Three Parts

Henry Black

Columbia University GSAPP

MArch 2022

—

Part One

Advanced Studios

—

Working at the urban and landscape scale, these projects examine architecture as a way to change how we interact with the land. Using techniques of enmeshing, blurring, amplifying, returning, overlapping, connecting, unconstructing, reusing, seeking, avoiding, repairing, engaging, acknowledging, and de-centering humans to create a more inclusive architecture and landscape.

Blurred Ecologies

Columbia University GSAPP

MArch I

**Adv VI - Mario Gooden - Water Studio**

Spring 2022

—

This project looks at how the ecology and connection to the natural environment has changed from the ahupua'a and aina land model to the mainland suburban model of land occupation in Oahu. Looking at the factors that made this transition happen and are keeping the ahupua'a from successfully providing for its people, to propose a project that reestablishes the practice of ea and aina.

It considers a possible future that is a product of these overlapping histories and an unconstruction of the human interventions to allow the return of aina. Through adaptive reuse and the acknowledgment that nature is a decolonizing force, there is an enmeshing of materials, histories, and futures.

Returning the fish ponds to a state of aina requires their connection to the rest of the ahupua'a. The urban grid gives way to reestablish the river network that delivers nutrients from the kalo fields up river. Buildings are "unconstructed", removing walls to allow the shifting sand dunes, fish ponds, streams and Waikiki breeze to move through their hollow frames and out from the Fort DeRussy site.

Welcome Center

Residential

Bathhouse

Education

Residential

Welcome

Science

Education

Residential

Classroom

Bathhouse

SITE SECTIONS
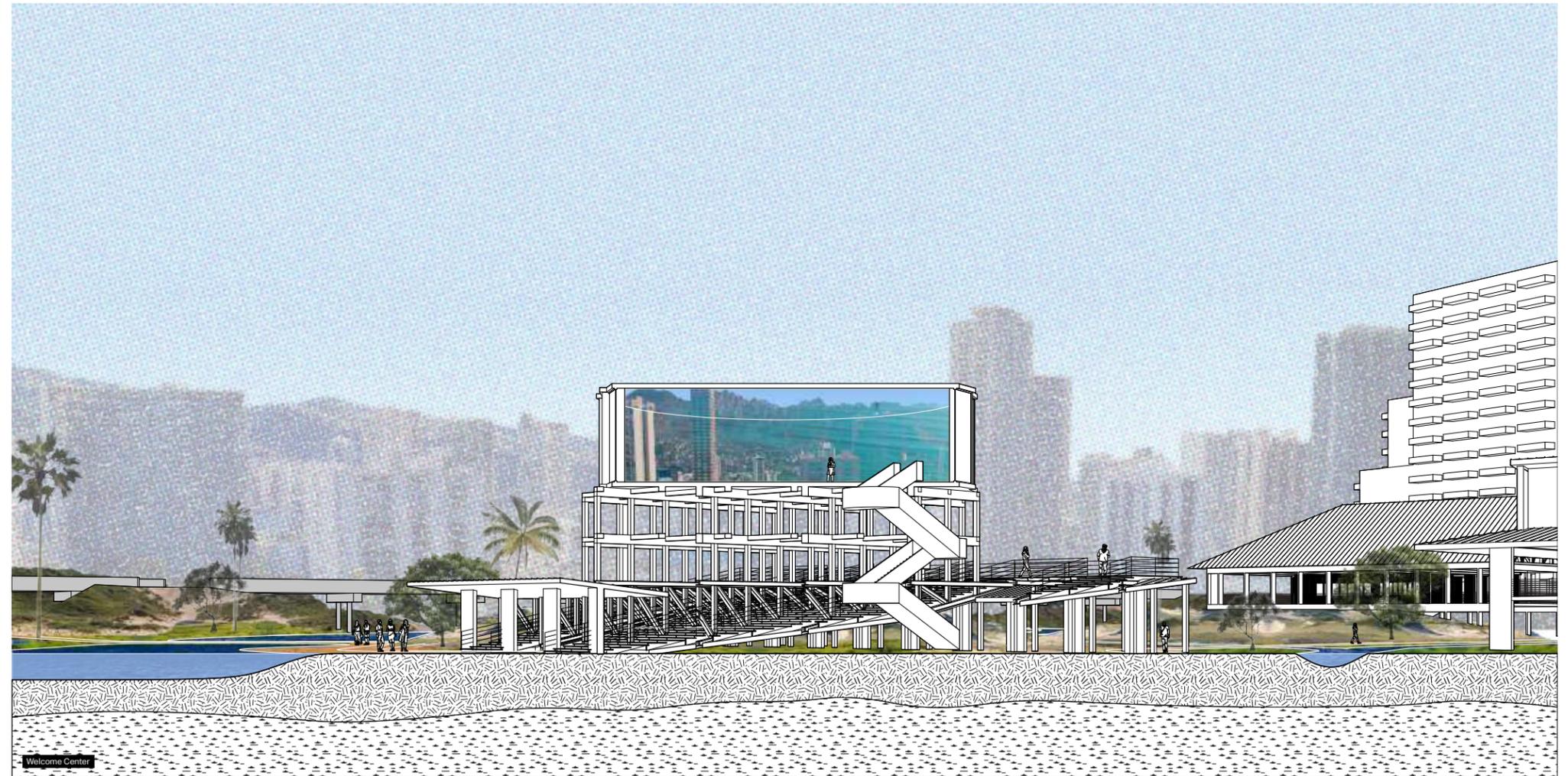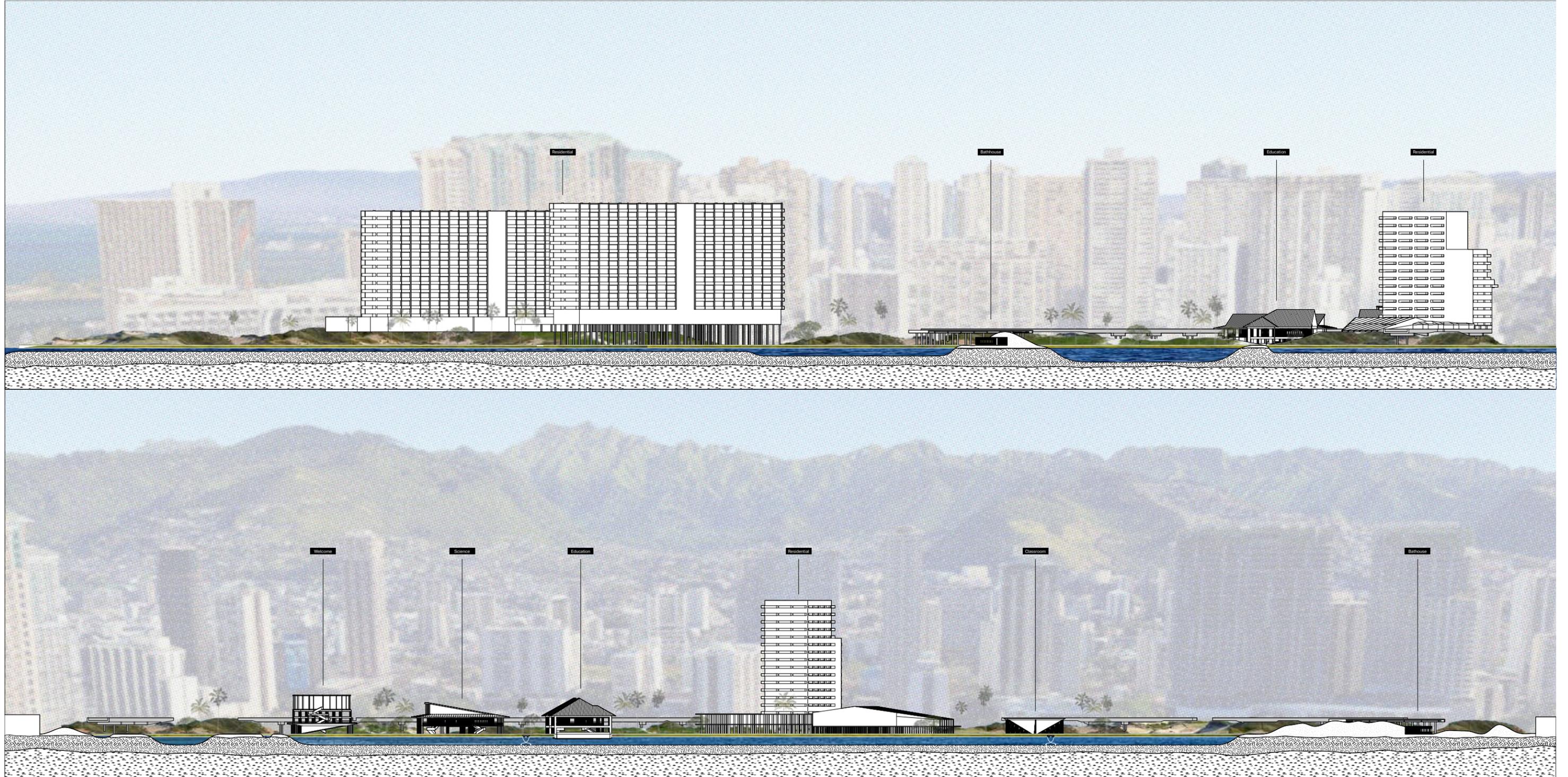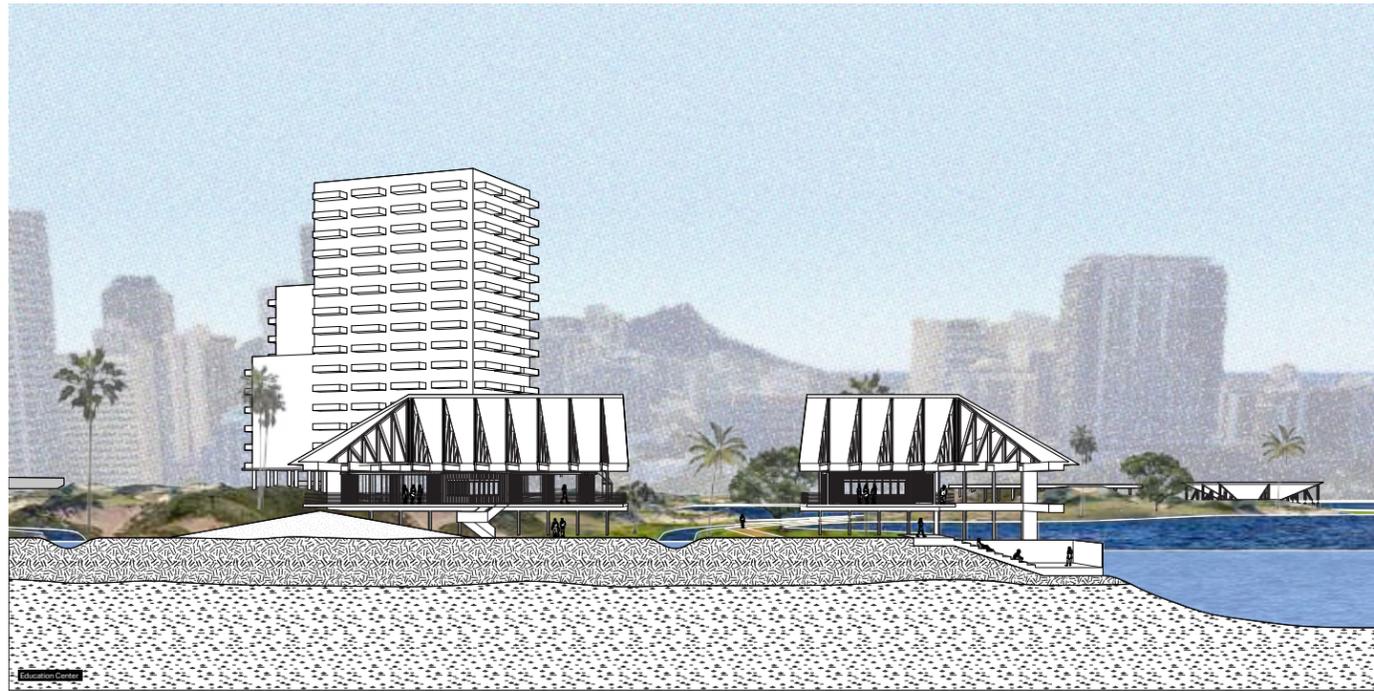
EDUCATION CENTER SECTION PERSPECTIVE

SITE PLAN

Street Building

Columbia University GSAPP

MArch I

Adv V - Bryony Roberts - Sensory Publics

Fall 2021

—

The Sensory Publics Studio looked to design a space for the neurodiverse community at the intersection of the public and private realm. We identified areas in our neighborhood that were under performing and proposed interventions.

Community Building looks at a superblock on the Upper West Side and in acknowledgment of the collective harm of its urban renewal past proposes a first step in a series to repair its effects. I am offering one possible proposal for the land to be turned into a Community Land Trust, turning the parking lot of the urban renewal development into a series of productive and inclusive space within the neighborhood.

By creating programmed hubs of varying sensory experiences and sensory transition spaces between these hubs, the project looks to create a variety of experiences, paths, and zones of seeking and avoiding as you move through the site.

Neglected Buildings

Manhattantown Stars

Phillip A. Payton Jr.

