

‘EIWA COLBURN

GRADUATION PORTFOLIO

Columbia University GSAPP '26 - Master of Architecture

EAST RIVER STATION

INTER-WINDING MODES OF TRANSPORTATION

Year: Fall 2023
Course: Core Studio I
Institution: Columbia University GSAPP
Studio Professor: Talitha Liu
Stuido Coordinator: Mpho Matsipa
Project Setting: Academic, Partners - Julian O'Donnell

Project Description

The Manhattan Bridge, an iconic suspension structure traversing the East River and uniting the boroughs of Manhattan and Brooklyn within the heart of New York City, is renowned for its distinctive double-decked configuration. Above, vehicular traffic flows seamlessly, while below, subway tracks, pedestrian walkways, and cyclist lanes offer passage. With a main span extending 1,470 feet (448 meters) and a total length, including approaches, reaching approximately 6,855 feet (2,089 meters), the bridge stands as a testament to the city's innovative spirit and functions as a vital artery in its transportation network, facilitating the daily movement of countless vehicles, subway trains, pedestrians, and cyclists.

Inspired by this bustling transport hub, the East River Station project endeavors to revolutionize the pedestrian experience on the bridge. Central to the project is the addition of a new subway station positioned at the midpoint of the bridge, complemented by the introduction of a novel form of transport: a suspended gondola. This innovative system seamlessly integrates and slows down various modes of transportation, converging them into a single point at the bridge's midpoint, thereby enhancing connectivity and convenience for commuters.

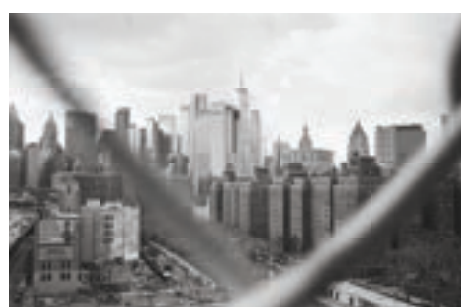
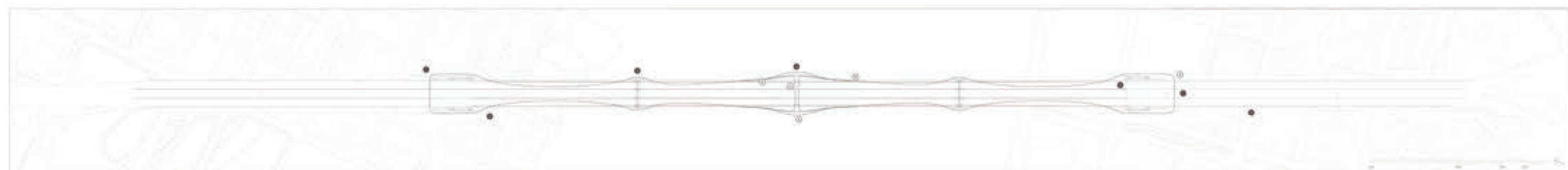
Studio Prompt + Objectives

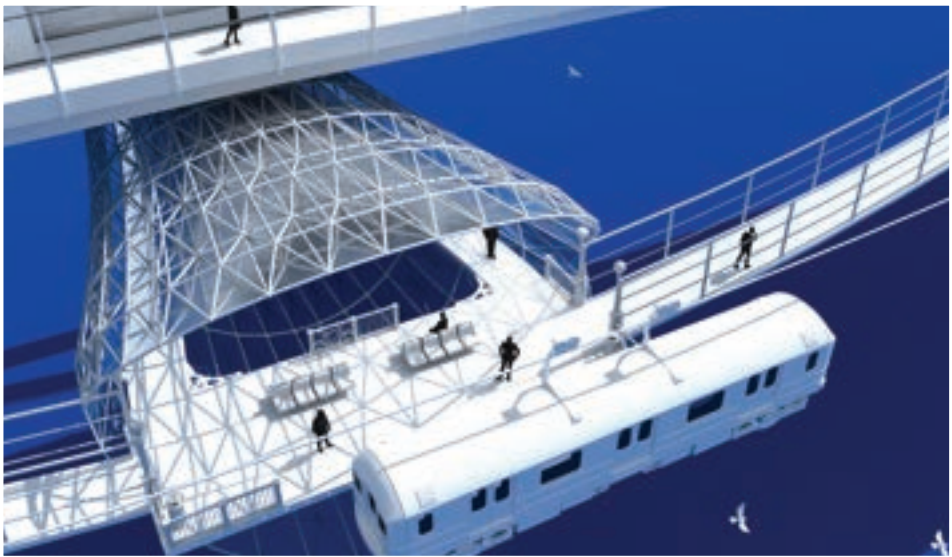
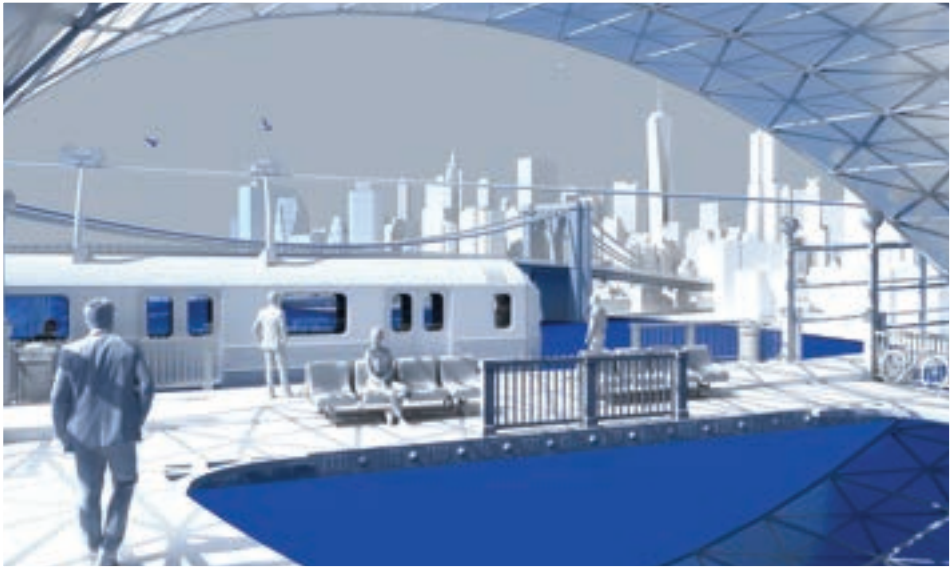
The first semester of the Master of Architecture will focus on the disciplinary knowledge of architecture while simultaneously treating the discipline as a contested and uncertain terrain across multiple scales from the architectural detail to infrastructure. In particular, the first semester will interrogate and consider specific questions of architecture and its relational conditions at the convergence of modernity and colonialism. The questions point towards the confrontation of environmental, social, and technological changes and the way these manifests in the intersection of bodies, ecologies, the environment, and spatial equity.

