

PORTFOLIO

GSAPP

WEI-CHUN BRIAN CHOU

**MS ADVANCED ARCHITECTURAL DESIGN
2021-2022**

CONTENT

1 SUMMER 2021

HAWAI'I NON-LINEAR // CRITIC: DOMINIC LEONG

2 FALL 2021

PLEIN AIR // CRITIC: NAHYUN HWANG

3 SPRING 2022

LA WATER // CRITIC: LAURIE HAWKINSON

1

SUMMER 2021 HAWAI‘I NON-LINEAR

CANOE, CRATER, CEREMONY: ARCHITECTURES FOR CONSTANT OBSERVATION

CRITICS: DOMINIC LEONG + SEAN CONNELLY

Teammate: Zida Liu (For Part 1)

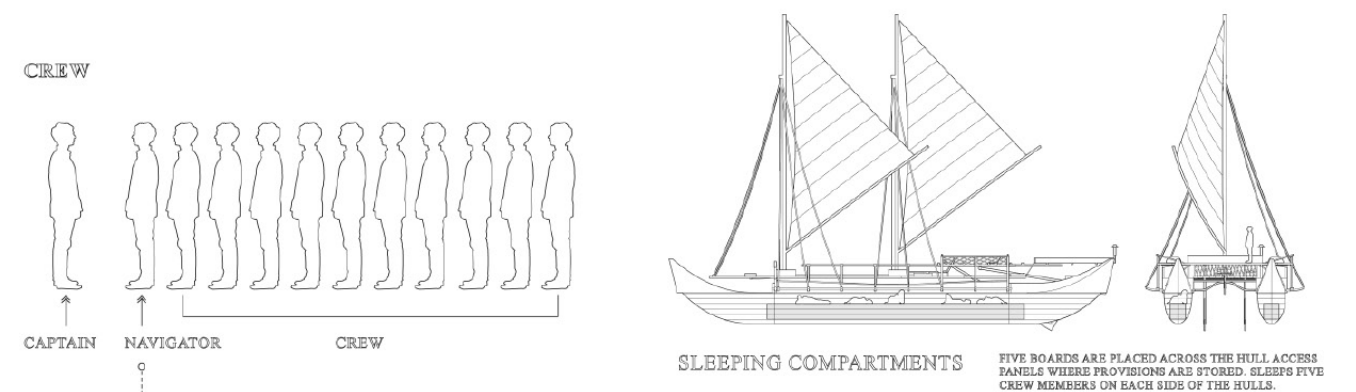
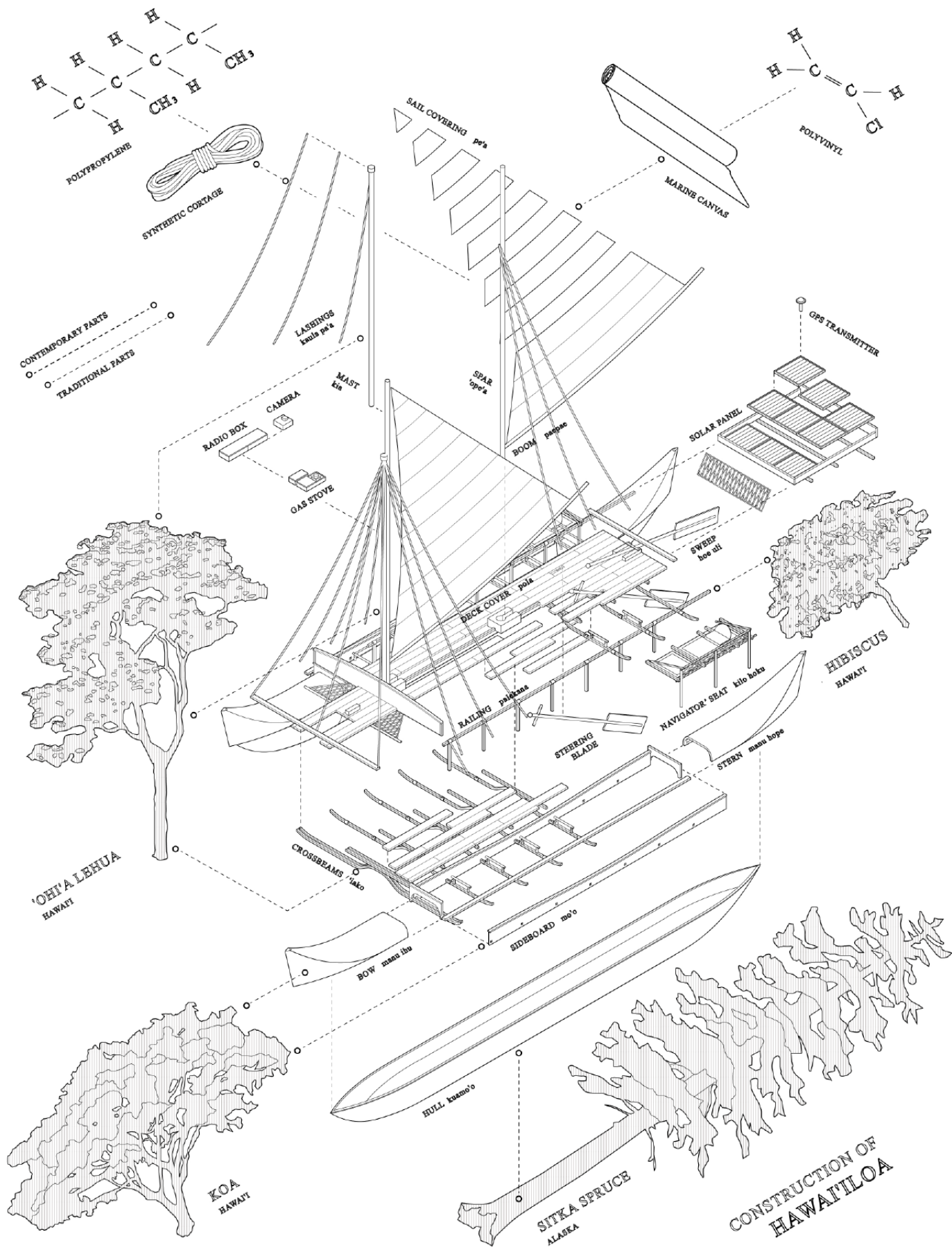
Summary

This studio is part of an ongoing social practice in architecture project conducted in collaboration with Honolulu-based Pacific Islander American artist-architect and activist Sean Connelly , to radically re-imagine the future for architecture in Hawai‘i, the most remote island in the world on the frontier of the COVID and climate crisis. The studio will explore a trans-scalar and trans-temporal approach to understand an indigenous concept of ground (‘ā ina) as the basis to interrupt existing US urbanism through a network of pedagogical sites (hālau) for indigenous knowledge (‘ike) at an architectural scale. The organizing conceptual framework of the studio aims to empower indigenous Hawaiian knowledge and the local ecologies of guardianship (ahupua‘a) in a way that Mary Pukui described as “ utilizing the resources of sustenance to a maximum .” Following an intensive agenda focused on Hawaiian culture, social justice issues, and indigenous knowledge, the studio will design a “living memorial” operating among a constellation of pedagogical sites, or “academies for ahupua‘a recovery”

Critical topics include:

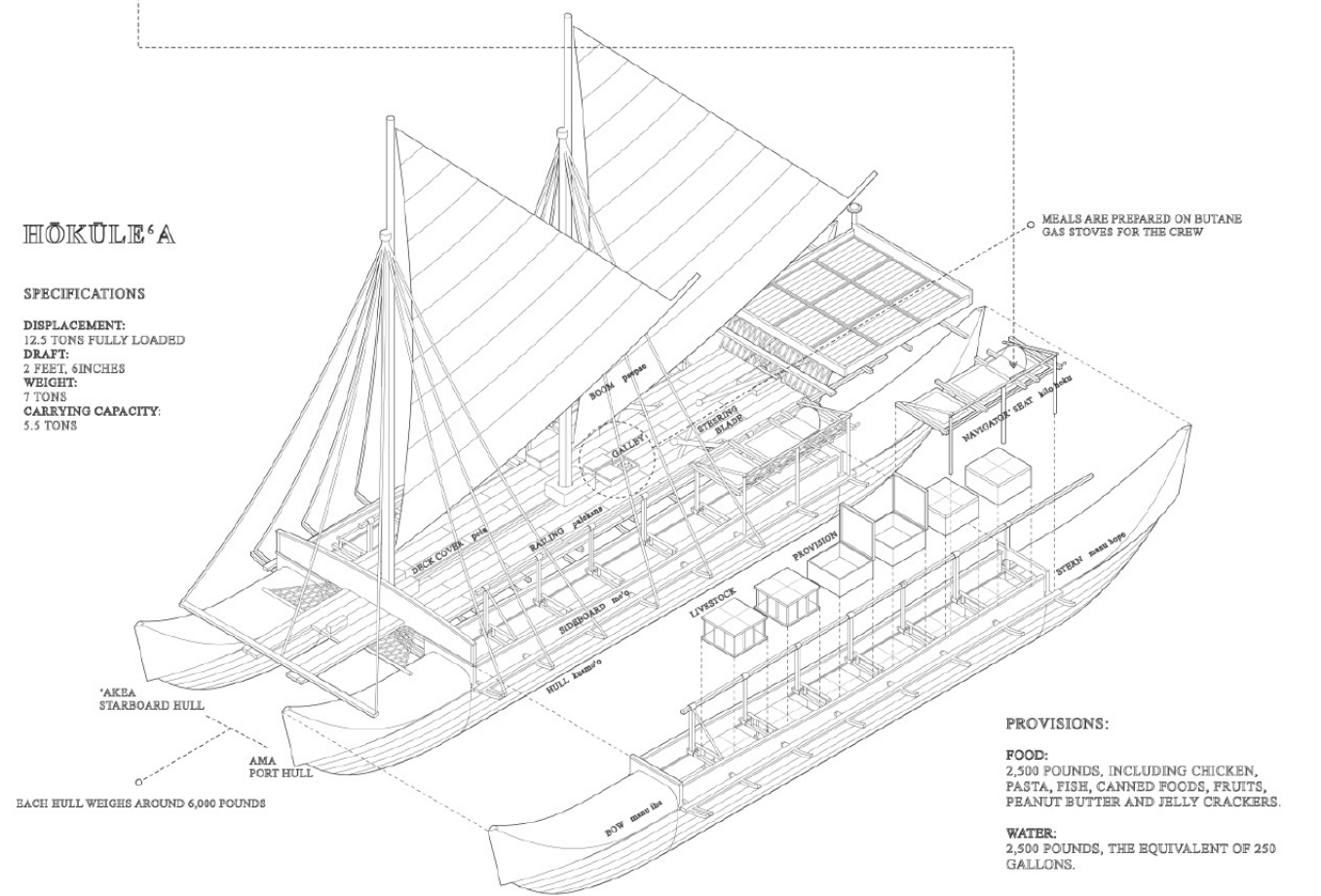
- Interrupting US urbanism through the recovery of indigenous Hawaiian knowledges
- Generative symbiosis with more-than human actors
- Trans-scalarity and trans-temporality
- Social and environmental justice

From Syllabus

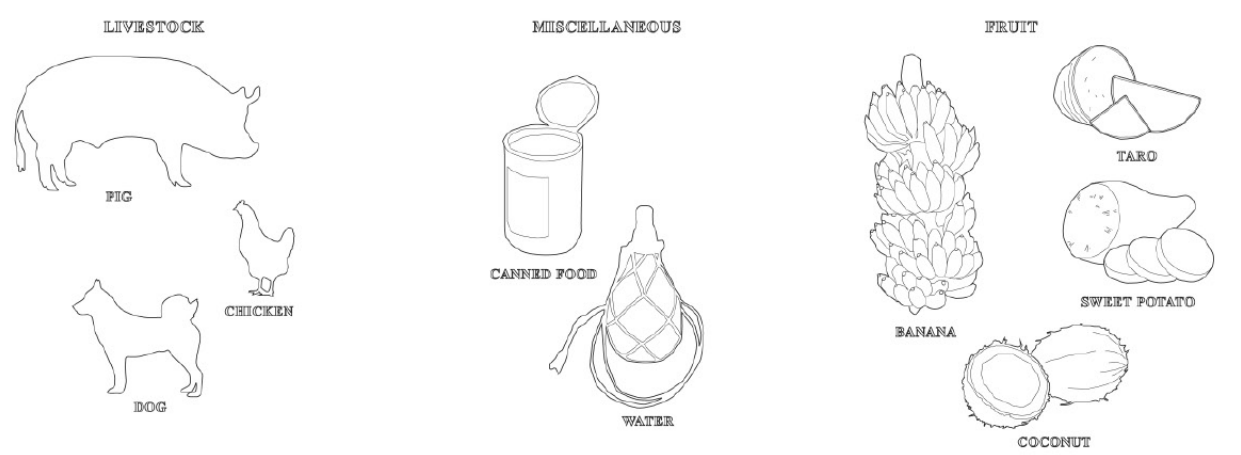


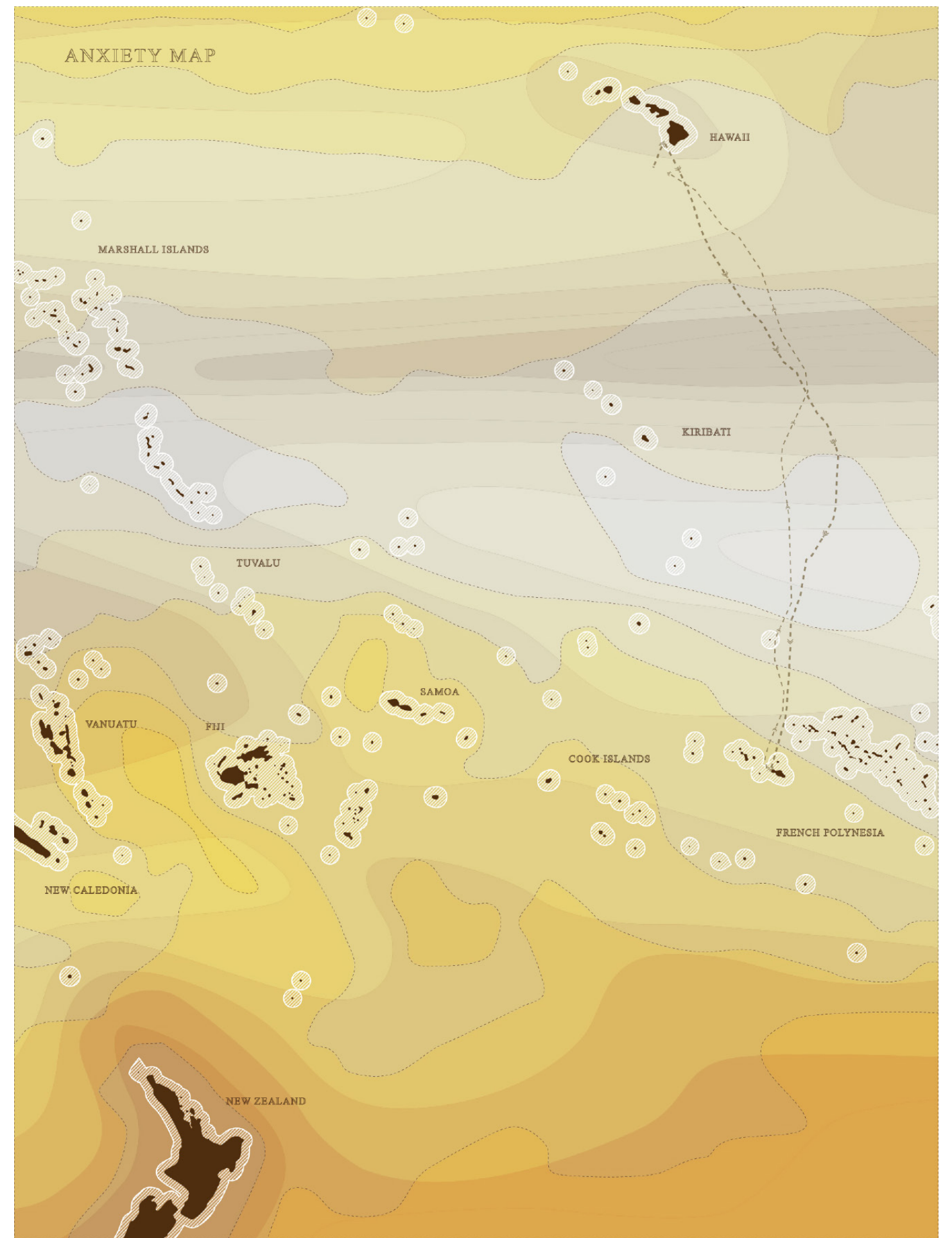
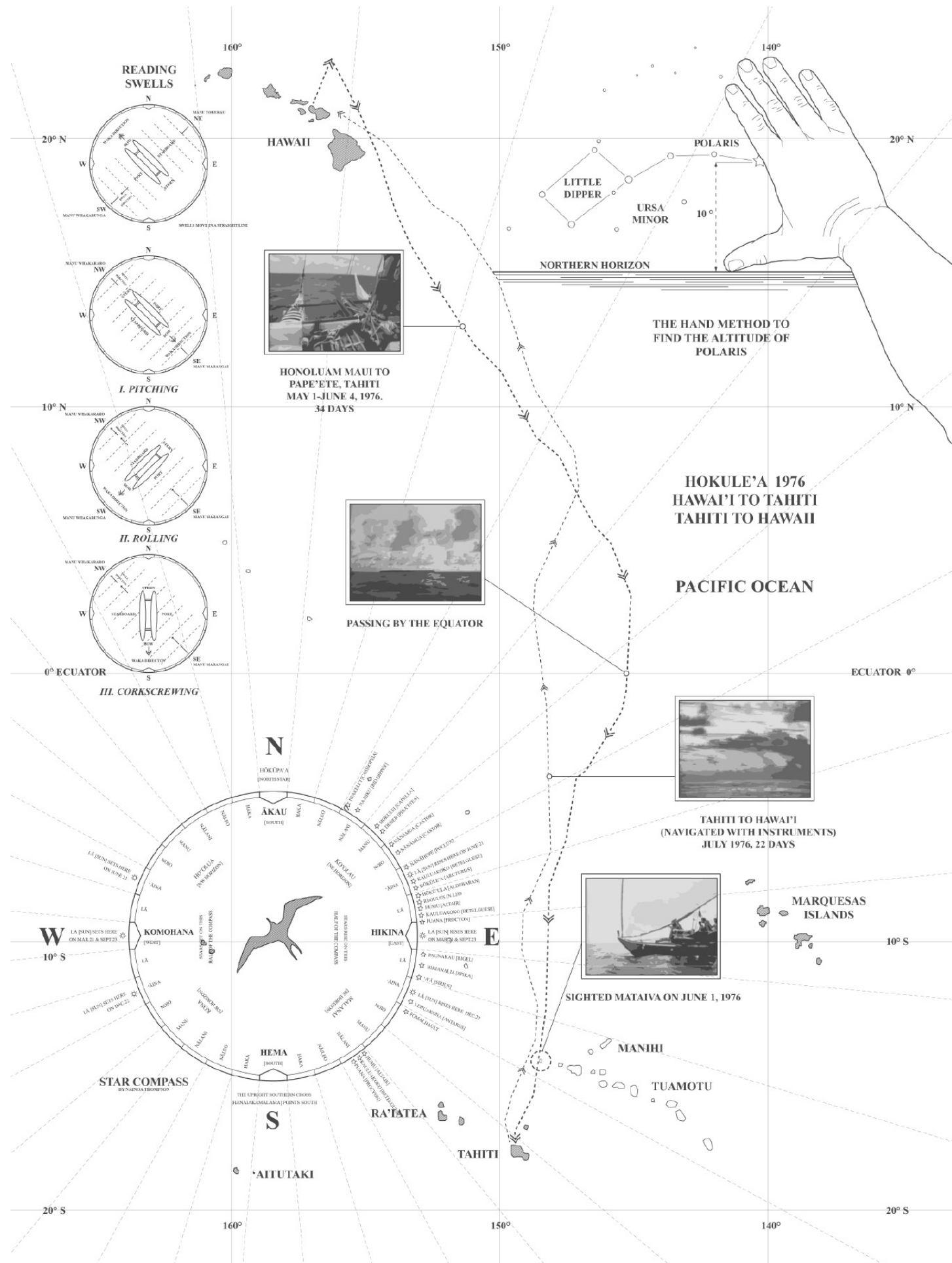
HOKULE'A

