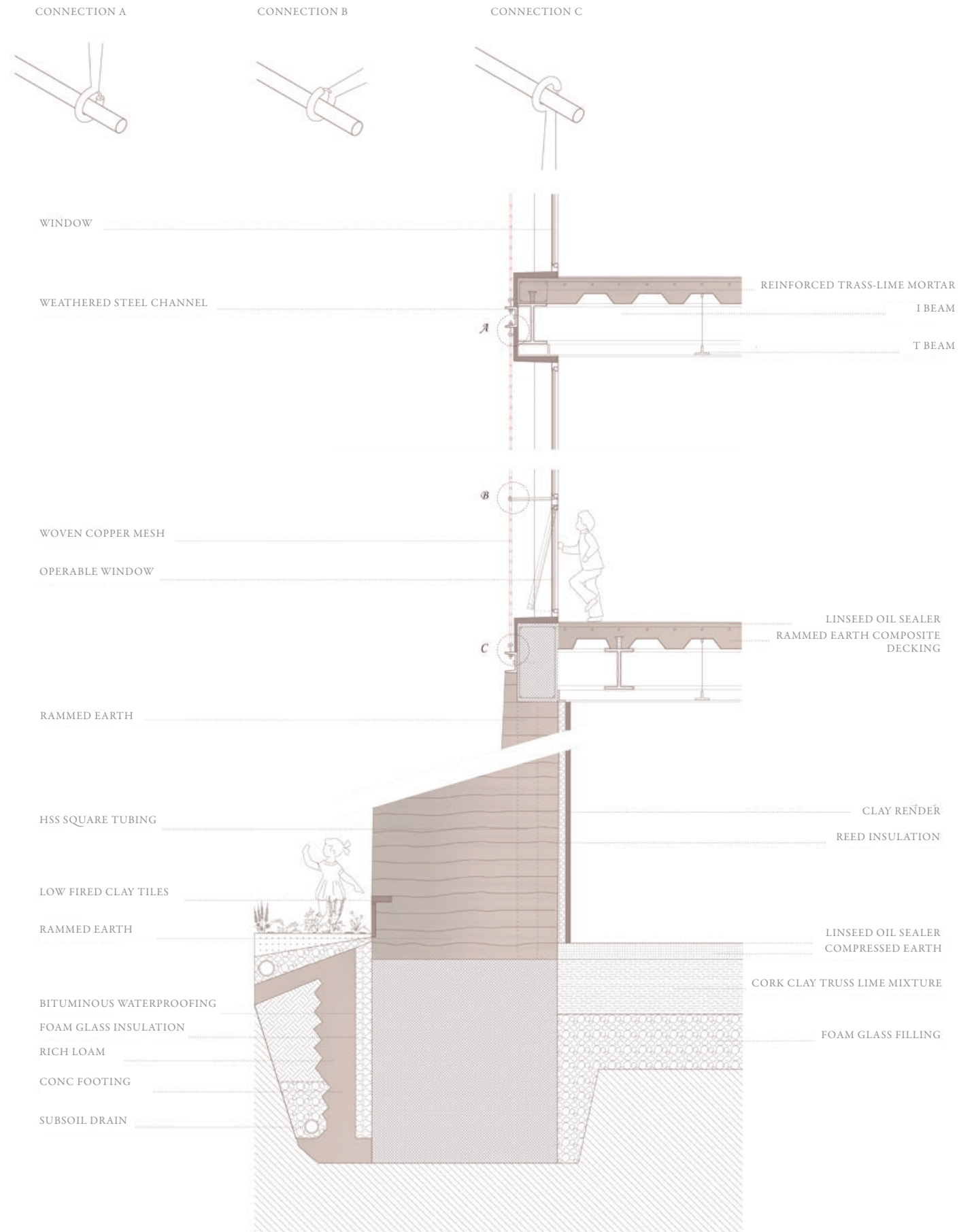
EMIT

ENABLE

ELIMINATE



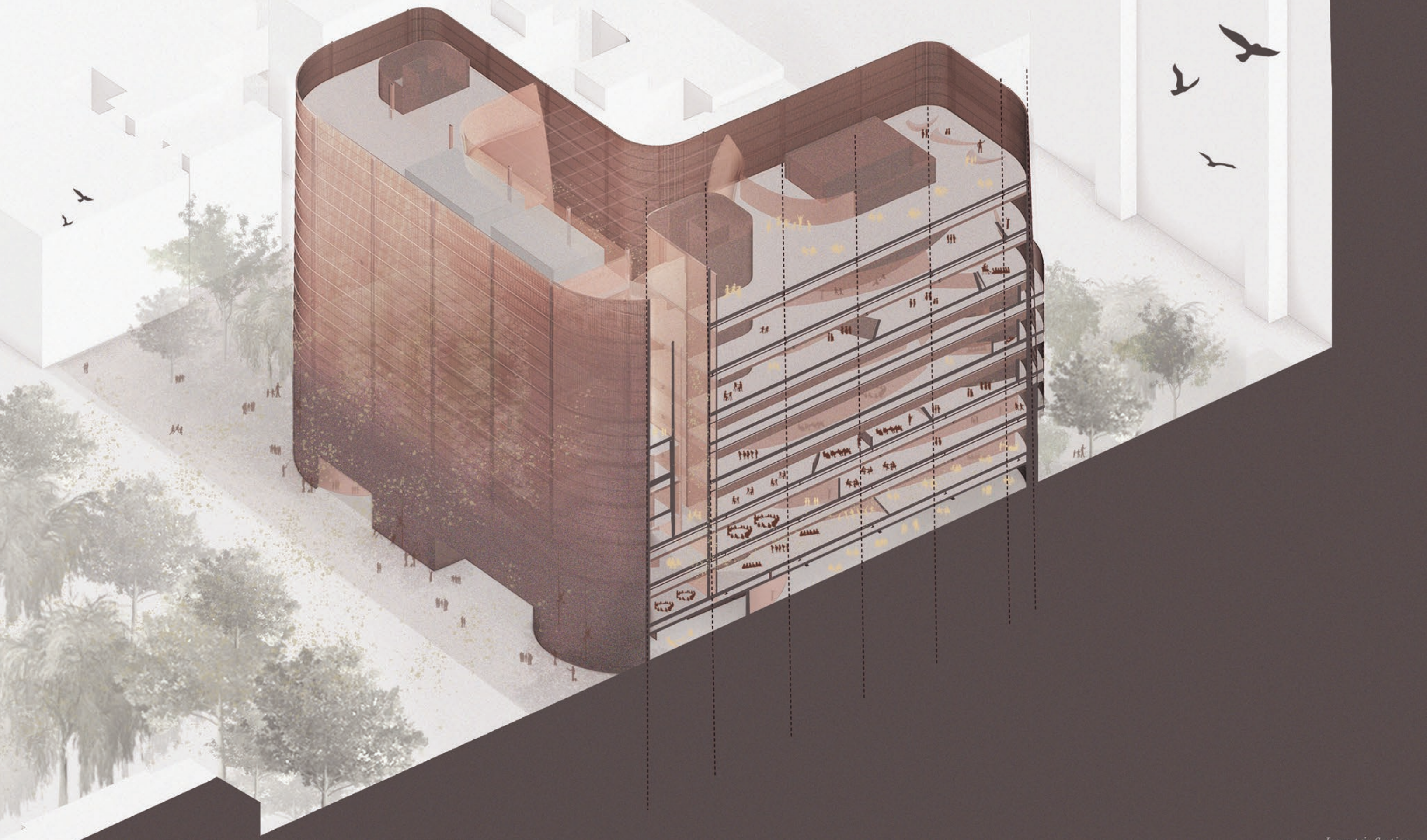




Wall Section Detail



Transverse Section showing permeability





# PHRAGMITES WEED OR NEED?

In collaboration with Maryam Haneef

Home is where the Toxins are Fall 2023

Instructor: Marta Heisel-Wisniewska

The material exploration seeks to generate initial material application pathways for Phragmites Australis in our local New York landscape and building culture. Current practices of coastal watershed management are oriented towards remediation and resilience of native ecological habitats, but do so without considering the benefits of utilizing plant species for their material applications.

Secondly, reeds have been and are still utilized in various building traditions, from historic Native American, to Colonial American, to contemporary Middle Eastern, Northern European building cultures etc. , but the aforementioned local conditions have prevented the re-adoption of them in the NE American context.

This proposal seeks to propose the use of phragmites reed as landscaping and building material, harvested from existing environmental management waste streams of phragmites removal pilot projects.



01 Veneer



02 Paper



03 Insulation



04 Brick

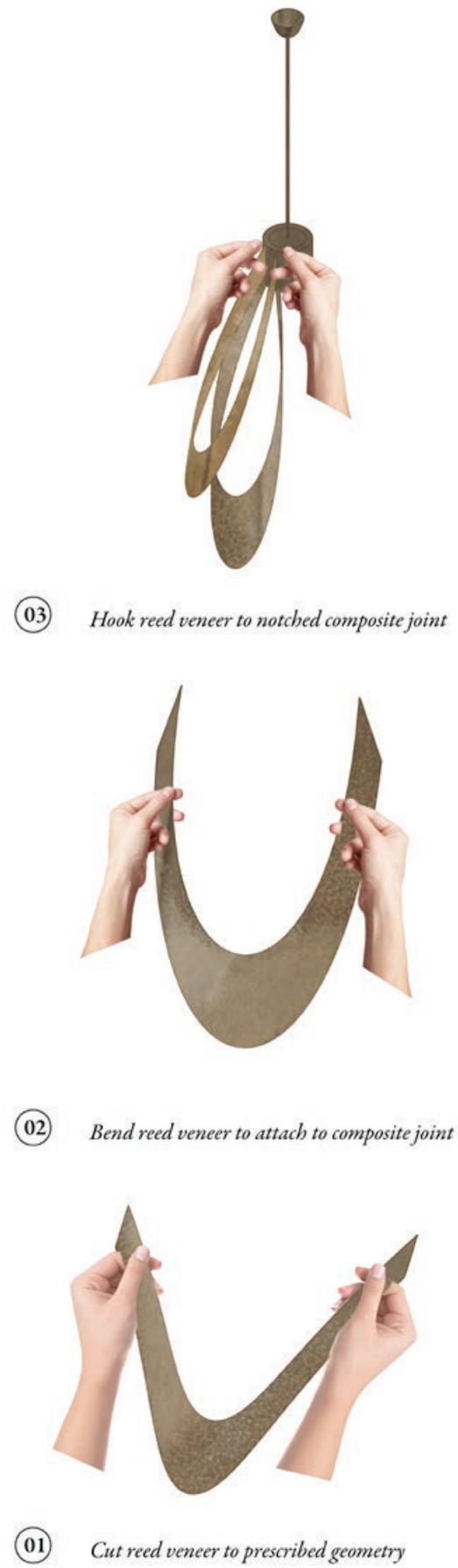
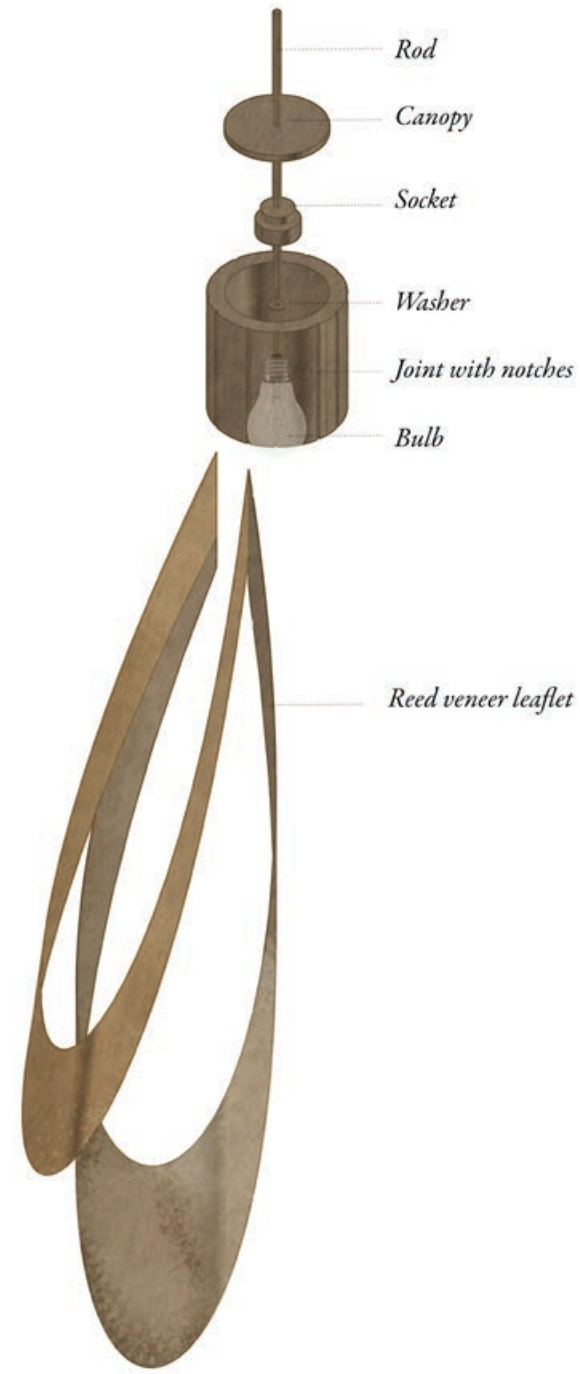


05 Column



### Components

- 1x reed composite center joint
- 6x boiled stalk 2ply reed veneer
- 6x regular stalk 2ply reed veneer