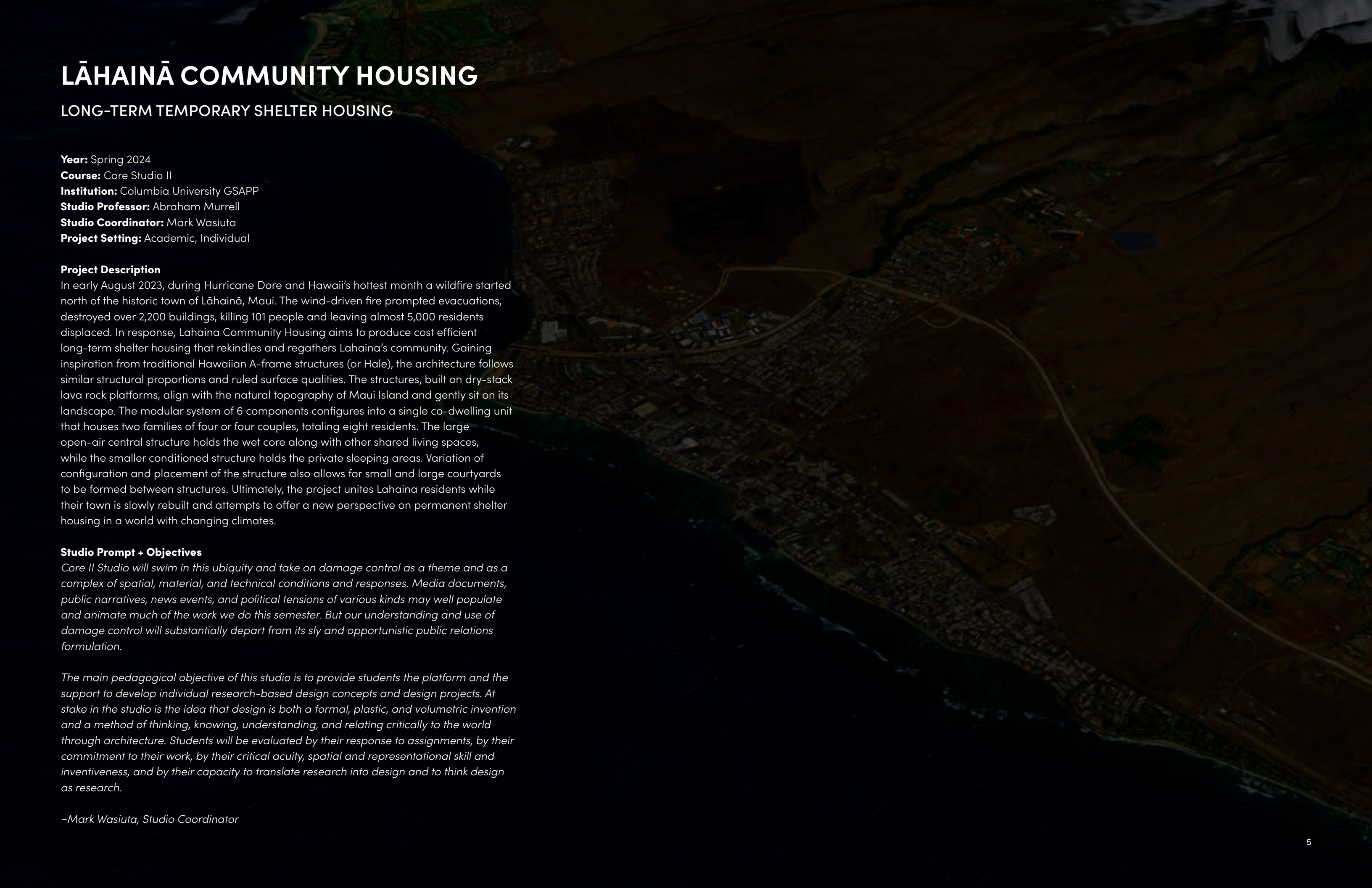
The studio course will include disciplinary knowledge while simultaneously questioning the boundaries of the discipline. This will include architectural drawing conventions and questions of representation, primary elements and questions of relationality, and architectural principles [measure, proportion + scale, order, detail] and questions of legibility.

–Mpho Matsipa, Studio Coordinator







An aerial photograph of Lahaina, Maui, showing the town and surrounding landscape. The town is densely packed with buildings, and the surrounding area is mostly brown and hilly. The ocean is visible on the left side of the image.

LĀHAINĀ COMMUNITY HOUSING

LONG-TERM TEMPORARY SHELTER HOUSING

Year: Spring 2024
Course: Core Studio II
Institution: Columbia University GSAPP
Studio Professor: Abraham Murrell
Studio Coordinator: Mark Wasiuta
Project Setting: Academic, Individual