SPECIFICATIONS
 DISPLACEMENT: 12.5 TONS FULLY LOADED
 DRAFT: 2 FEET, 6 INCHES
 WEIGHT: 7 TONS
 CARRYING CAPACITY: 5.5 TONS



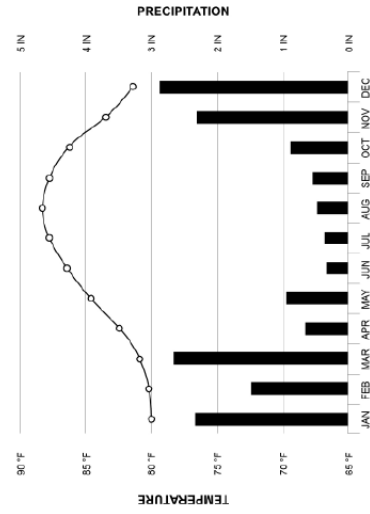
PROVISIONS:
FOOD: 2,500 POUNDS, INCLUDING CHICKEN, PASTA, FISH, CANNED FOODS, FRUITS, PEANUT BUTTER AND JELLY CRACKERS.
WATER: 2,500 POUNDS, THE EQUIVALENT OF 250 GALLONS.



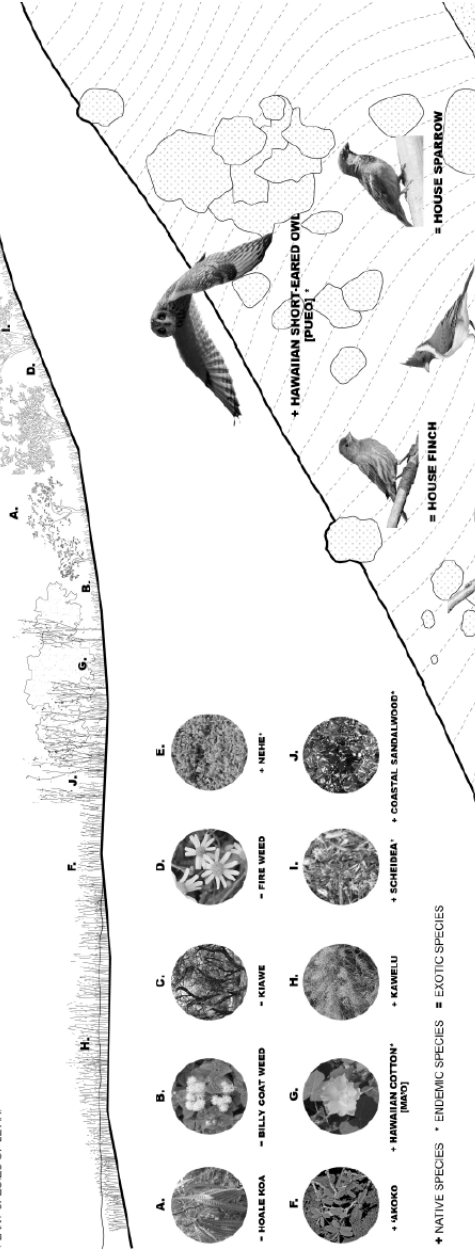


LE'AHU WETLAND

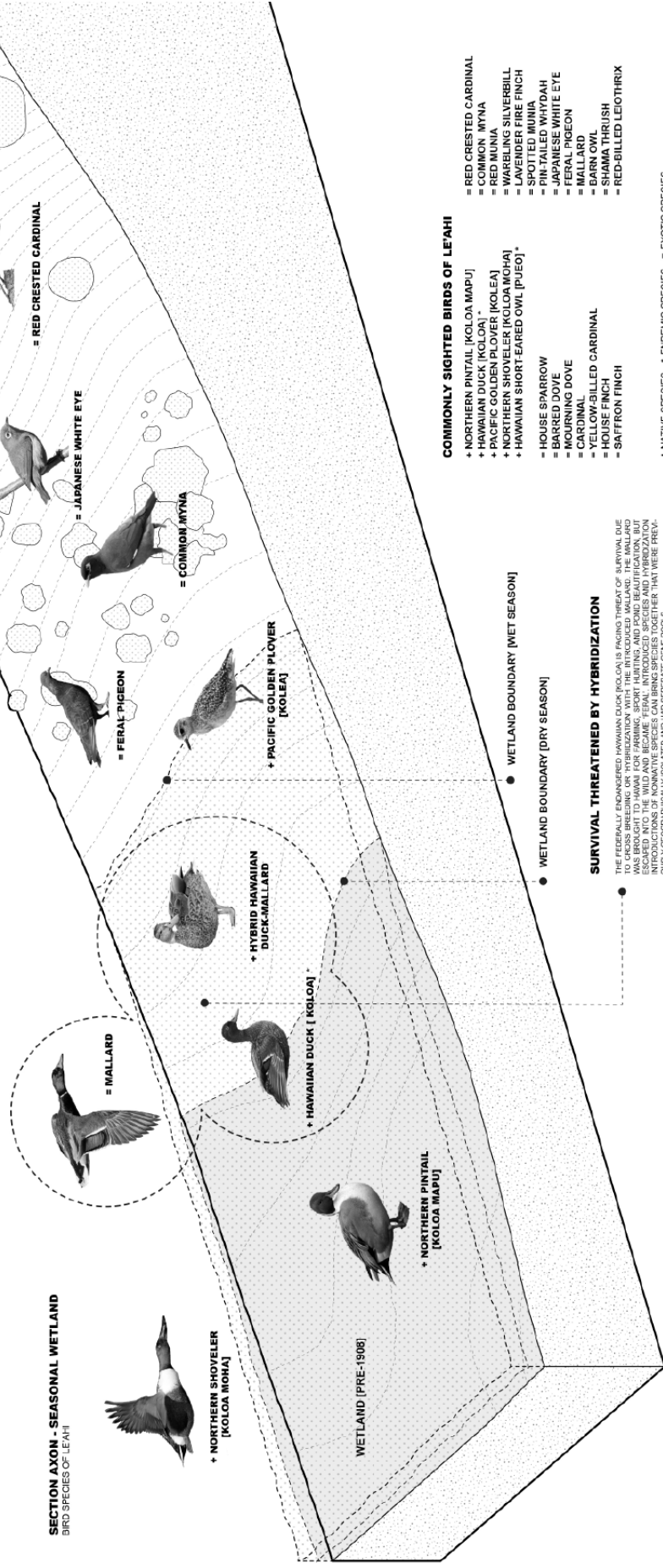
DIAMOND HEAD, HI
16 INCHES OF RAIN / YR



SECTION - SEASONAL WETLAND
PLANT SPECIES OF LE'AHU



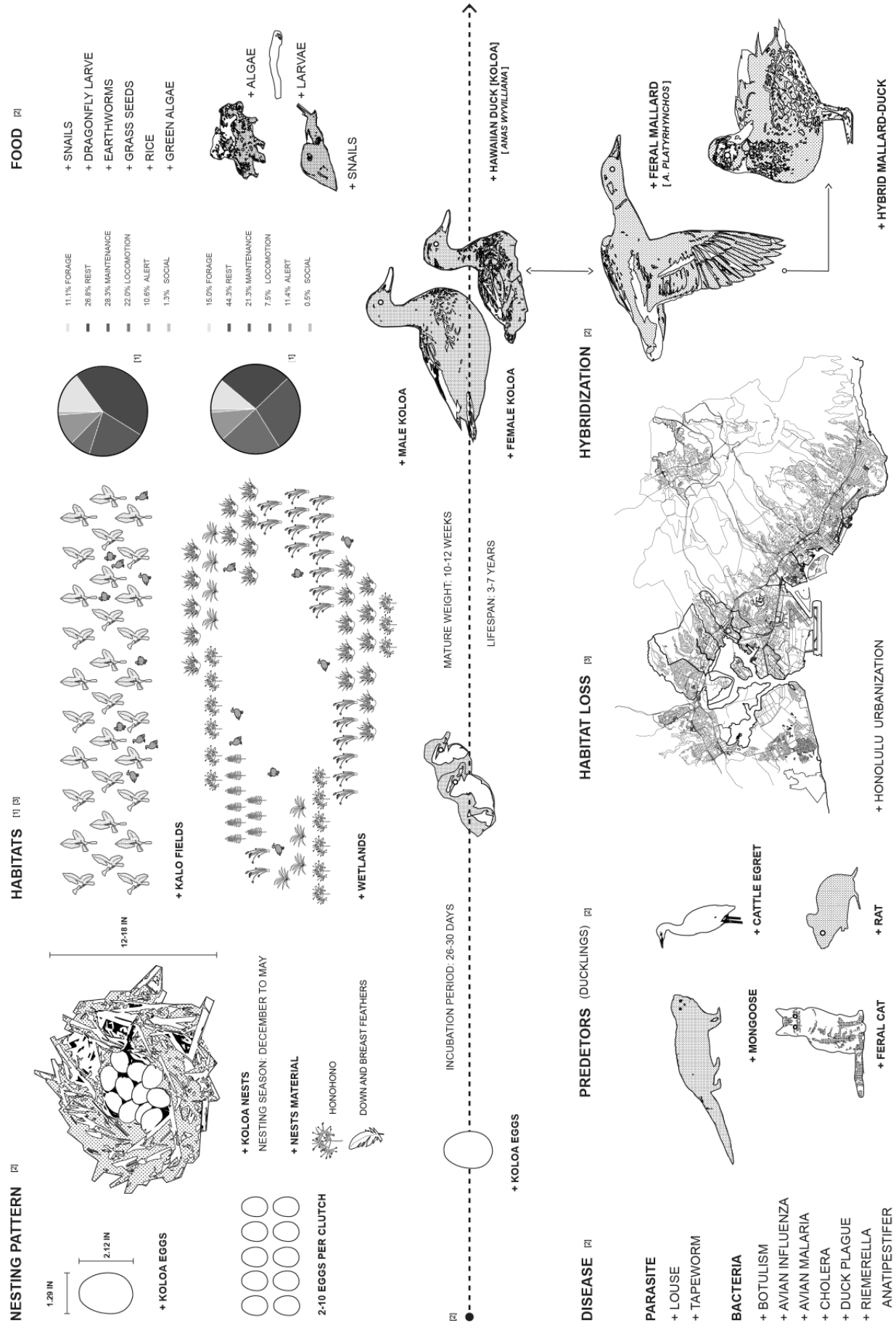
SECTION AXON - SEASONAL WETLAND
BIRD SPECIES OF LE'AHU



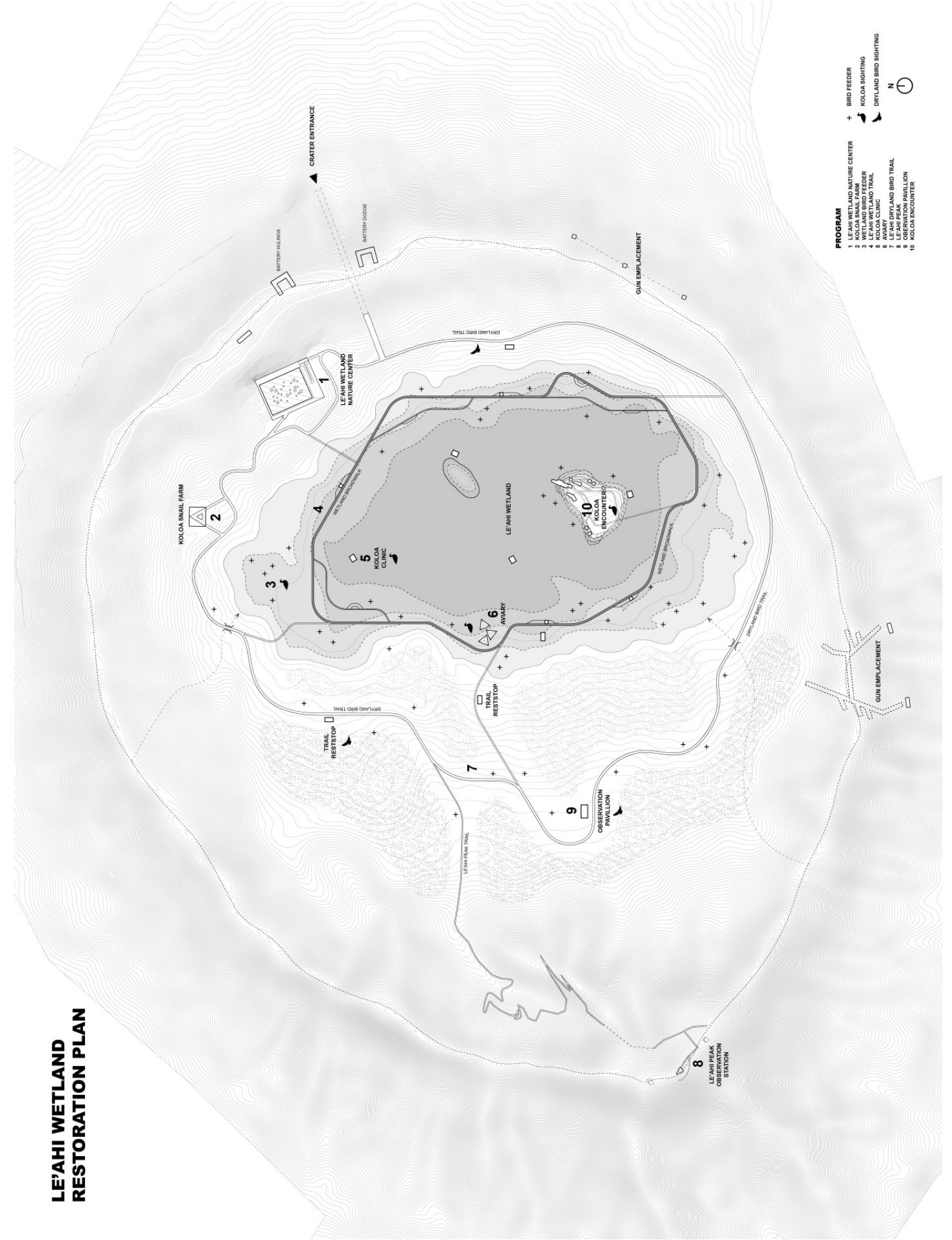
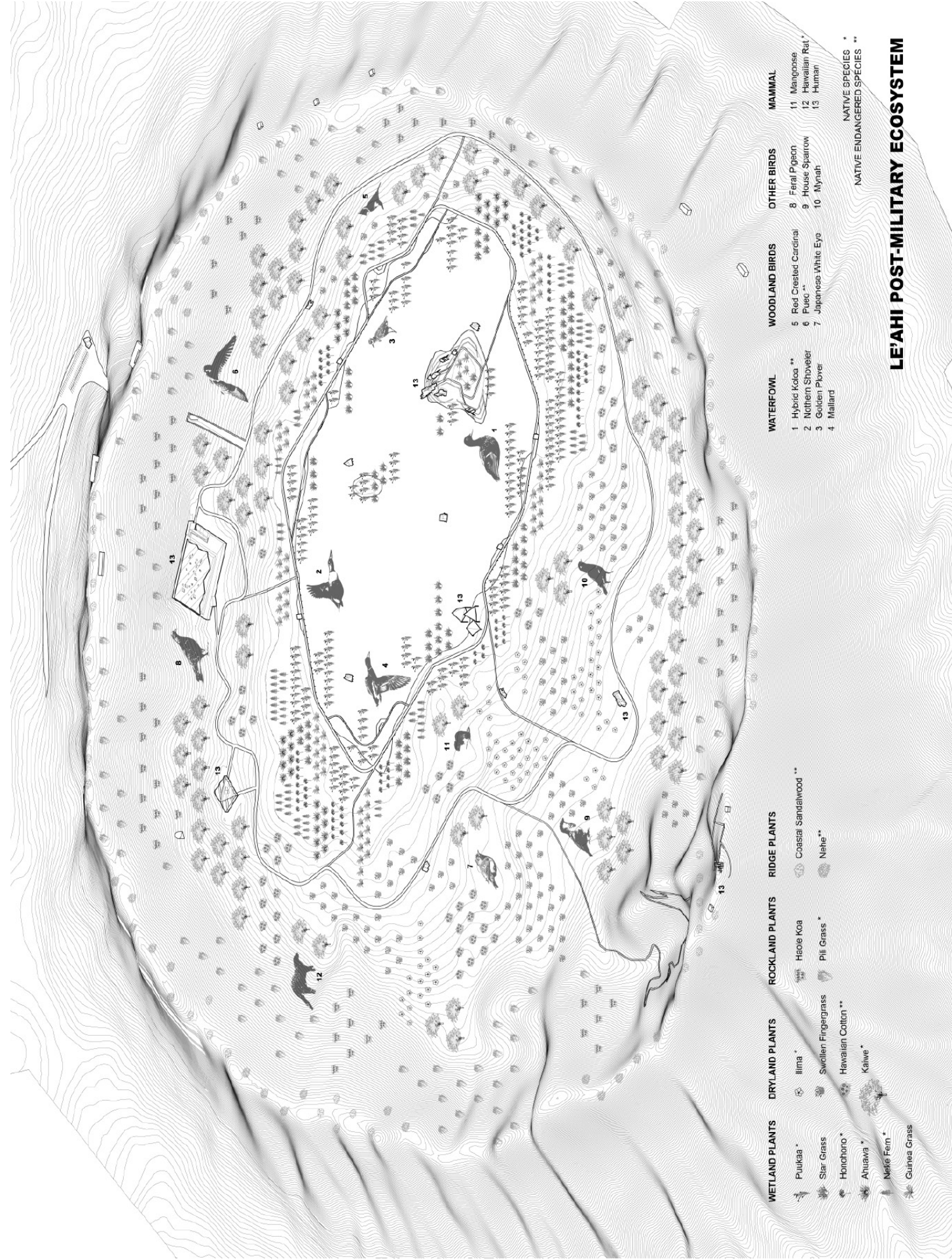
- COMMONLY SIGHTED BIRDS OF LE'AHU**
- + NORTHERN PINTAIL [KOLOA MAPU]
 - + HAWAIIAN DUCK [KOLOA]
 - + PACIFIC GOLDEN PLOVER [KOLOA]
 - + NORTHERN SHOVELER [KOLOA MOHA]
 - + HAWAIIAN SHORT-EARED OWL [PUO]
 - + HOUSE SPARROW
 - + BARRED DOVE
 - + MORNING DOVE
 - + CARDINAL
 - + YELLOW-BILLED CARDINAL
 - + HOUSE FINCH
 - + BAYBROOK FINCH
 - + RED CRESTED CARDINAL
 - + COMMON MYNA
 - + RED MUNIA
 - + WARBLING SILVERBILL
 - + LAURENCE FIRE FINCH
 - + PIN-TAILED WHYDAH
 - + JAPANESE WHITE EYE
 - + FERAL PIGEON
 - + MALLARD
 - + SHAMA THRUSH
 - + RED-BILLED LEOTHRIX