# FORT TILDEN REIMAGINED

In collaboration with Meghan Jones

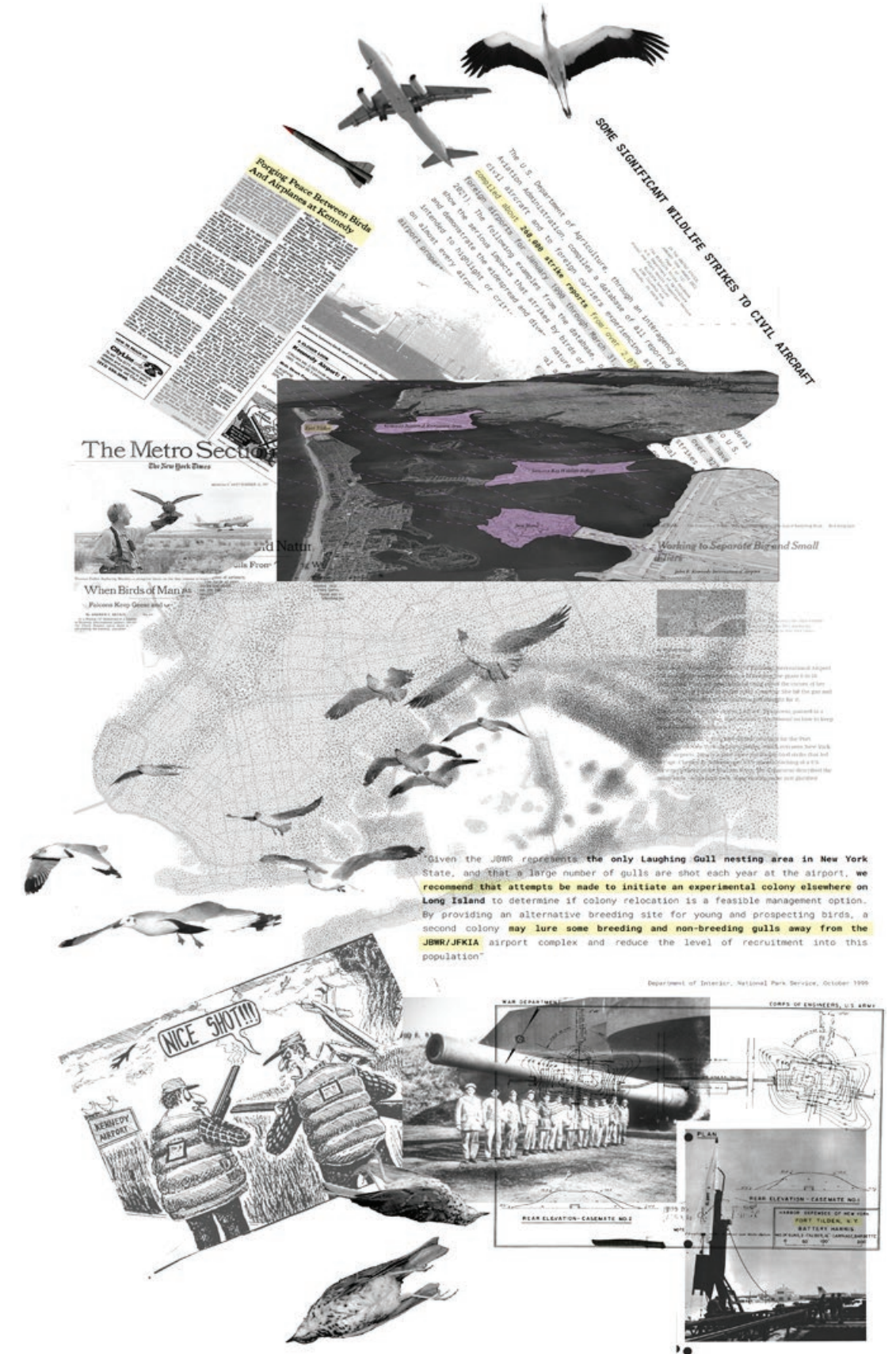
ADV V Fall 2023

Instructor: Marc Tsurumaki

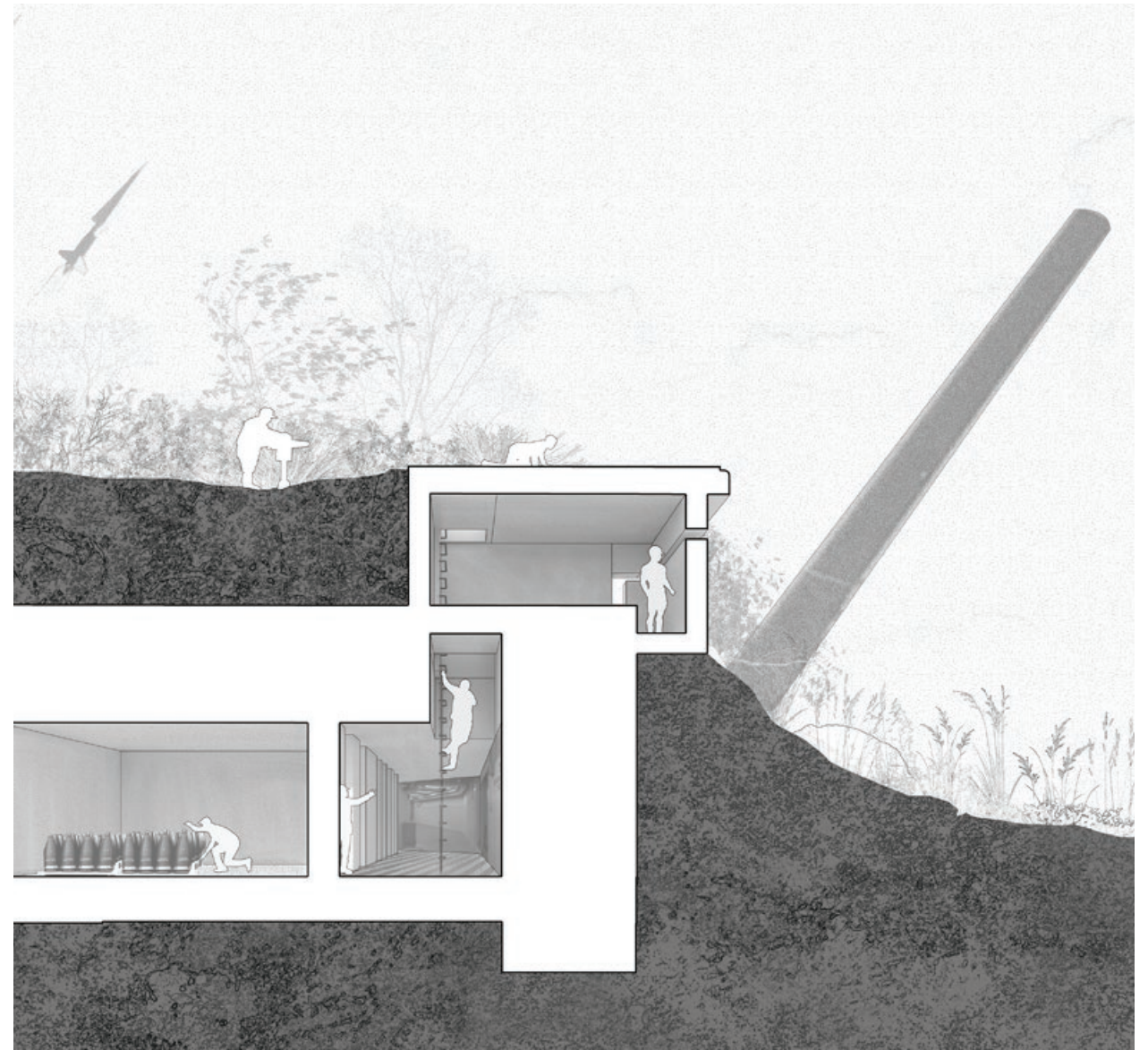
The design proposal aims to draw attention to the bird strike issue at JFK Airport, particularly the T4 runway's direct projection towards Joco Marsh and Jamaica Bay Wildlife Refuge. Aligning with the 1999 National Park Service report, the project envisions establishing an experimental bird colony at Fort Tilden, strategically located within the Atlantic Flyaway, outside the flight path, and away from airport noise.

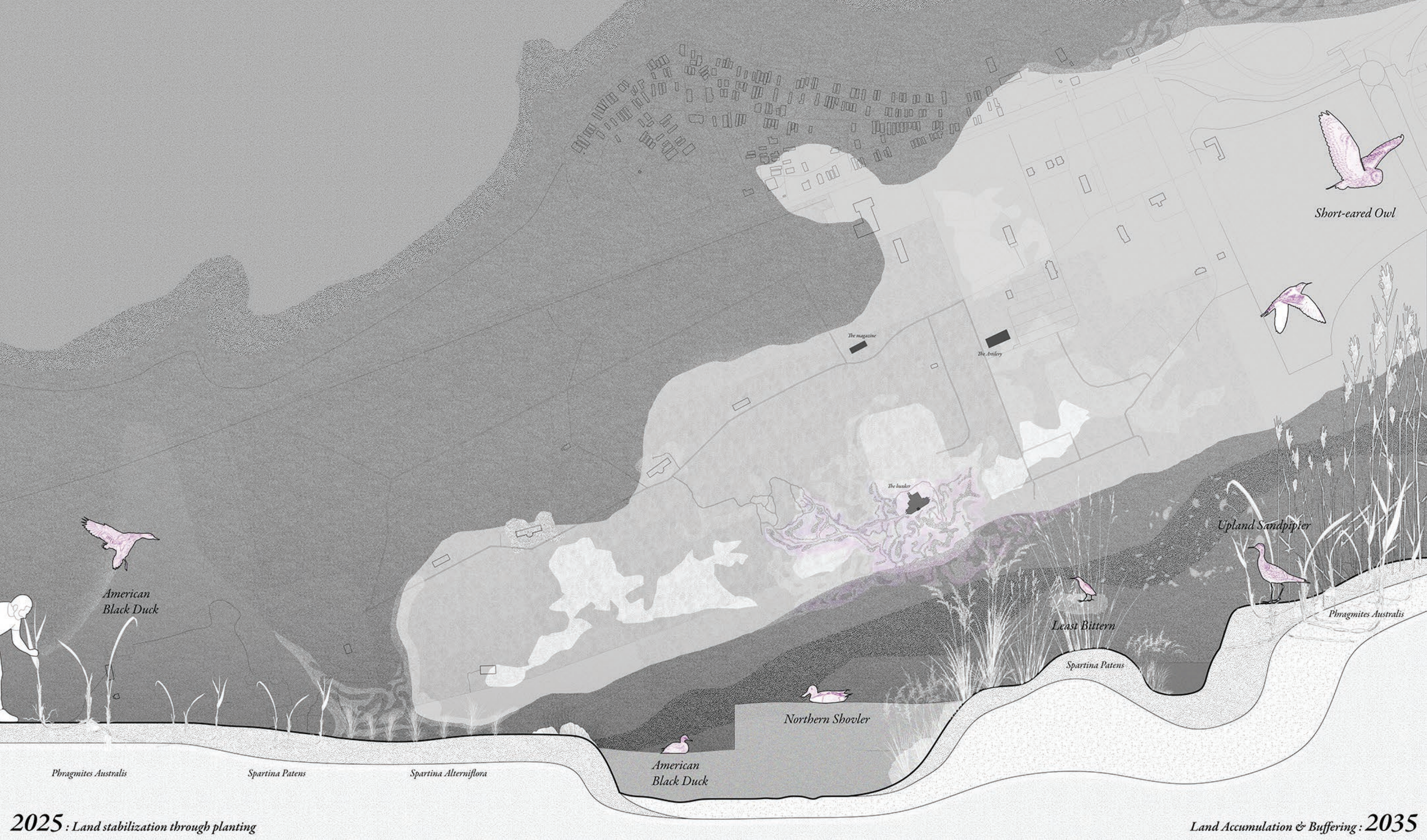
Given the site's flood level projections, the proposal addresses stabilization concerns by utilizing the abundant reed that was planted by the military in the early 1900s. Due to its rhizomatous root structure and rapid growth, the reed can become a mechanism for erosion control of the shoreline, thereby stabilizing the land for human use whilst providing micro climates for breeding and nesting for the avian. The proposal also considers repurposing the decommissioned steel of the artillery, and harvesting the excess phragmites on site cyclically to create a facade for an inter-species exchange.

This would enable engaging the local community and children in habitat protection, research, and maintenance, through the existing expeditionary learning program.