Manhattantown before "slum" clearance

Robert Moses

Resident Displacement

YOUNGSTERS FROM 99th STREET

"Old" Community Reunion, 1981 & 2011

Park West Village

1954 Housing Act

Today

Community Stakeholders

CLT How To

SITE HISTORY

COMMUNITY LAND TRUST & PROGRAM HUBS
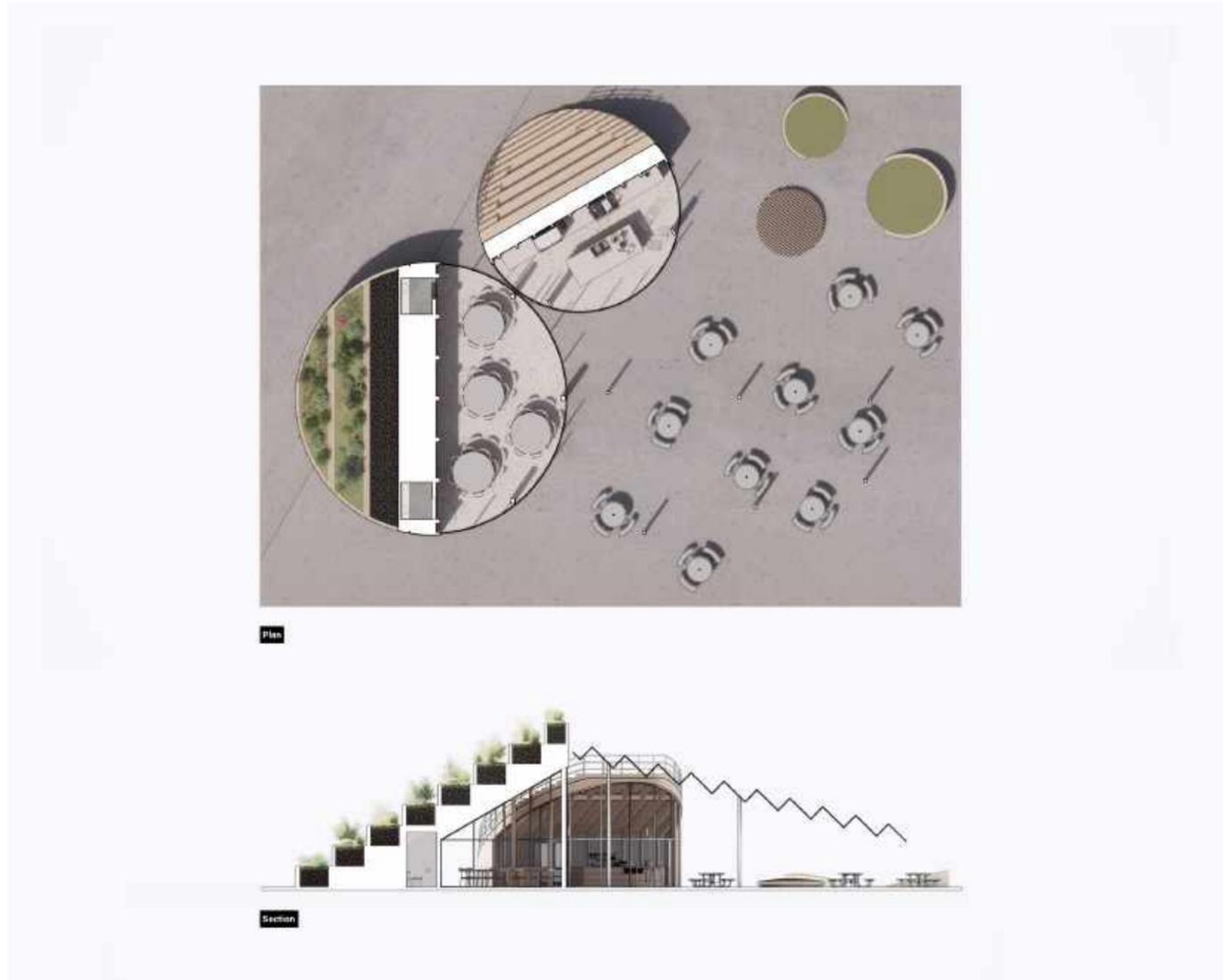
Plan

Section

COOKING HUB - PLAN & SECTION
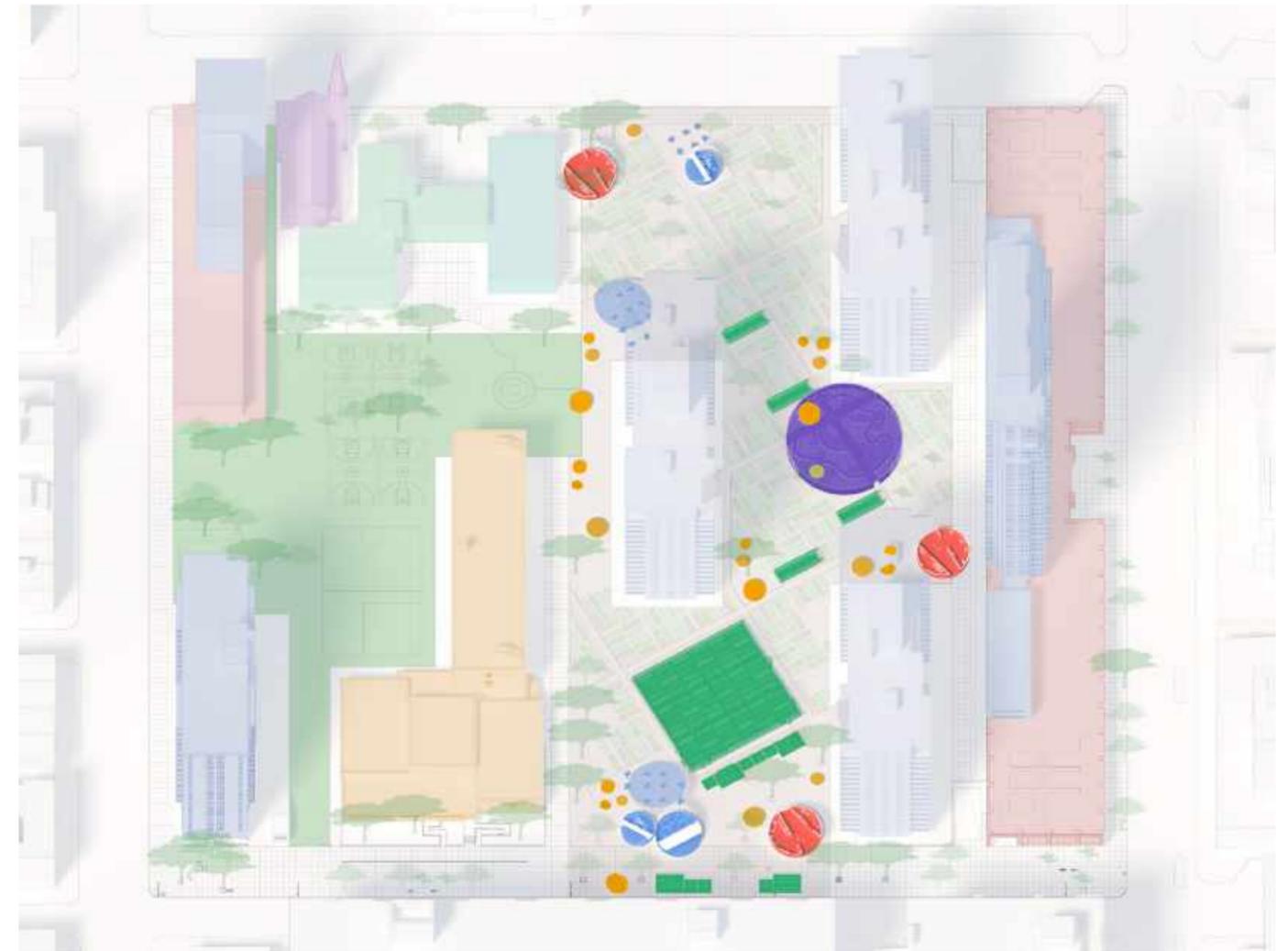
PLAN OBLIQUE

Natural Tectonics

**Columbia University GSAPP**

MArch I

**Advanced IV - Jerome Haferd - Dark Rurality**

Spring 2021

—

Natural Tectonics counters the idea of a virgin landscape to reassign value in the land surrounding Soul Fire Farm as an infrastructure of care and habitation, de-centering the human to create a form of land stewardship.

Soul Fire Farm is a 72 acre BIPOC community farm that shares skills in sustainable agriculture, natural building construction, spiritual activism, health and environmental justice that was looking to expand their campus with a lodge and program center to expand their ability to teach their ways of working with the earth. I propose a new farming and building infrastructure that allows them to connect further with the landscape while providing habitat for natural plants and wildlife.