SURVIVAL THREATENED BY HYBRIDIZATION
THE FERAL PIGEON AND HAWAIIAN DUCK PIGEON ARE FORMER SPECIES OF ORIGINAL DUE TO CROSS BREEDING OR INTERBREEDING WITH THE INTRODUCED MALLARD. THE MALLARD WAS BROUGHT TO HAWAII FOR FARMING, SPORT HUNTING, AND FISH BEAUTIFICATION, BUT INTRODUCED SPECIES OF NONNATIVE SPECIES CAN BRING SPECIES TOGETHER THAT WERE PREVIOUSLY GEOGRAPHICALLY ISOLATED AND HAD SEPARATE GENE POOLS.

KOLOA OBSERVATION

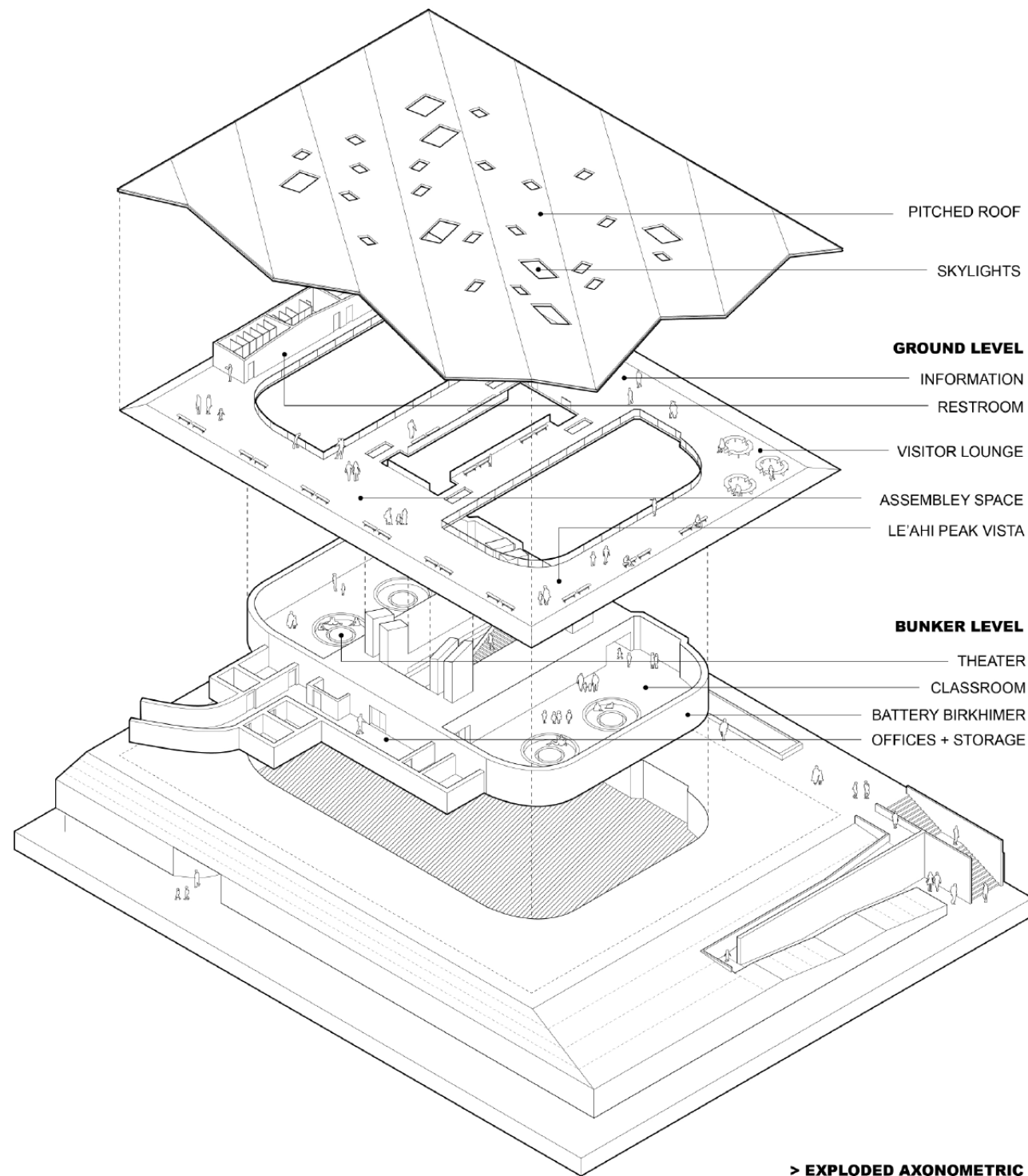


[1] Malachowski, C. P., & Dugger, B. D. (2018). Hawaiian duck behavioral patterns in seasonal wetlands and cultivated taro. The Journal of Wildlife Management, 82(4), 840-849. <https://doi.org/10.1002/wmg.21429>
 [2] Svedberg, G. E. (1987). The Koloa; a preliminary report on the life history and status of the Hawaiian Duck (Anas wyvilliana). prepared as part of The Koloa restoration project. Division of Fish and Game.
 [3] Green, N. M. (2005). Ethnology of taro farmers and their management of Hawaiian wetlands and endangered Waterbirds. In: taro agroecosystems.



LE'AHU WETLAND NATURE CENTER

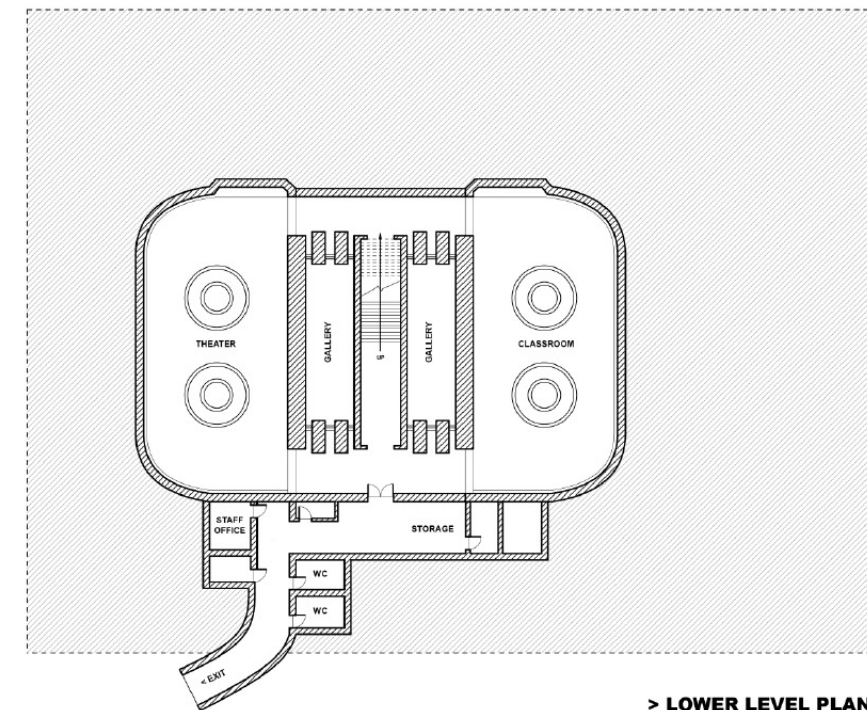
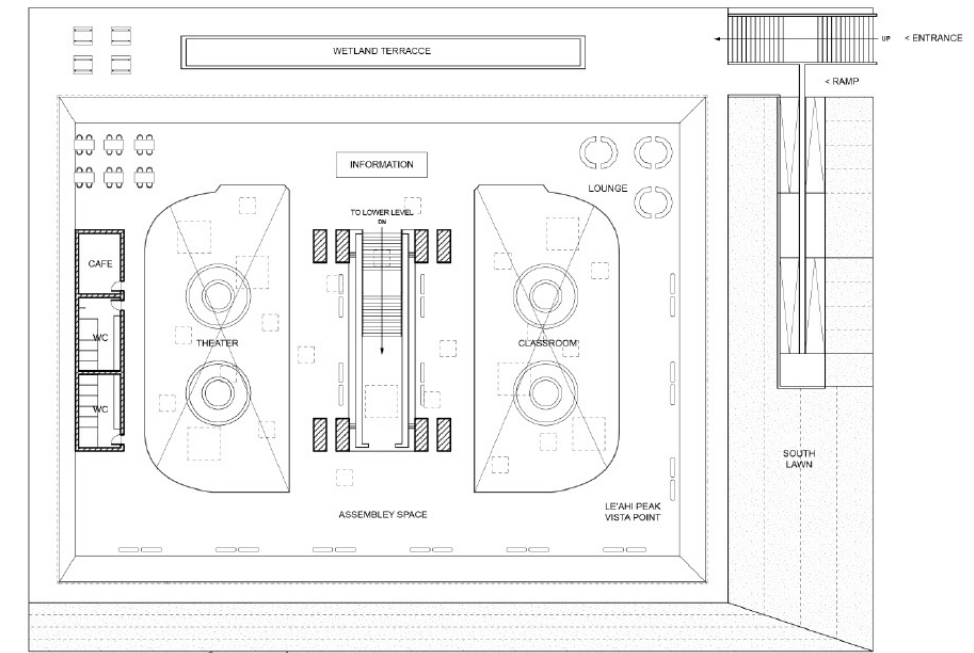
FLOOR PLANS + EXPLODED AXONOMETRIC



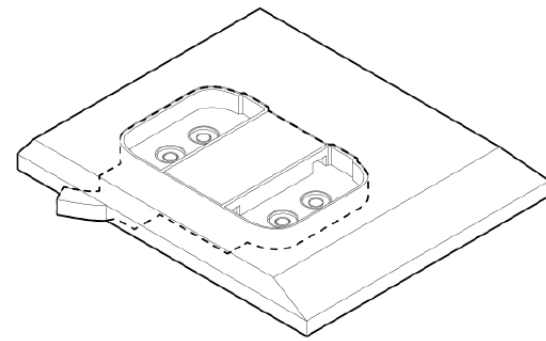
PROGRAMS:

- 1. Classrooms
- 2. Wildlife Gallery
- 3. Theater
- 4. Cafe
- 5. Educational Wetland
- 6. Staff Offices
- 7. Assembly Hall
- 8. Information

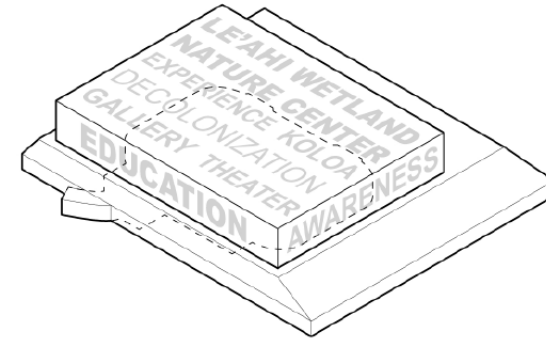
Individual Work



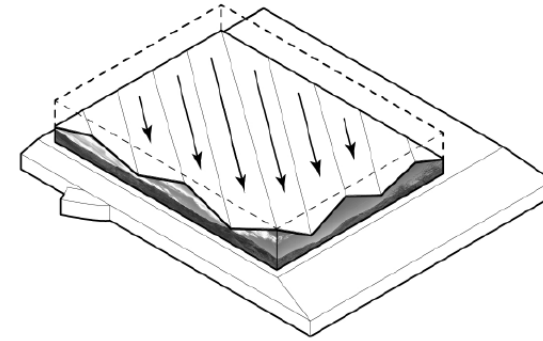
The Le'ahi Wetland Academy is part of a larger proposal that reintroduces the wetland ecosystem back into the Diamond Head Crater, previously militarized by the United States Military during the early 1900s. The restored wetland will provide habitats for endemic species of water birds, migratory birds and various species of vegetation. The wetland academy will be a crucial actor in this newly established network, where it serves as a platform for the education and advocacy of its natural history. The building sits atop the old Battery Birkhimer while the military structure is repurposed into classrooms and galleries. The juxtaposition of the old military structure and the new education facility reinforces the importance of knowledge and preservation over colonial infrastructure. The pitched roof of the facility also frames the view of the Le'ahi Peak, where the visitors could have the most optimized view of the crater.