Need for alternative Breeding site due to issues being adjacent to JFK





*Short-eared Owl*

*Upland Sandpiper*

*Phragmites Australis*

*Least Bittern*

*Spartina Patens*

*Northern Shovler*

*American Black Duck*

*Spartina Alterniflora*

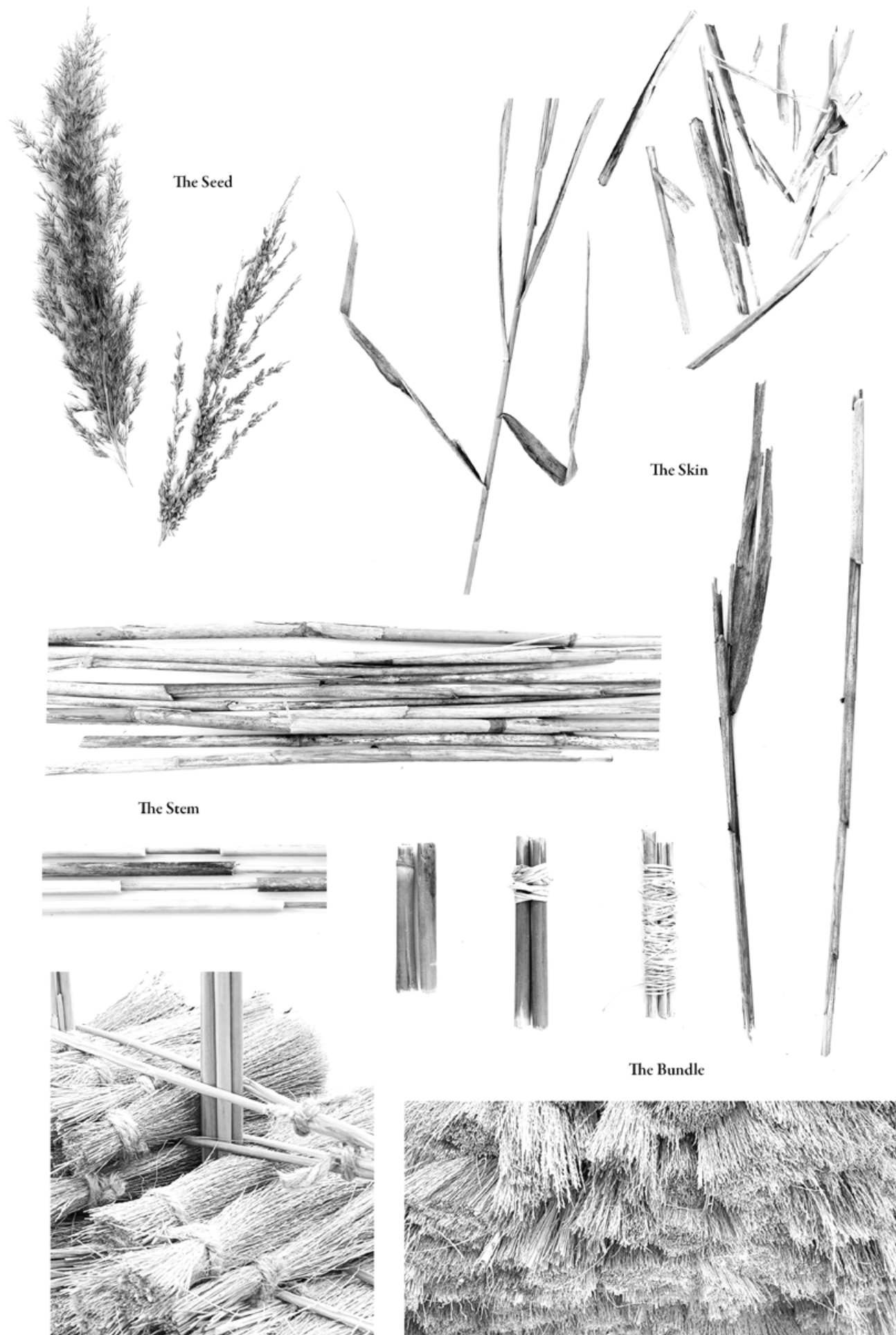
*Spartina Patens*

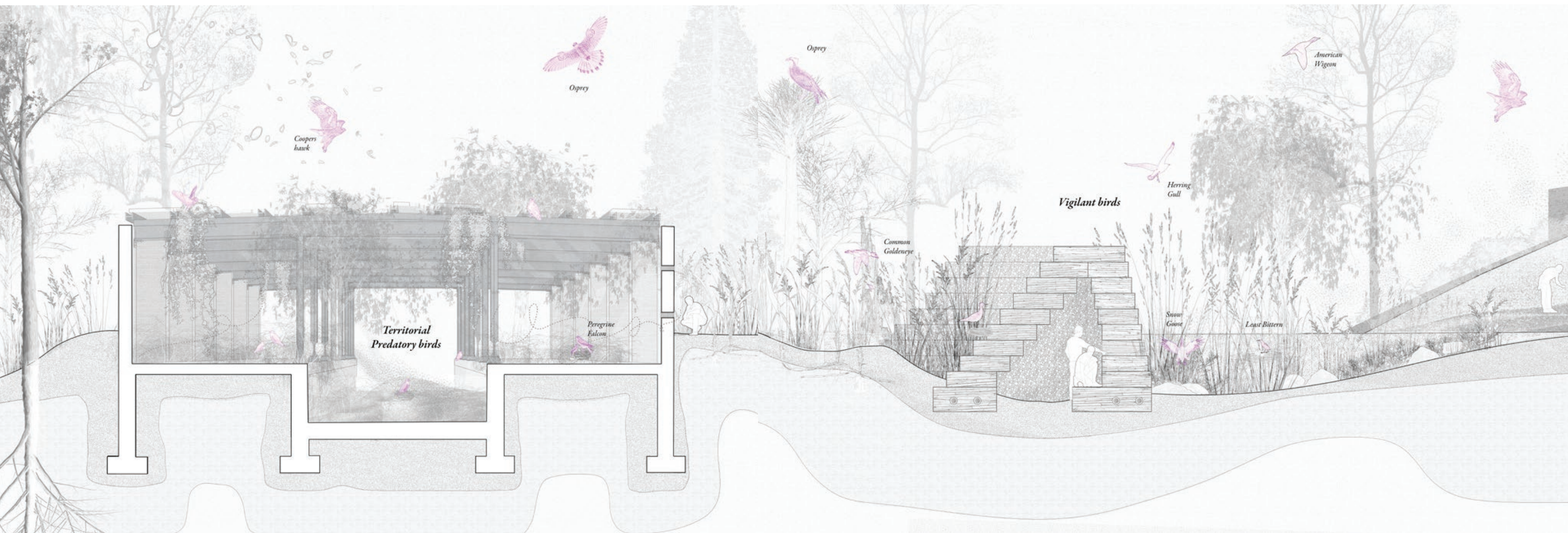
*Phragmites Australis*

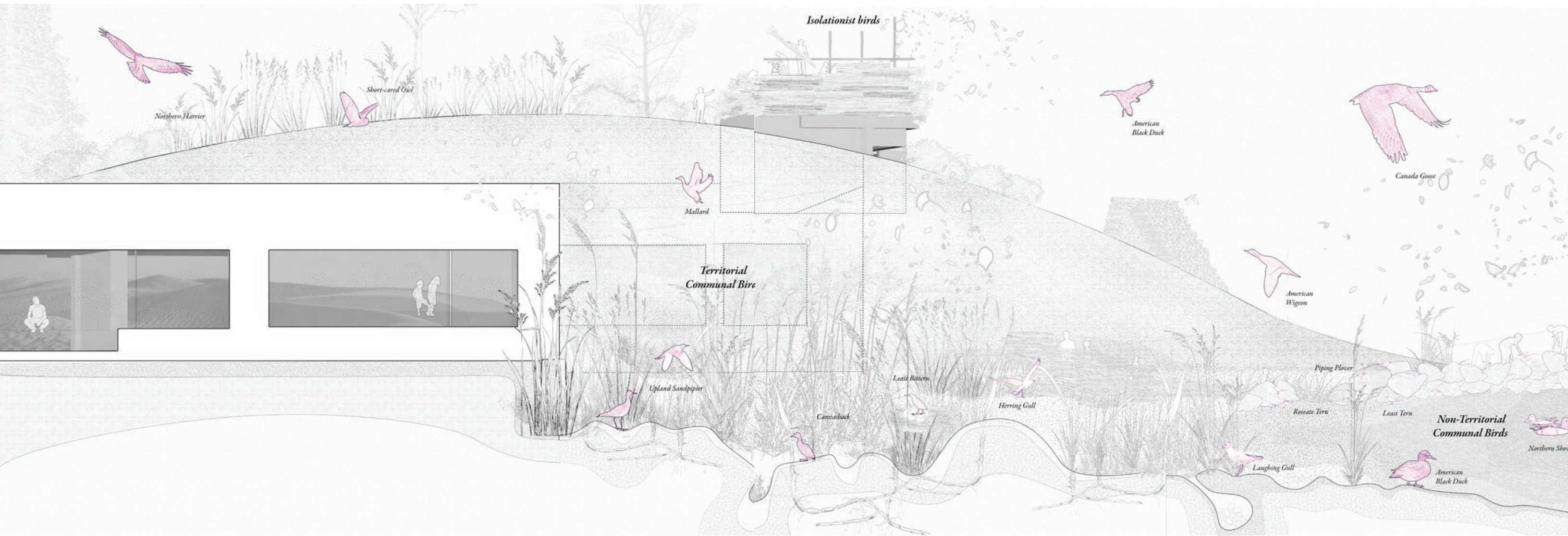
*American Black Duck*

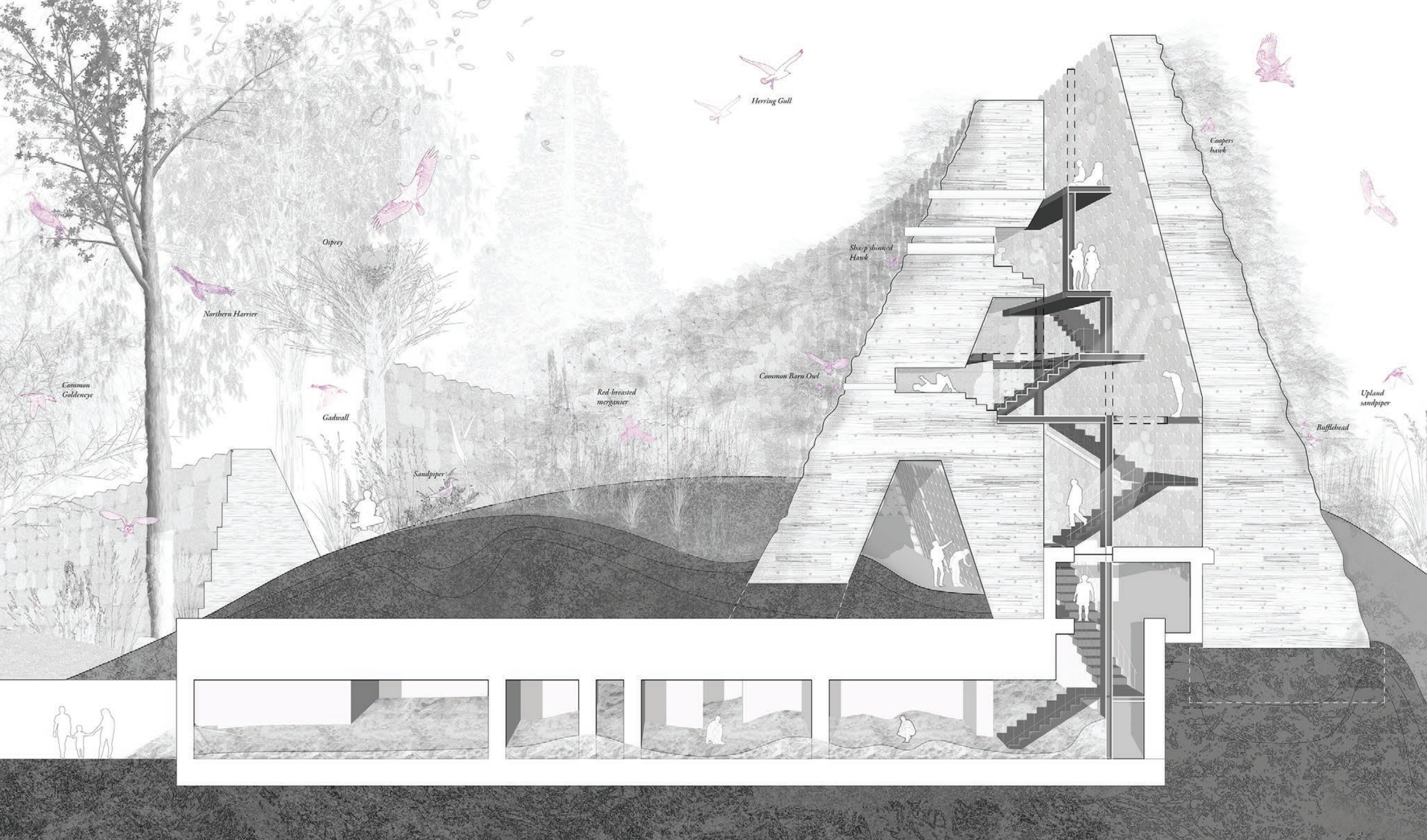
**2025** : Land stabilization through planting

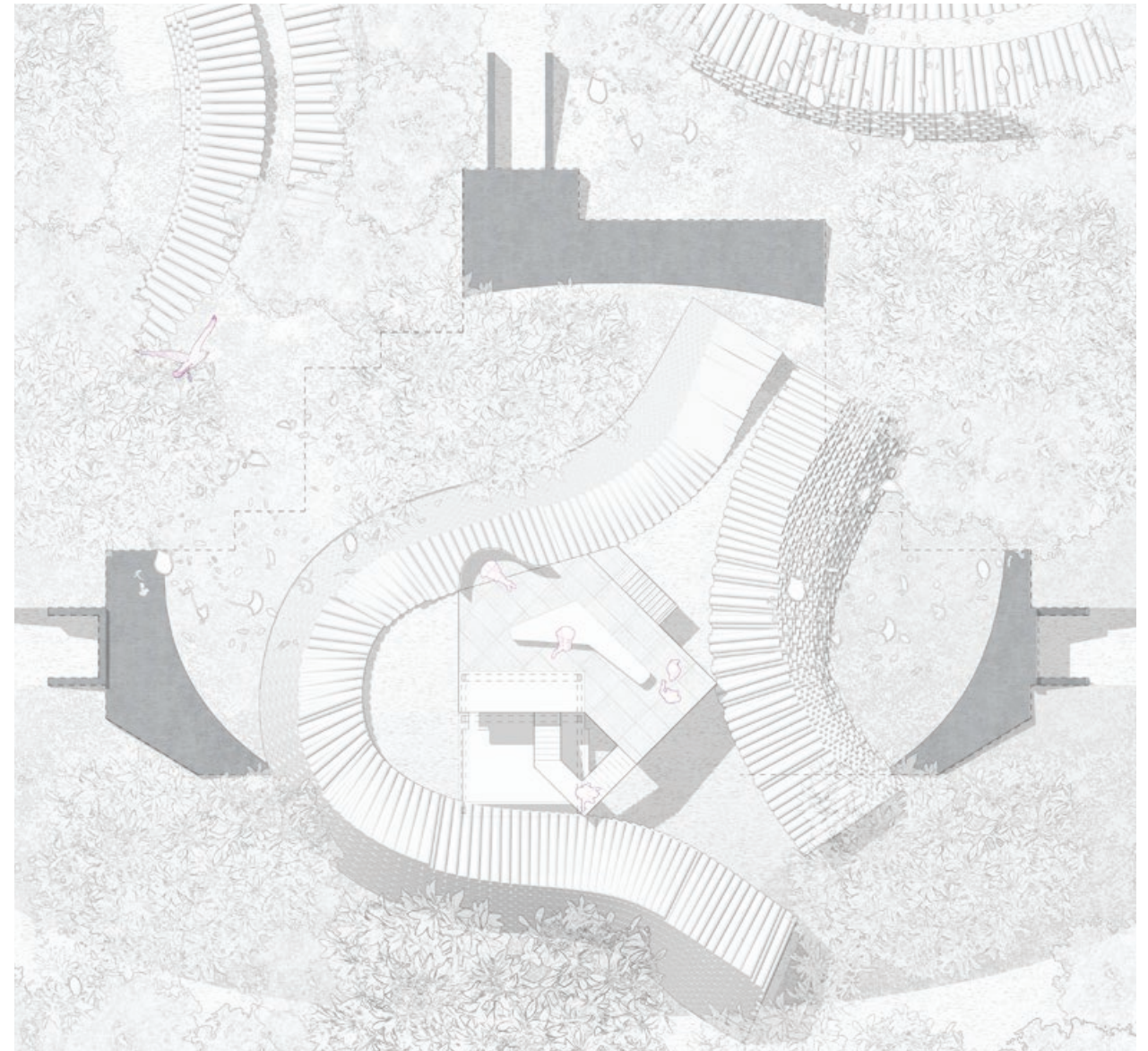
Land Accumulation & Buffering : **2035**





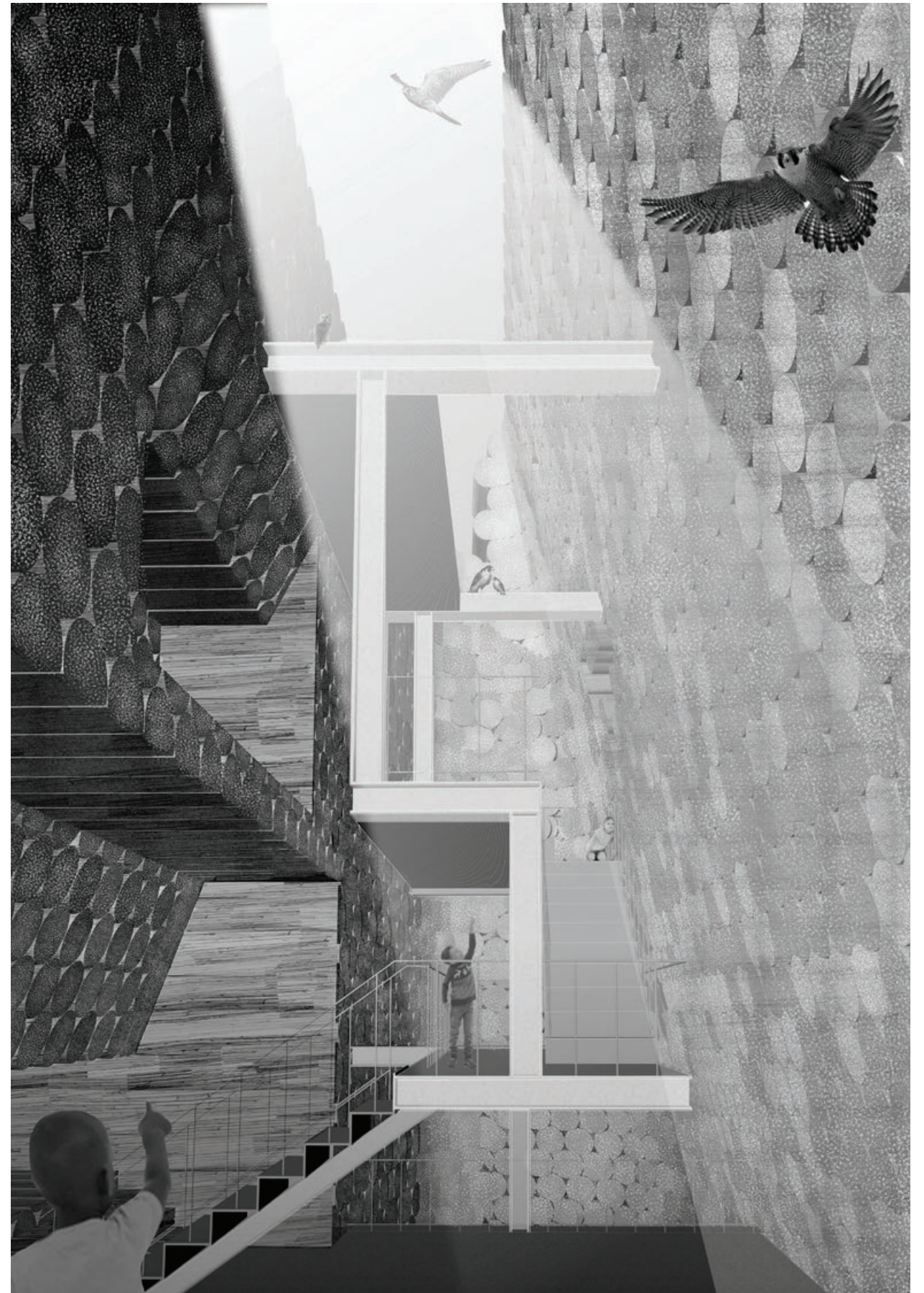
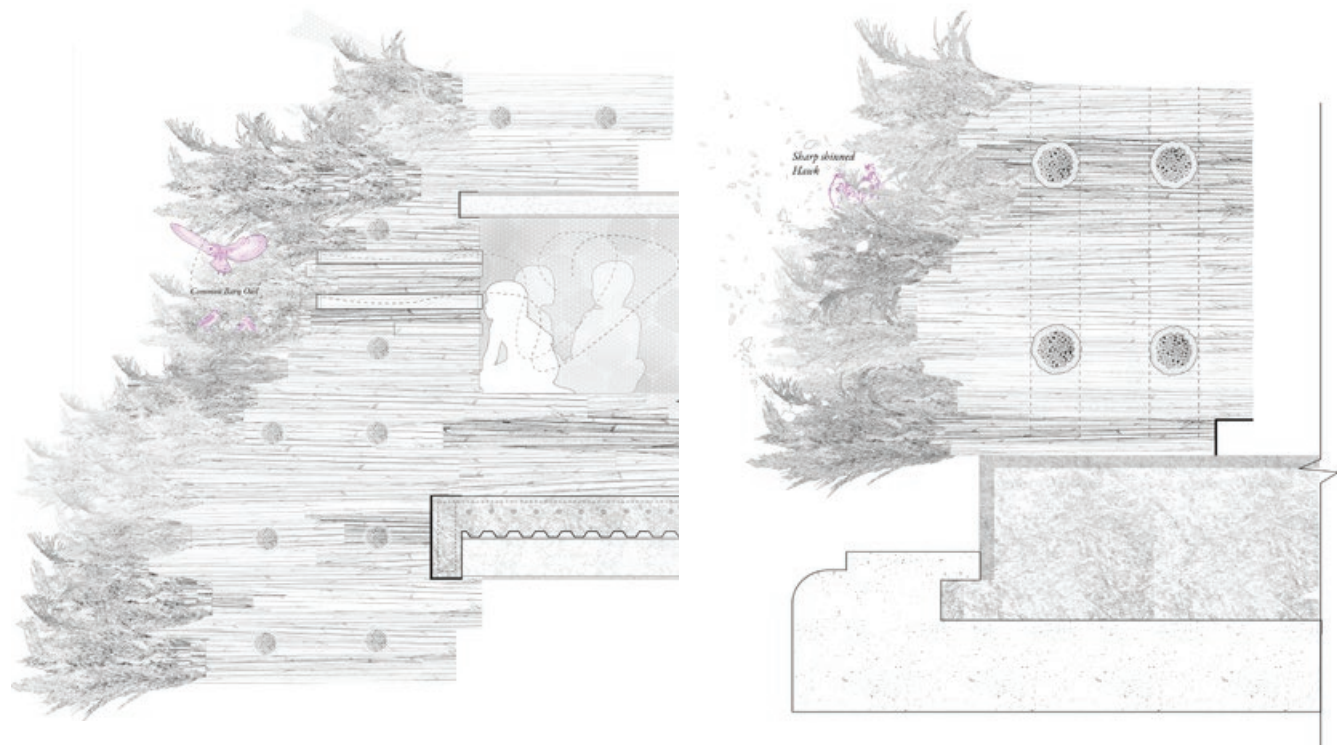
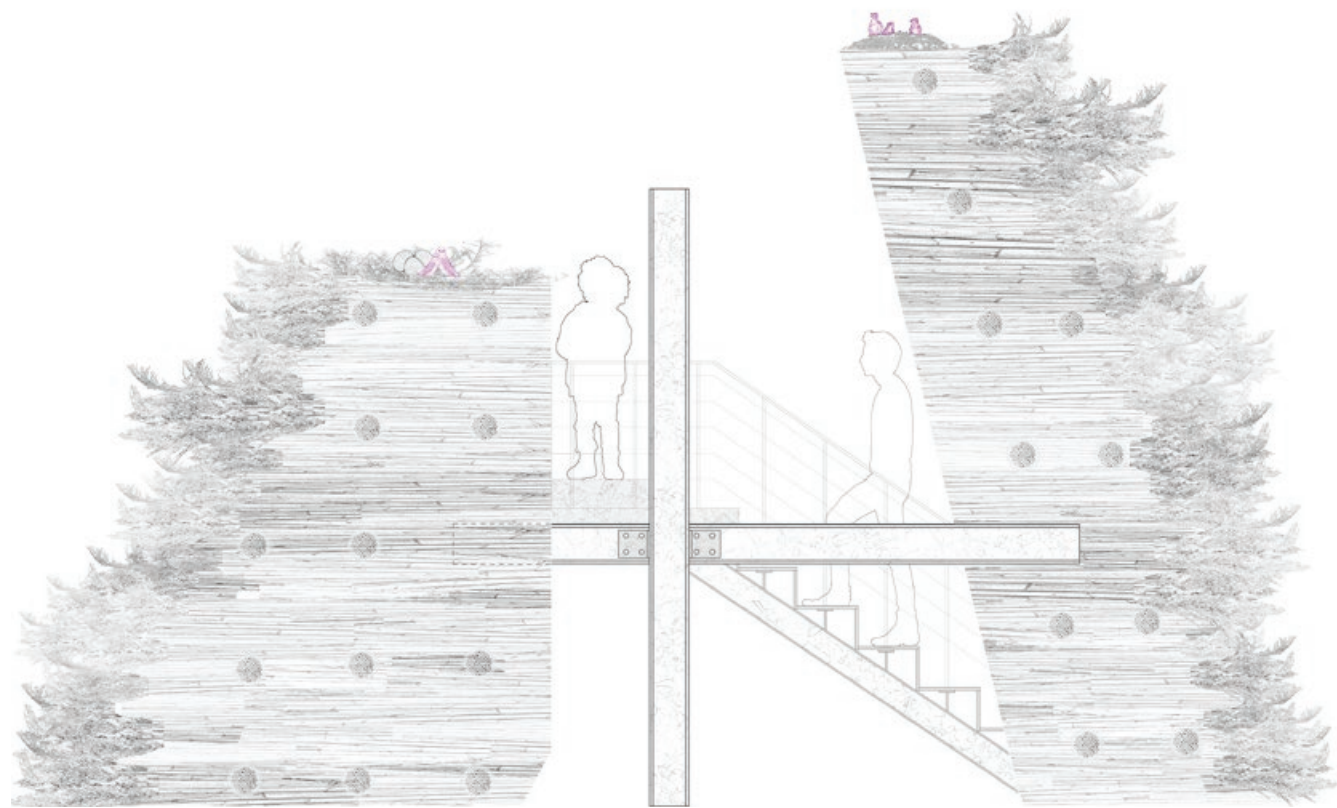