UNROLLED SITE SECTION
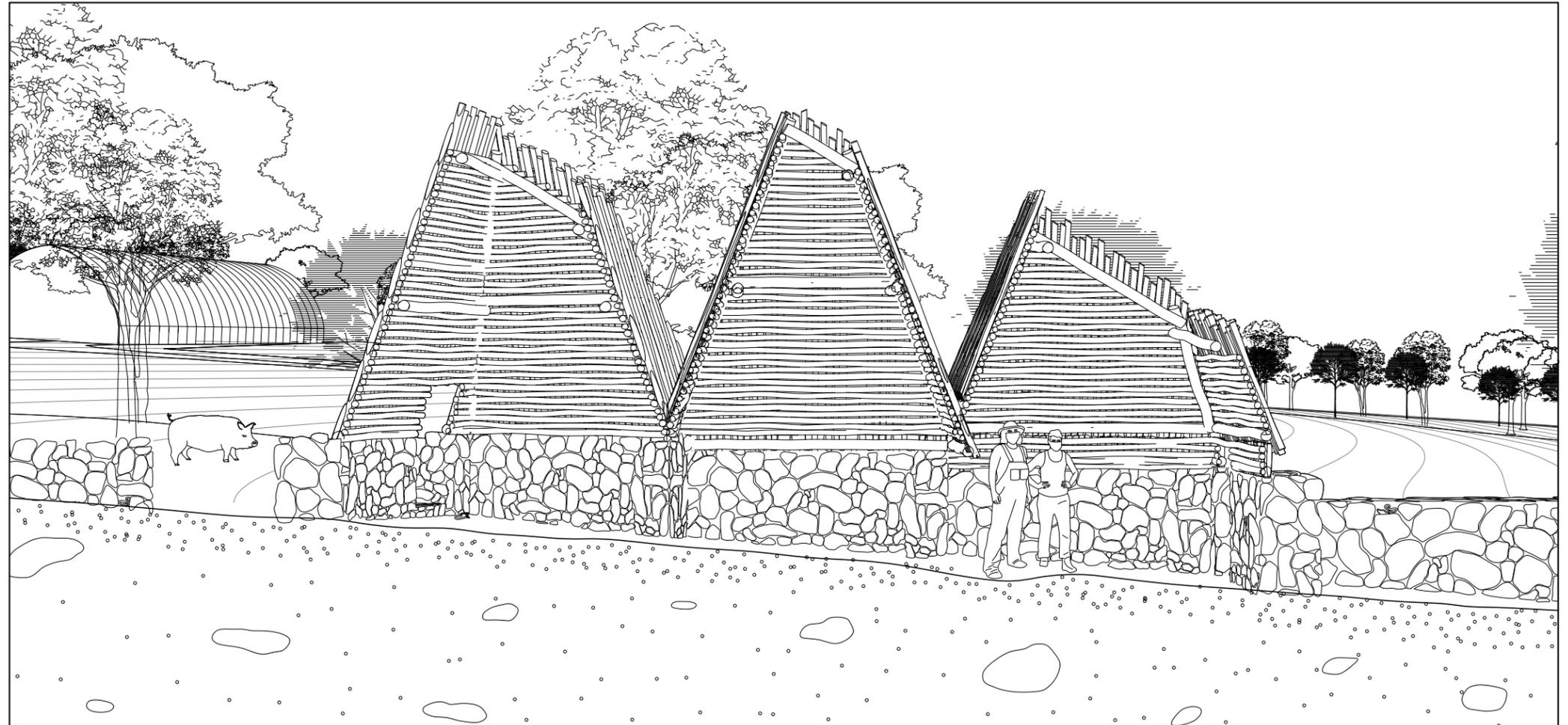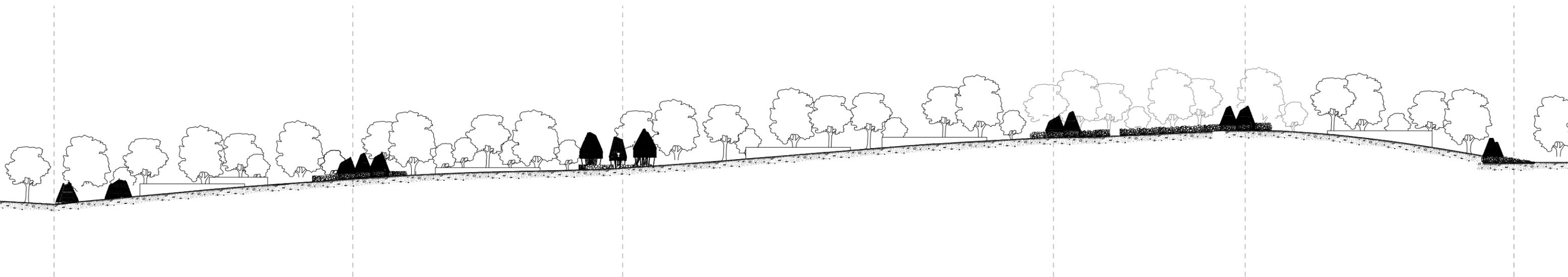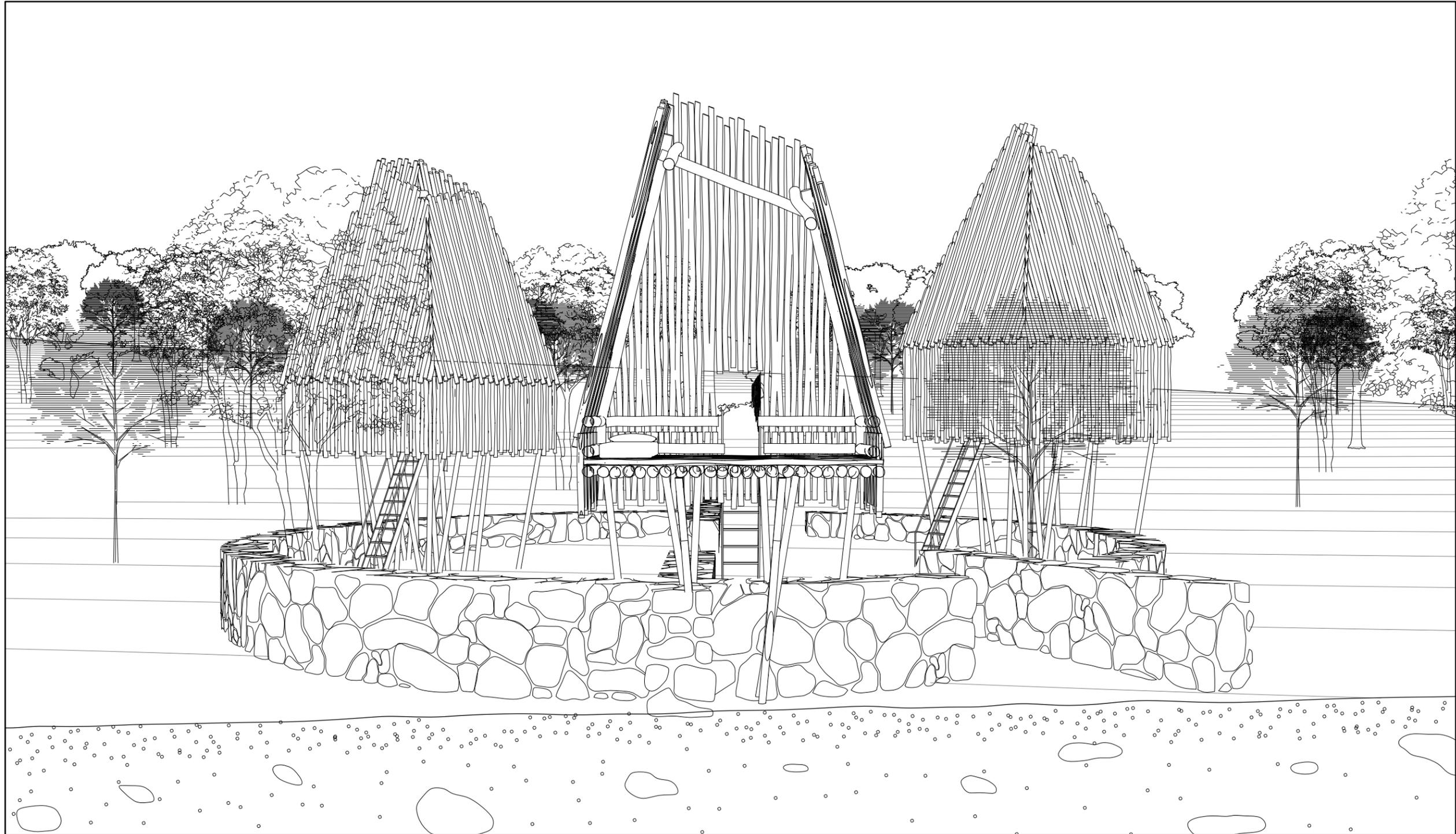
THE NEST - SECTION PERSPECTIVE
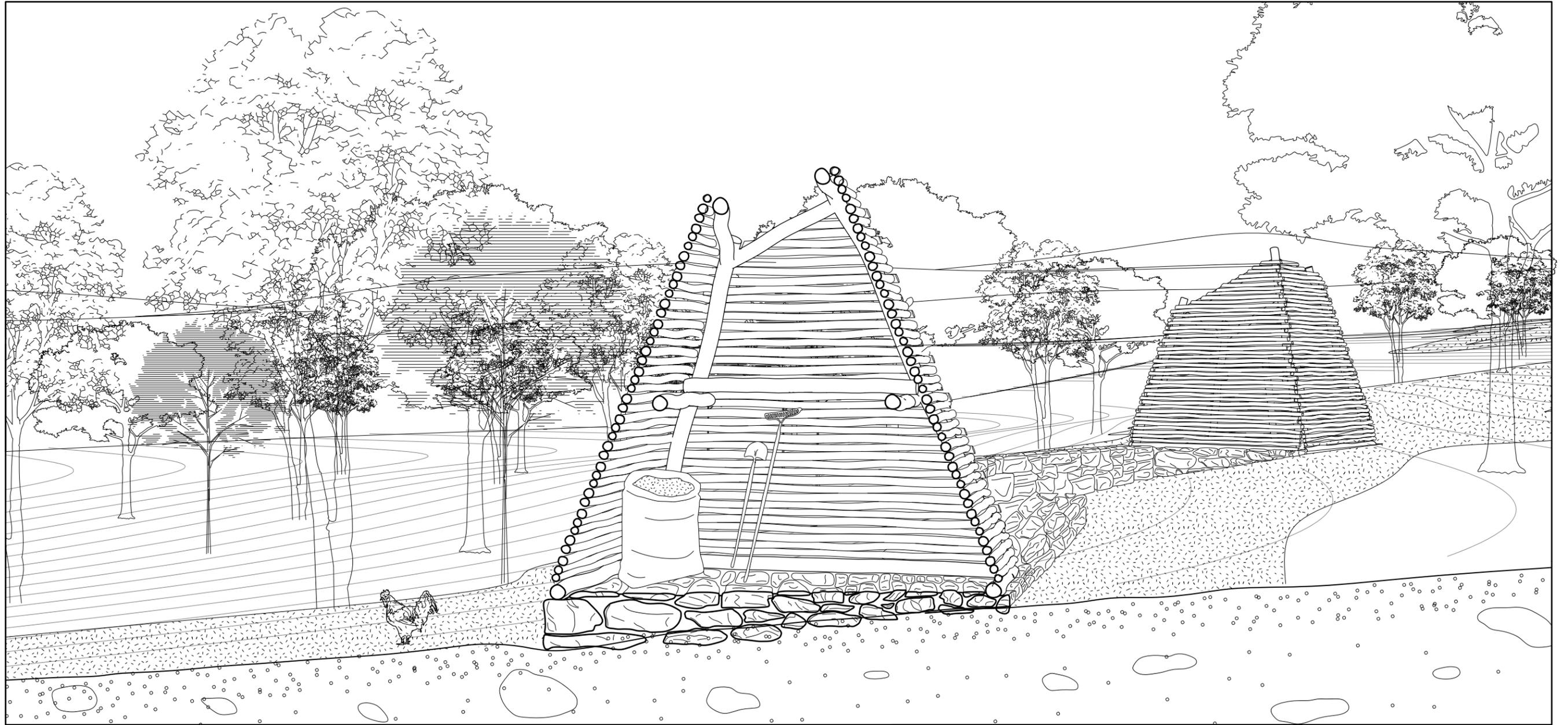
THE FIELD - SECTION PERSPECTIVE

Part Two

These projects look to empower the communities they are for, going beyond their programmatic prescription to create engaging spaces that build interdependencies amongst their extended community. Breaking down the line between public and private to create intimate and inclusive spaces.

Core Community

Columbia University GSAPP

MArch I

Core III - Annie Barret - Living In-Between

**Fall 2020**

Partner: Jo Hee Lee

—

Located in the Melrose neighborhood of the Bronx, our apartment building looked to create interconnected micro-communities for a neighborhood lacking space for collective activities. We addressed the threshold between individual and collective activities and how that manifests in public housing. Our solution is to introduce localized amenities connecting vertical cores; extending the resident's daily activities throughout the building to create micro communities unique to each apartment. The localized amenities create a network through the building, connecting apartments to other apartments, cores, courtyards, and rooftop terraces and complimenting other adjacent amenities. Public space is brought in to the building and courtyards in the form of an extension of the Bronx Documentary Center (existing on site), cafe, daycare, and gym.