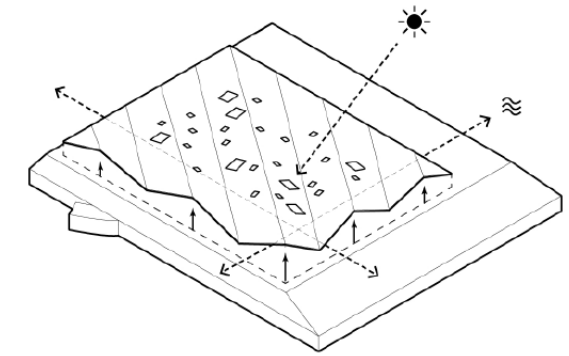
EXISTING MILITARY STRUCTURE:
BATTERY BIRKHIMER



NEW PROGRAM OVERLAYS BUNKER

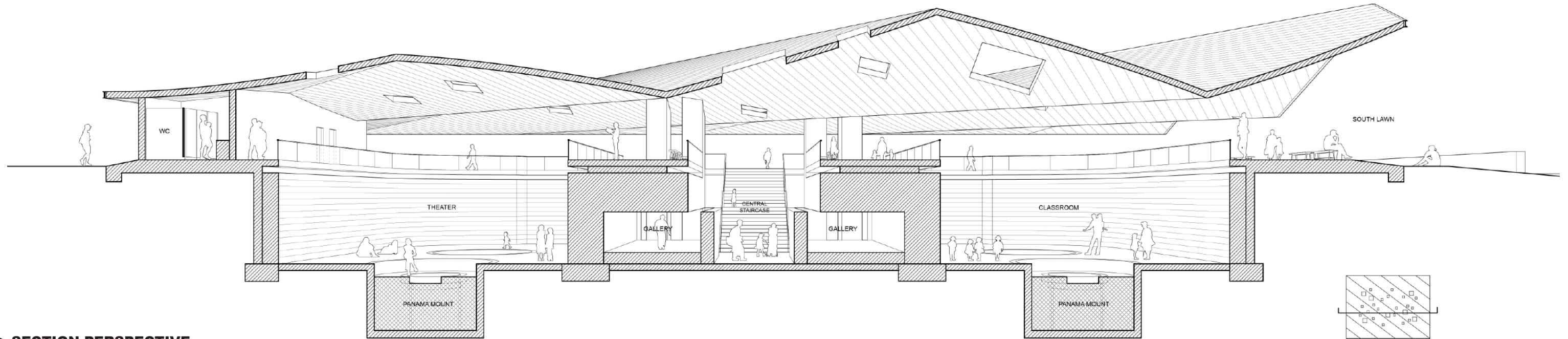


PITCHED ROOF ACCENTUATE
VIEW OF THE LE'AHU PEAK



OPEN STRUCTURE CONNECTS
BUILDING TO ENVIRONMENT

> PROGRAM DIAGRAM



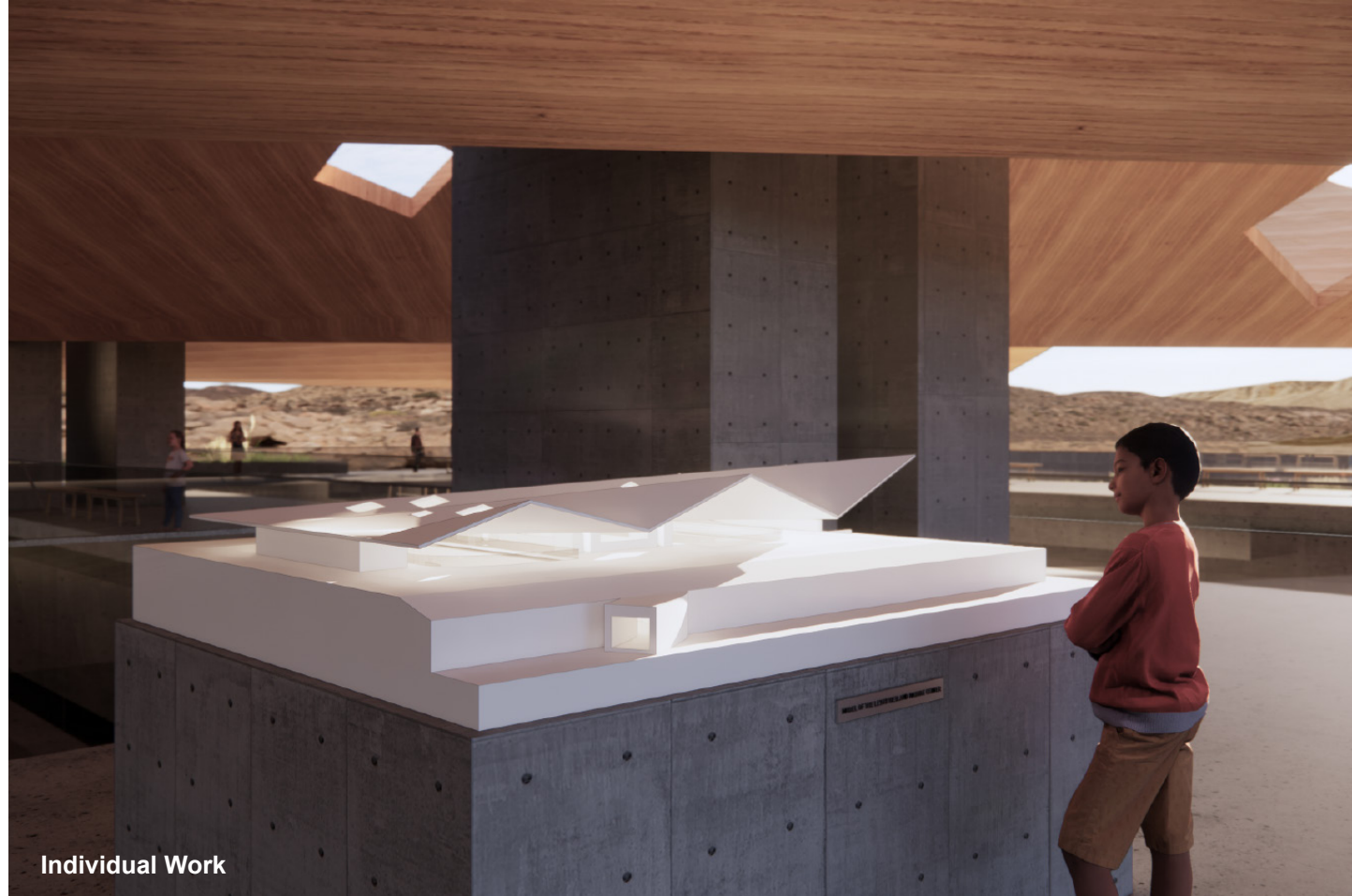
> SECTION PERSPECTIVE



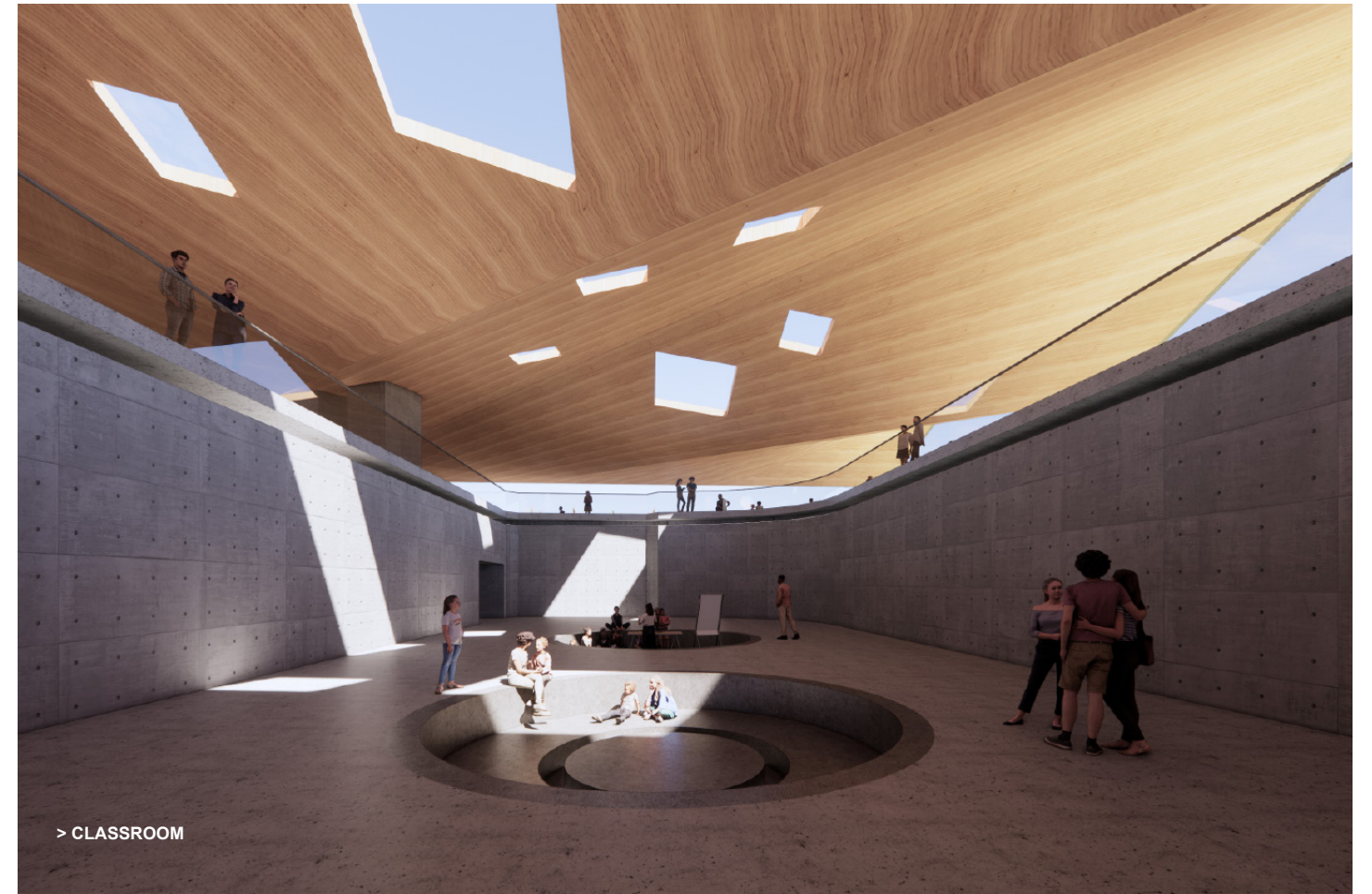
> EXTERIOR PERSPECTIVE



> CENTRAL STAIRCASE



Individual Work



> CLASSROOM



> INTERIOR PERSPECTIVE

2

FALL 2021 PLEIN AIR

CARBON OFFSET PILOT COMMUNITIES + PROJECTS, SAO JOSE DU BURITI, BRAZIL.

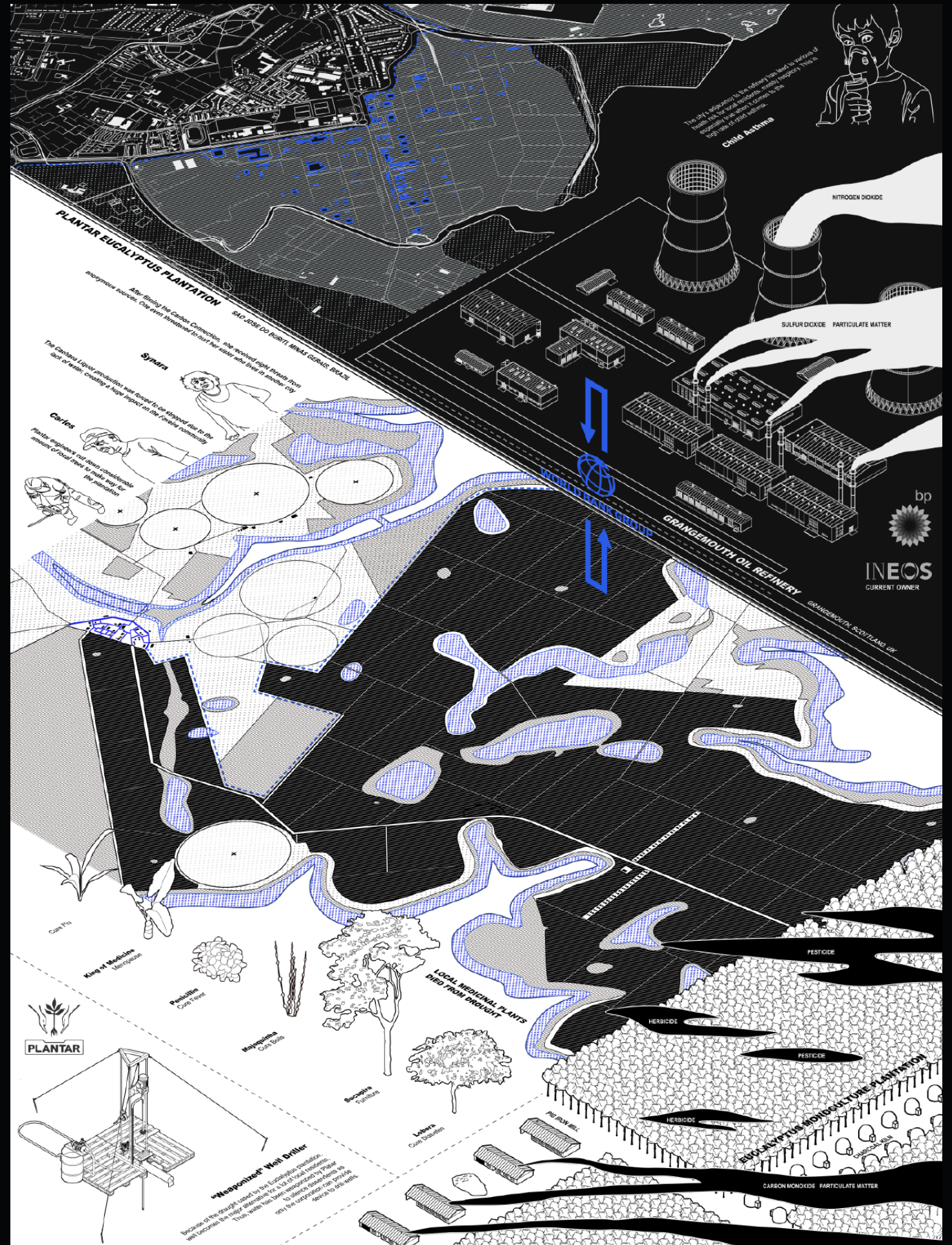
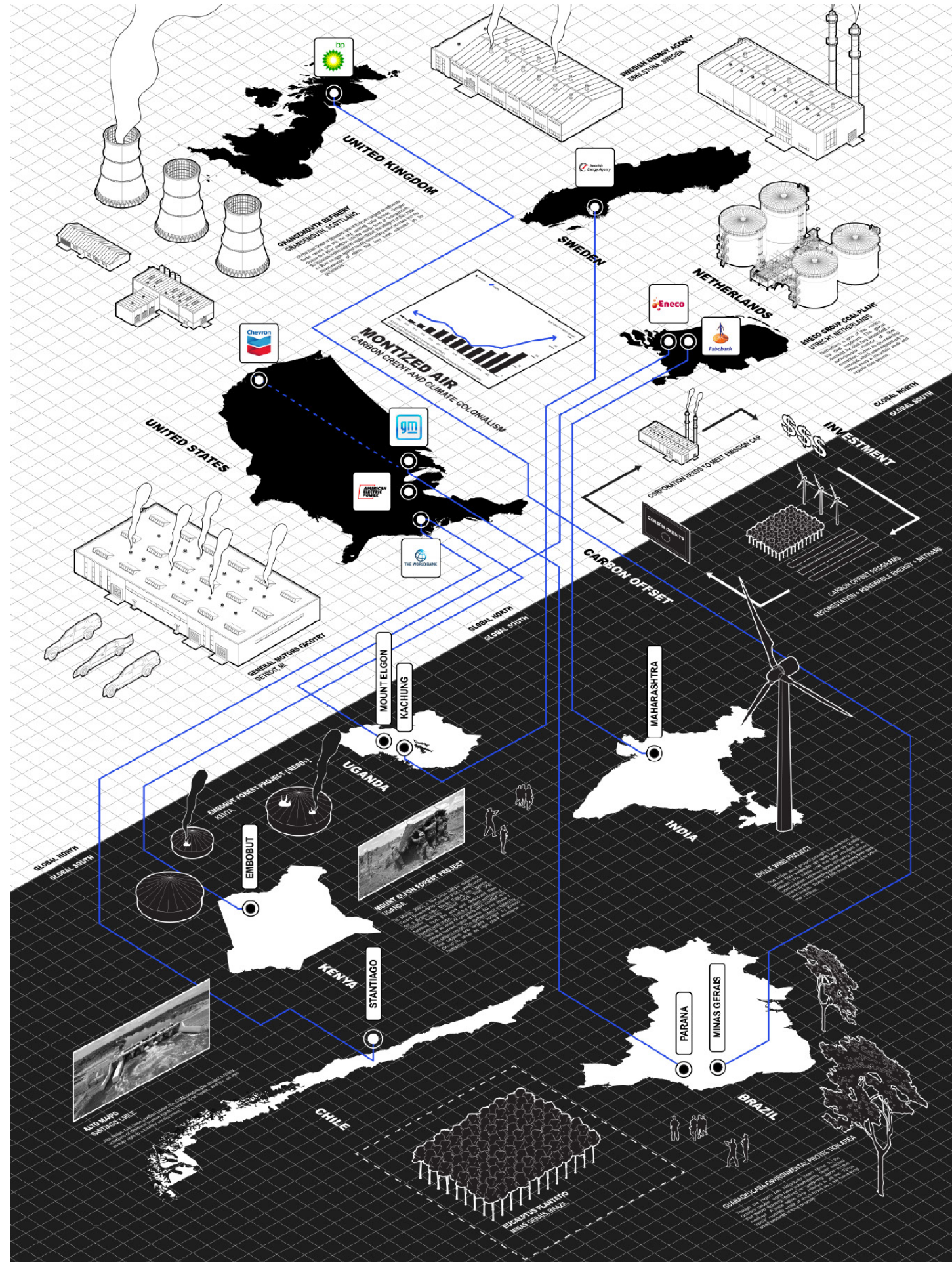
CRITIC: NAHYUN HWANG

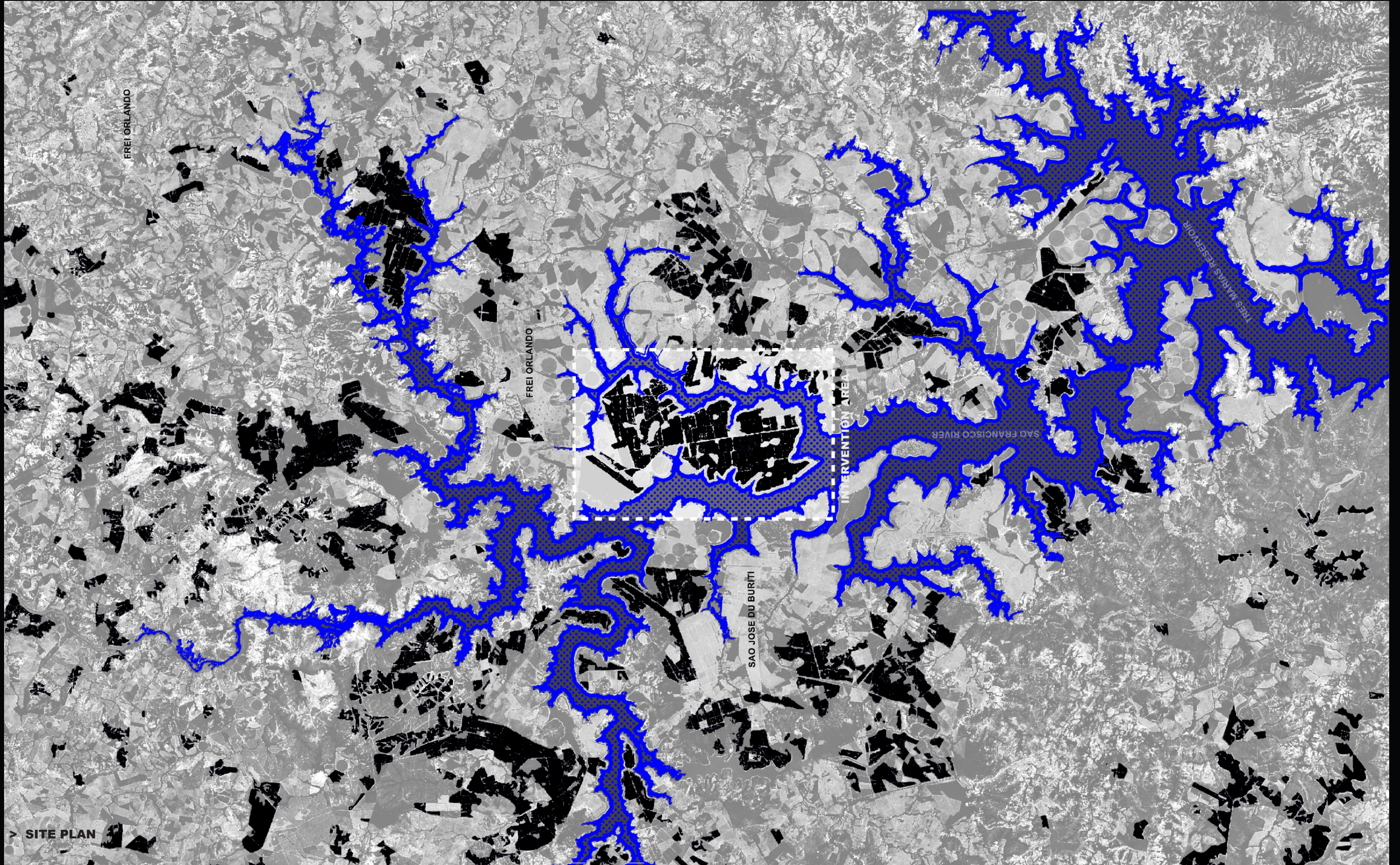
Teammate: Zida Liu

Since the inception of the industrial revolution, greenhouse gas along with carbon emissions have seen exponential growth each year, posing a direct threat to the survival of our planet. The consequences of our innovation requires our full attention as we must look to reduce the harm we have inflicted on our ecosystems and environment. The Carbon Offset initiative is a trade of Carbon Credits, where corporations would invest in carbon offset projects [in the global south] to offset/compensate for their yearly emission numbers. These carbon offset projects include, reforestation, renewable energy projects and methane capture, etc. However, this seemingly benign trade of carbon credits has been in some instances turned into a tool for climate colonialism and land grabbing.