Project Description

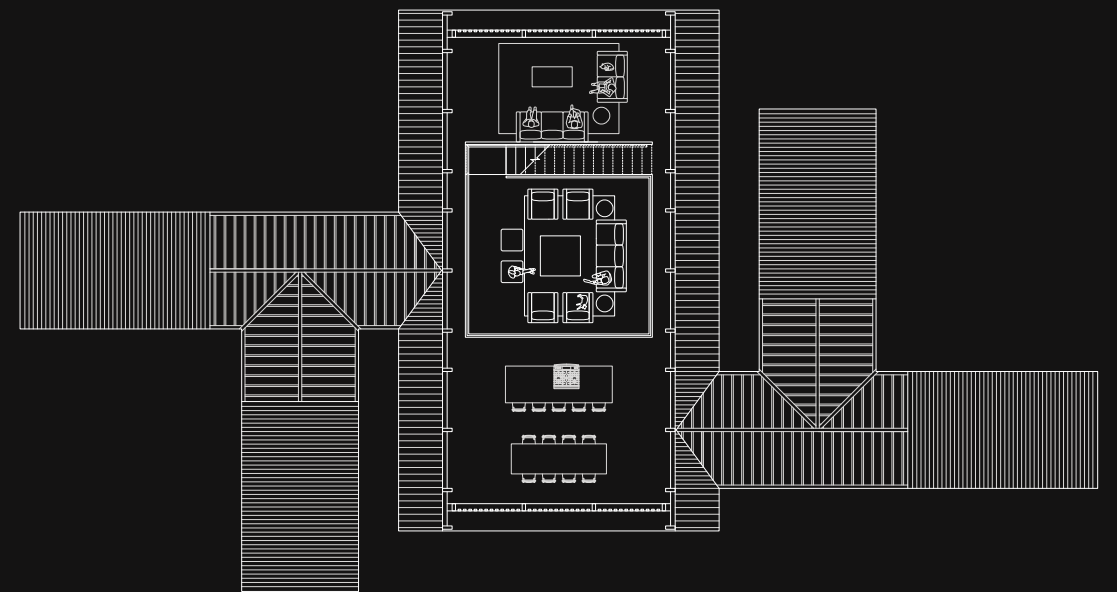
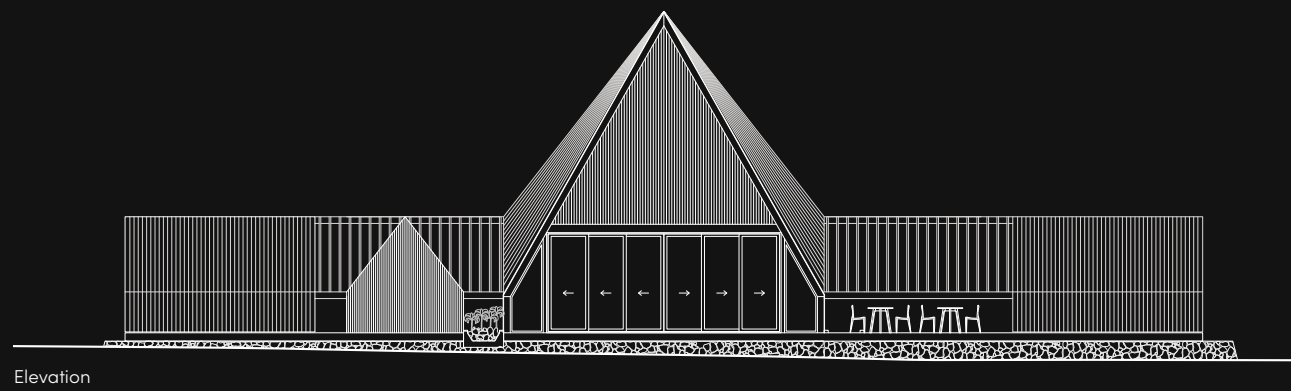
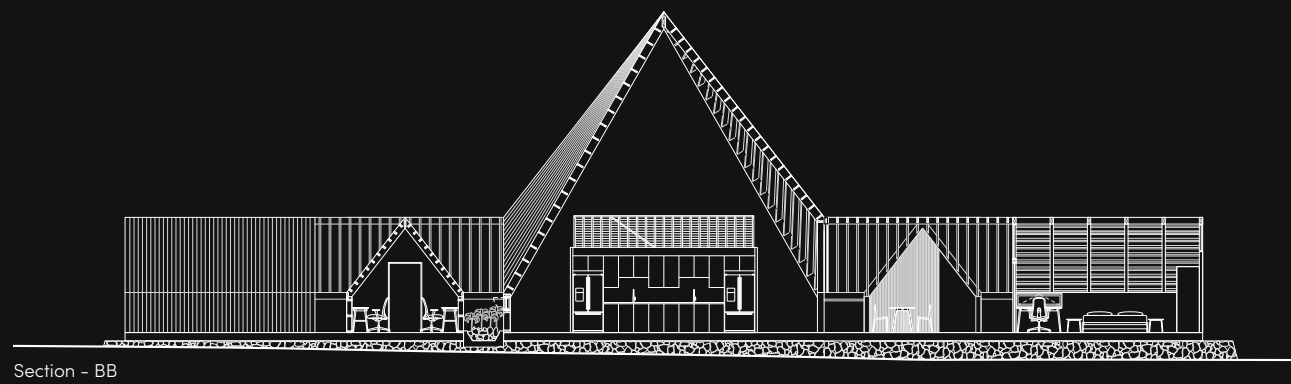
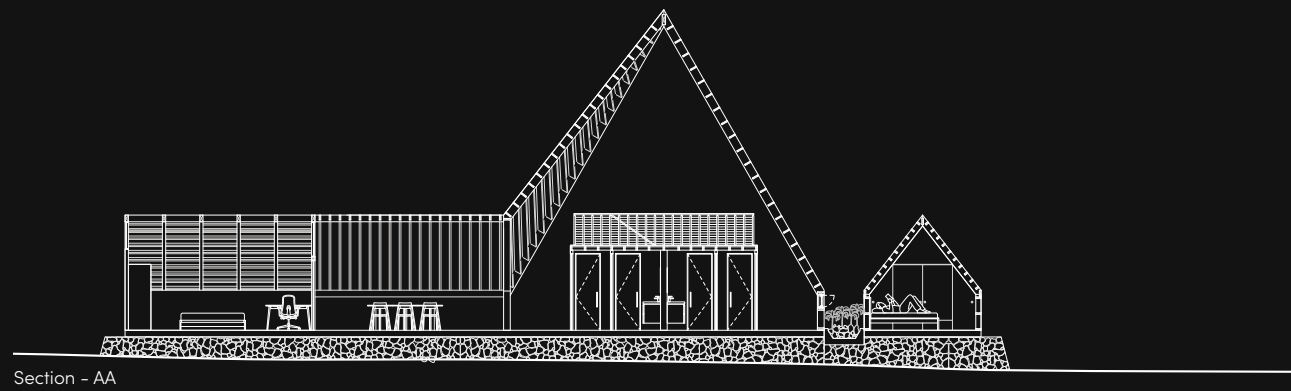
In early August 2023, during Hurricane Dore and Hawaii’s hottest month a wildfire started north of the historic town of Lāhainā, Maui. The wind-driven fire prompted evacuations, destroyed over 2,200 buildings, killing 101 people and leaving almost 5,000 residents displaced. In response, Lahaina Community Housing aims to produce cost efficient long-term shelter housing that rekindles and regathers Lahaina’s community. Gaining inspiration from traditional Hawaiian A-frame structures (or Hale), the architecture follows similar structural proportions and ruled surface qualities. The structures, built on dry-stack lava rock platforms, align with the natural topography of Maui Island and gently sit on its landscape. The modular system of 6 components configures into a single co-dwelling unit that houses two families of four or four couples, totaling eight residents. The large open-air central structure holds the wet core along with other shared living spaces, while the smaller conditioned structure holds the private sleeping areas. Variation of configuration and placement of the structure also allows for small and large courtyards to be formed between structures. Ultimately, the project unites Lahaina residents while their town is slowly rebuilt and attempts to offer a new perspective on permanent shelter housing in a world with changing climates.