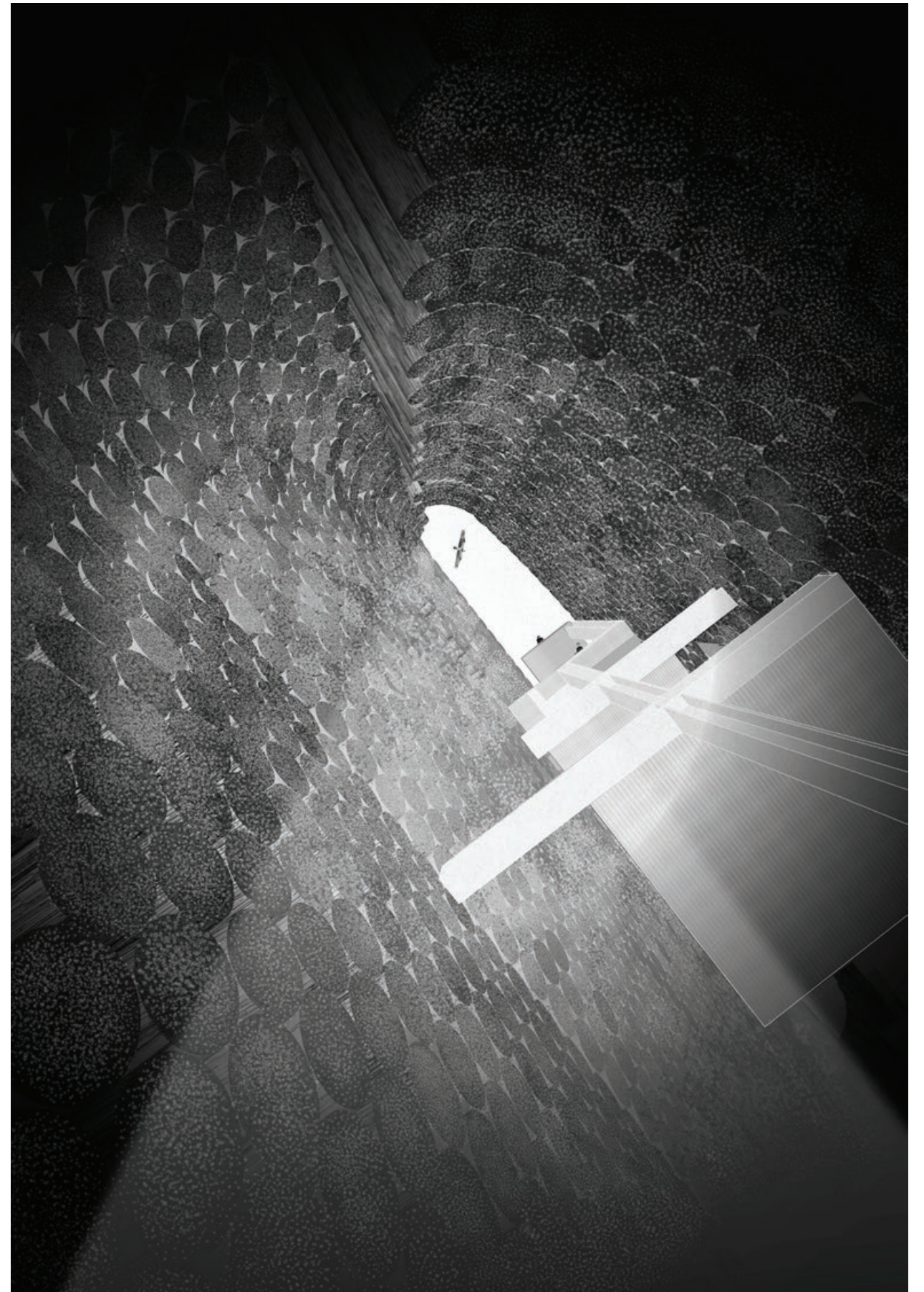
Right: Second floor plan  
 Left: Temporal Narrative Drawing







Wall section detail of human interacting with avian from an auditory lens



Interior worms eye view perspective



# TRANSIENT PERMANENCE

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All Models showcased done by author.

ADRI Fall 2021

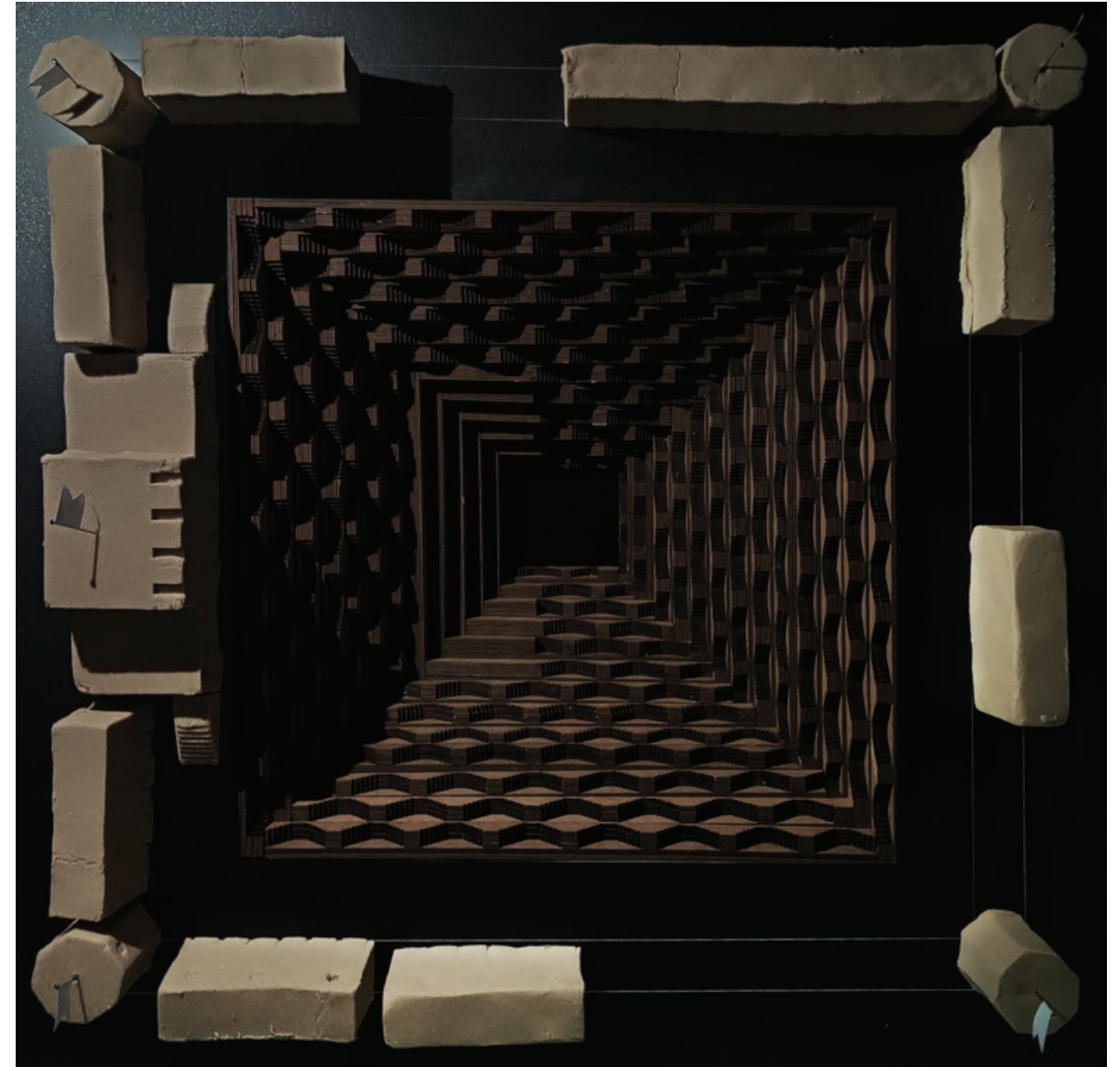
Instructor : Josh Uhl

Chand Baori is one of the few remaining step wells in India where the construction of two classical periods( Chauhan and Mughal) can be identified in a single setting. The analysis, and research preceding the model making process led to a deeper understanding of this artefact's evolving levels of ownership and privacy.

The transient quality of the sand castle coupled with the additive element of each participant constructing their own fort helps emulate the altering connotations of colonized civic structures in the Global south. This ideology became the premise of the game like interpretation of this overlooked piece of ancient architecture.

Materials:

Chipboard, Kinetic Sand, Acrylic,  
3D printed moulds







# INTERACTIVE 1:1 MODEL

In collaboration with Isaiah Graham,  
Kelly He, Laurin Mosely

Core III Spring 2022 Case Study  
Instructor : Gary Bates

As part of analyzing our precedent case study of Star Apartments, designed by Michael Maltzan Architects, we decided to create an interactive 1:1 tape model of one of the living units onto the sidewalk in front of Avery in Columbia.

The dimension of the unit nested perfectly on the typical width of the sidewalk, with an extra 4 feet of passing distance for pedestrians and carts.

This model allowed people to experience the dimensions of living, while also juxtaposing the qualities of domestic living in public and being surrounded with traffic. Most people respected the boundaries, few interacted with these familiar objects under this strange setting, and some took time to stay within the space and critique it in relation to their own living conditions.









# BLURRING BOUNDARIES

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In collaboration with Isaiah Graham

Core III Spring 2022

Instructor : Gary Bates

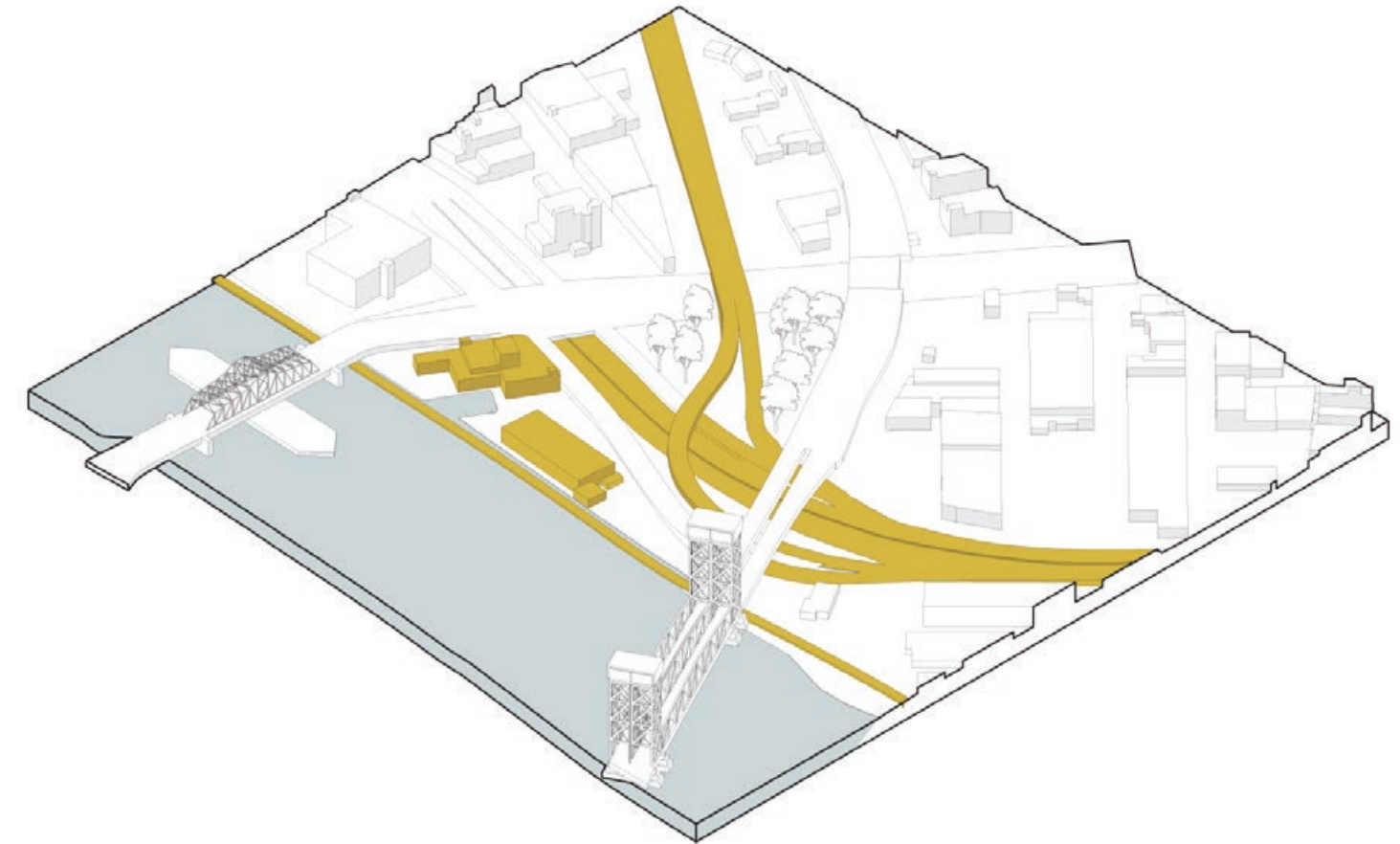
How can we blur the boundaries between the initial proposed site, and the potential sites around us?

How can we blur the boundaries and increase connectivity between land and water?

How can we blur the boundaries and coexist within or outside invisible and visible boundaries set between humans and with other sentient beings?

How can inter-generational living become an opportunity to blur the boundaries revolving notions of public and private space as well as related and found families?

With this line of questioning, our design intervention works toward restoring the Harlem River edge, re-circuiting access to the waterfront; and reinvigorating the community through the historical and recreational activities that once populated the water edge as part of living.