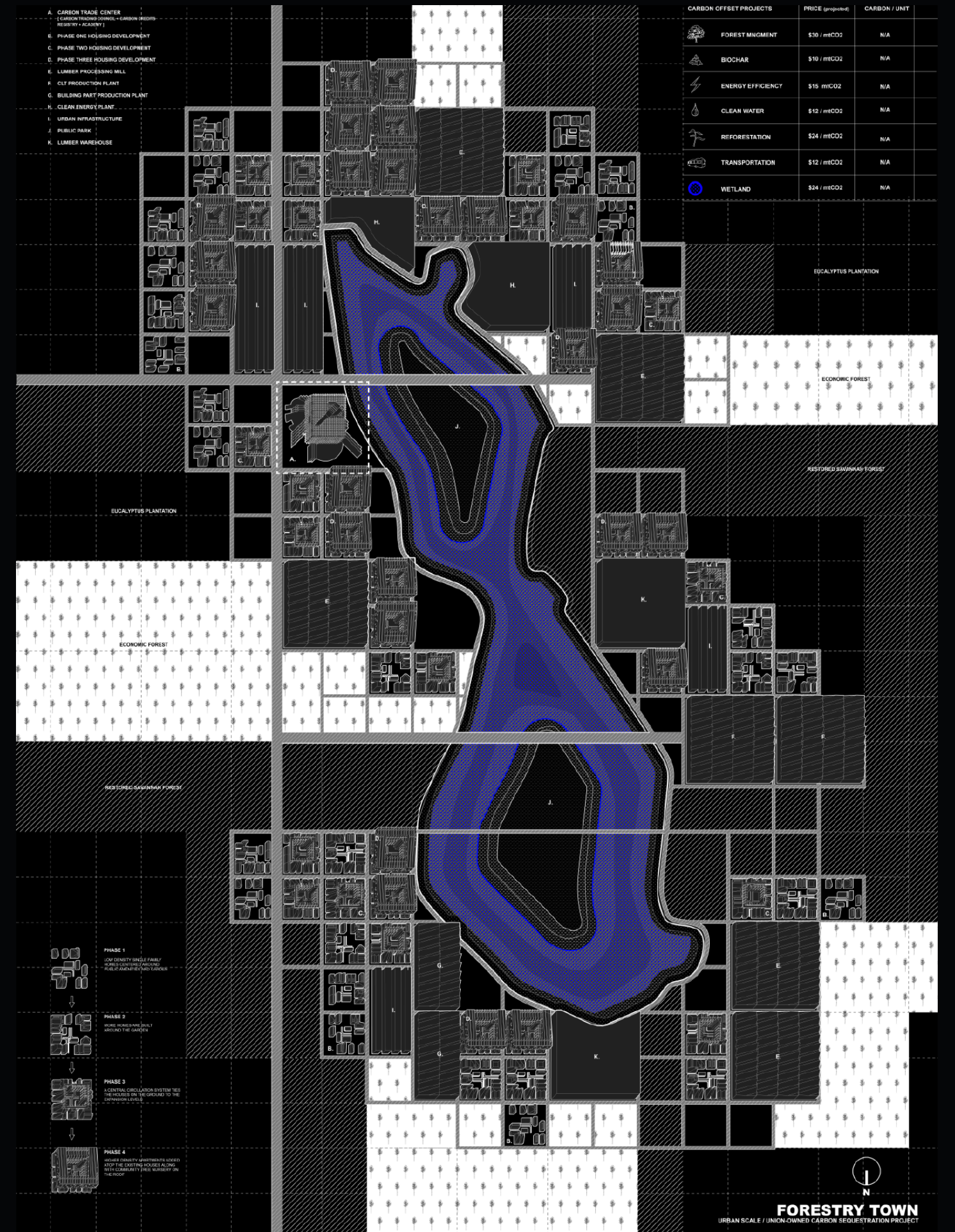
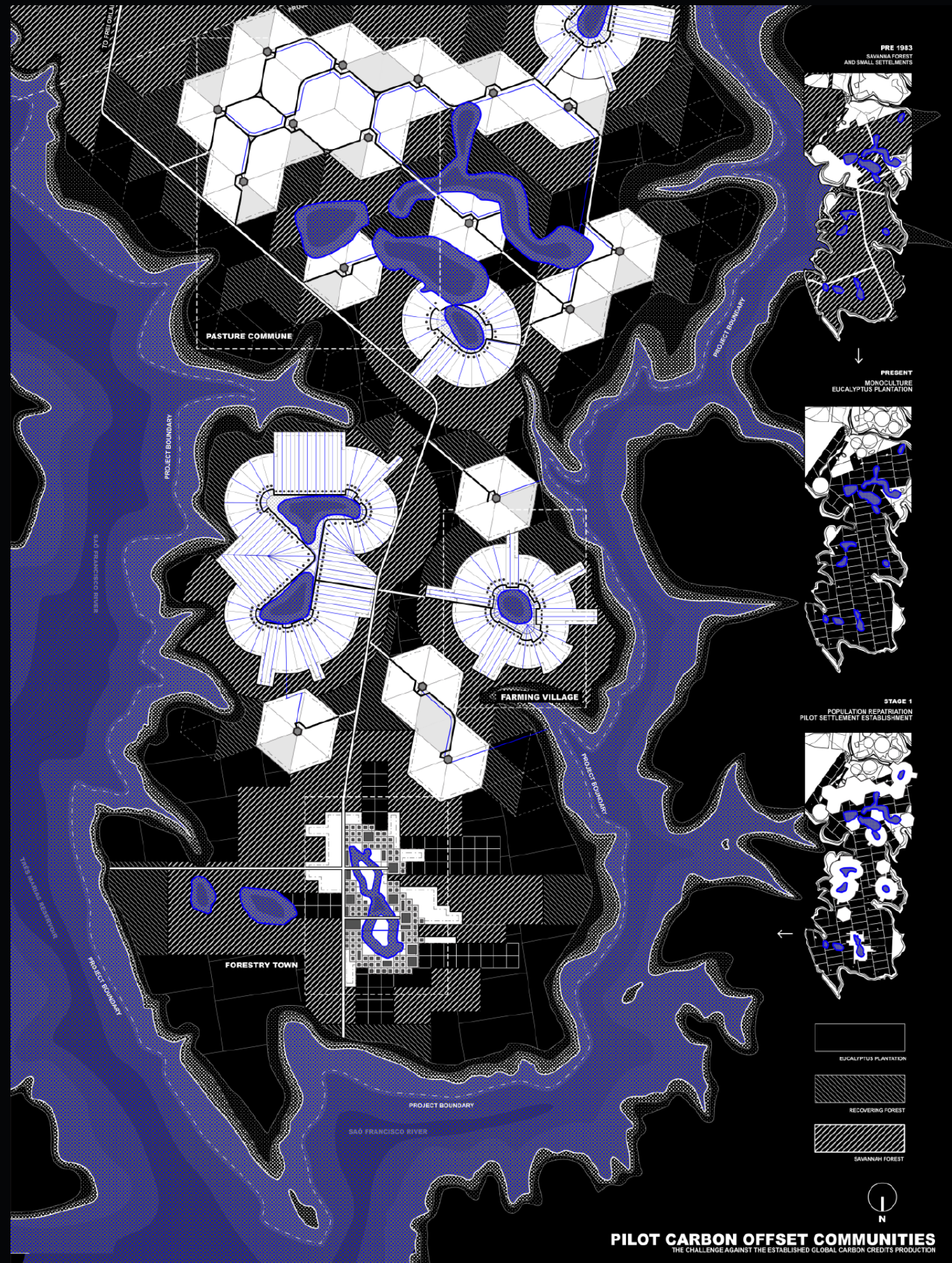
Our project focuses on the specific case in Sao Jose Du Buriti in Brazil and how the carbon offset projects owned by the Plantar company have caused years of suffering and injustice to the local communities. In the process of converting the unlawfully acquired land into its vast monoculture eucalyptus plantations across Sao Jose Du Buriti, the company wiped out the existing ecosystems along with many jobs of the people living there, all while promising the new plantation would generate new opportunities. However, the people did not receive what was promised and in return have to work in terrible conditions without sharing the wealth the Plantar company has generated via their carbon offset project.

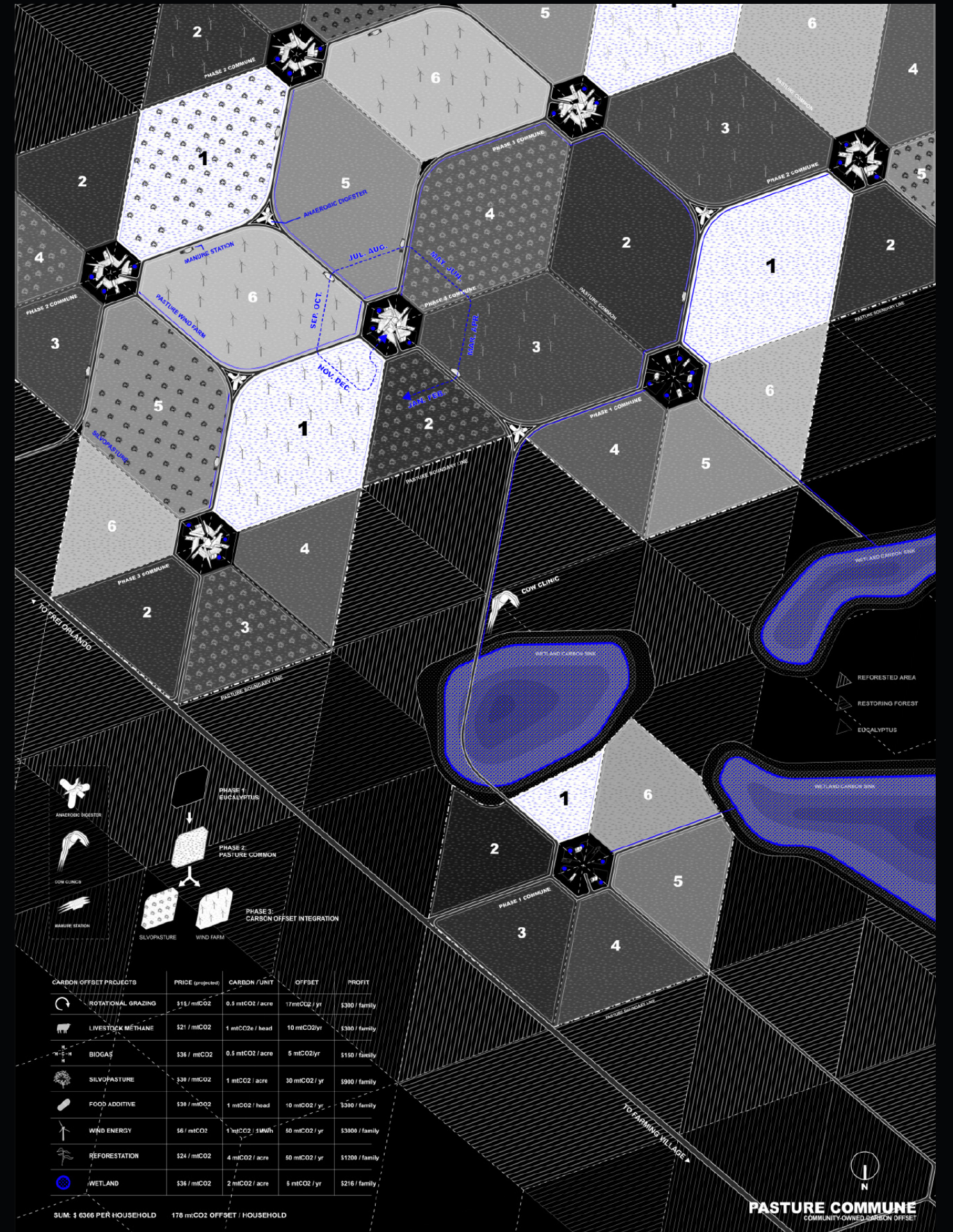
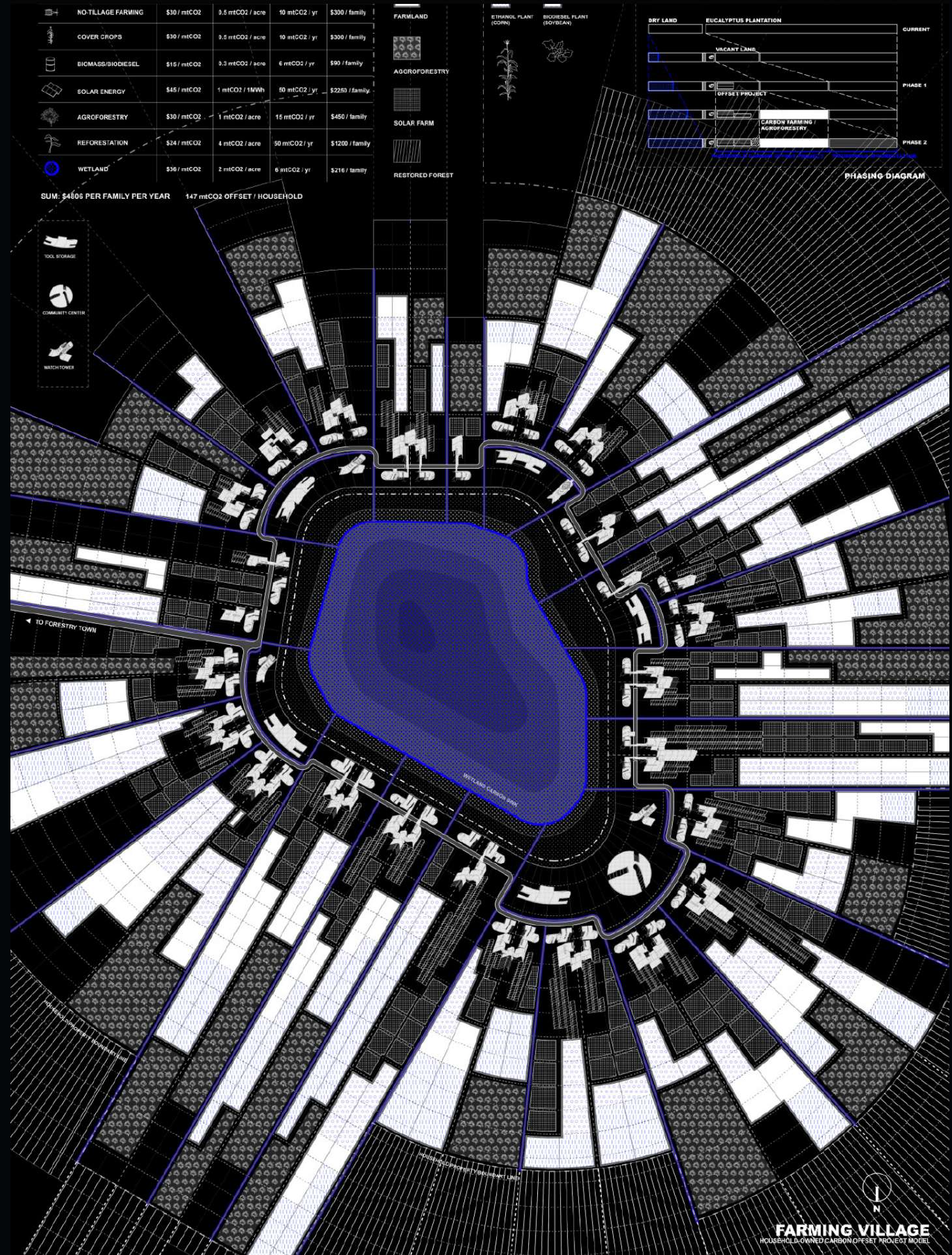
In response to the current situation at Sao Jose Du Buriti, we are proposing a pilot project that would place the power and wealth generated from carbon offset projects back into the hands of the local people. The proposal entails two parts, first an urban scale proposal for a series of carbon offset-centered communities that could be replicated and redistributed across the site. Second, a series of program-based carbon offset buildings that serve the purpose of generating carbon credits via different methods while functioning as a living environment for the communities. As these prototypical carbon offset communities grow in scale, the people would be able to generate more income along with agency which they were previously stripped of.