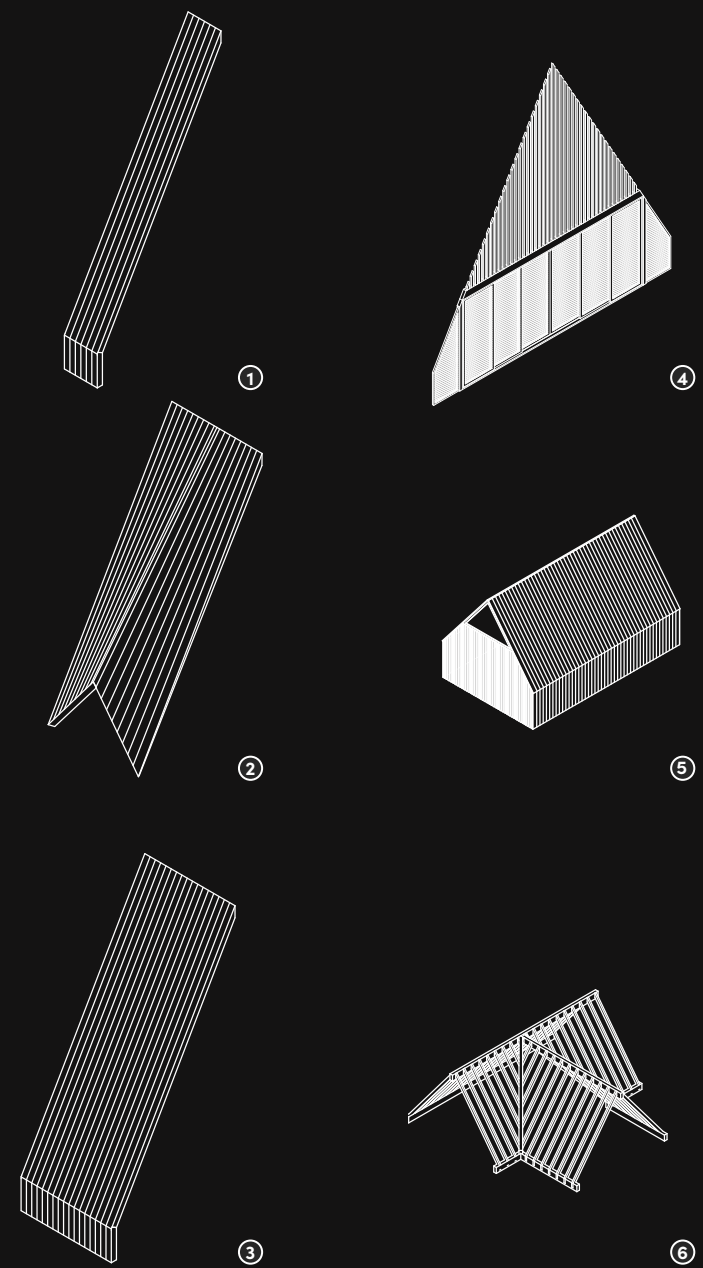
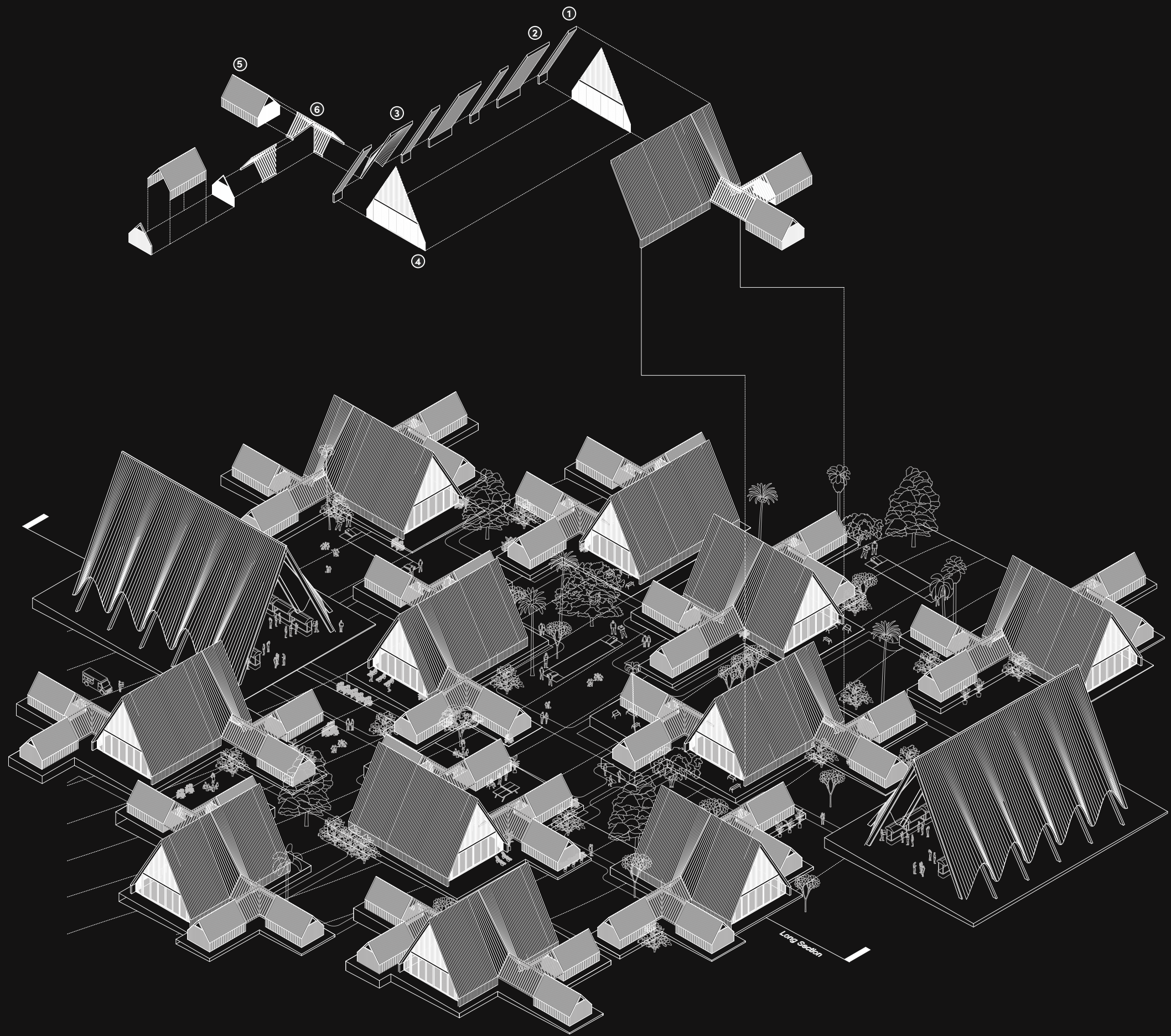
Studio Prompt + Objectives

Core II Studio will swim in this ubiquity and take on damage control as a theme and as a complex of spatial, material, and technical conditions and responses. Media documents, public narratives, news events, and political tensions of various kinds may well populate and animate much of the work we do this semester. But our understanding and use of damage control will substantially depart from its sly and opportunistic public relations formulation.

The main pedagogical objective of this studio is to provide students the platform and the support to develop individual research-based design concepts and design projects. At stake in the studio is the idea that design is both a formal, plastic, and volumetric invention and a method of thinking, knowing, understanding, and relating critically to the world through architecture. Students will be evaluated by their response to assignments, by their commitment to their work, by their critical acuity, spatial and representational skill and inventiveness, and by their capacity to translate research into design and to think design as research.

–Mark Wasiuta, Studio Coordinator





CONVENT ARCHWAYS

COMMUNITY AND MULTI-GENERATIONAL LIVING

Year: Fall 2024
Course: Core Studio III: Housing
Institution: Columbia University GSAPP
Studio Professor: Erica Goetz
Studio Coordinator: Hilary Sample
Project Setting: Academic, Partners – Lorennah Granfors

Project Description

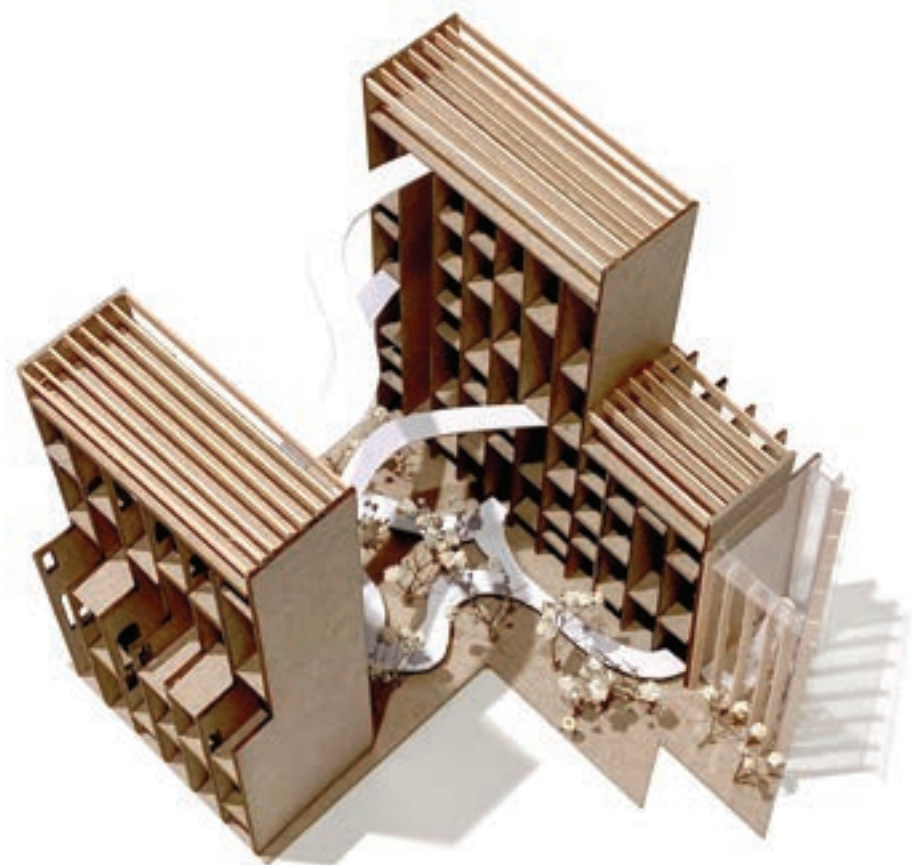
Convent Archways housing project is focused on supporting diverse family structures, particularly multi-generational units. It aims to create a community-centered space where care and mutual support are central. The design includes adaptable units based on a 13’6” wide planning module that can accommodate varying family sizes, with the flexibility to vertically or horizontally expand or contract through winter gardens. The building’s structure features brick load-bearing walls with arched openings, an ode to the surrounding neighborhood. The central courtyard and public ground floor spaces, including local businesses such as a bakery, café, and senior care services, fosters a neighborhood within the building, promoting intergenerational exchange among residents of different ages and backgrounds. A greenhouse space provides a mesothermal environment for residents and the public, promoting well-being. Sustainability is integrated throughout the design, with natural systems like rainwater management, passive solar heating, and cross-ventilation. Units are oriented to maximize comfort year-round, with deep overhangs for summer sun protection and optimal solar gain in winter. This building is not only a place to live, but a catalyst for connection and adaptability in the face of an urban ever-evolving landscape.