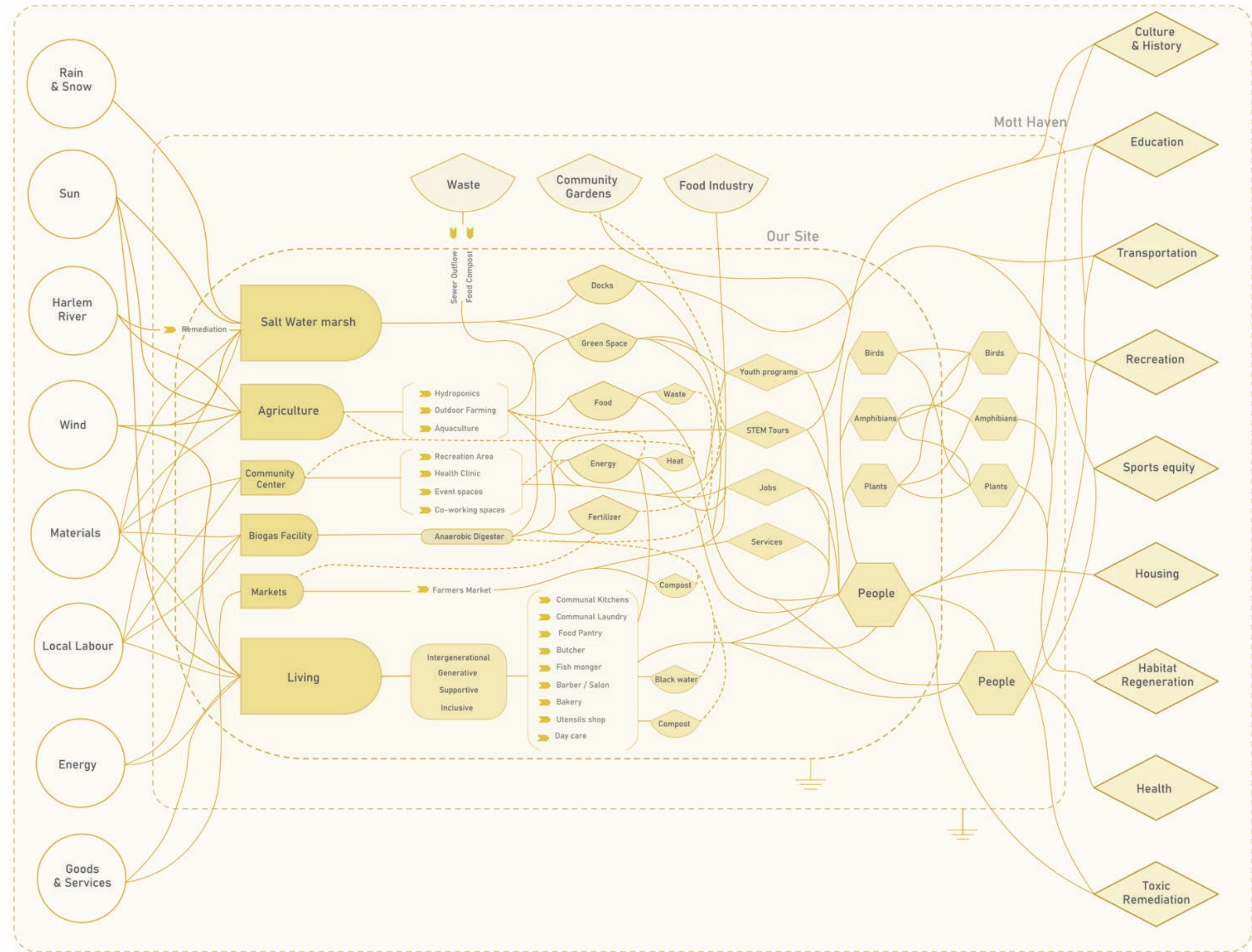


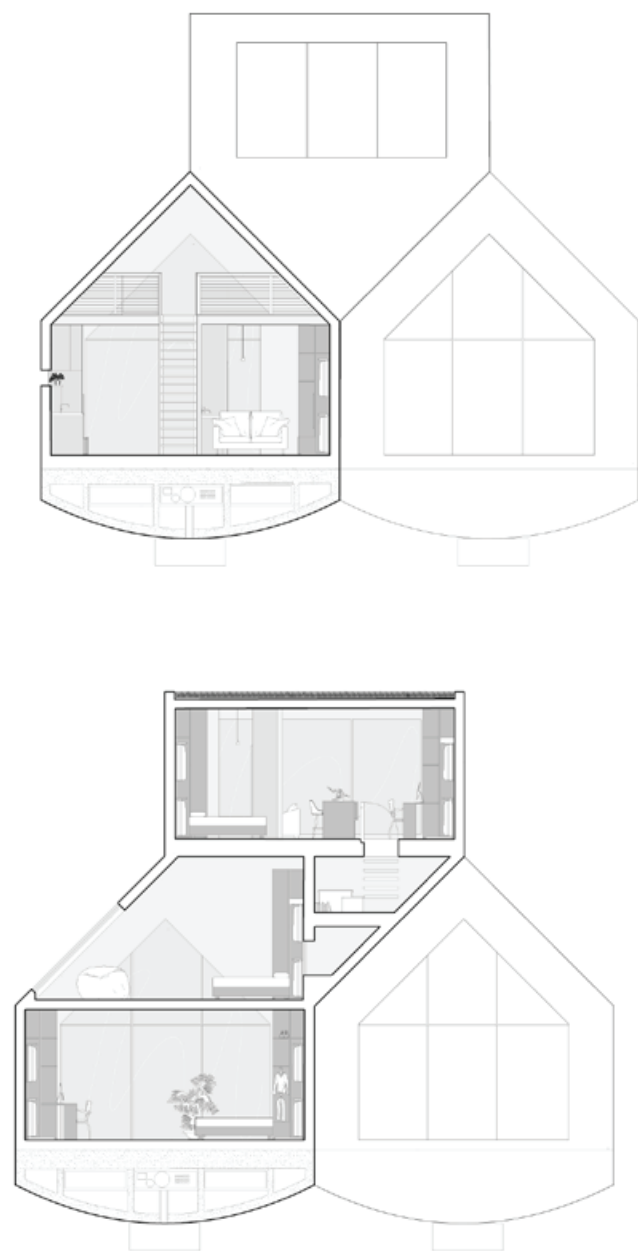
*Housing Project*

*Proposed Park*

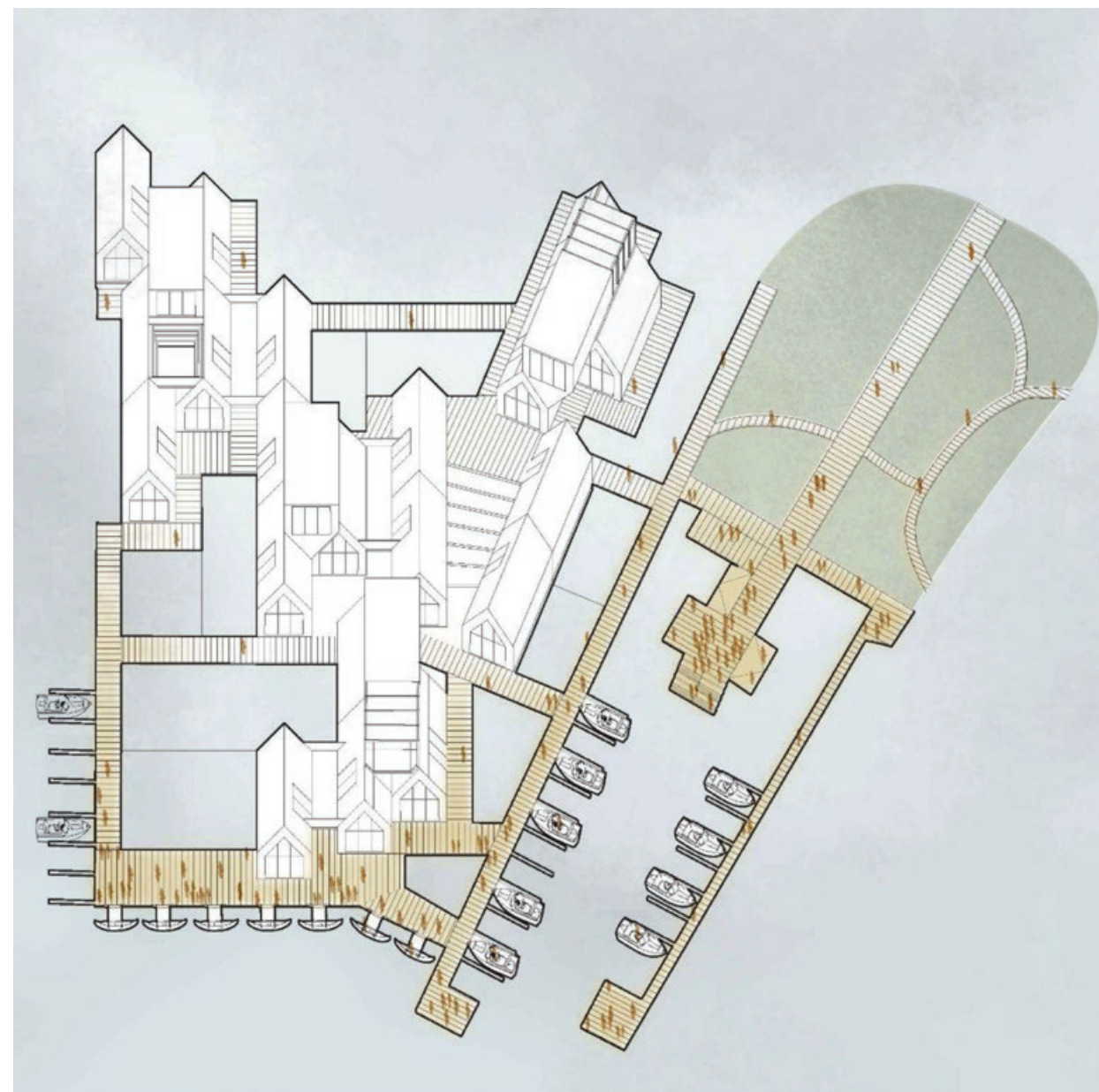


*Major Deegan Expressway*

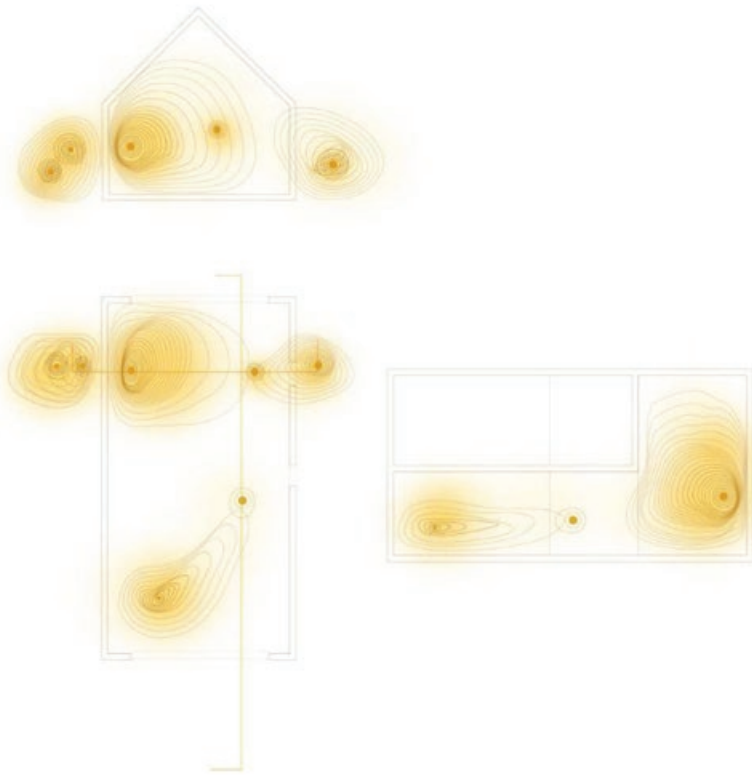




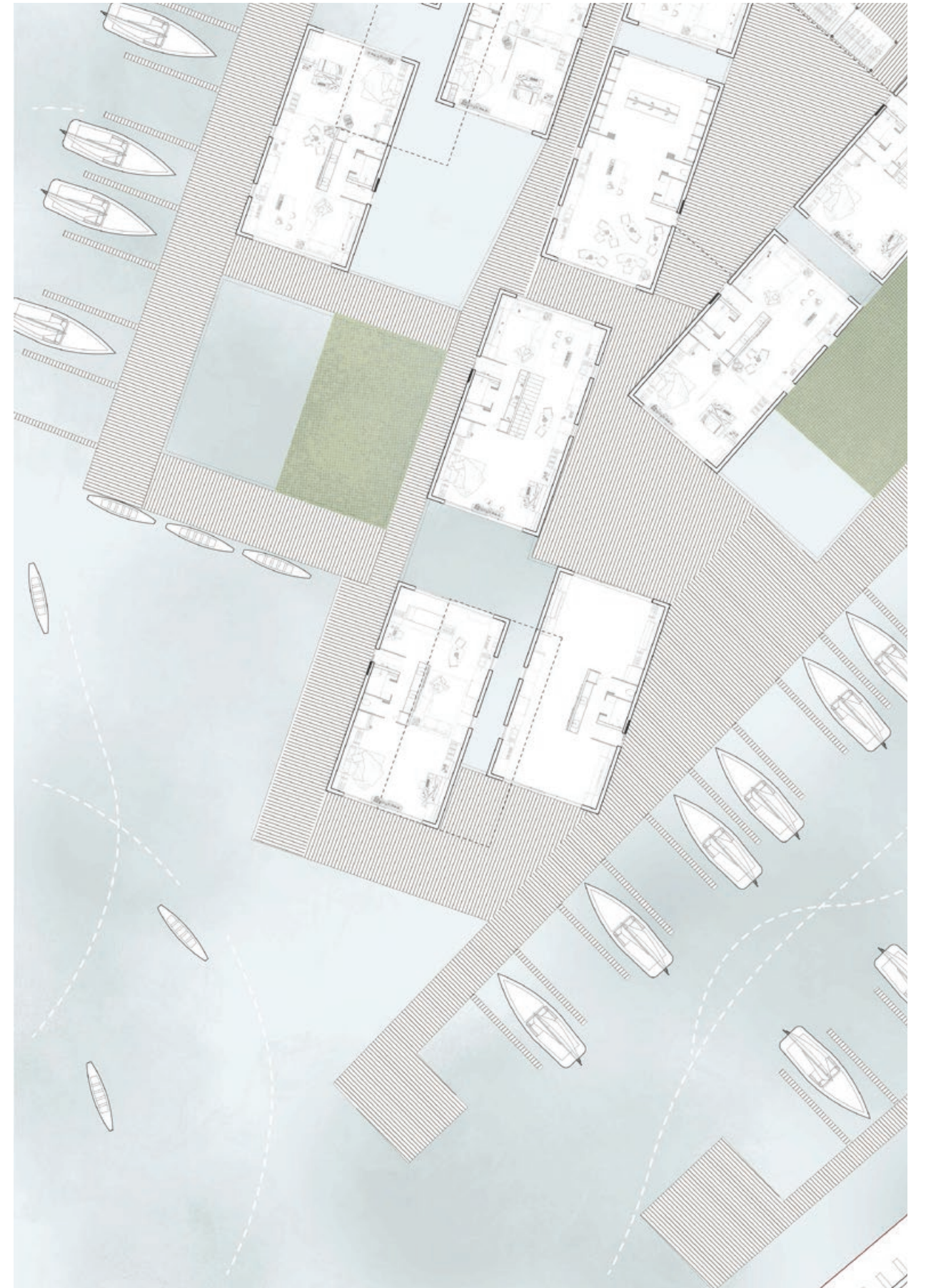
Transverse Section of Housing

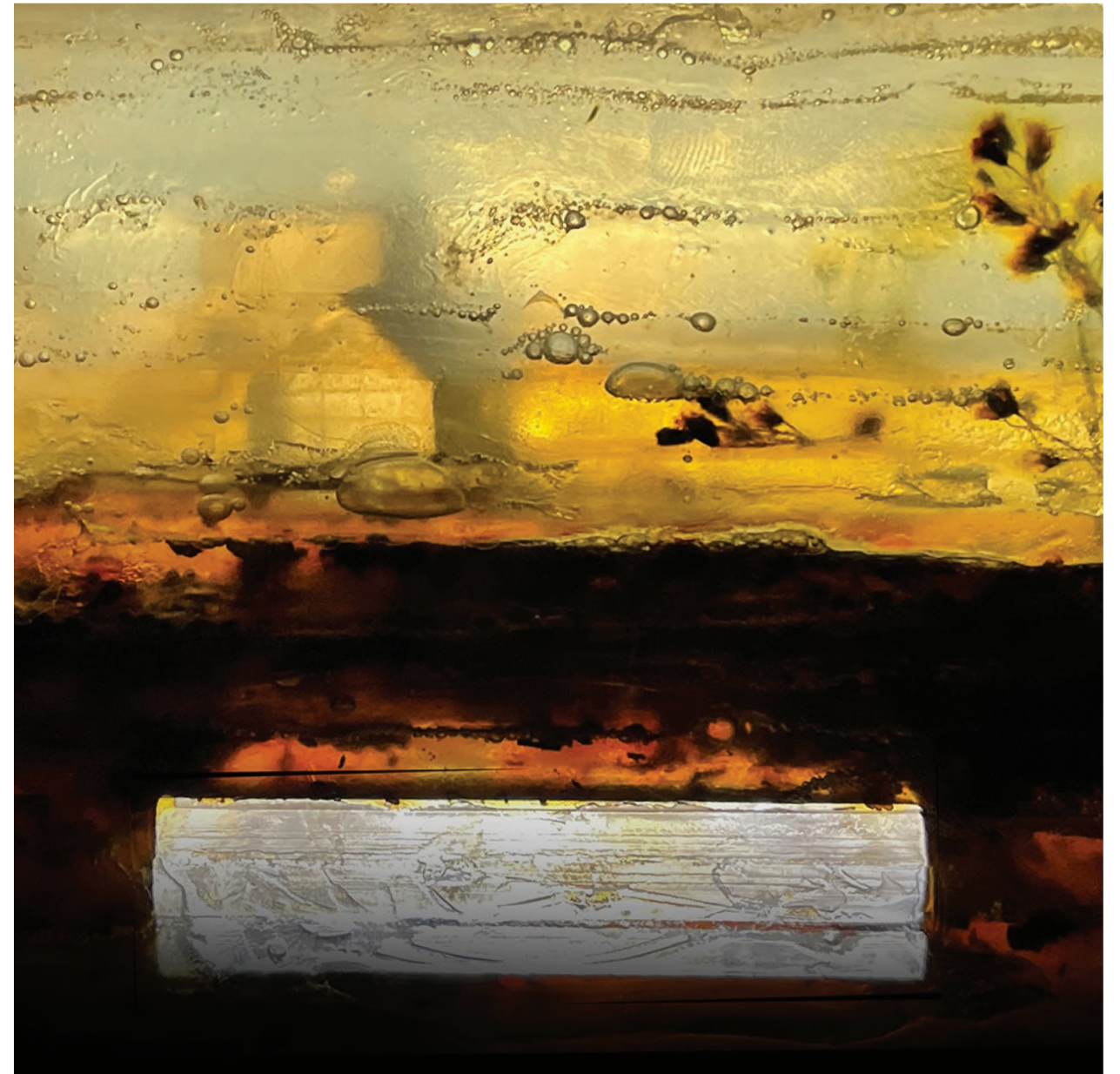
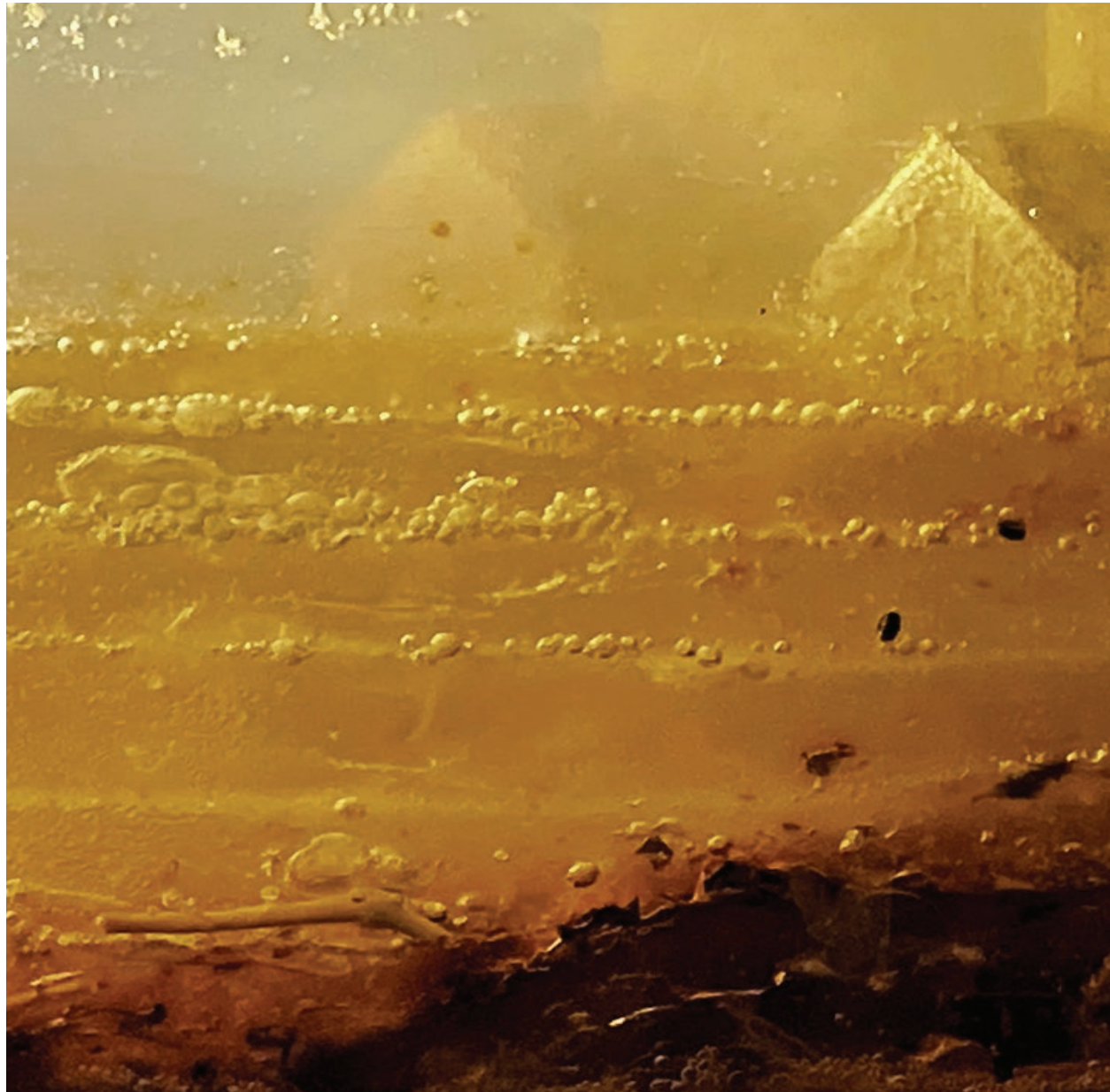


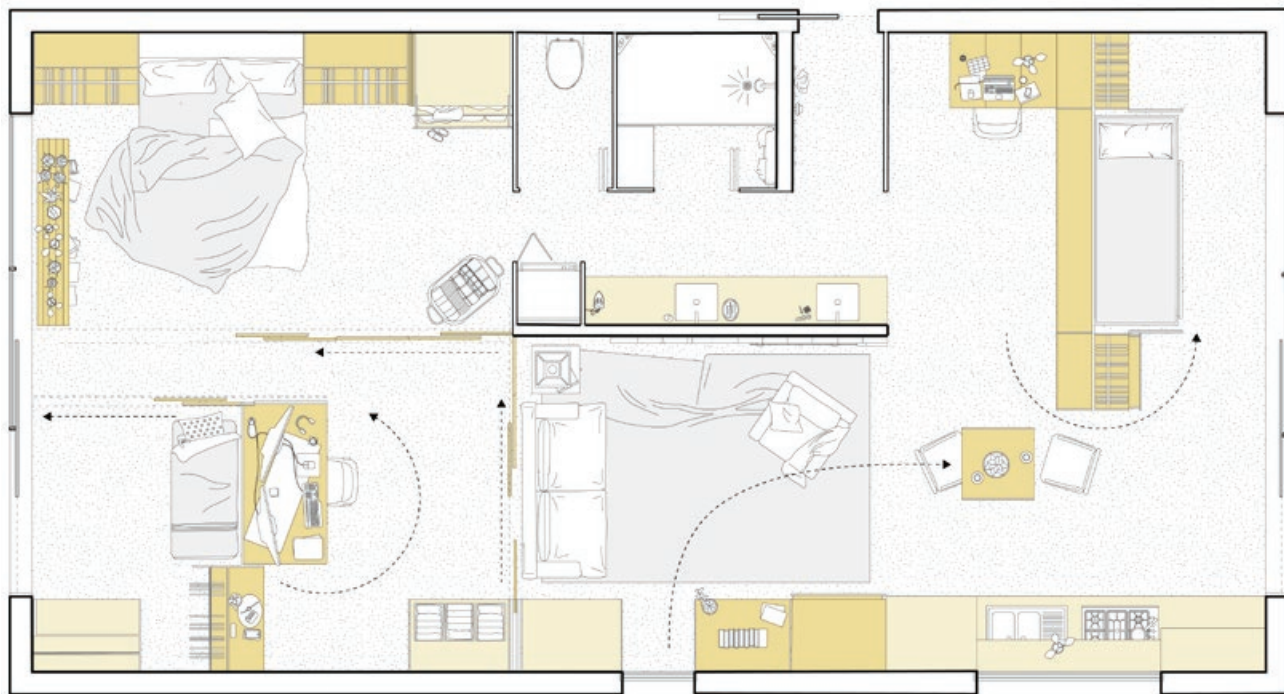