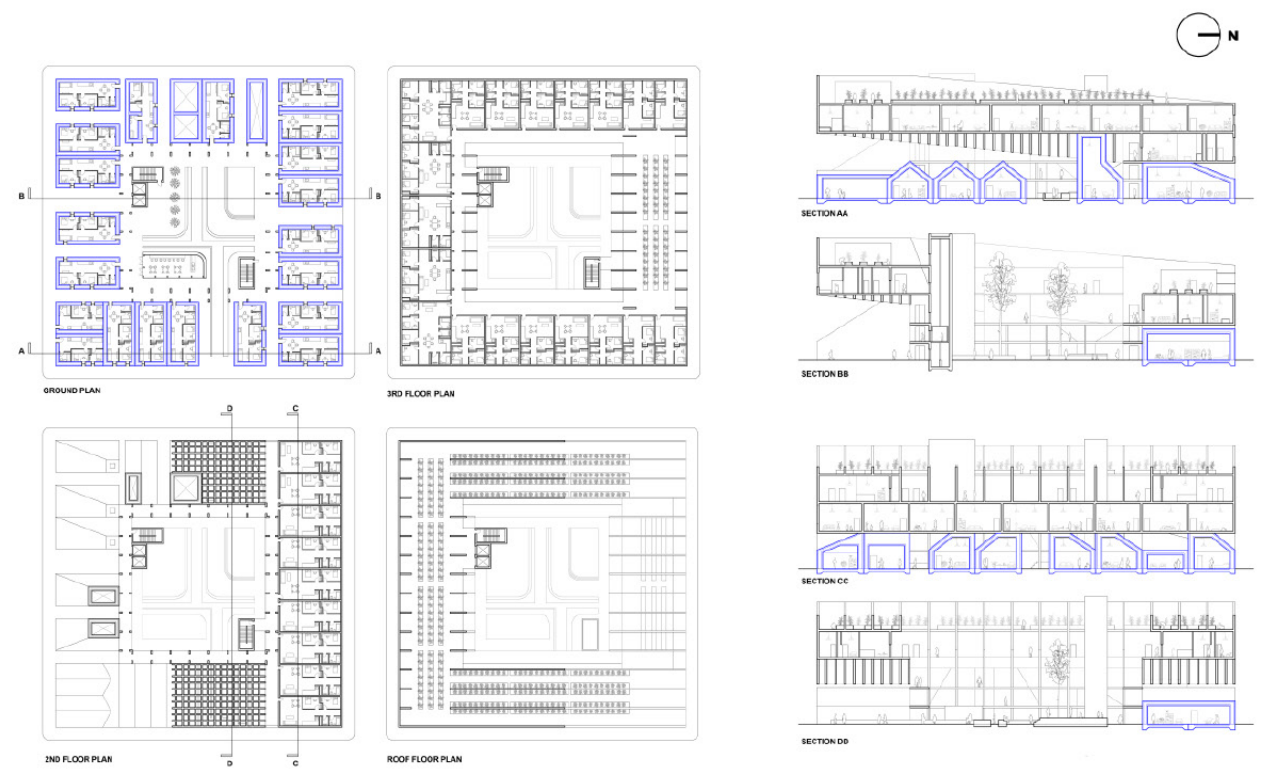
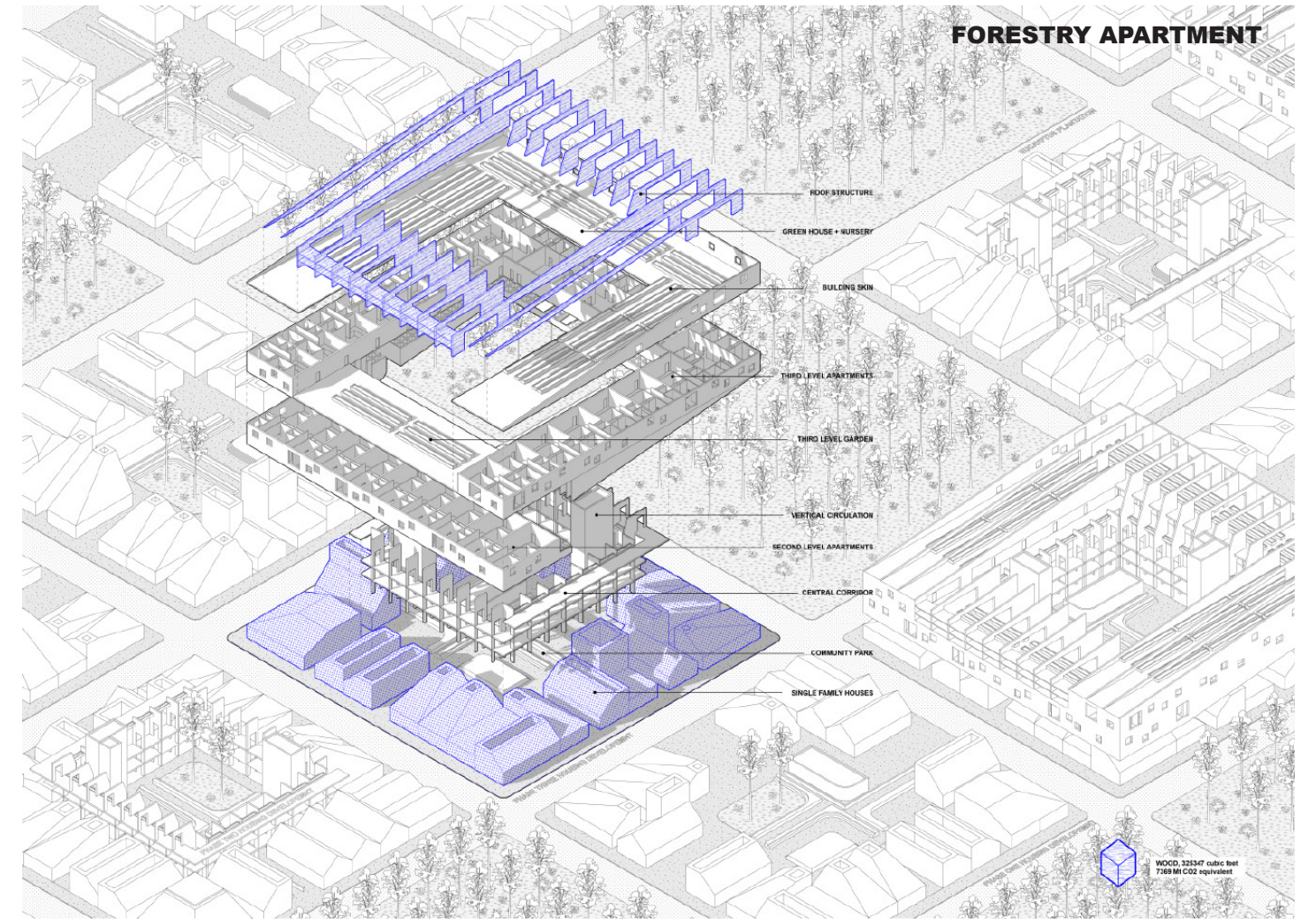
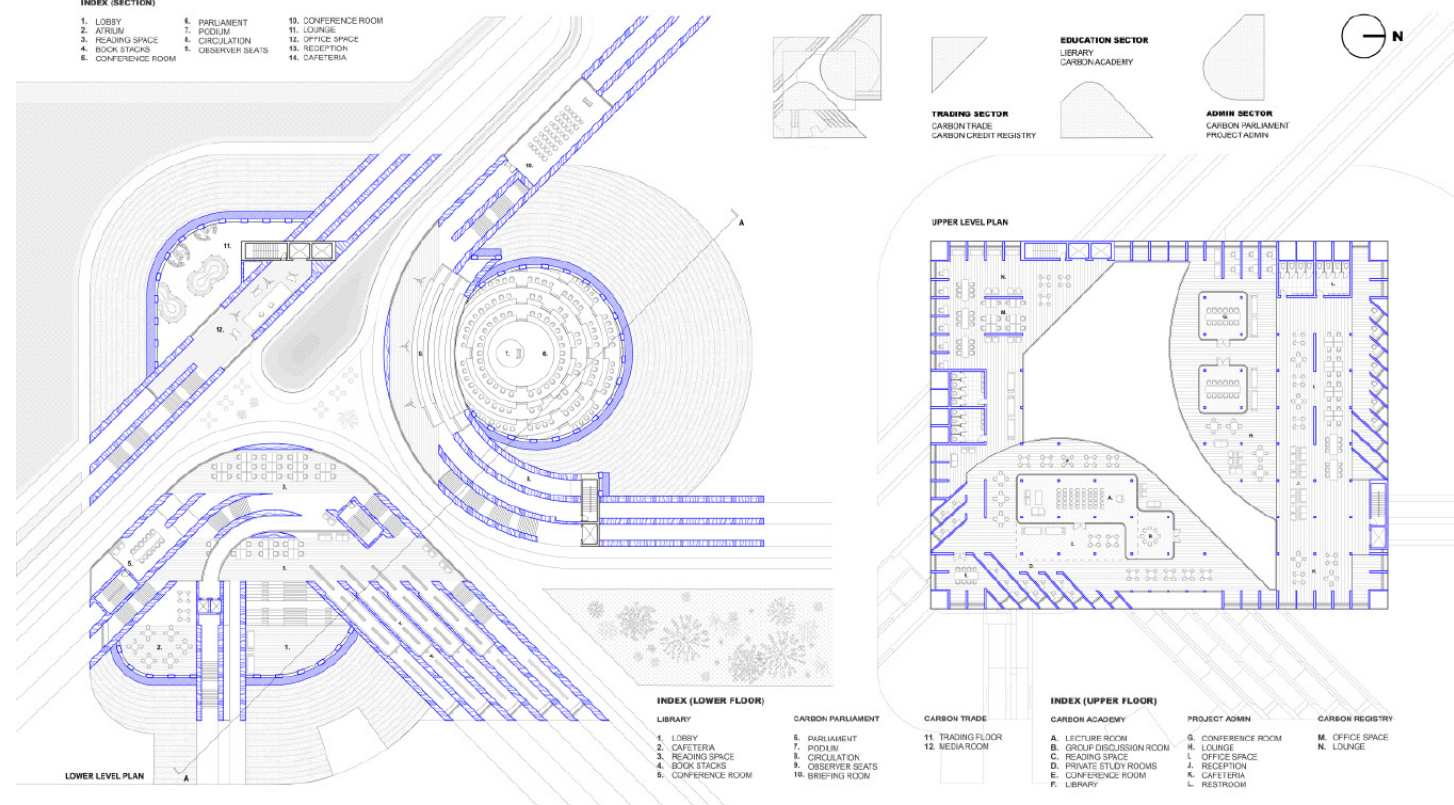
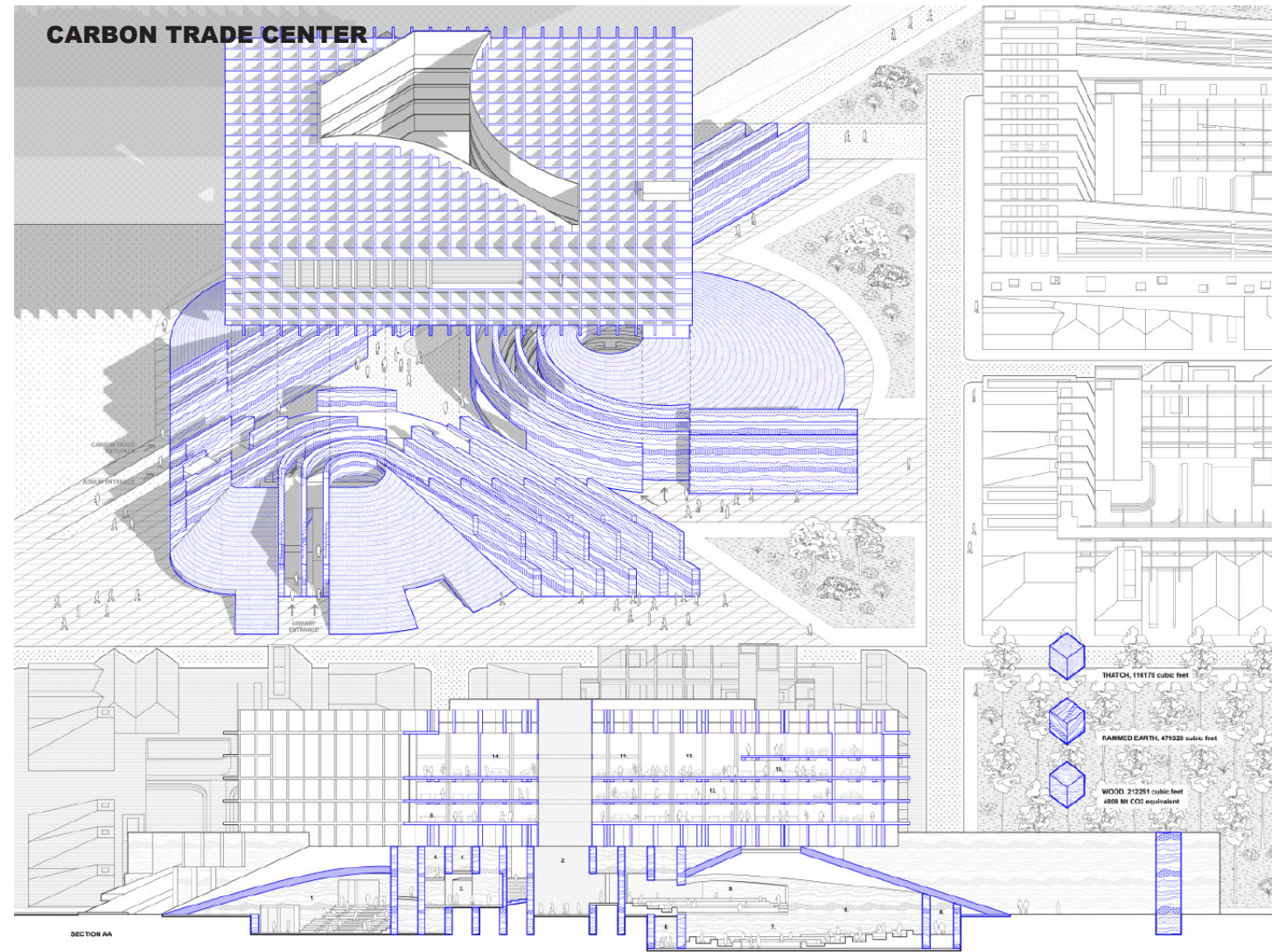