Studio Prompt + Objectives

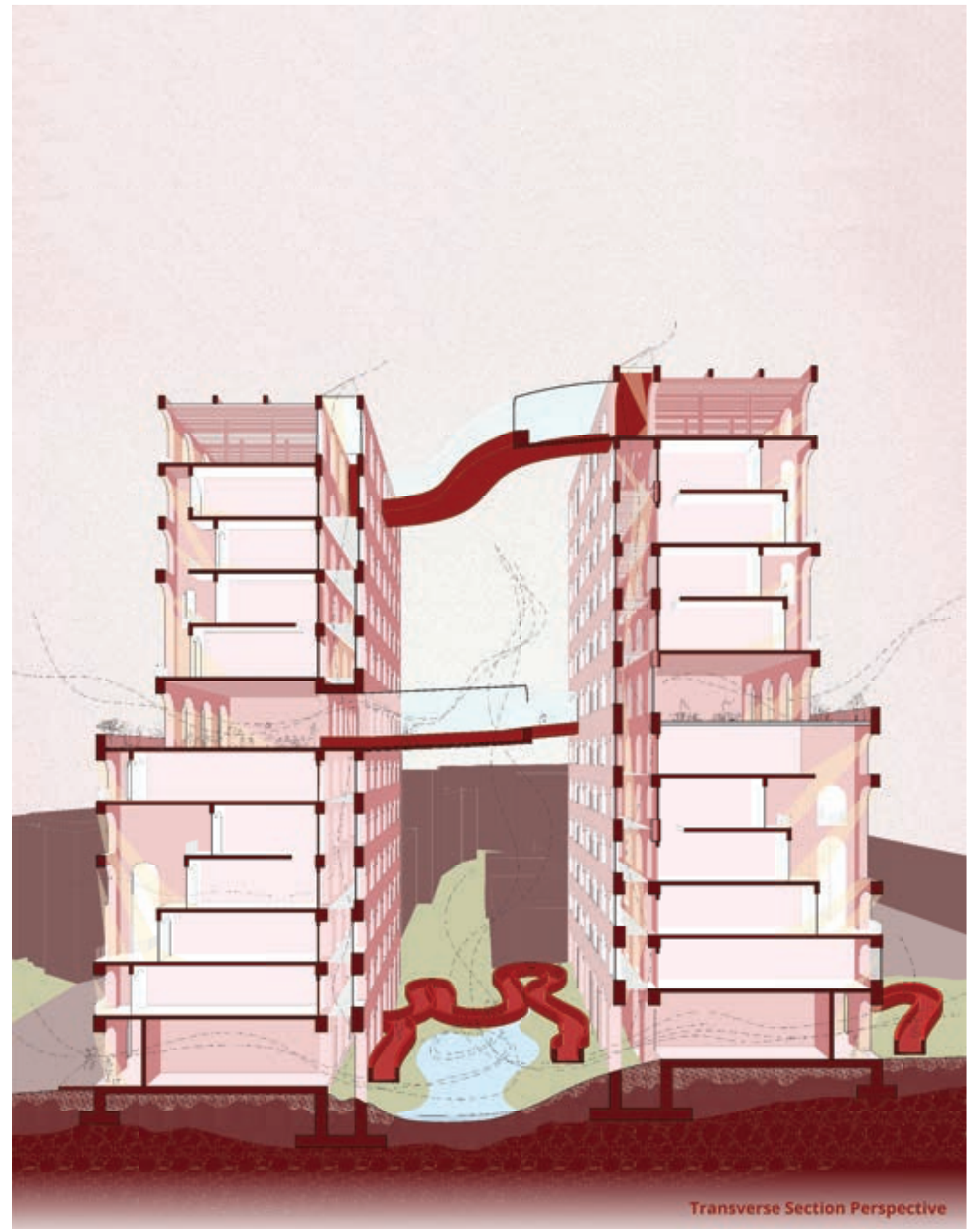
This architecture studio explores public spaces and everyday life as it relates to designing collective housing in an incomplete block. NYC’s significant housing shortage compounded with an increasing demand for affordability, raises critical questions about design and density: How much housing is needed? For whom? How might architects address density? What spaces are urgently required? How is community cultivated through design? Public spaces have been typically owned by the City yet are increasingly becoming privately owned public spaces. One alternate form of public space is the community garden, yet, they currently reflect ownership that can produce exclusion rather than inclusion. As the studio thinks of alternate housing models, public spaces including ideas for community garden spaces should be reimagined to represent contemporary values and culture as intersect housing.

The first is a four-week design research phase, during which students will produce drawings that will inform their final studio project. The second assignment is the design of a community housing proposal, which is supported by their research.