Plan Oblique of a section of the housing



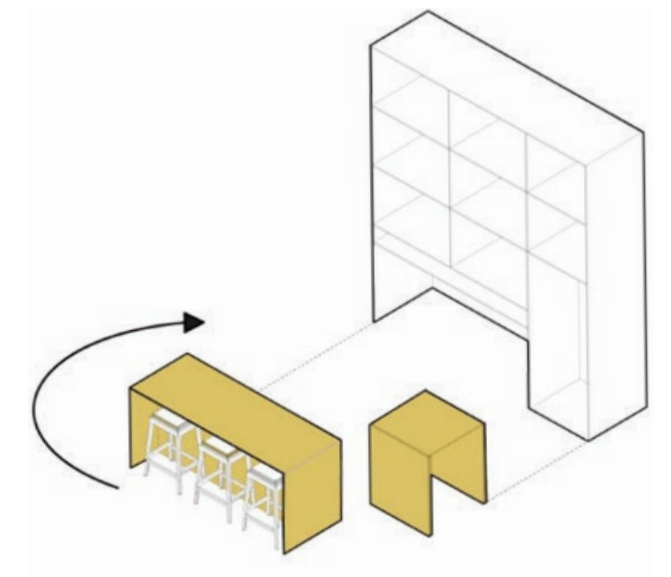
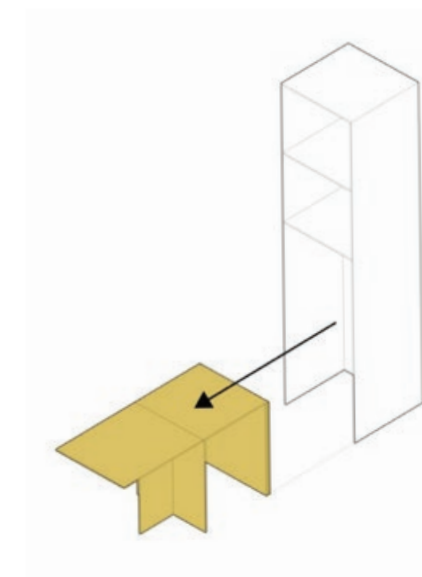
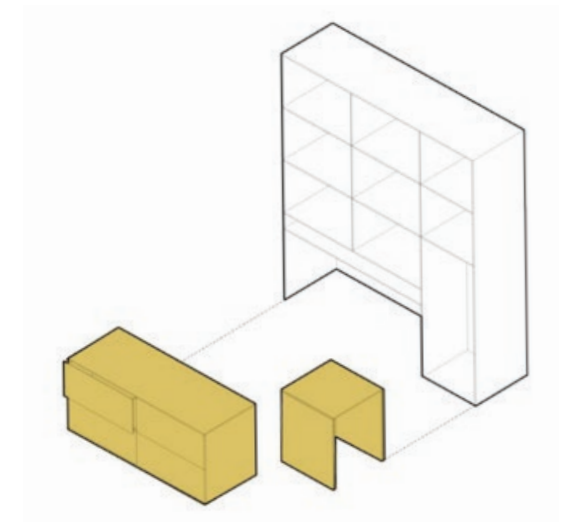
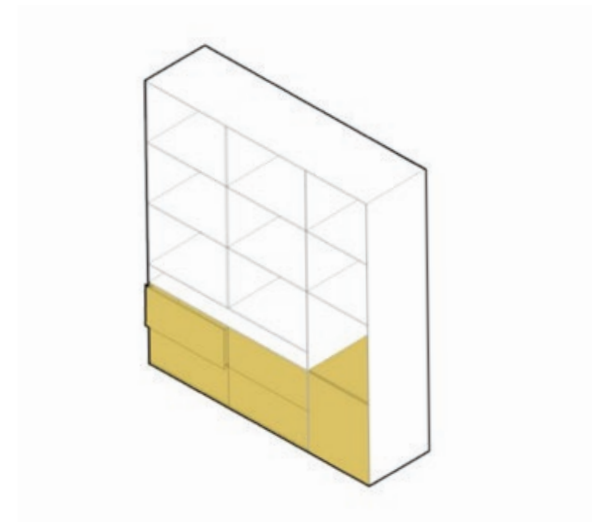
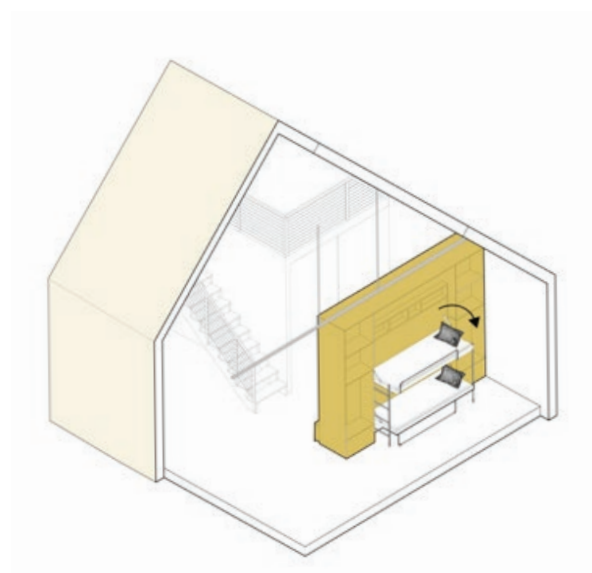
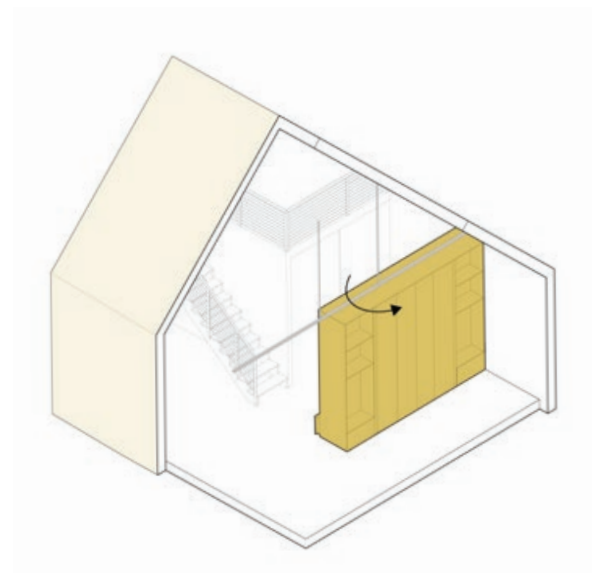
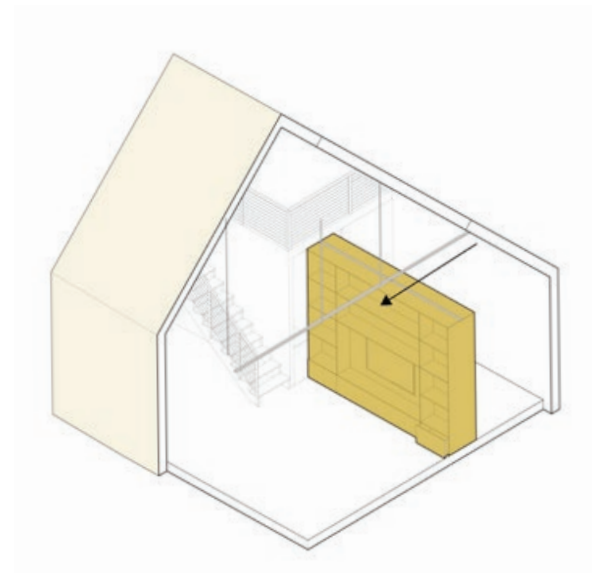
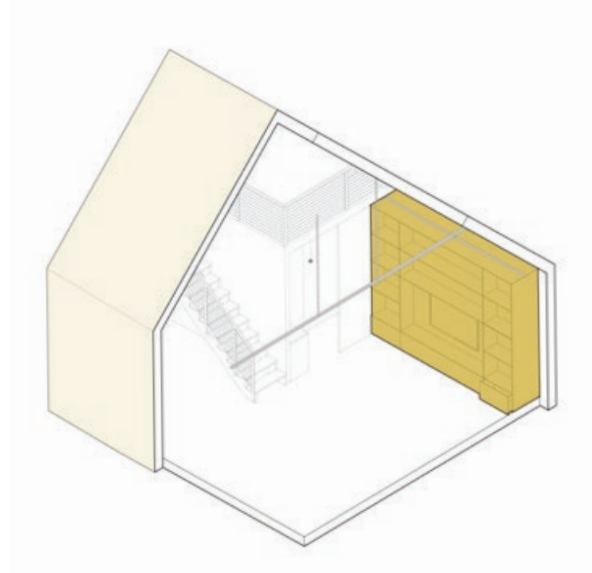
Top: Soap Models that investigate Daylighting  
Bottom: Sound as a tool for negotiation