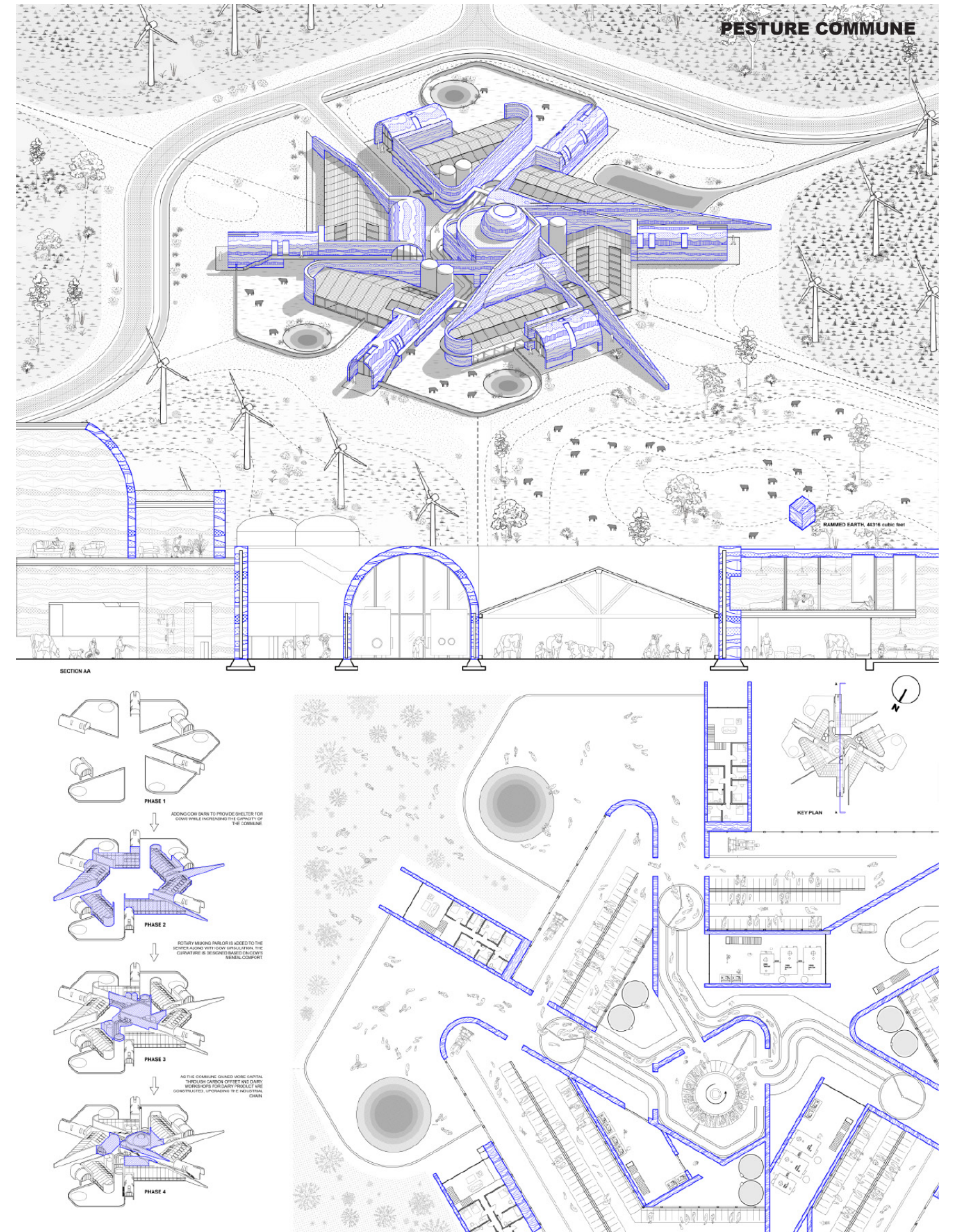
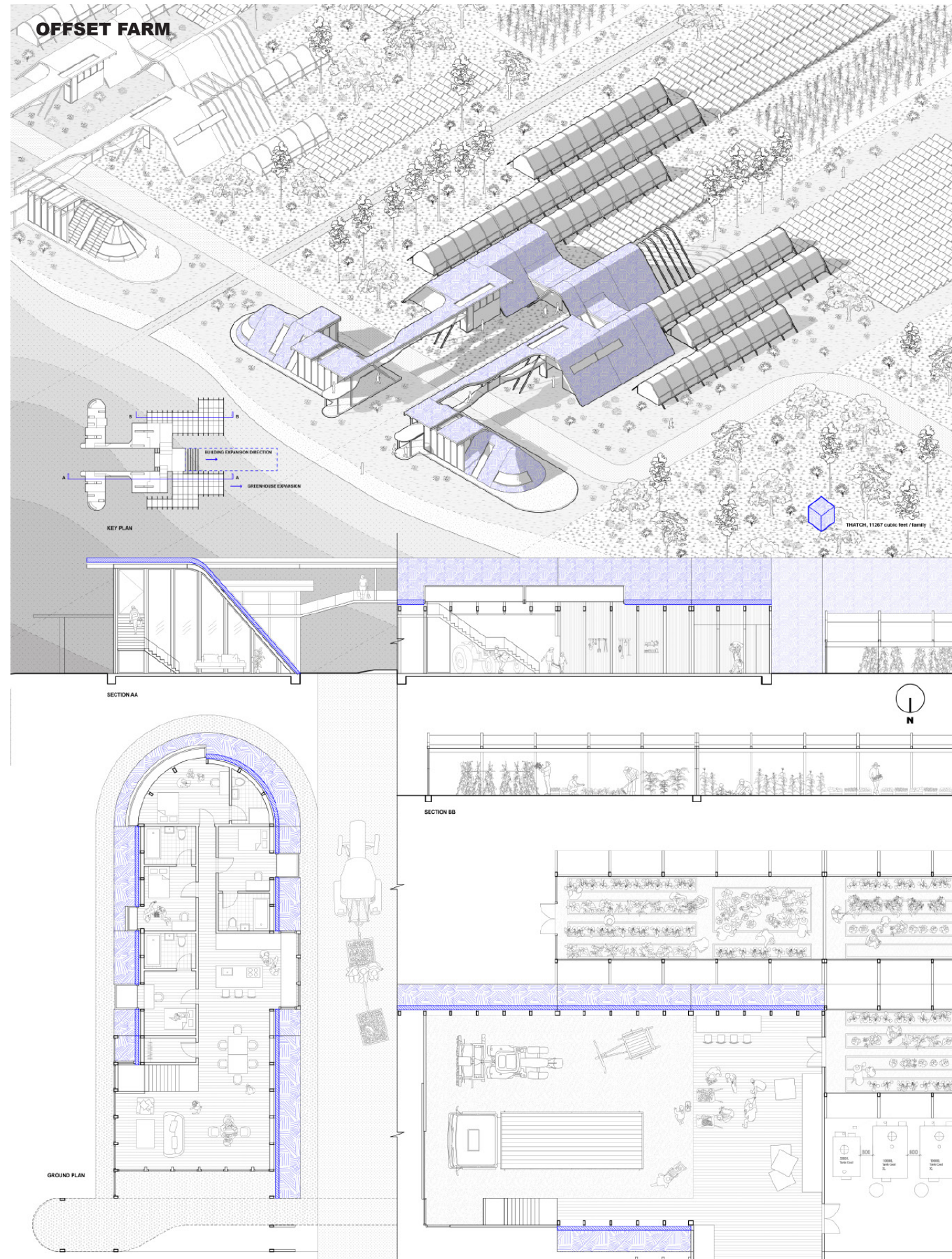


> SITE PLAN











> PERSPECTIVE COLLAGES

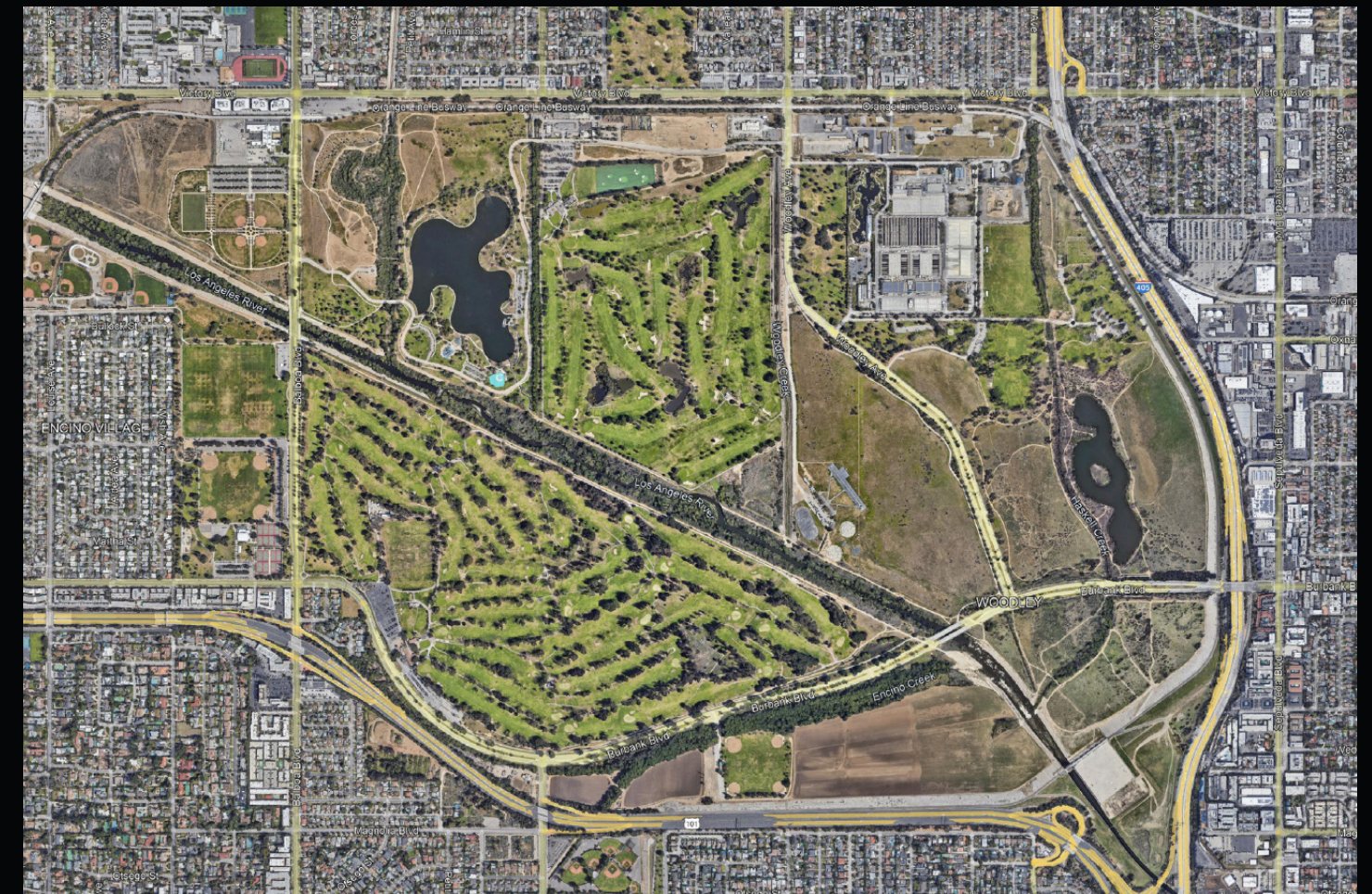
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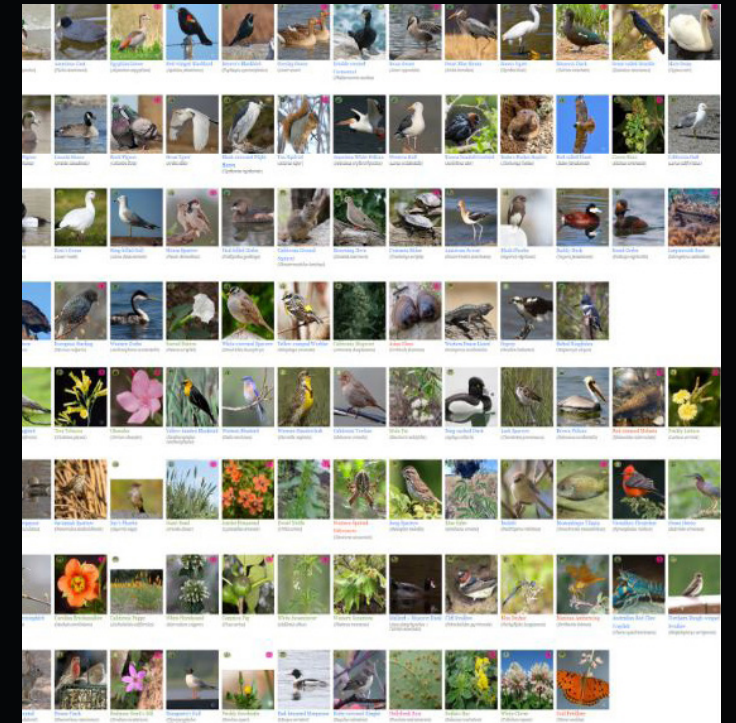
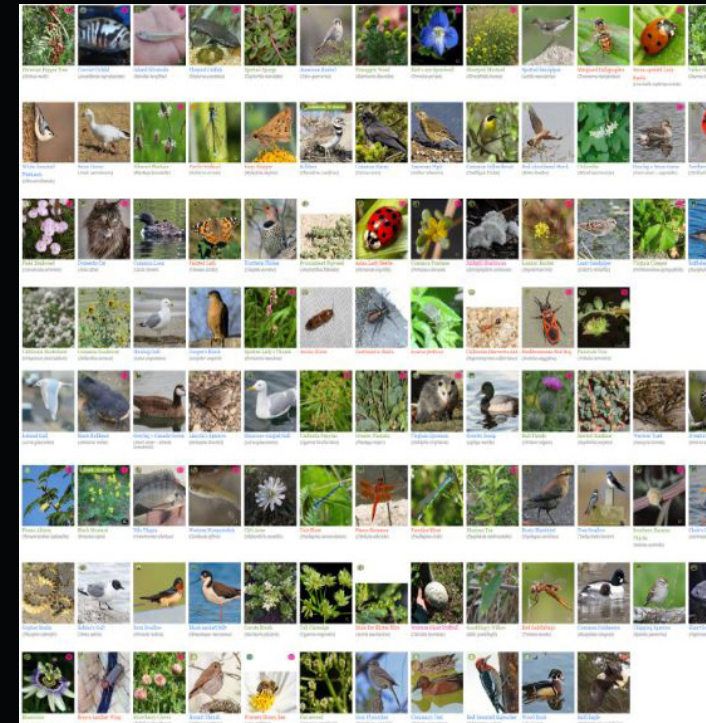
SPRING 2022 LA WATER STUDIO

LA Arts Park, Sepulveda Basin, Los Angeles, CA.

CRITIC: LAURIE HAWKINSON

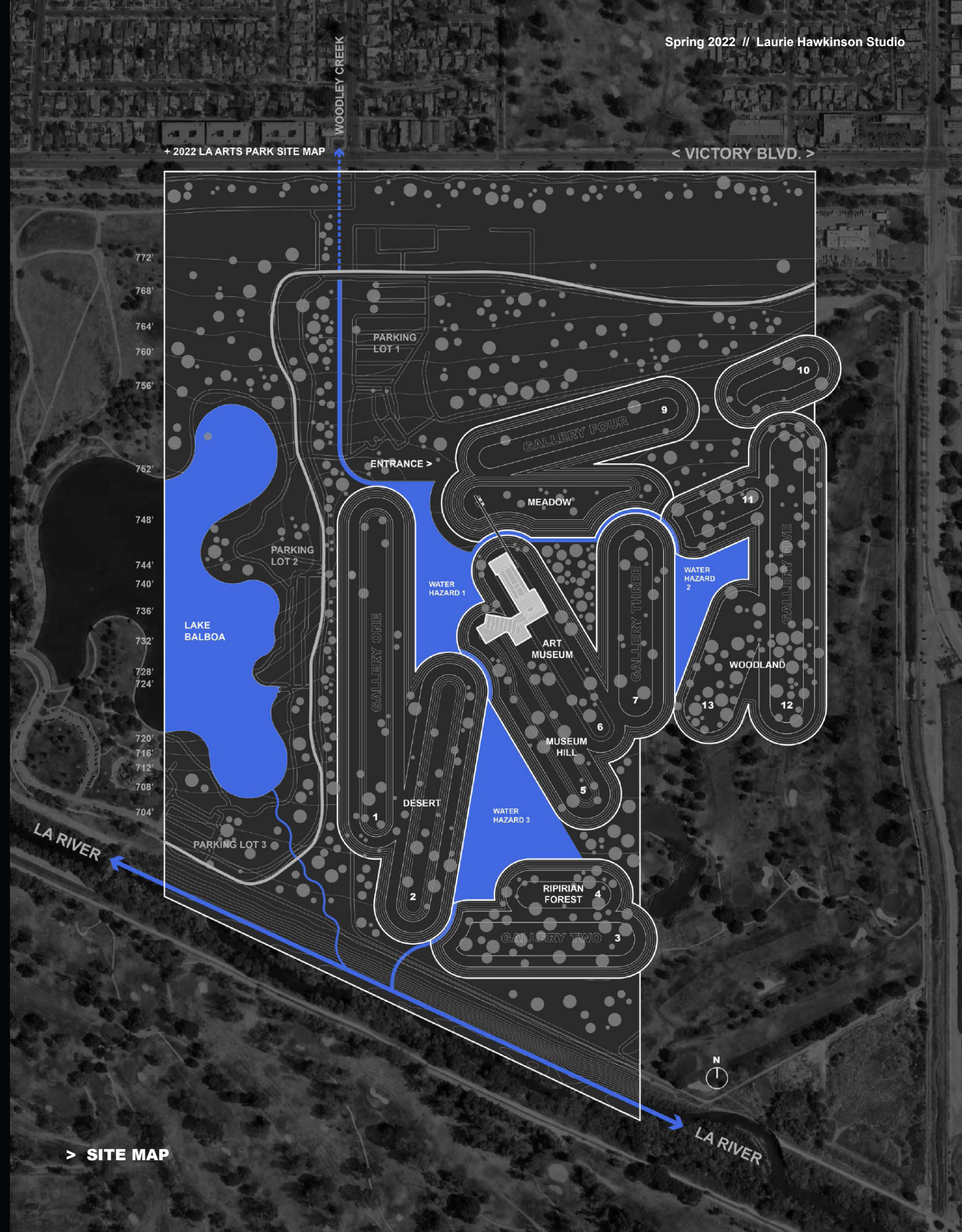
The Studio focuses on the study on water in the greater context of Los Angeles and the Sepulveda Basin in the San Fernando Valley.