Jo Hee and I worked collectively throughout the project. The Hardegg building by Matti Ragaz Hitz in Bern was used as precedence for our project.
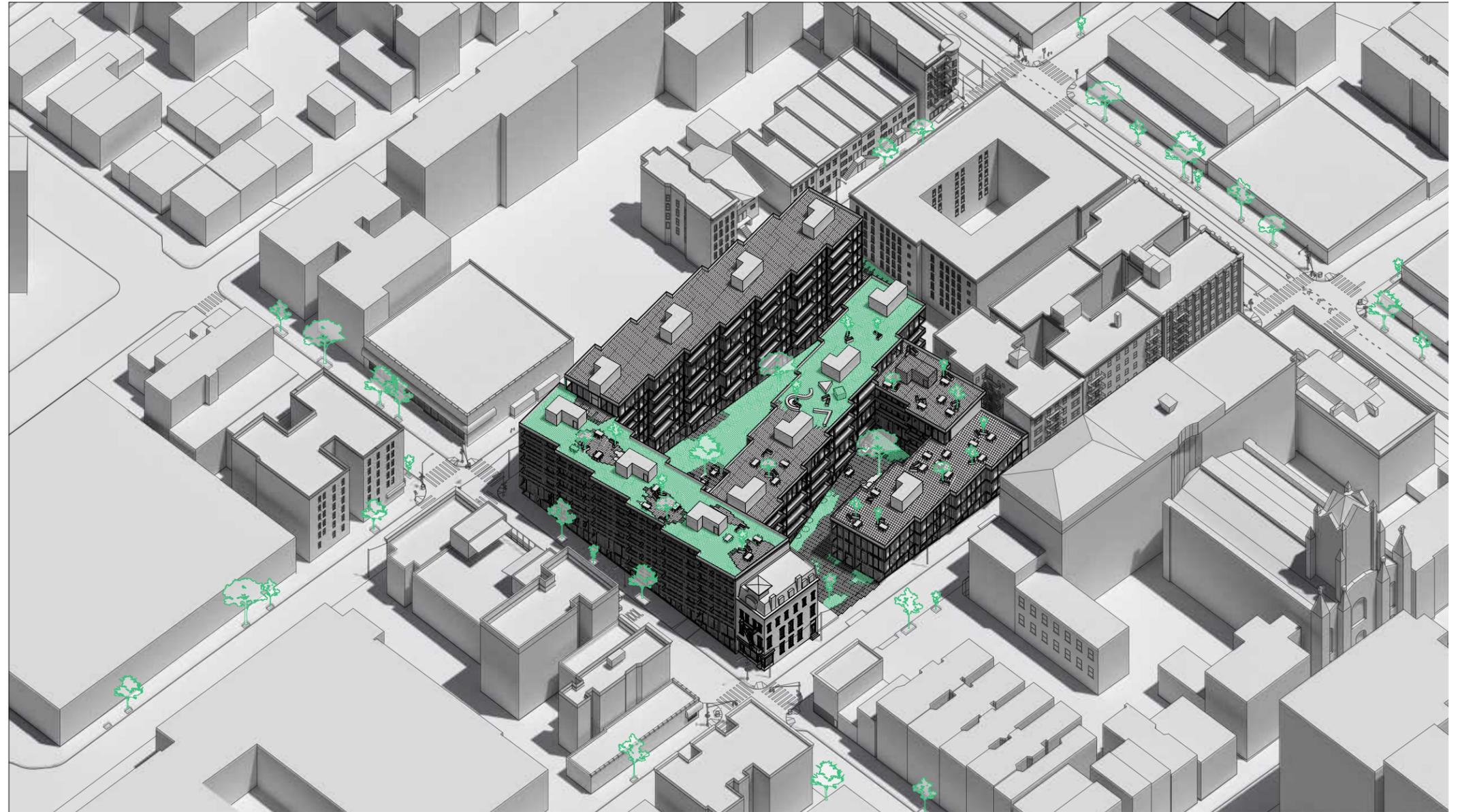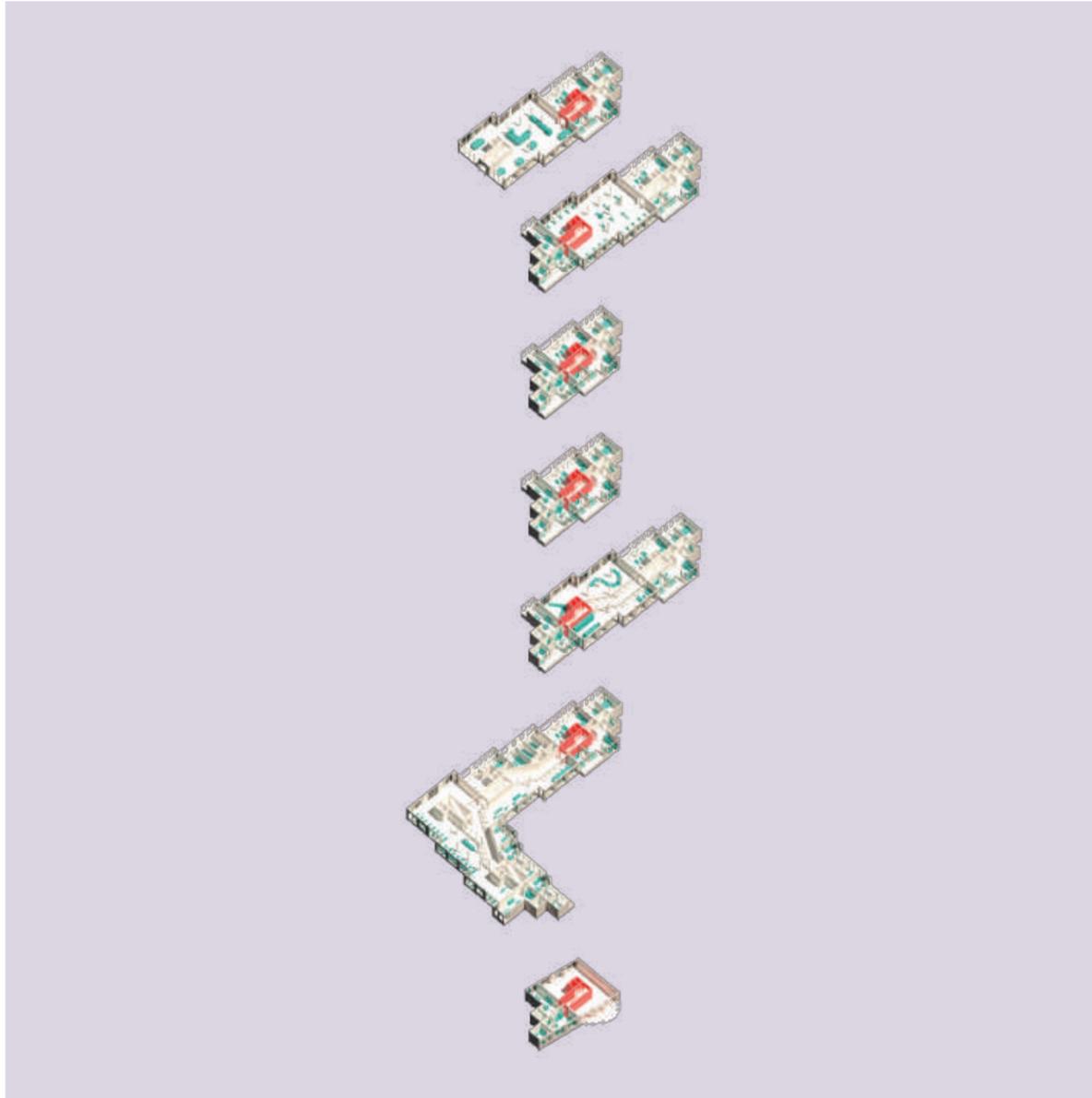
COURTYARD PERSPECTIVE
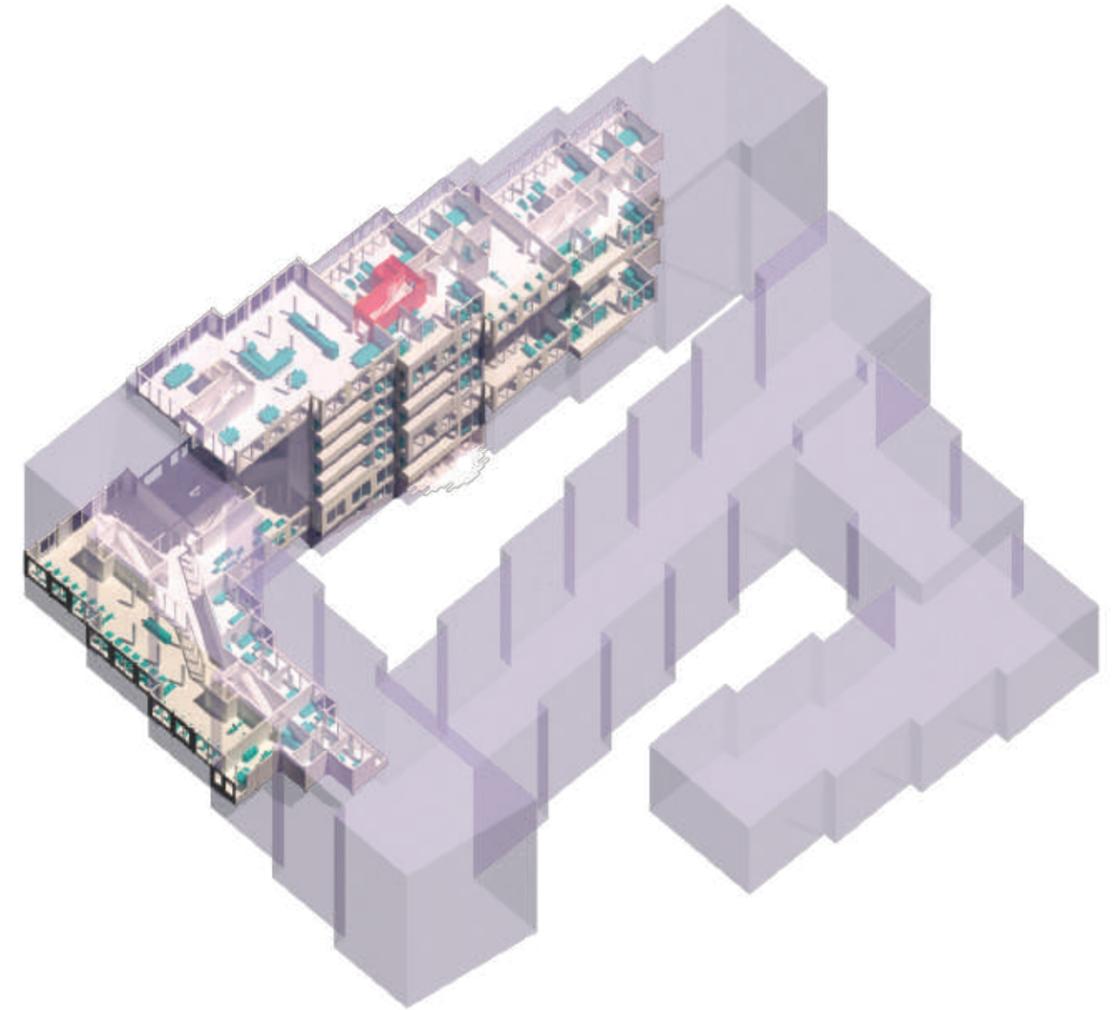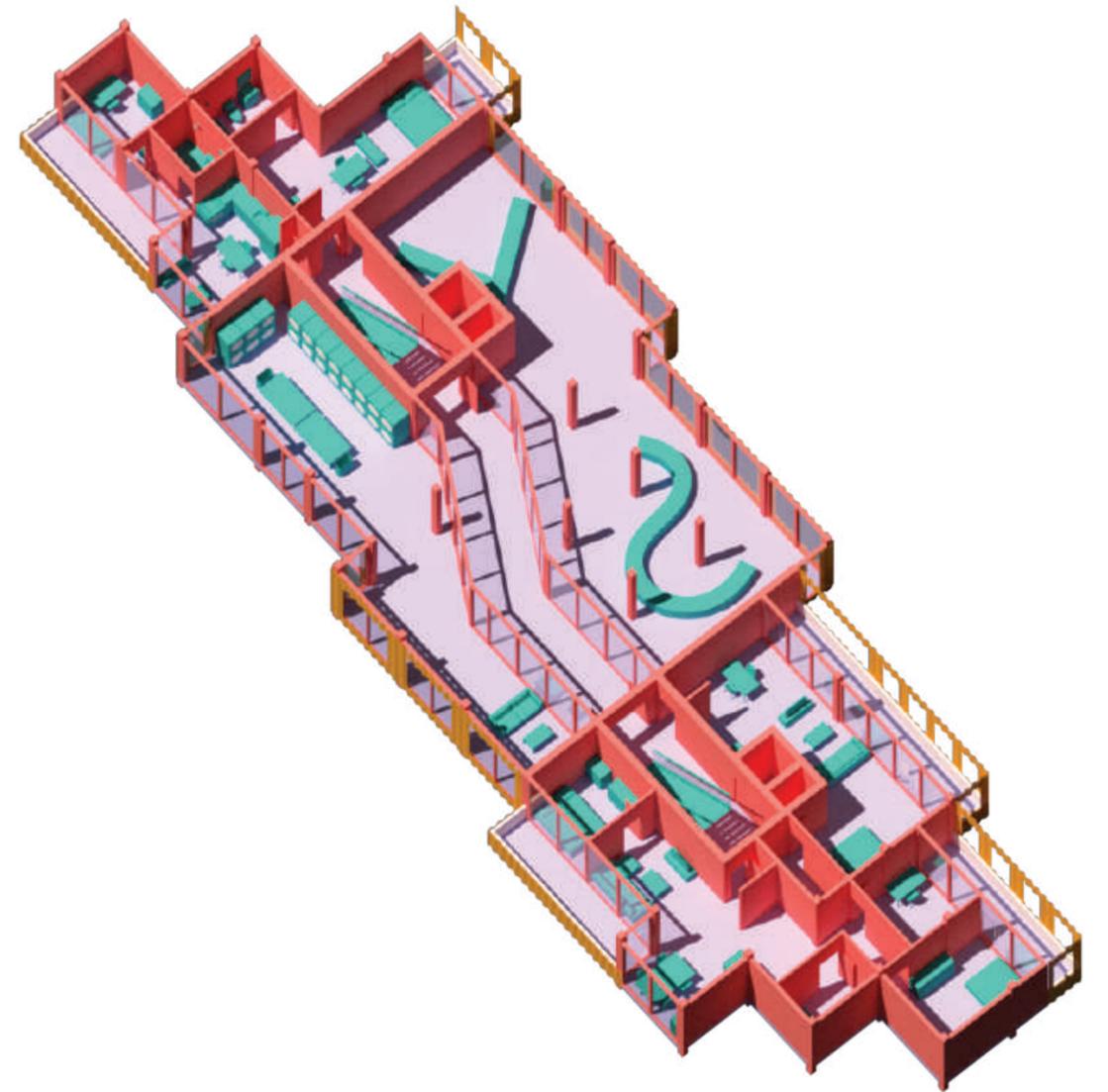
School for Community