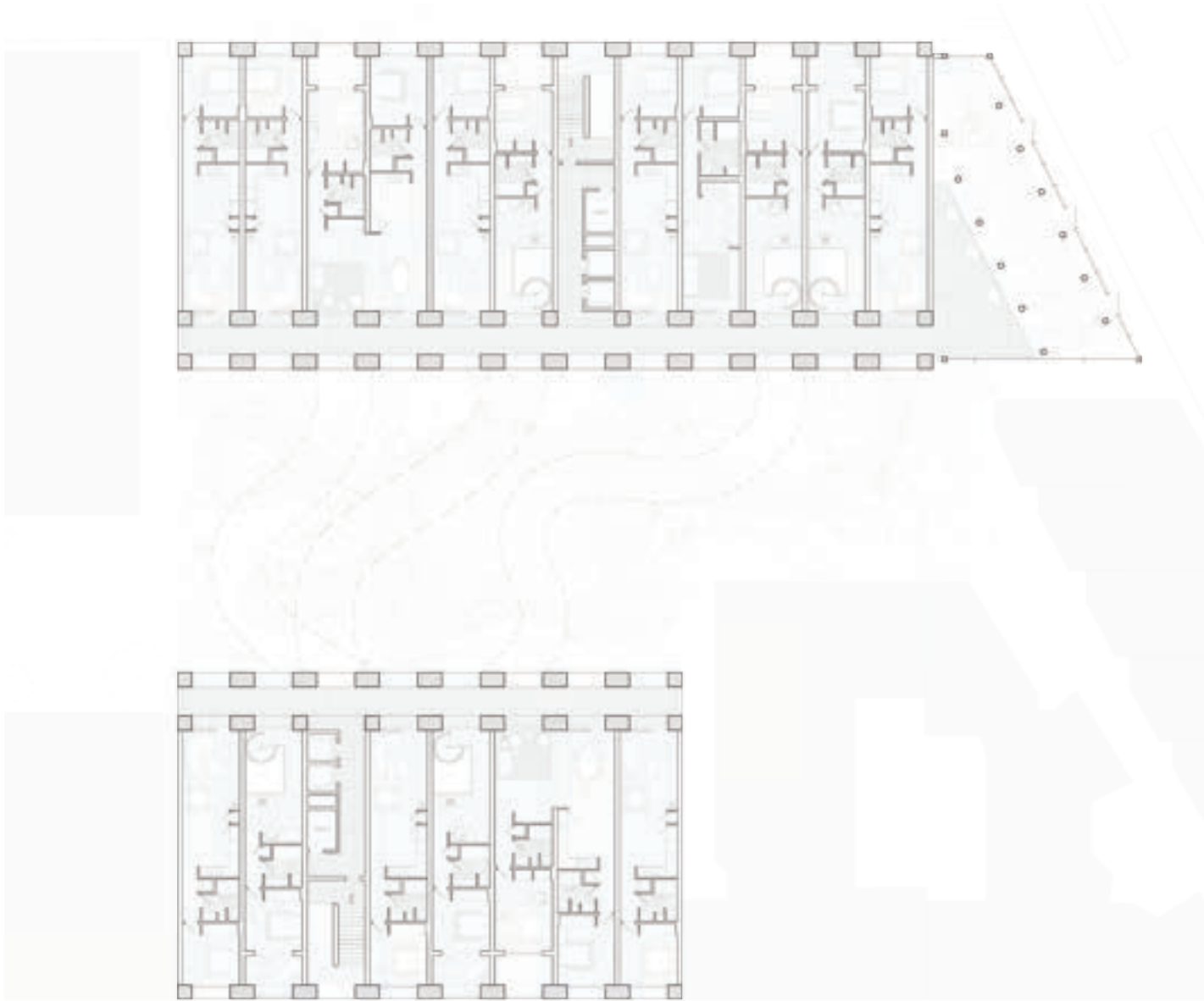
–Hilary Sample, Studio Coordinator



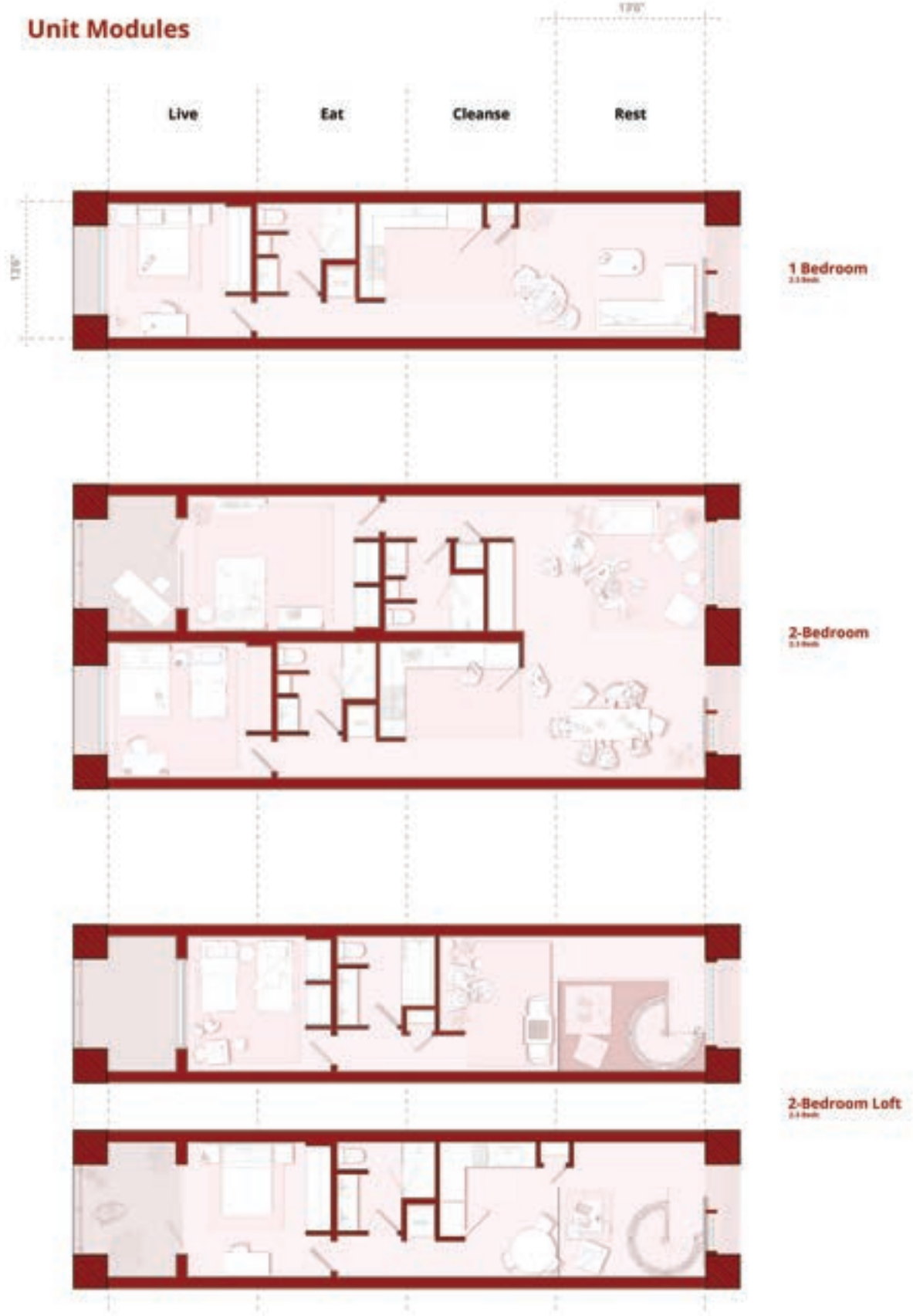
Scale: 1' = 1/32"



Typical Floor Plan



Unit Modules





RECLAIMING SHINNECOCK HILLS

LAND, WATER AND MEMORY

Year: Spring 2025
Course: Advance Studio IV
Institution: Columbia University GSAPP
Studio Professor: Feifei Zhou
Studio Coordinator: Ziad Jamaledidine
Project Setting: Academic, Partners - Nadeysh Ojasmar

Project Description

Today, four massive private golf courses blanket the Shinnecock Hills—Sebonack Golf Club, National Golf Links of America, Southampton Golf Club, and Shinnecock Hills Golf Club. On the surface, these courses offer pristine landscapes of leisure. But beneath the manicured greens lies a deeper story of environmental harm and Indigenous displacement. These golf courses apply nitrogen at rates of up to 232 kg N/ha/year—the maximum allowed under Suffolk County law. Together, they contribute nearly 89,000 kilograms of nitrogen pollution annually, with an estimated 17,790 kilograms leaching into surrounding ecosystems.

This nutrient runoff fuels toxic algae blooms that choke Shinnecock Bay, devastate shellfishing grounds, and threaten centuries-old Shinnecock aquacultural practices. The landscape, once rich with pitch pines, native grasses, eelgrass meadows, and thriving marine ecosystems, has been displaced by chemically dependent, monocultural lawns. Our proposal is not only an ecological response—it is a land reclamation grounded in justice. The Shinnecock Nation, whose ancestral burial grounds lie beneath parts of these developments, has long protested the erasure of its presence from these lands.

Studio Prompt + Objectives

This year, the studio set its site in Montauk, NY, a contested site of land-and-waterscapes with “boundary issues.” As both a popular fishing port and tourist destination, Montauk is undergoing some profound transformations: the privatization of community spaces into upscale commercial properties; the reinforcement of seawalls and coastal barriers for coastal protection; the zoning and regulation of fishing activities, as well as the battle for restoring fishing rights for Indigenous communities such as the Shinnecock Nation. These issues of gentrification, over development, coastal erosion, and fishing rights, although across economic, ecological, social, and political fields, are deeply interconnected, each tied to the imposition of boundaries and privatization.