# CHARGED MEMBRANE

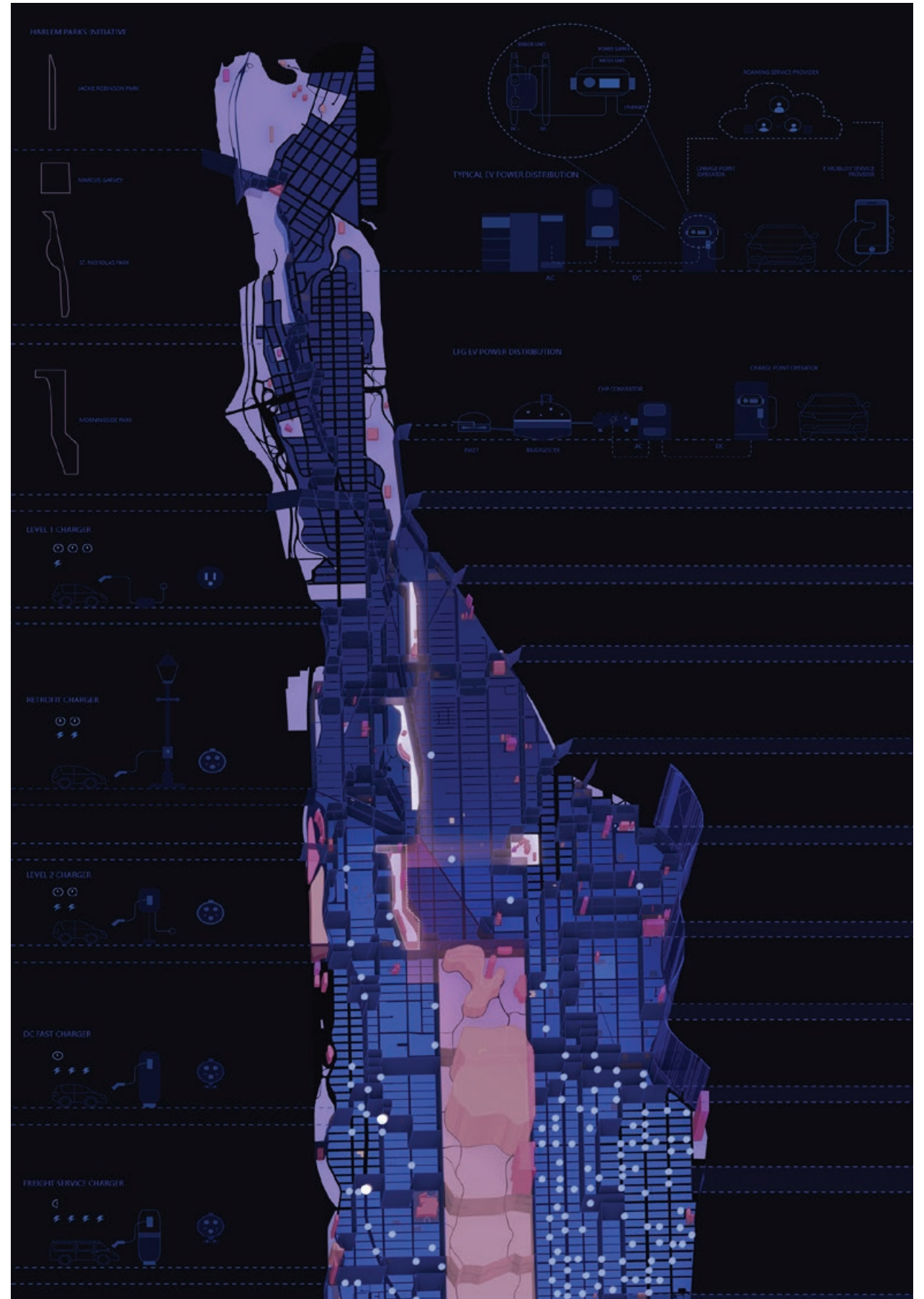
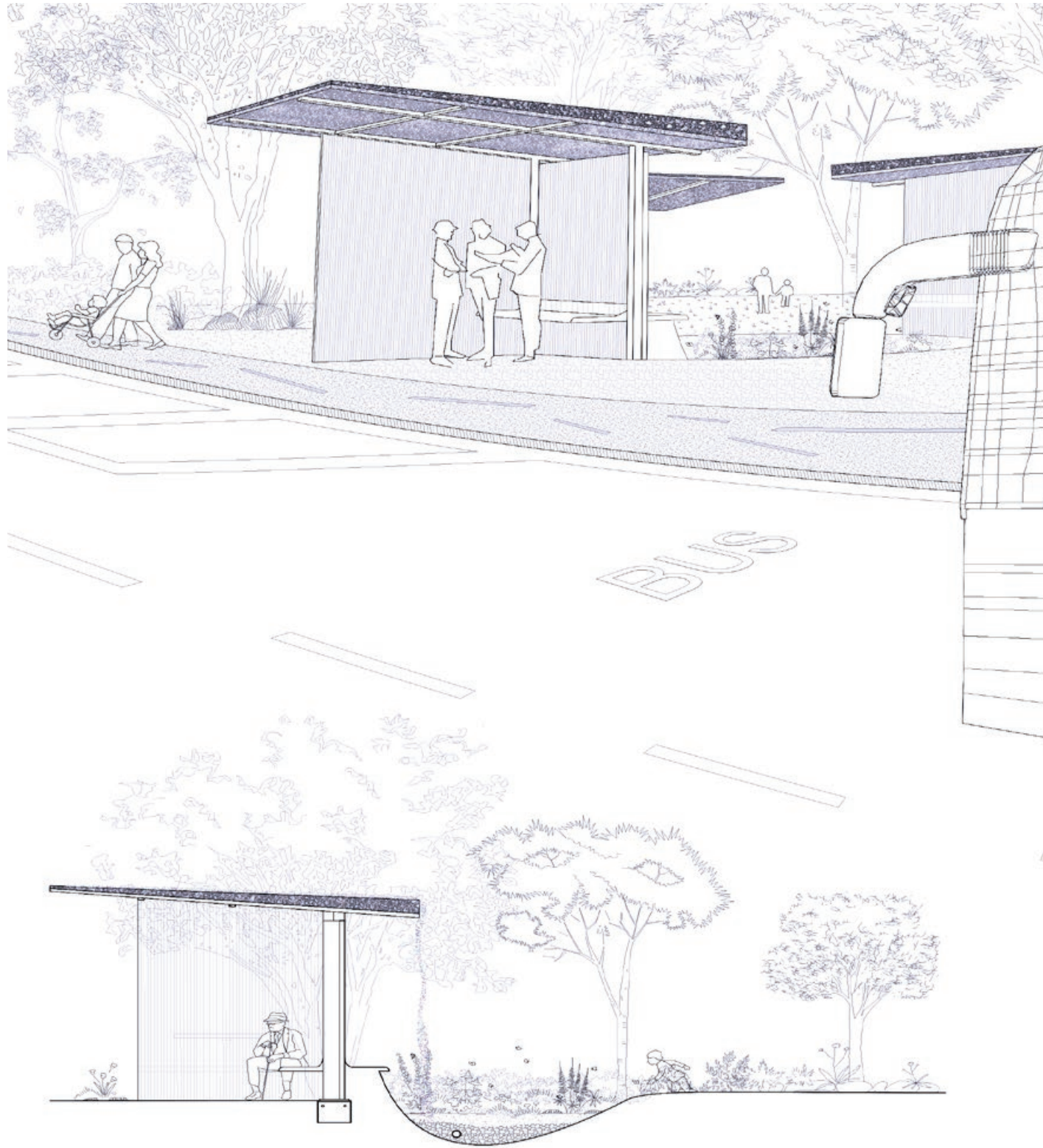
.....  
All drawings showcased done by author.

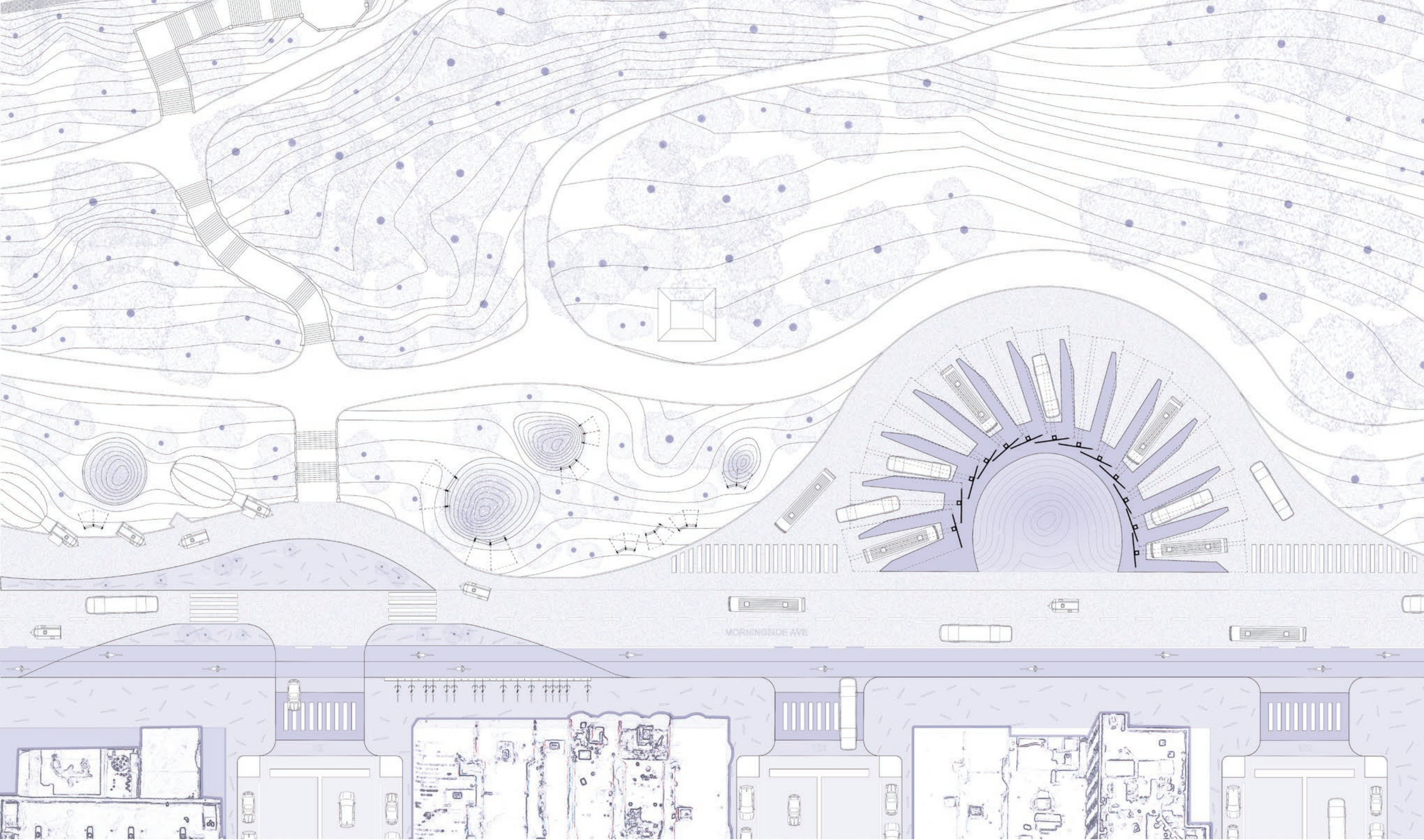
Core I Studio Fall 2021  
Instructor : Lindy Roy

The proposal aims to replace the existing fenced iron barrier around Morningside Park and reintegrate the edge with Harlem by creating a new charged membrane utilizing a series of EV stations. The canopy structures that are dispersed throughout the edge are designed to not only engage with the vehicle but also from an avian and human standpoint.

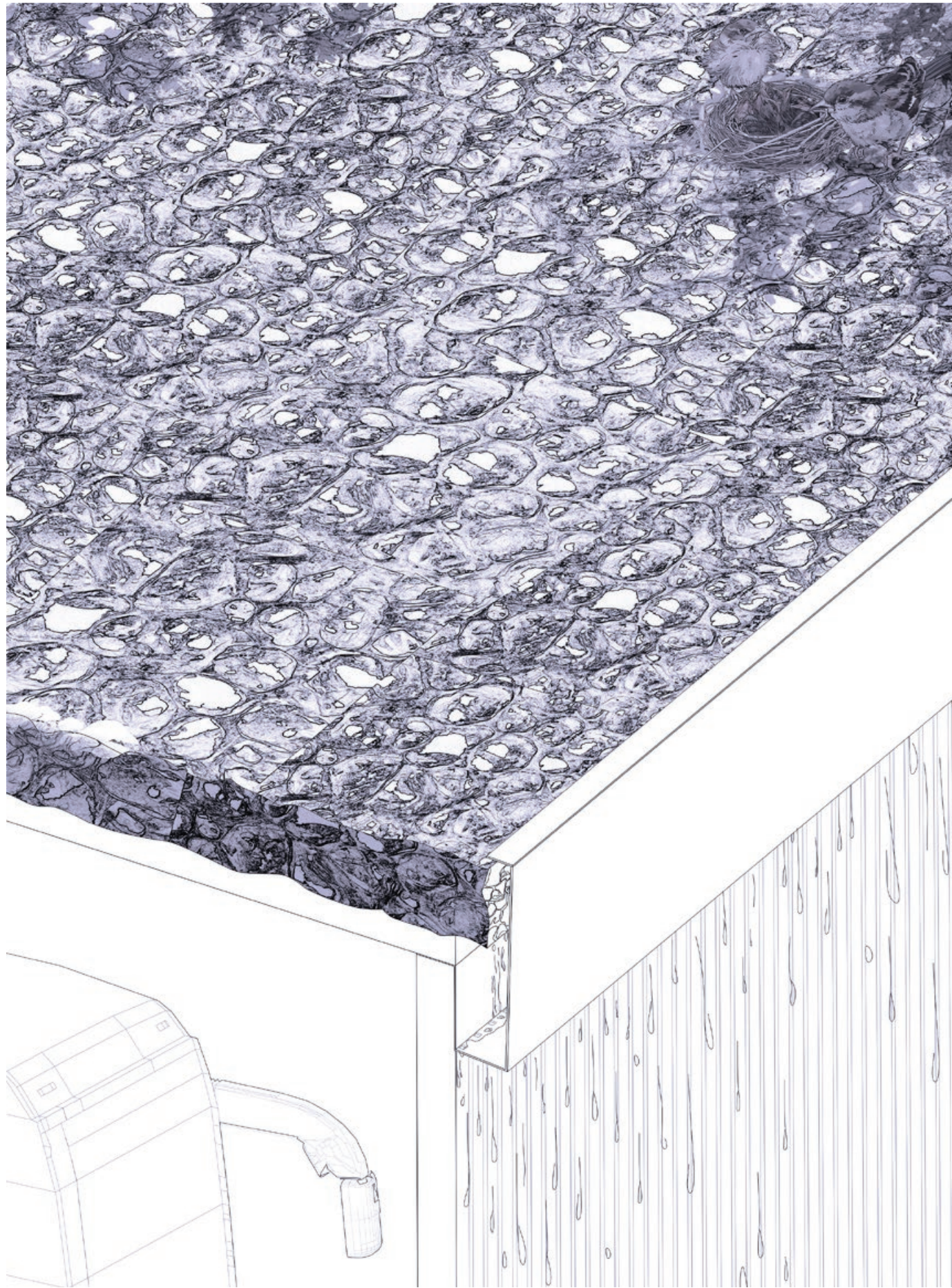
This new membrane sheds light on the reciprocity and symbiosis that exists across different scales: from the scale of sentient beings to the vehicle, from what is deemed as waste and then becomes a source of power, from the infrastructure that exists within the natural ecosystem of the park to the infrastructure of the city as a whole.







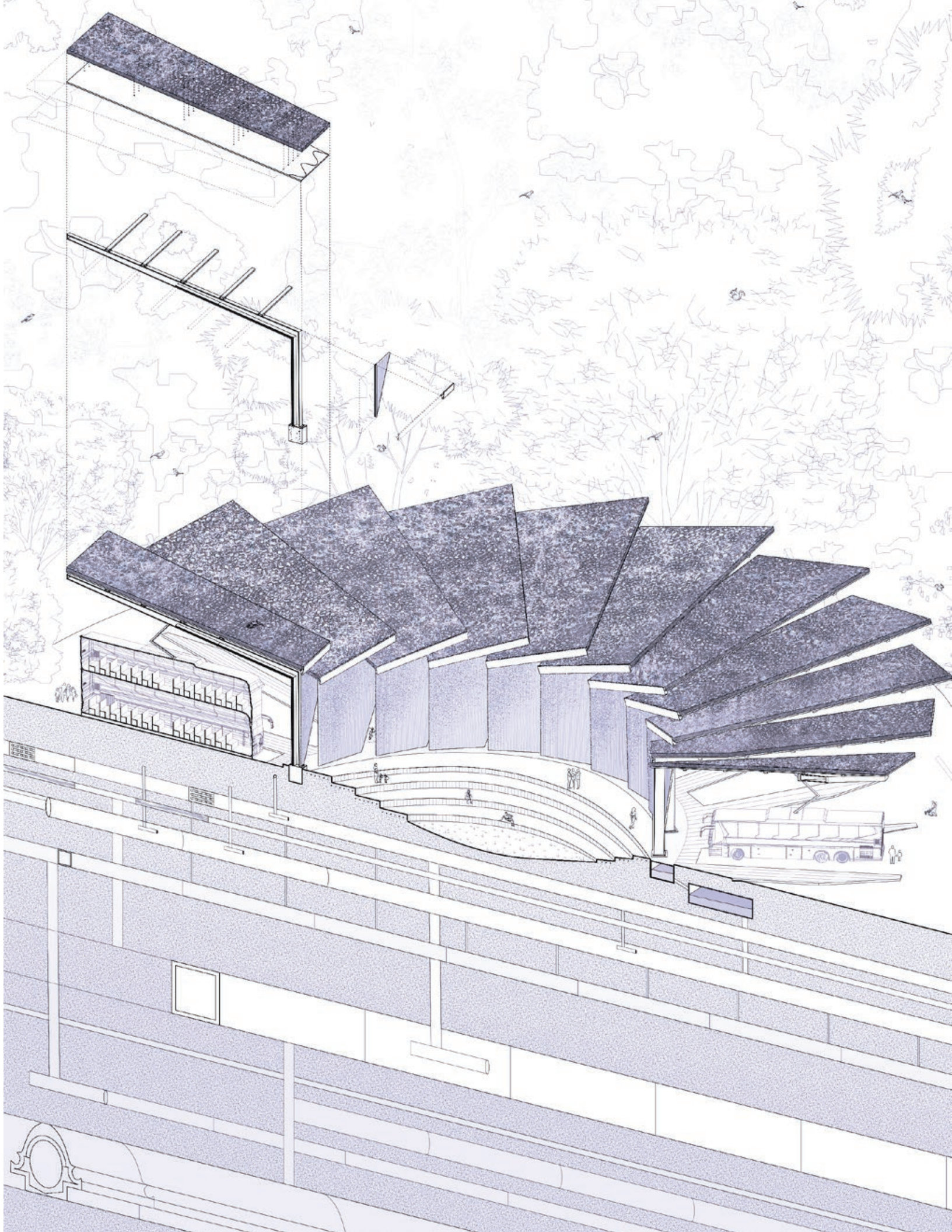
MORNINGSIDE AVE



Roof Canopy Interactions



1:1 Model Roof Canopy Detail



Right: Multiscalar Interaction in Section  
Left: 1:1 Model Roof Canopy Detail





# EXHALE

All drawings showcased done by author in collaboration with Interior Inflatable Team: Harshvardhan Jhaveri, Janhavi Hinge, Aashka Ajmera, Aishwarya Garg, Inbal Himelbau