Columbia University GSAPP

MArch I

**Core II - Erica Goetz - Adaptive Reuse School**

Spring 2020

—

The project is located in the East Village of New York City and takes an adaptive reuse approach to revive the existing H block school designed by C. B. J. Snyder in 1904. The project looks to bring the community into the school through architectural events that break down the line between the school and the surrounding neighborhood. The public programs are extracted, reorientated to the neighborhood, and then reinserted back into the school while maintaining their presence on the exterior. This reorientation skews the public programs from the building and city grid and its heavily axial views, creating a new perspective on the city and a visual and physical connection between the school and neighborhood. Spaces are organized within the building based on levels of public interaction with the program. Each space's interaction with the building then begins to inform the interior spaces. Sectional shifts create opportunities for play spaces with uneven ground or double height conditions. The public programs make a connection back to the community while creating a dynamic interior space.
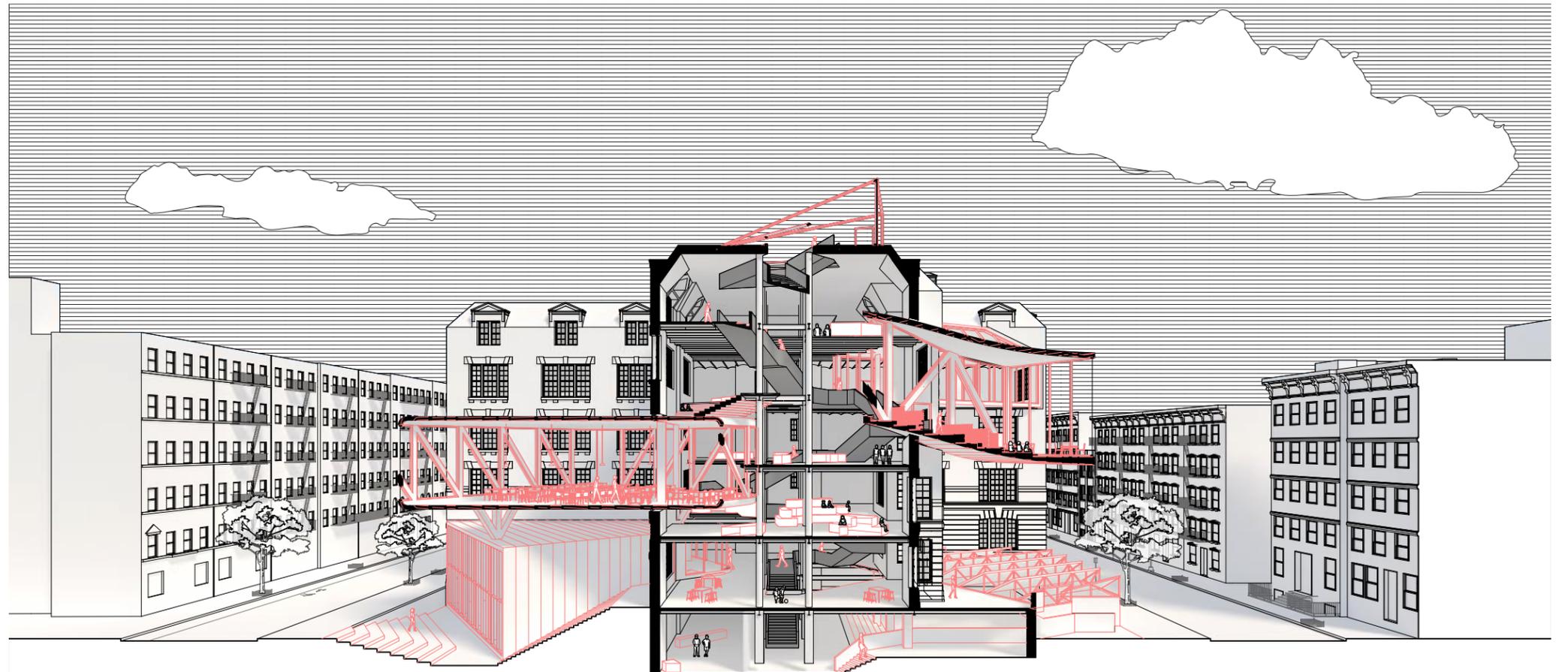
SECTION PERSPECTIVE
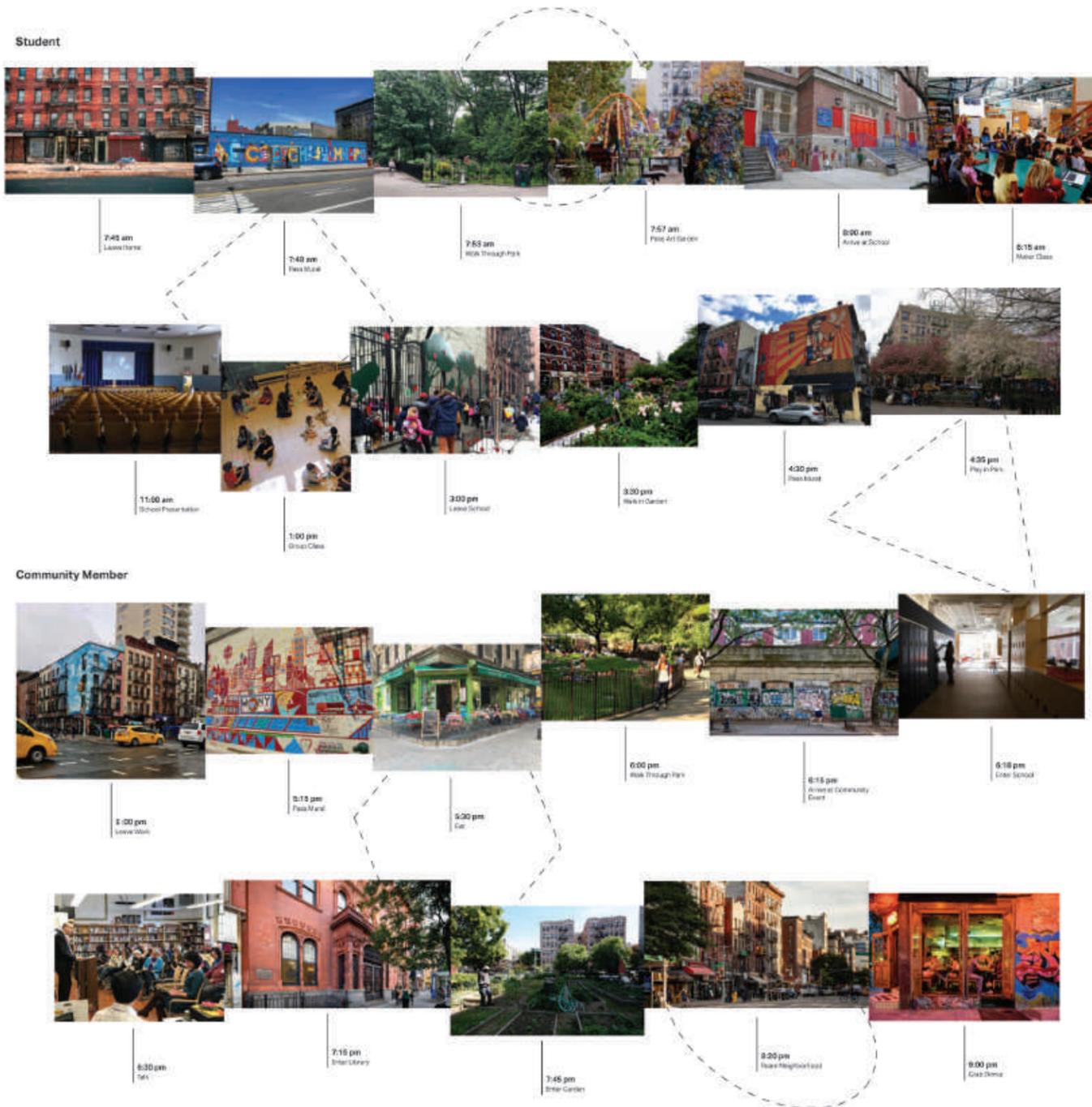
SITE ANALYSIS FILM STRIP
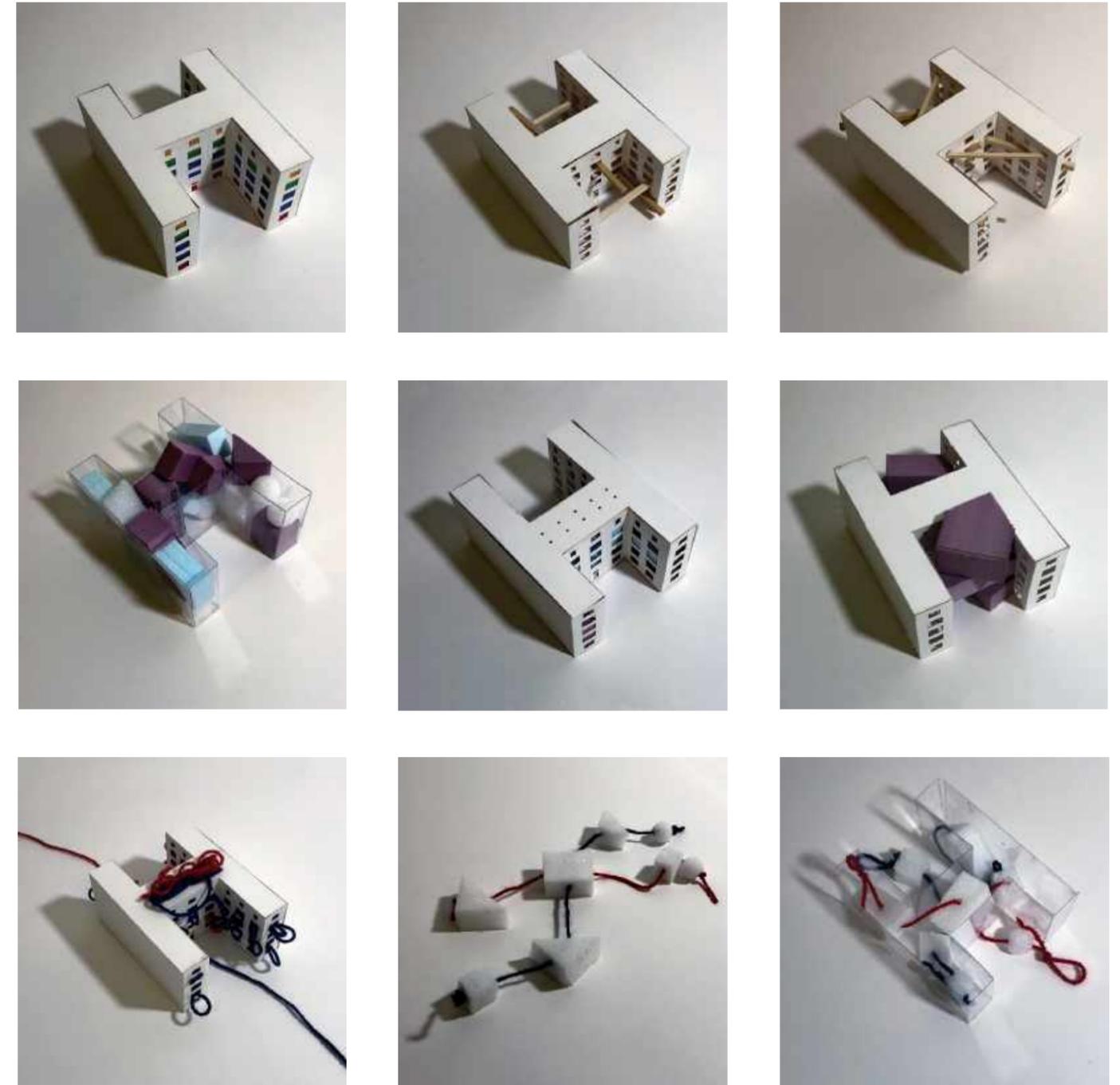
CONCEPT MODELS
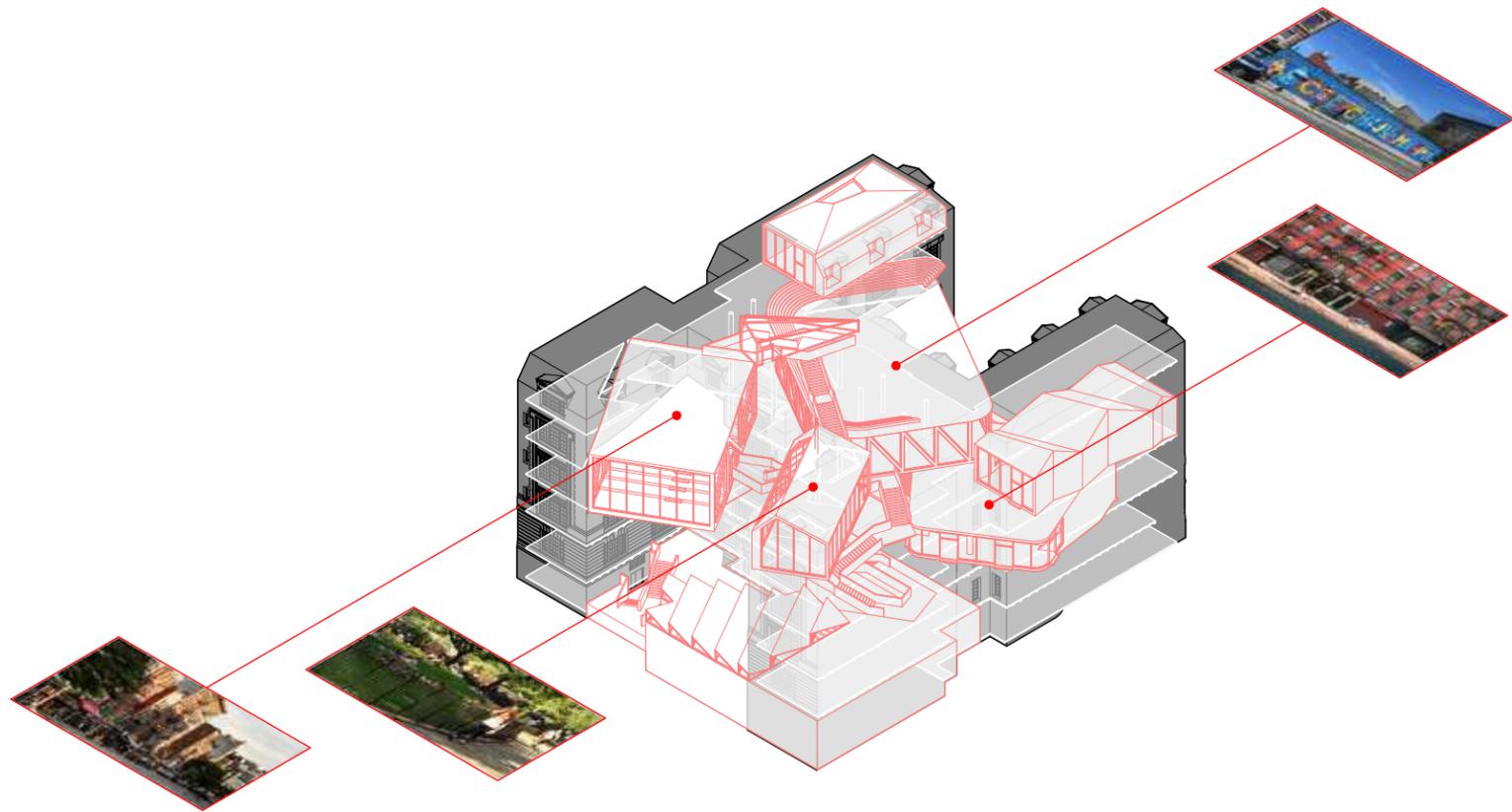
Roof Terrace