The studio assignment asks students to seek contested territories— whether on land, in water, or at their intersections—where boundaries have been imposed, and challenge the conflicts that arise from the boundary issues. The goal is to design spaces that resist privatization and control, instead providing opportunities for knowledge to be gathered, created, and exchanged.

—FeiFei Zhou, Studio Professor





HUDSON BOTANICAL GARDEN

PIER 76, NEW YORK CITY

Year: Fall 2025
Course: Advance Studio V
Institution: Columbia University GSAPP
Studio Professor: Gordon Kipping
Studio Coordinator: Mario Gooden, Lydia Kallipoliti
Project Setting: Academic, Partners – Violetta Masttronardi

Project Description

By preserving the existing steel platform and pier infrastructure at Pier 76, the design conserves significant embodied carbon and transforms an industrial relic into a permanent armature for civic life. Situated at a premier multimodal node near Hudson Yards, the proposal leverages its high accessibility to anchor a year-round public facility within a district undergoing rapid residential densification.

The project reimagines the pier as a bioclimatic public interior, filling a critical typological gap in the Hudson River Park system for enclosed, non-fee-based communal space. Drawing inspiration from the High Line’s logic, the design unfolds as a linear climatic corridor housing botanical landscapes, recreational courts, and cultural amenities. An advanced environmental envelope—featuring a double-skin façade and retractable shading—modulates solar gain and humidity, creating a high-performance “civic condenser” that reconciles ecological stewardship with the everyday needs of a growing West Side community.

Studio Prompt + Objectives

This studio focused on the intersection of performative design and data-driven urbanism, establishing a rigorous framework for sustainable architectural intervention. The initial phase involved the production of a comprehensive series of environmental analytical books. These studies dissected fundamental sustainable strategies, including solar-responsive façade orientations, passive air circulation techniques, and thermodynamic temperature control. This foundational research equipped us with the technical vocabulary to treat environmental performance as a primary driver of formal expression rather than an afterthought.

The curriculum transitioned into a specialized GIS (Geographic Information Systems) workshop, providing the tools to map and synthesize complex public-source data into actionable site intelligence. This analytical rigor culminated in the final design challenge: the redevelopment of Pier 76 in Manhattan. Tasked with navigating the tension between preservation and new construction, we evaluated the existing industrial infrastructure through a lens of embodied carbon. The resulting proposals represent a synthesis of climate-specific building systems and data-informed civic programming within New York City’s evolving waterfront.