**Outside In Spring 2024**

Instructors : Laurie Hawkinson ,

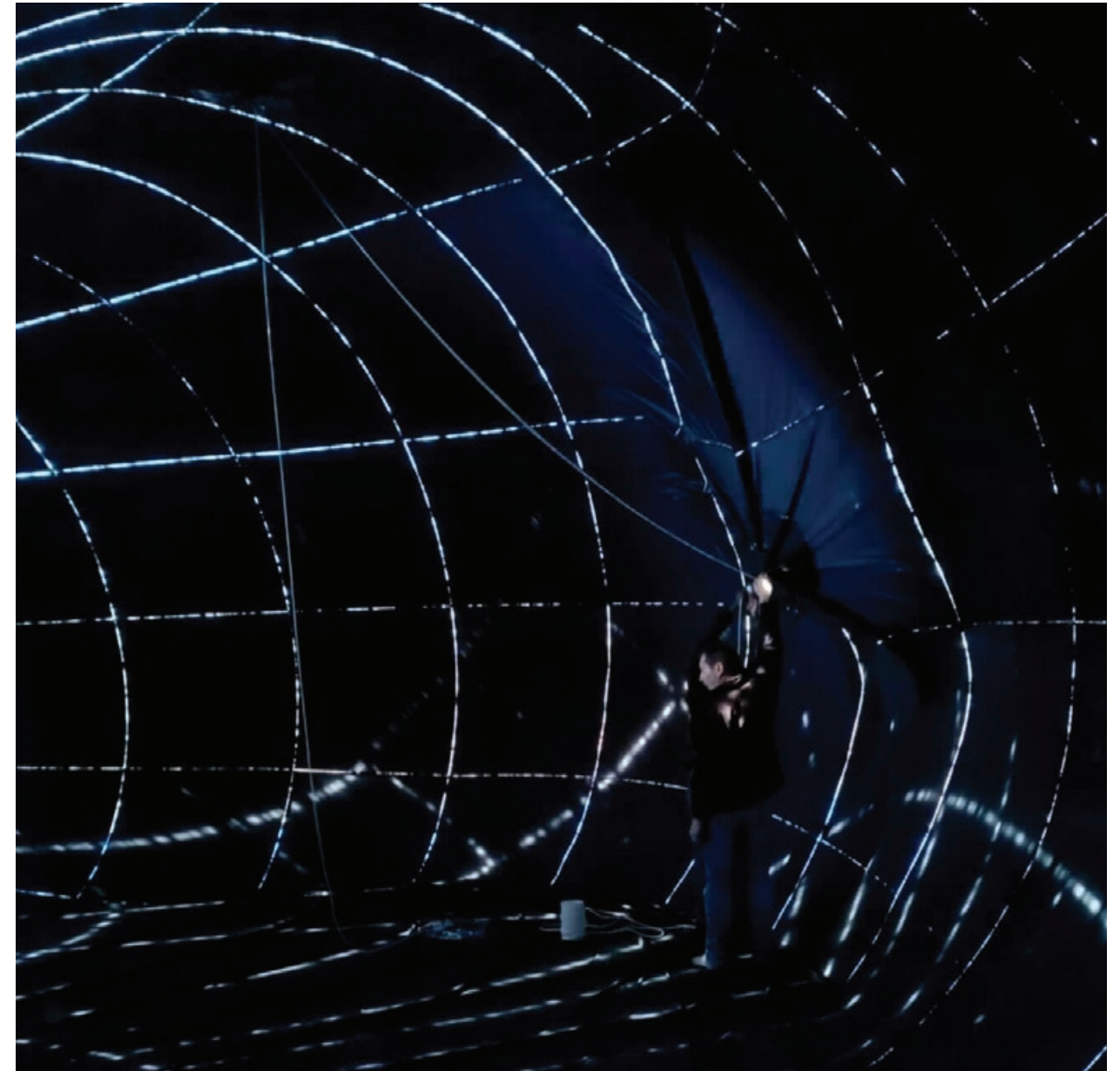
Galia Solomonoff

Teaching Assistant: Haseeb Amjad

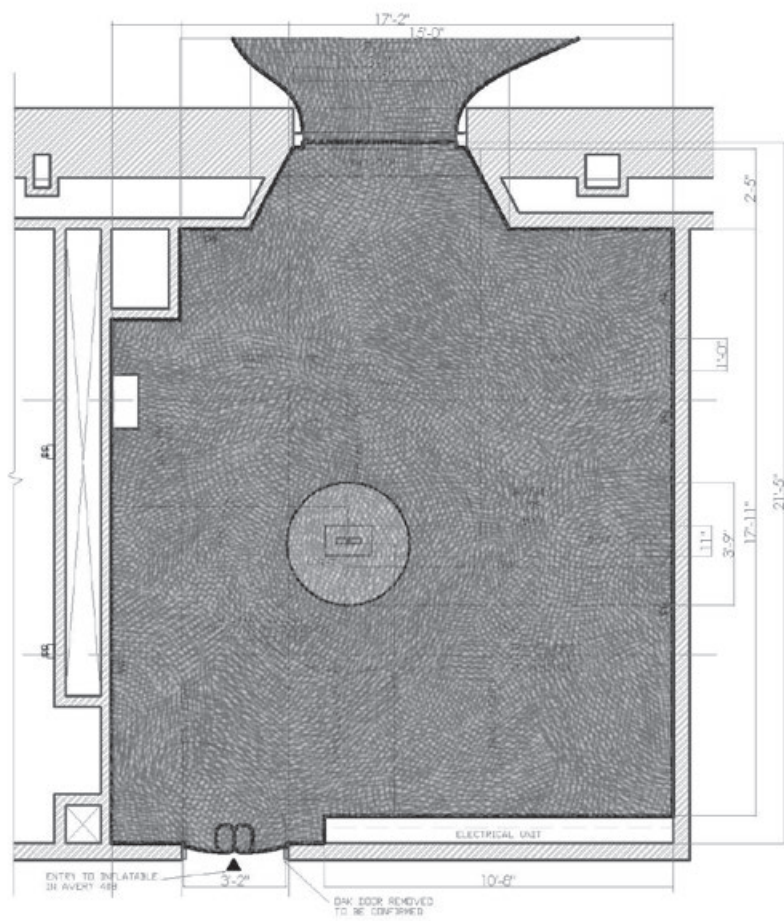
Exhale is a 2-part installation that plays with the viewer's perception of geometry and light, and invites a new element of activation and playfulness to Avery Plaza.

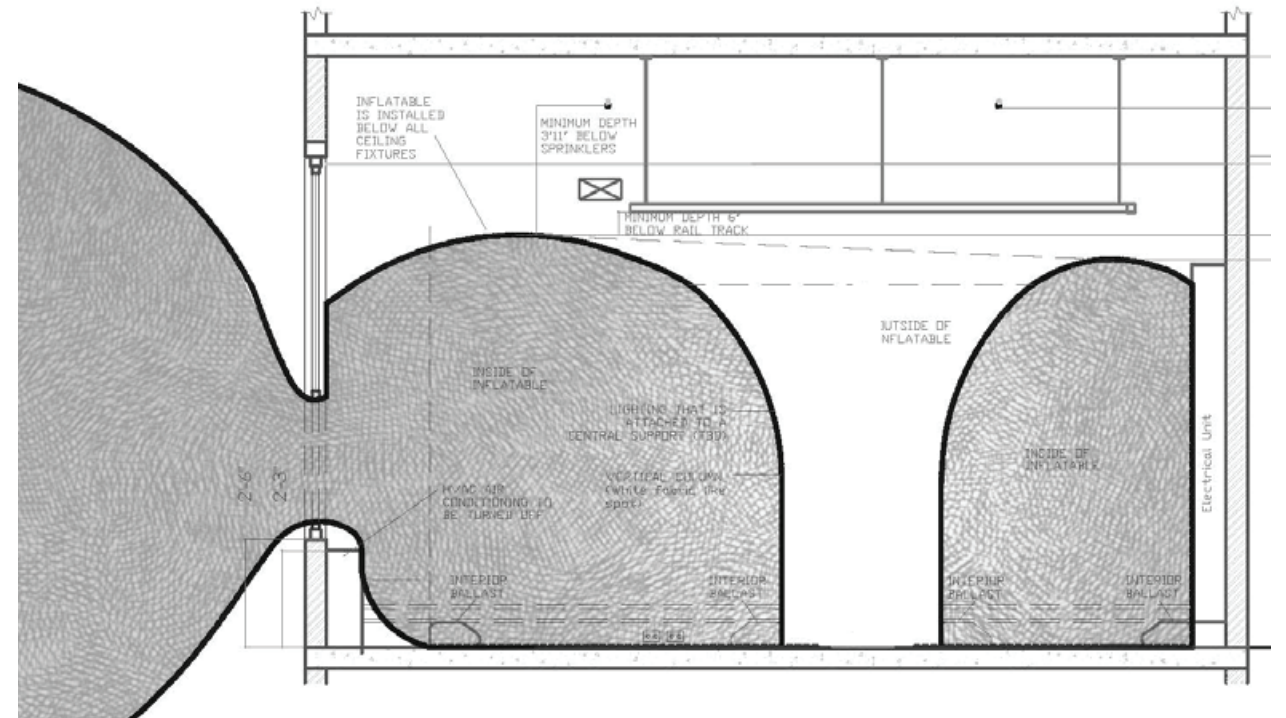
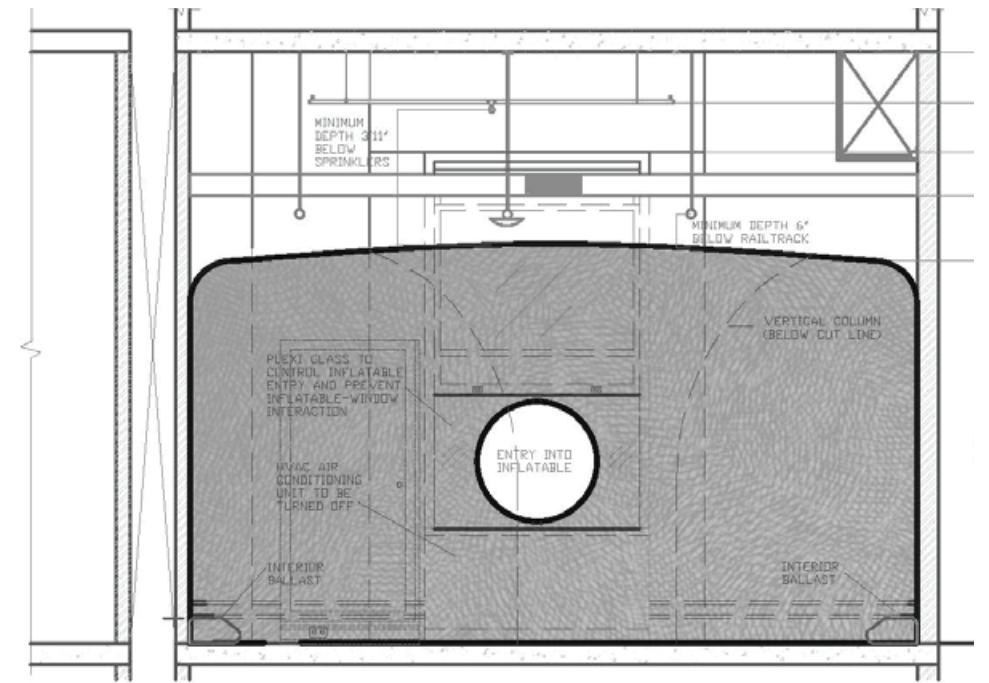
The exterior portion is a 20.39 m long x 19.51 m wide x 7.84 m high inflatable donut powered by 4 blowers, suspended by 16 cables anchored to 4 steel beams in Avery and Fayerweather Halls, and tied to 9 points on the ground in Avery Plaza. A net rests atop the inflatable donut, descending into the center with 8 tube-like appendages that serve as moveable, adjustable seating. The interior portion is a 6.36 m long x 5.13 m wide x 2.55 m highly interactive installation that extends from the exterior inflatable into Avery Hall, occupying the located inside of classroom Avery 408. The materiality is inverted from the metallic exterior to one of darkness and discovery.

This pavilion stands as a testament to a deeply collaborative effort, showcasing our hands-on involvement in designing, constructing, and fabricating a temporary structure within a condensed time frame.



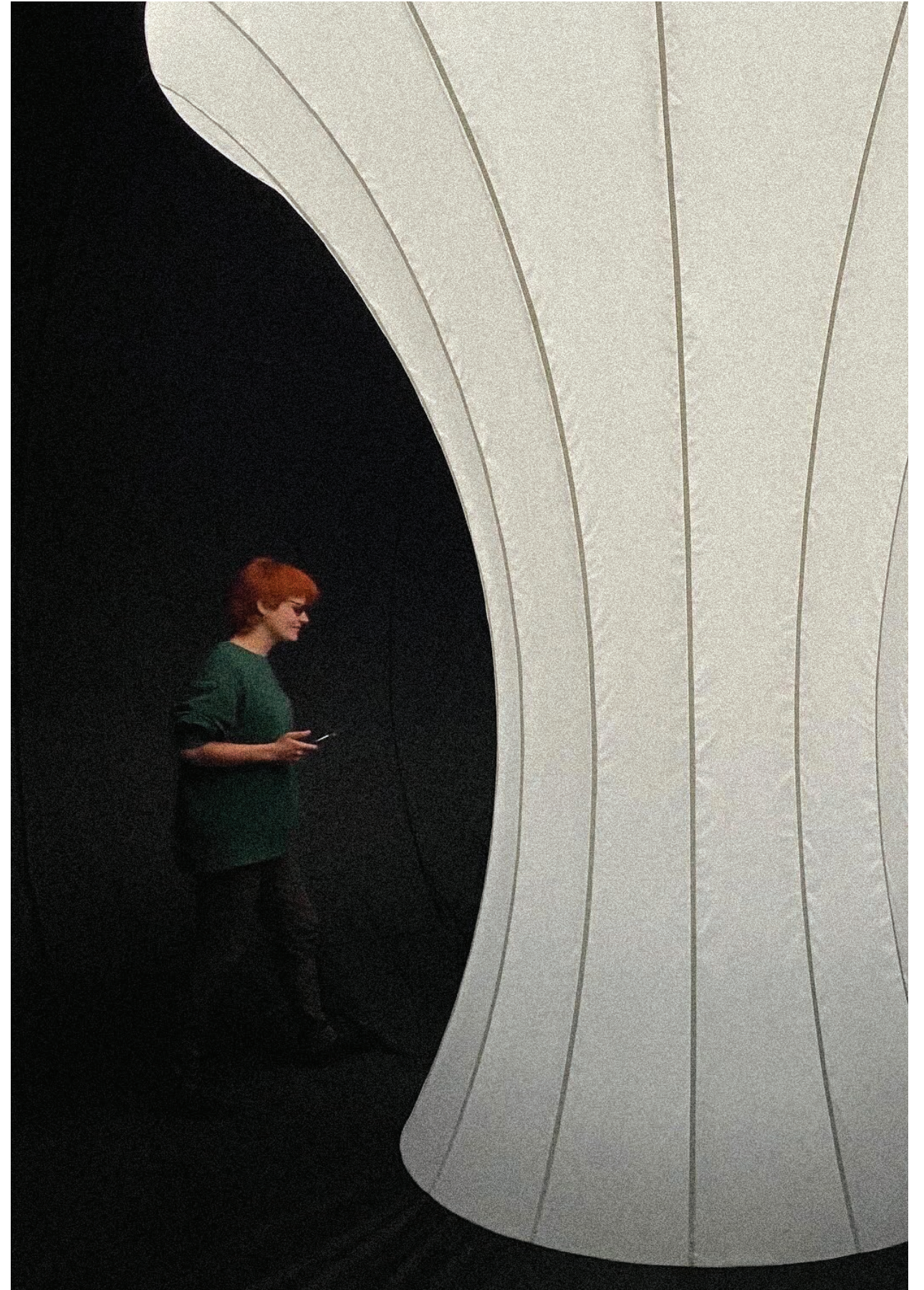









Test inflation of exterior by Area Cubica



Test inflation of interior by Area Cubica



*Mariam Jacob*