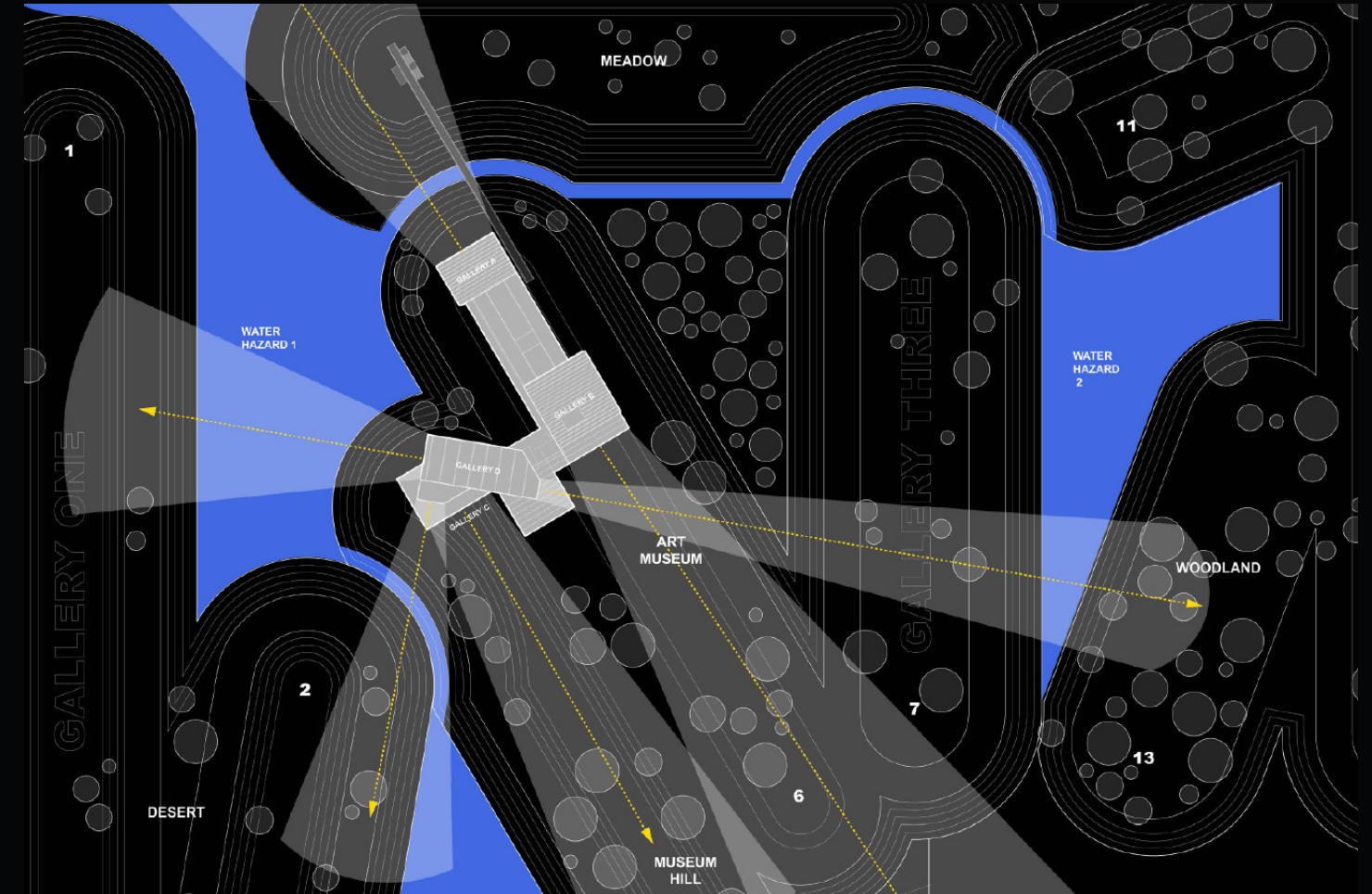
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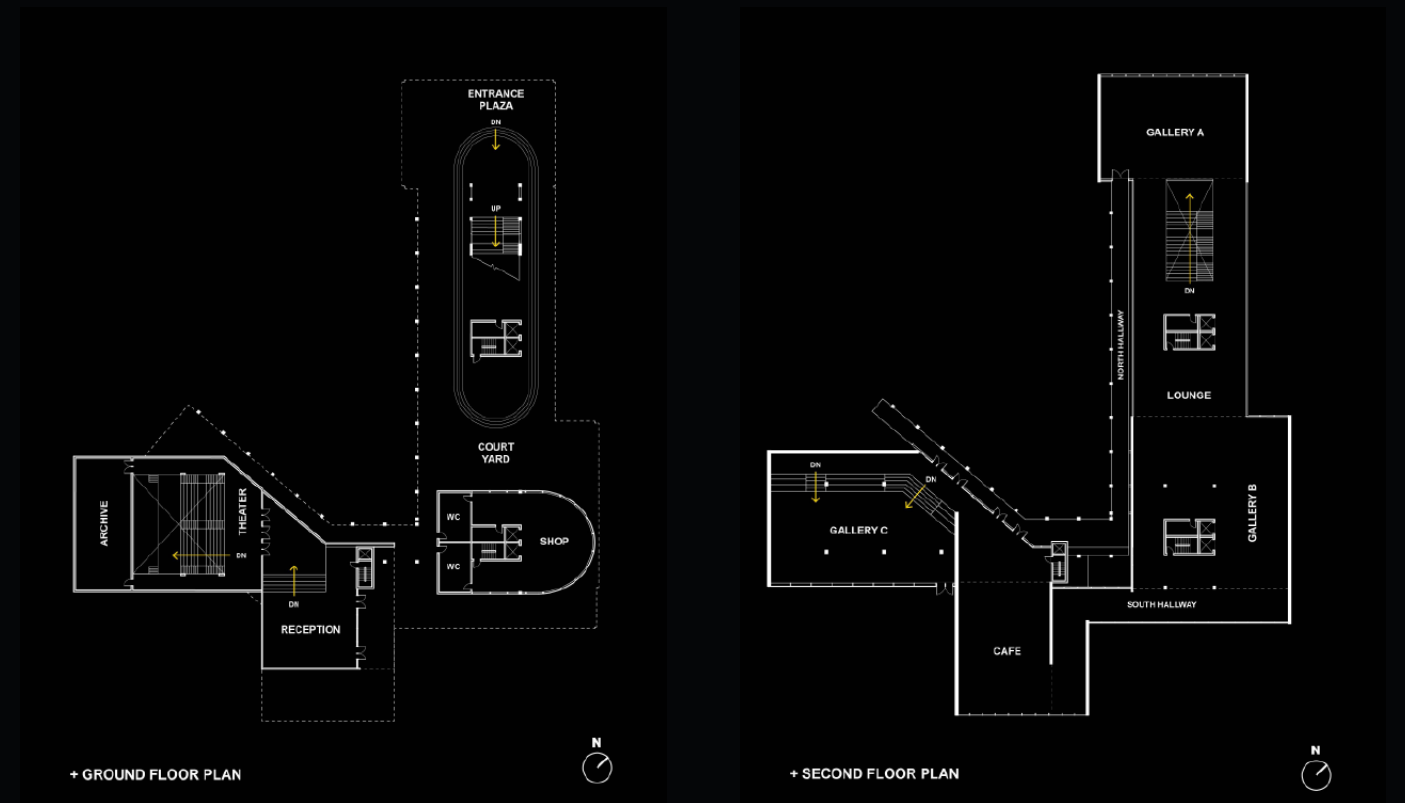
> SITE MAP



> ECOLOGY ZONES



> 100-YEAR FLOOD LEVEL

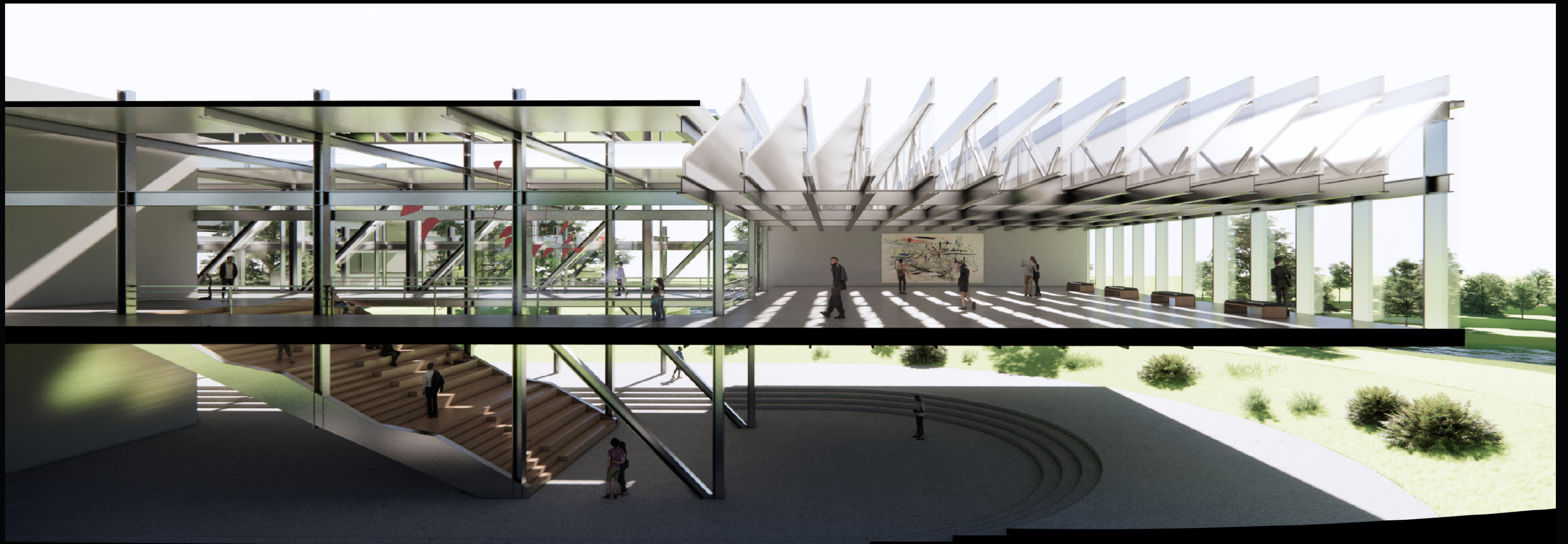


+ GROUND FLOOR PLAN

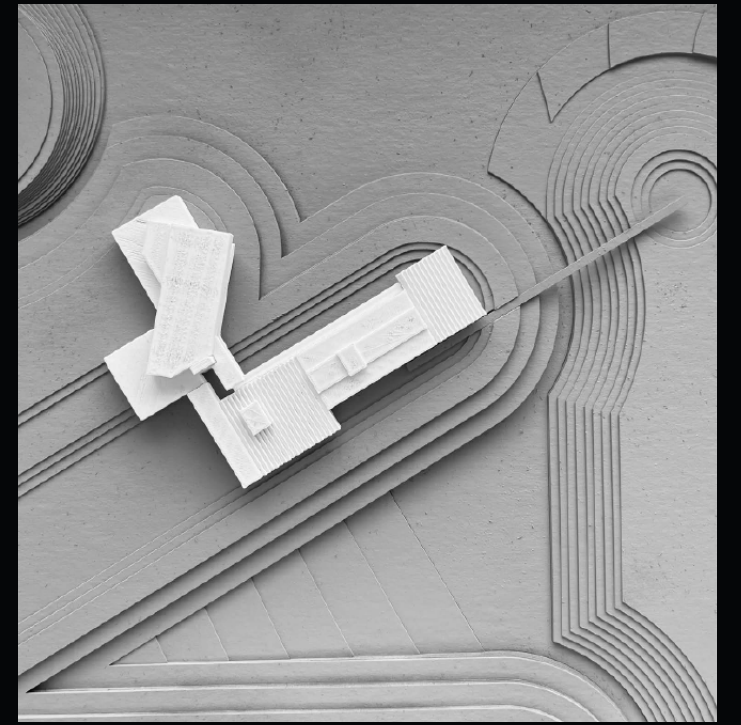
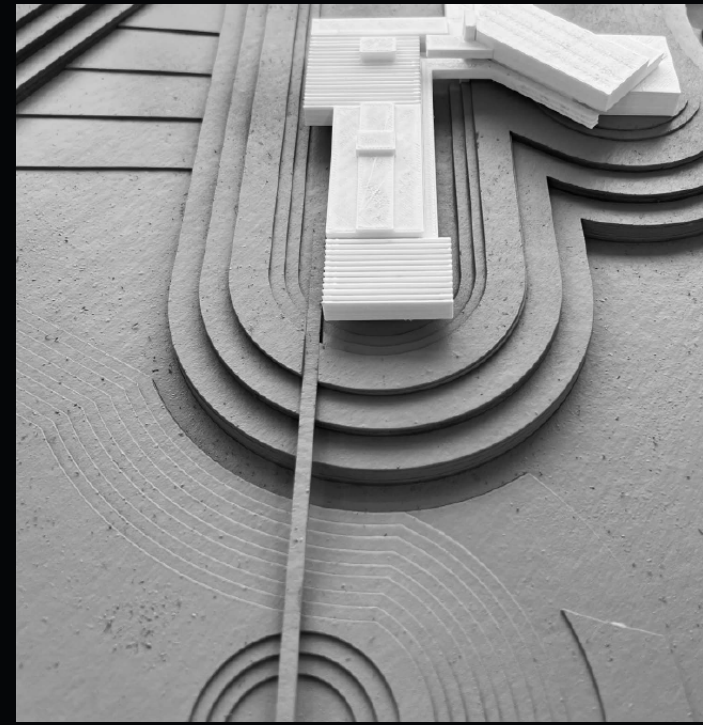
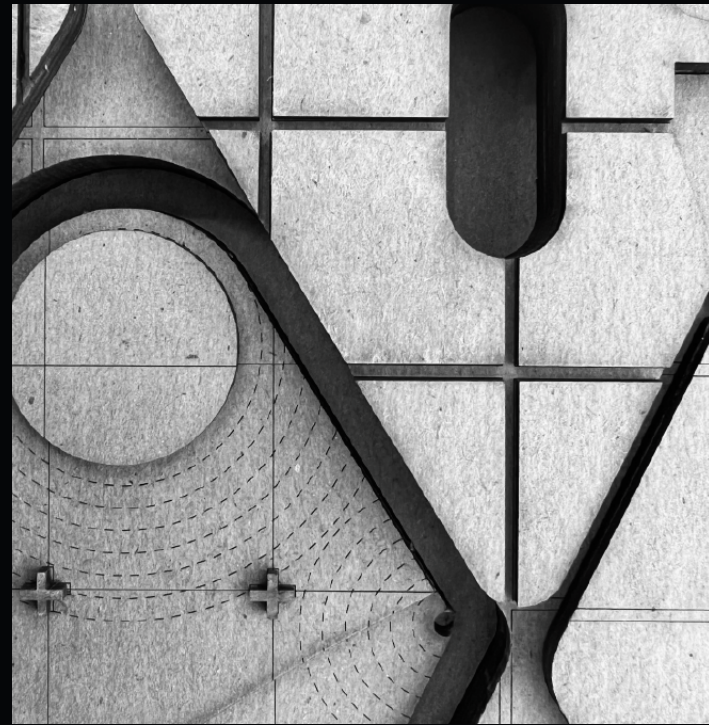
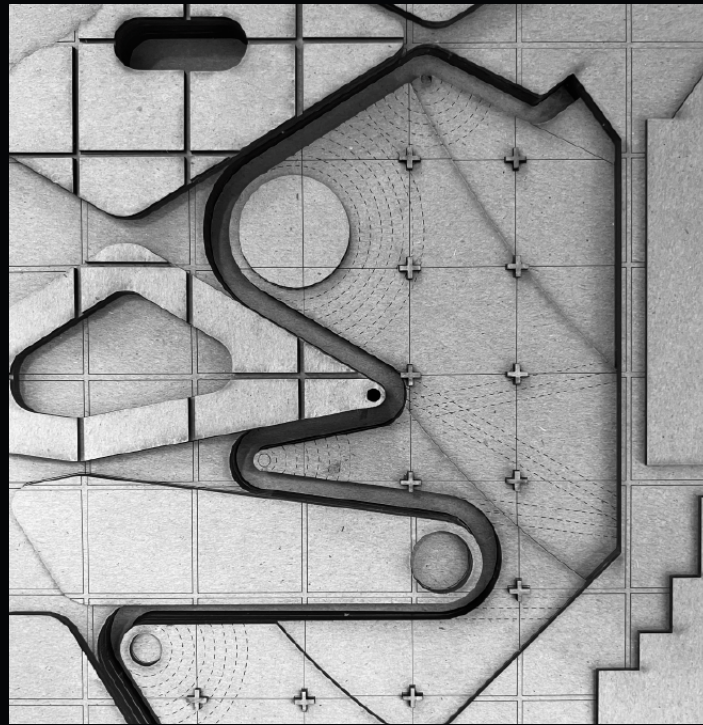
+ SECOND FLOOR PLAN

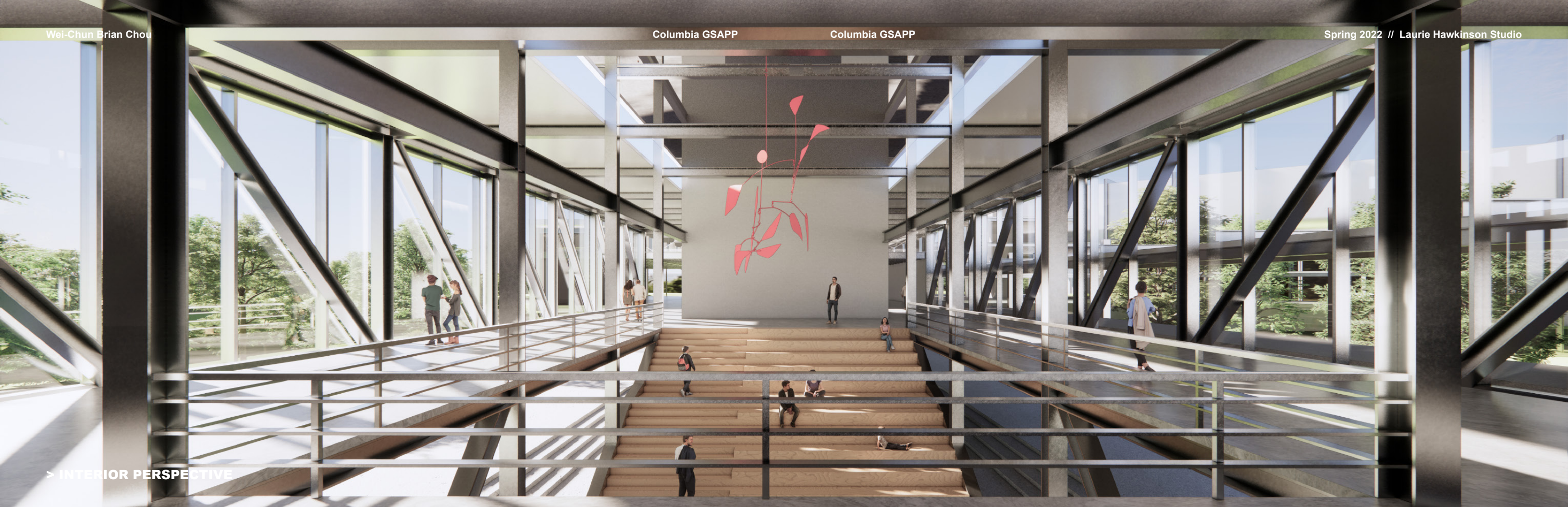


> SECTION



> SECTION





> INTERIOR PERSPECTIVE



> EXTERIOR PERSPECTIVE



> INTERIOR PERSPECTIVE



> INTERIOR PERSPECTIVE



> INTERIOR PERSPECTIVE

END

THANK YOU.