Art Space/Gallery

Wood Shop

Library

Music/Performance Space

Restaurant/Food Lab

Auditorium/Theater

Gym

FIRST FLOOR PLAN

THEATER

LOBBY

ADMINISTRATION

MEDICAL

SECOND FLOOR PLAN

CLASSROOMS

FOOD LAB

RESTAURANT

PLAY SPACE

CLASSROOMS

CLASSROOMS

THIRD FLOOR PLAN

MUSIC ROOM

PLAY SPACE

LIBRARY

CLASSROOMS
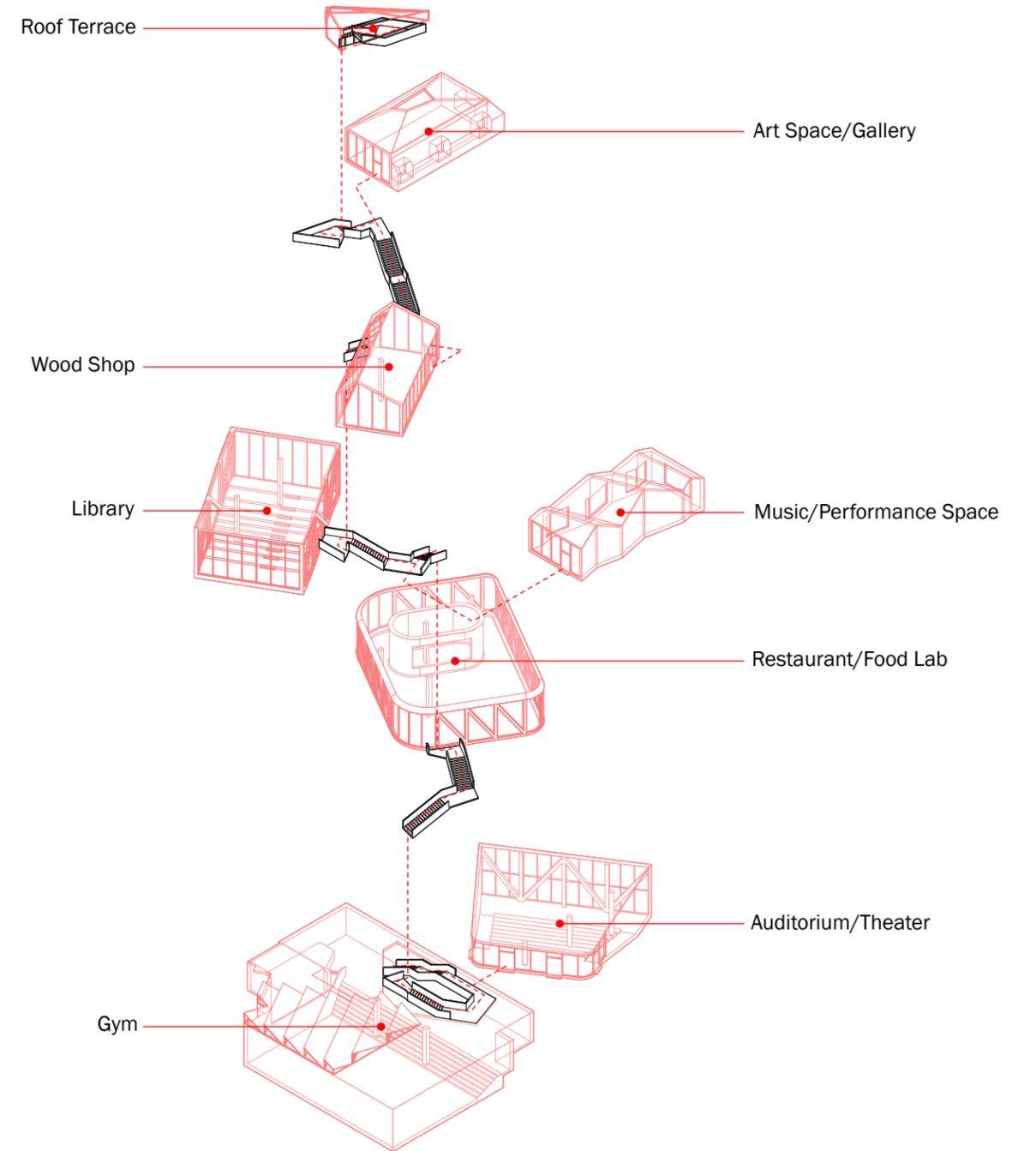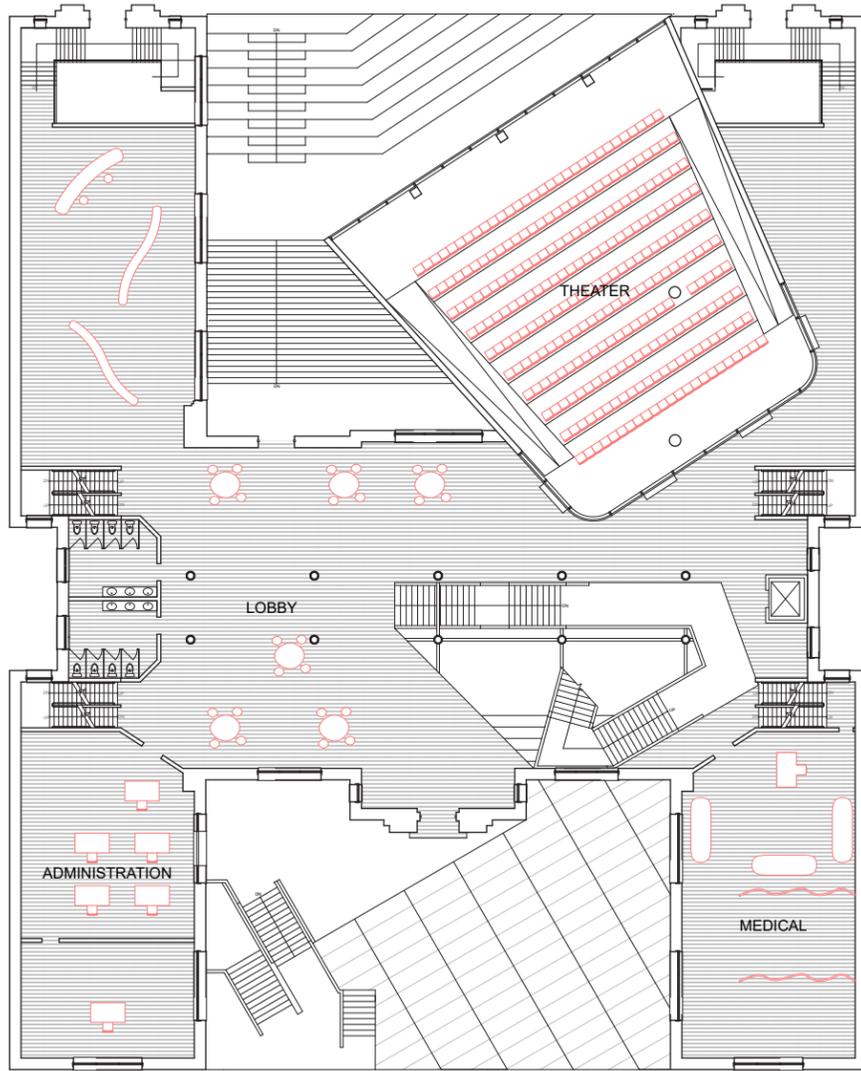
PLANS
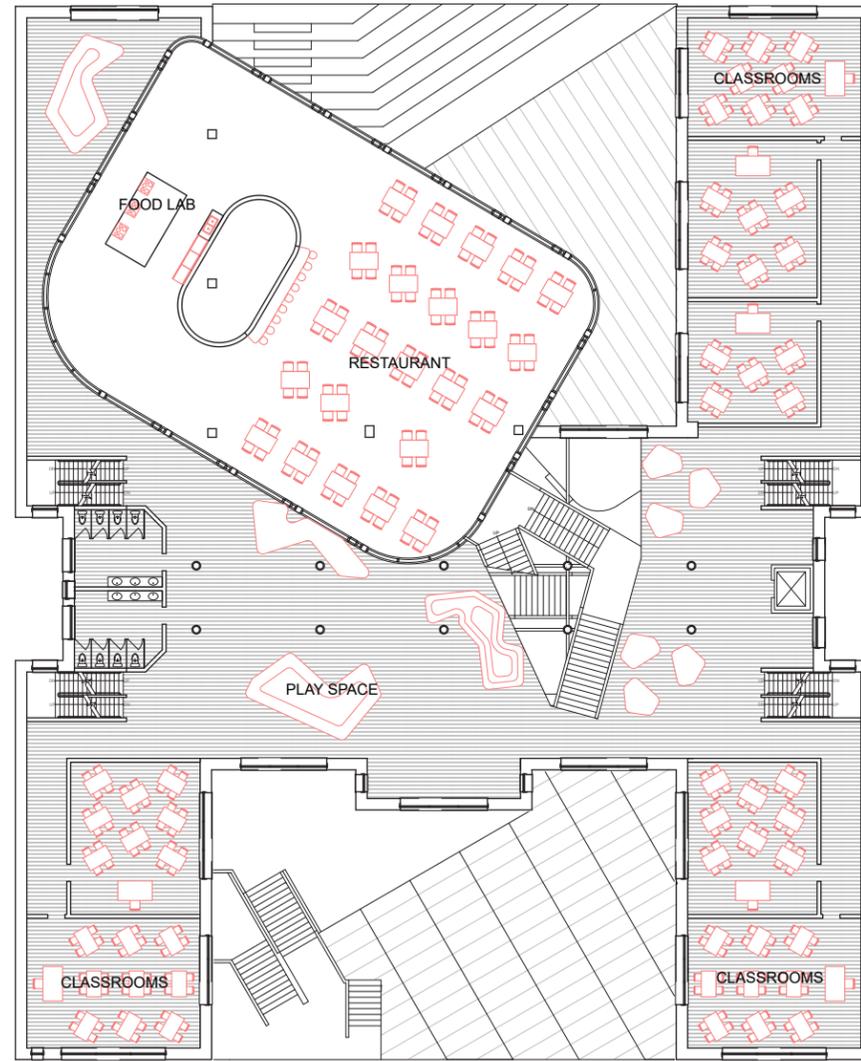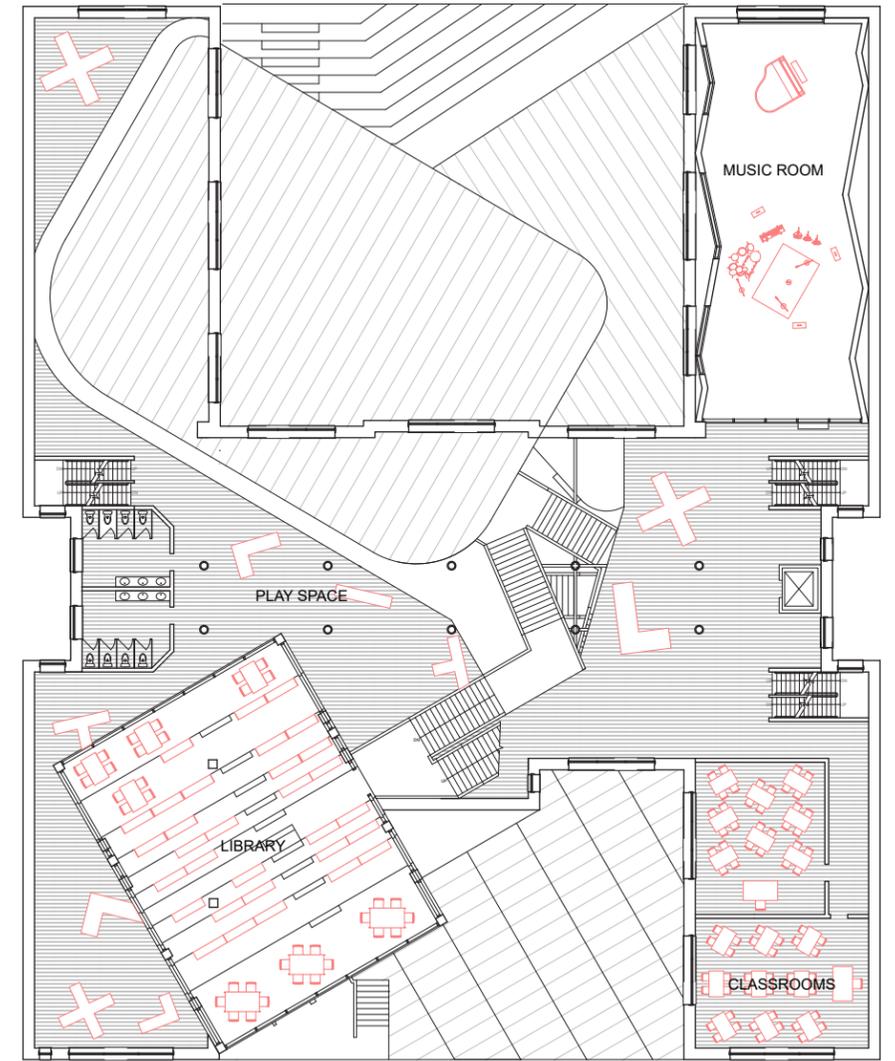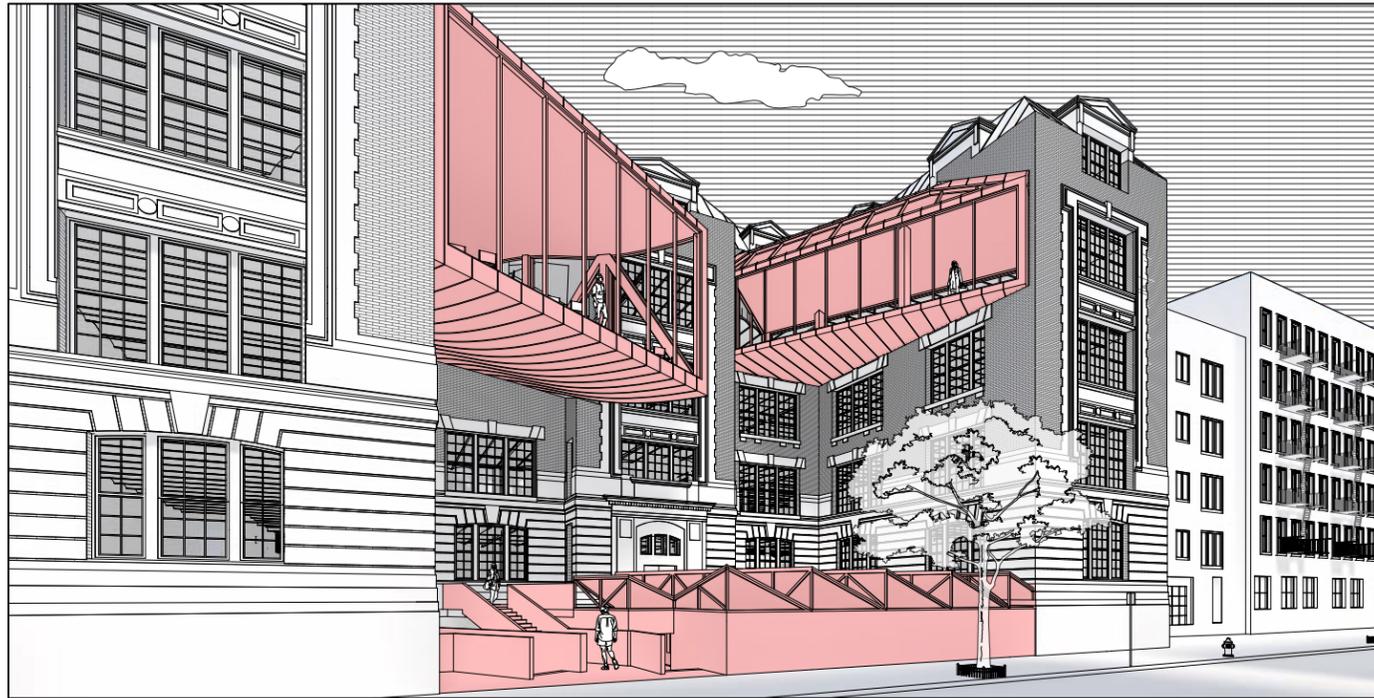
PERSPECTIVE AT 9TH ST
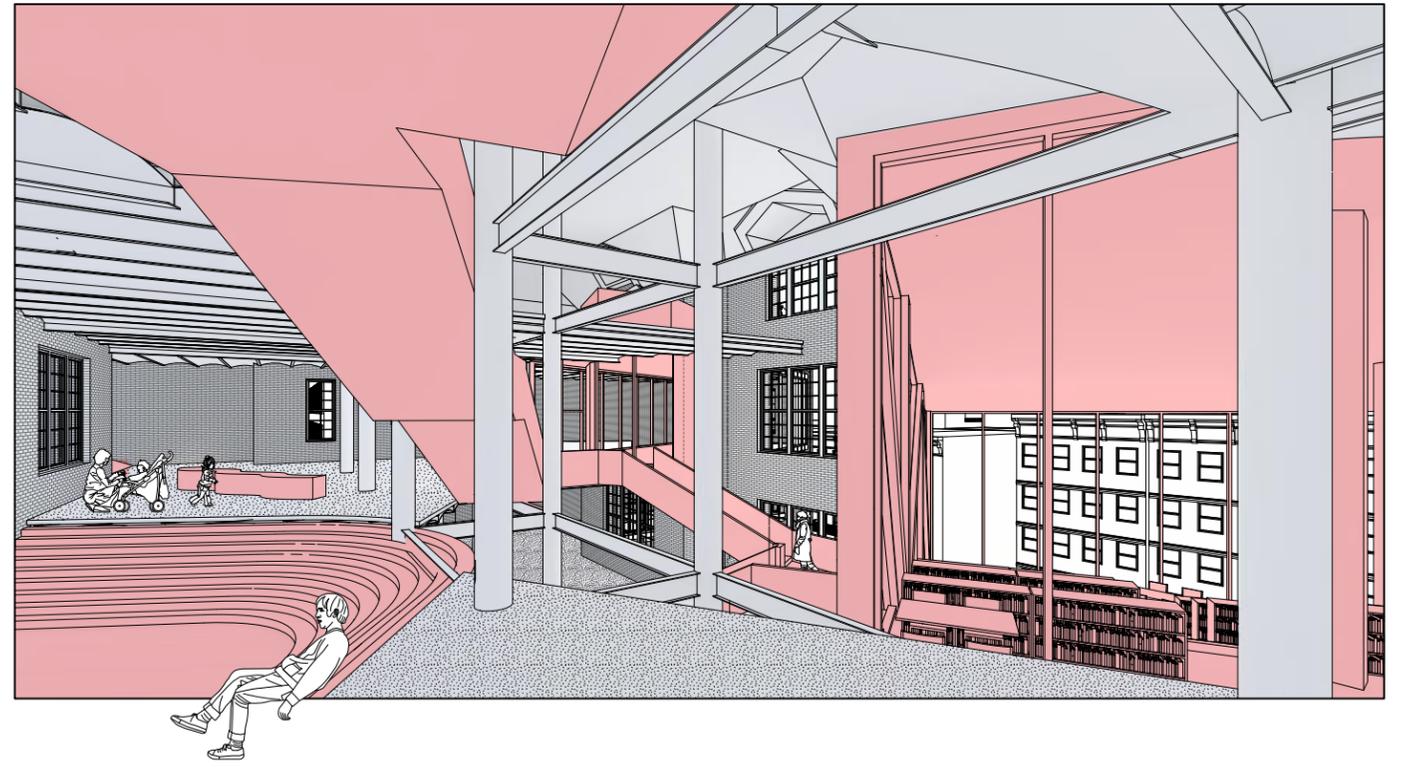
FOURTH FLOOR PERSPECTIVE
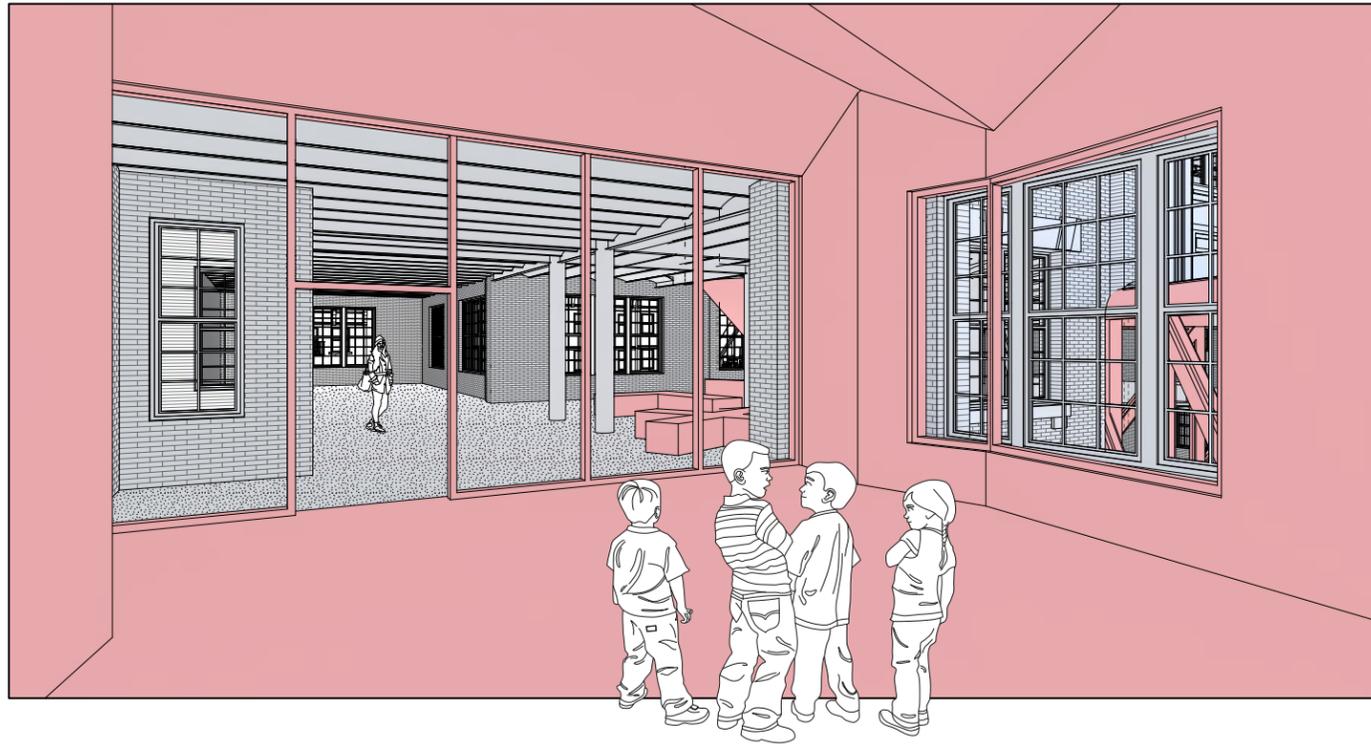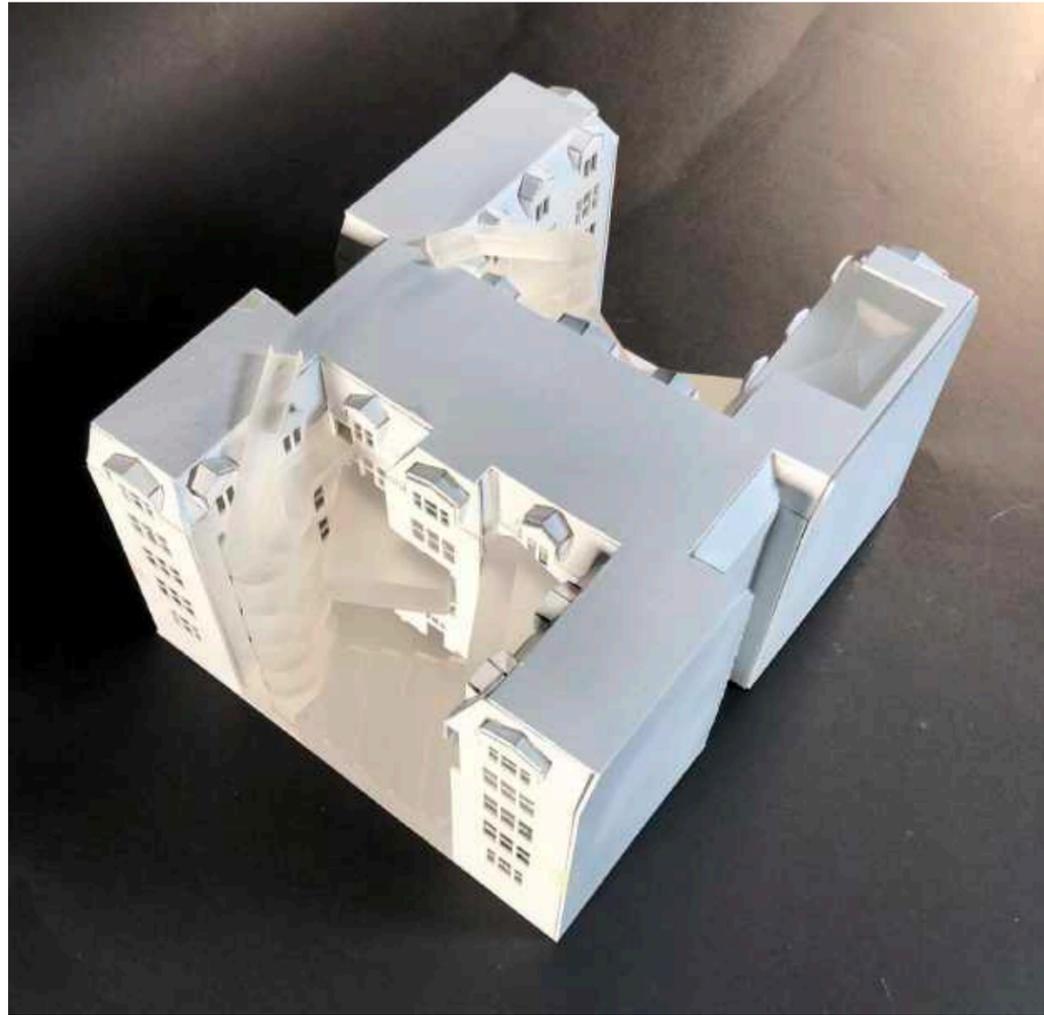
MODEL ISOMETRIC
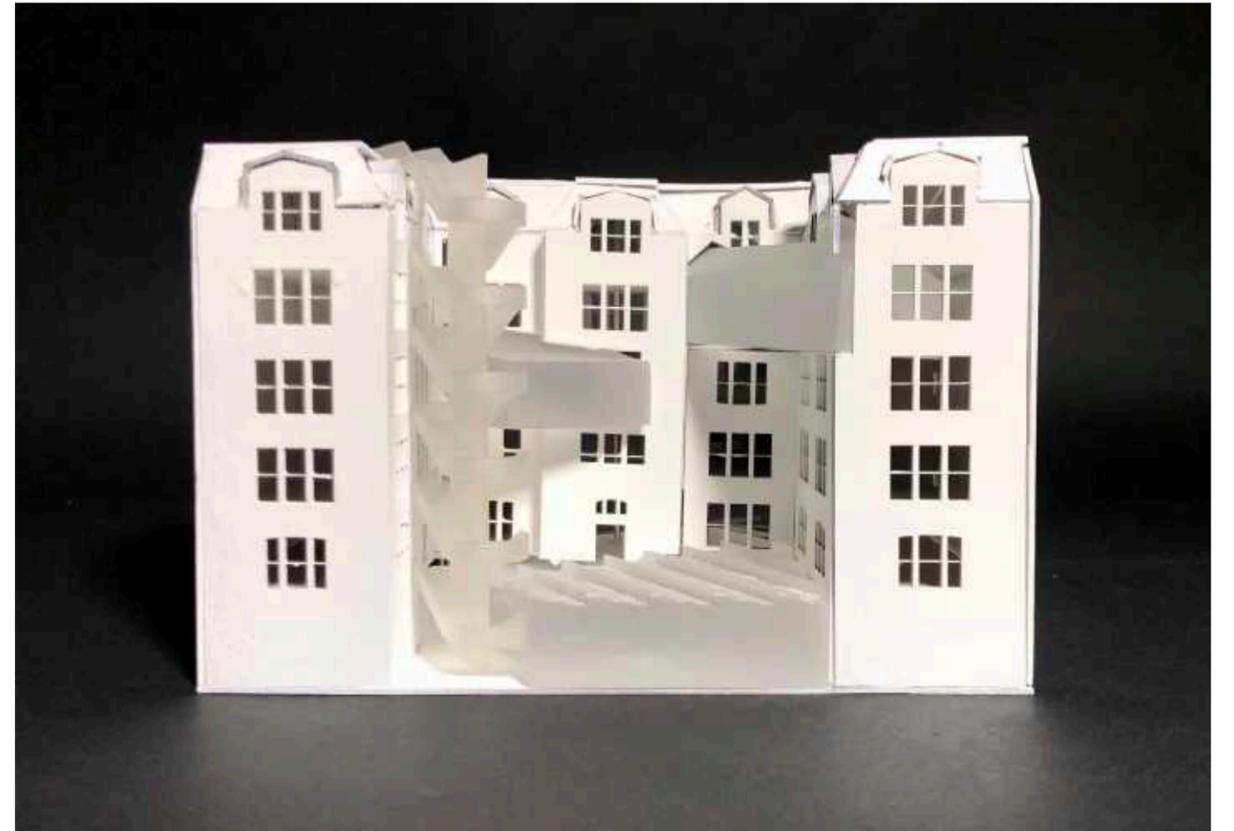
MODEL ELEVATION

Broadway Stories II

Columbia University GSAPP

MArch I

Core I - Lindy Roy

Fall 2019

—

Looking at the median as a resource, this project exists in a smart street future where medians become an integral part of the greater smart street system. The intervention acts as a charging hub where one can spend their time in the park or performance space. The form is derived from using the concrete median as a datum and how the intervention can begin to interact with the infrastructure around it, moving above the street to provide a new vantage point and below to interact with the subway. This move allows for the creation of four different types of spaces; indoor, semi-enclosed, covered and outdoor space which then promote different activities. An interior performance space, enclosed observation platform, and an elevated meadow are created.