Subway Lines

- 1-2-3
- 4-5-6
- 7
- A-C-E
- B-D-F-M
- G
- J-Z
- L
- N-Q-R-W
- S

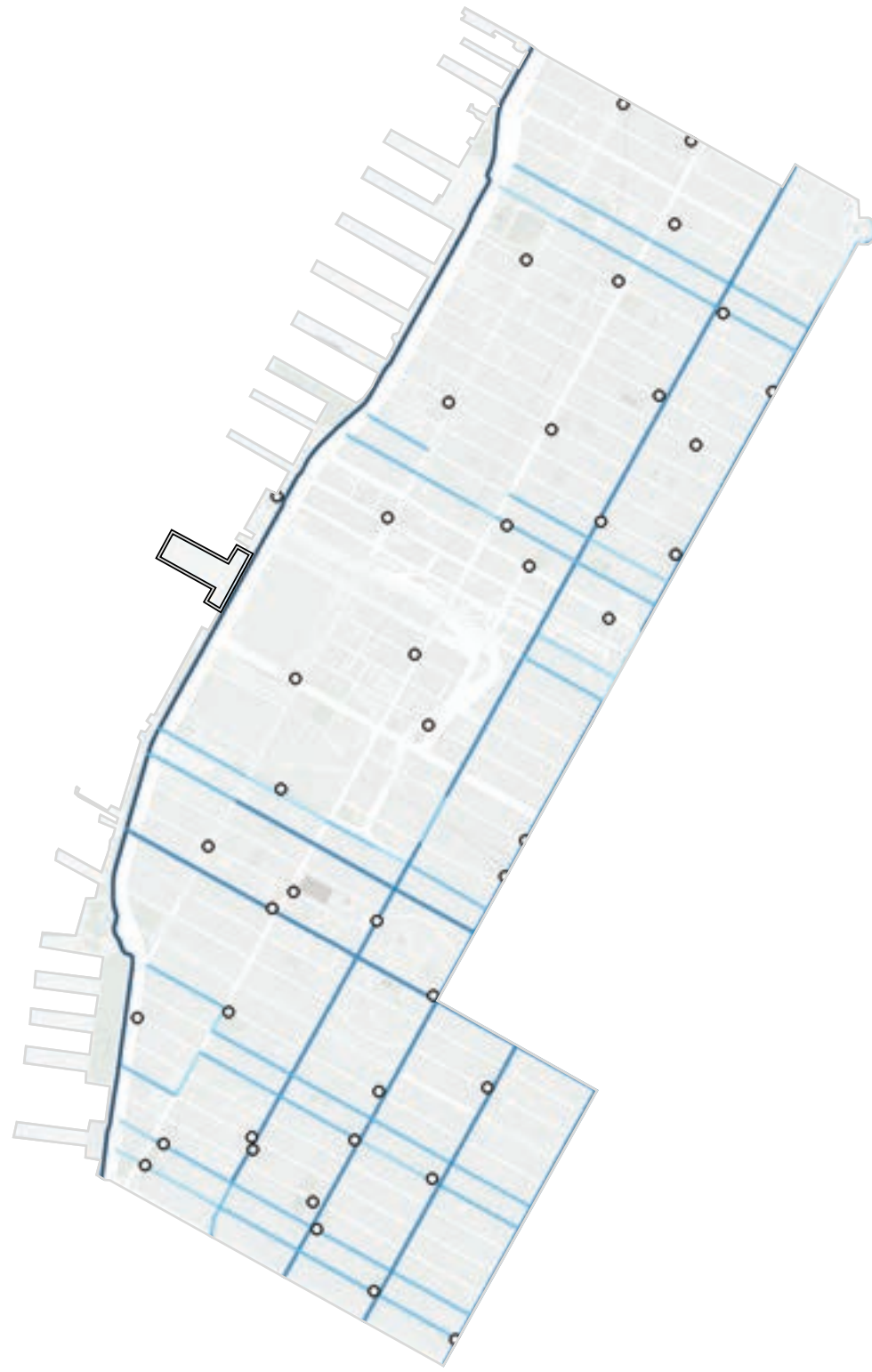


Bike Lanes

- Bike Lanes
- Citi Bike Stations



Bike Lanes





Plan

- ①

Pickleball courts
- ②

Tennis court
- ③

Biergarten
- ④

Public bathrooms
- ⑤

Art gallery
- ⑥

Cafe
- ⑦

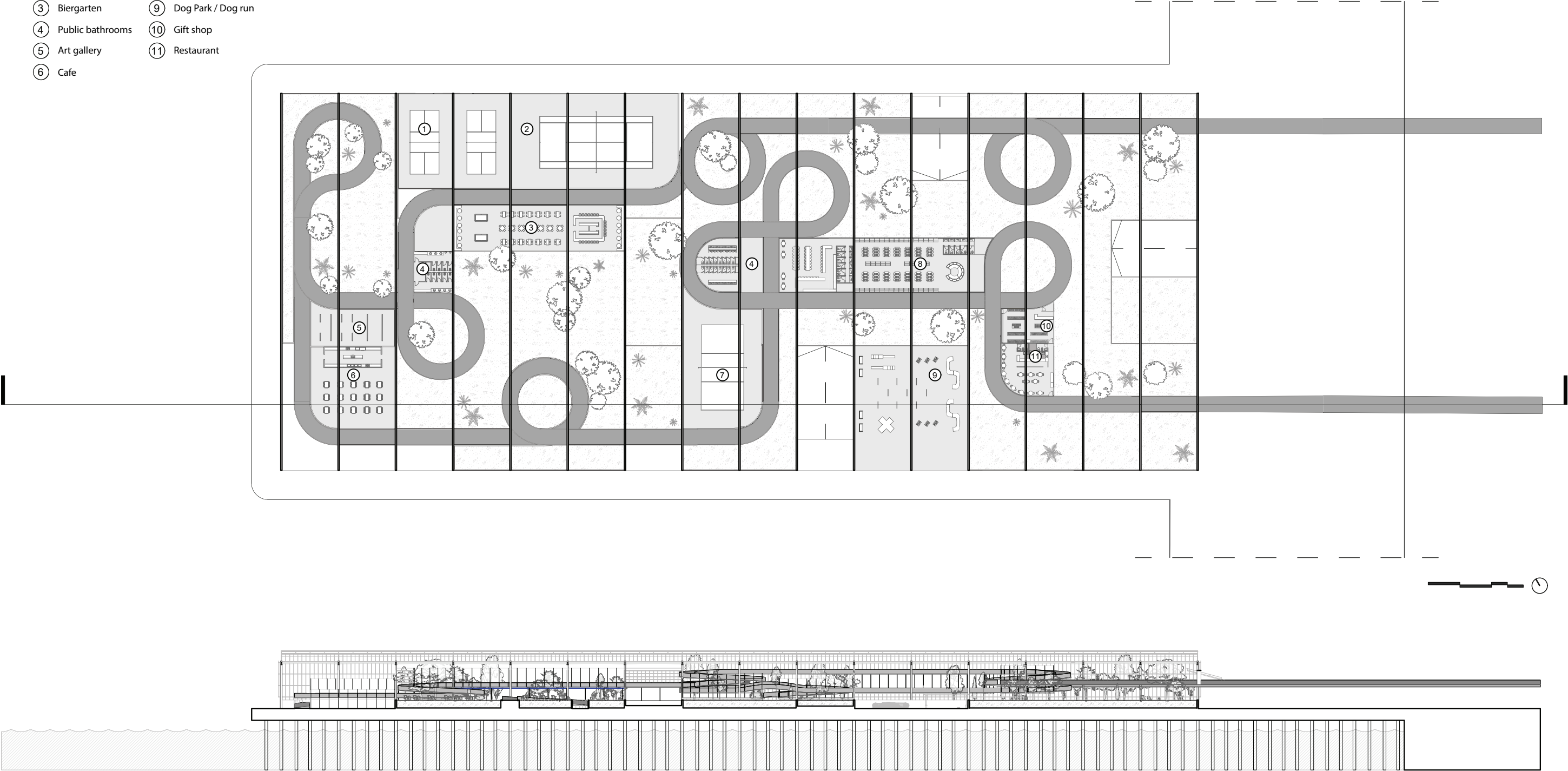
Volleyball courts
- ⑧

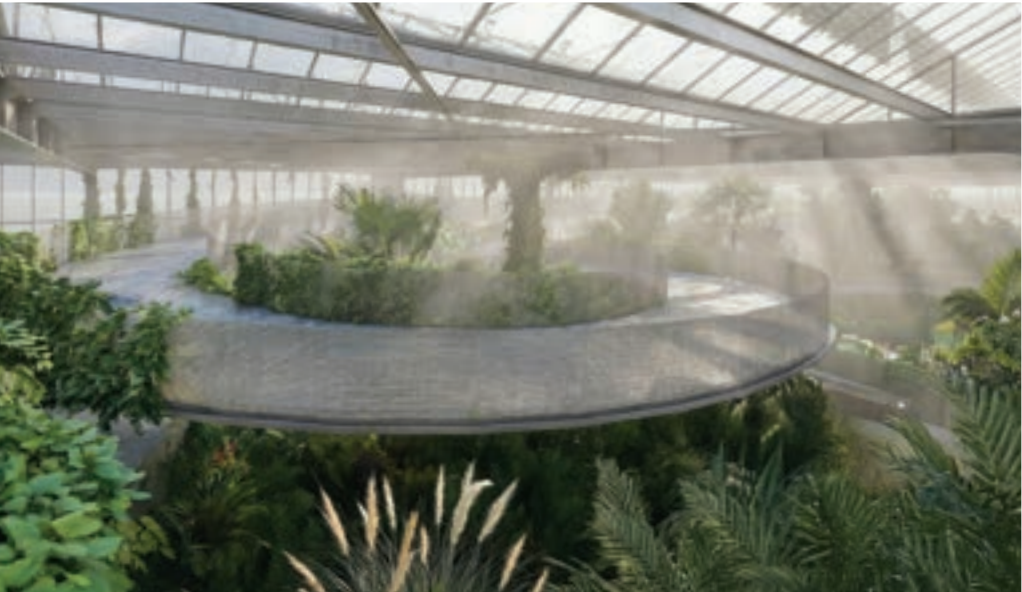
Library
- ⑨

Dog Park / Dog run
- ⑩

Gift shop
- ⑪

Restaurant





RECLAIMING SHINNECOCK HILLS

LAND, WATER AND MEMORY

Year: Spring 2026
Course: Advance Studio VI
Institution: Columbia University GSAPP
Studio Professor: Juan Herreros, Aystiara Shanning
Studio Coordinator: Marc Tsurumaki
Project Setting: Academic, Partners – Nadeysh Ojasmar & Eugenia Lopez

Project Description

Located in Madrid’s Lot 2 near Laguna Ambroz, this co-living project addresses the tension between the Nueva Centralidad Este housing demand and the site’s delicate ecology. Rather than treating the land as an empty plot, the design honors the lagoon’s history as a self-healing former extraction site. The architecture adopts the density of a traditional Madrid block but “breaks” the grid, allowing biodiversity to flow between porous building clusters. This strategy preserves critical habitats for birds and invertebrates, transforming the development into an active participant in the Bosque Metropolitano green belt.

The project utilizes a material strategy of rammed earth and clay, sourced directly from site excavations that simultaneously create new seasonal “floodable forests.” Architecturally, the buildings function as vertical ecosystems: the ground floor hosts wetland research labs and seed banks, while the upper “coronations” provide nesting habitats for migratory species. By integrating adaptable residential units with communal pottery and ecology stewardship spaces, the proposal redefines domesticity as a multi-species collaboration, reconciling urban growth with profound ecological repair.

Studio Prompt + Objectives

The course begins with groups of three students each, focused on one of the proposed cases. The main objective is to explore project techniques driven by an experimental spirit that allows us to challenge established paradigms in collective housing shaped by routine, regulations, economic constraints, and preconceived ideas. Using “realistic” initial data, we seek to anchor seemingly utopian and radically innovative ideas in viable and necessary proposals that resonate with their inherent relevance.

The working model functions as a rigorous but experimental laboratory with a strong collective focus. Imagination and essayistic thinking will drive the commitments that each project wants to deploy. The goal is to foster continuous collective reflection, where every contribution — documentary, written, oral, or graphic — adds value. Given the workshop’s brevity, the materials produced must function as clear and communicative architectural documents, ready for dissemination.

–Juan Herreros, Studio Professor