CONCEPT MODEL
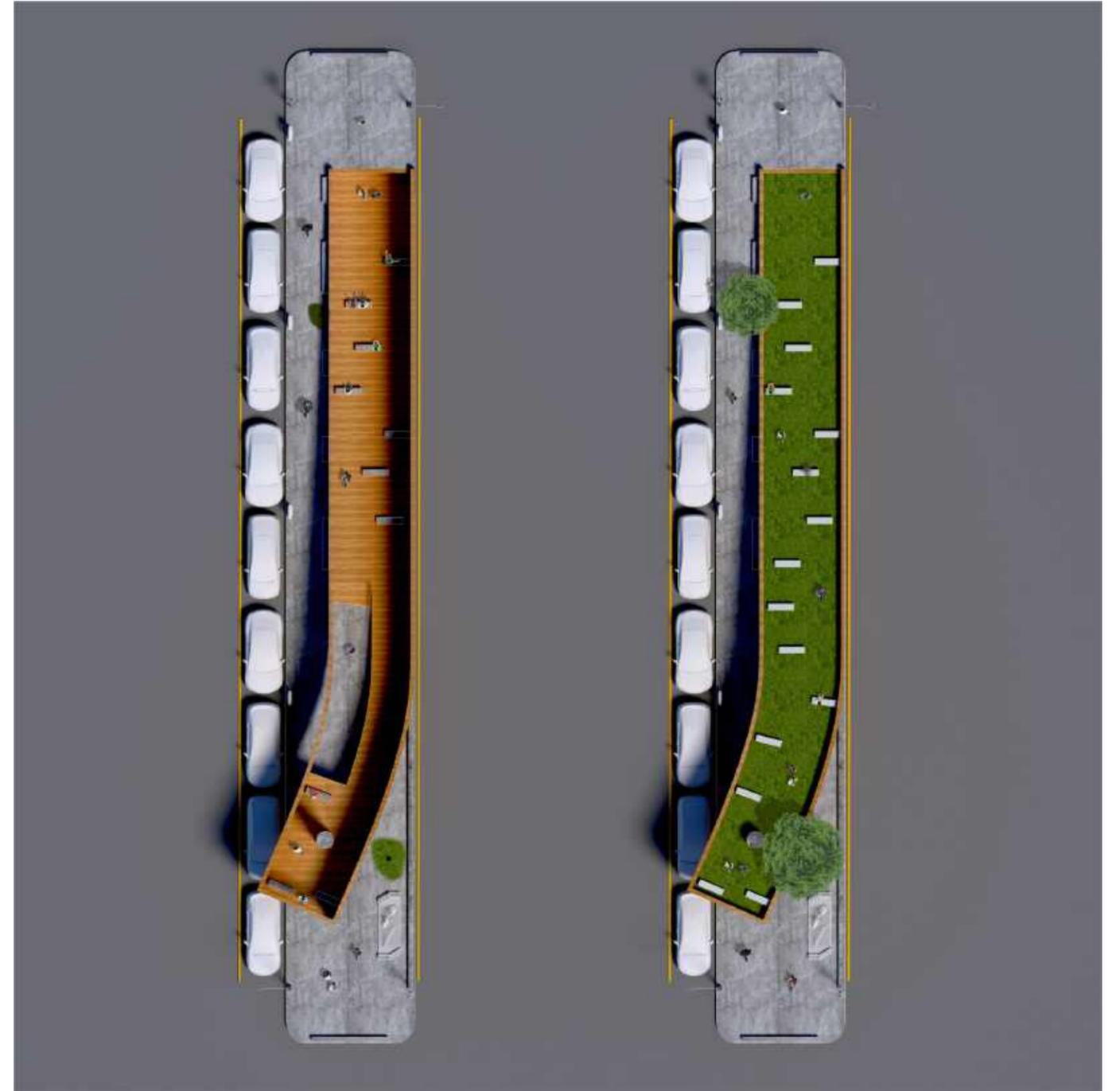
PLAN

Part Three

Tech, Visual Studies, and History

—

The following works are experiments in technology and making in the physical and digital realms. They accompany and compliment the previous work. You'll find architecture of varying scales, a website and a book entry.

Melrose Community Center

Columbia University GSAPP

MArch I

AT III & IV

Fall 2020

Partners: Livia Calari, Hazel Villena, Kaeli Streeter

—

The project looks to create thermal diversity by creating an atrium and courtyard space within the building which creates several thermal transition zones as well as allowing cross ventilation and day light to penetrate the building. The terracotta facade screen creates a dynamic and contextual front to the building while regulating sunlight and responding to the interior program to provide privacy.

As a group we worked on the development of the initial design in Rhino until I transferred the project into Revit. As a team we split the tasks of detailing and annotating the architectural, MEP, structural, and facade elements. I worked on program layout, structural detailing and facade screen design.


PLAYGROUND COURTYARD RENDERING
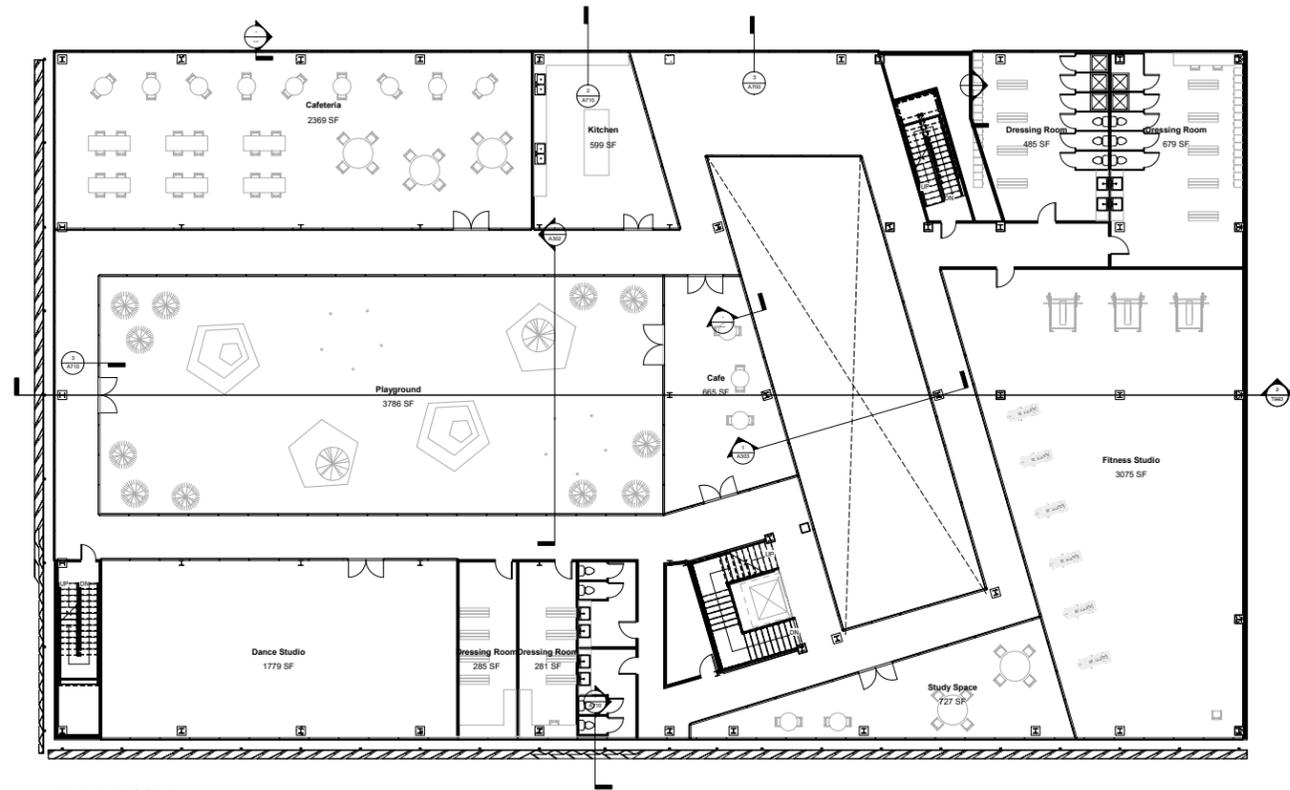
THIRD FLOOR PLAN
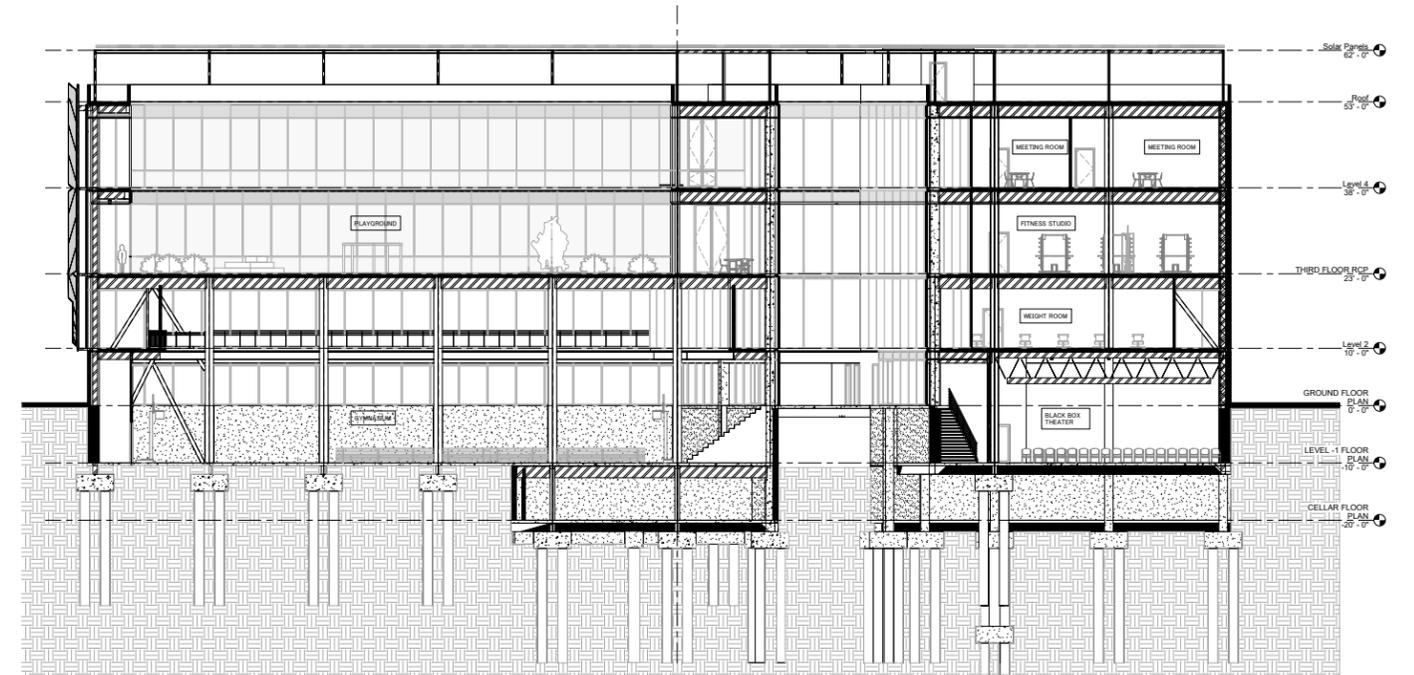
SECTION THROUGH ATRIUM AND COURTYARD

ALUMINUM
FLASHING

PARAPET WALL

Roof
55' - 0"

SPANDREL PANEL

W16X40

COMPRESSION STROUT

W10X26

W24X55

GYPSUM CEILING

GLAZED
ALUMINUM
WINDOW WALL
SYSTEM
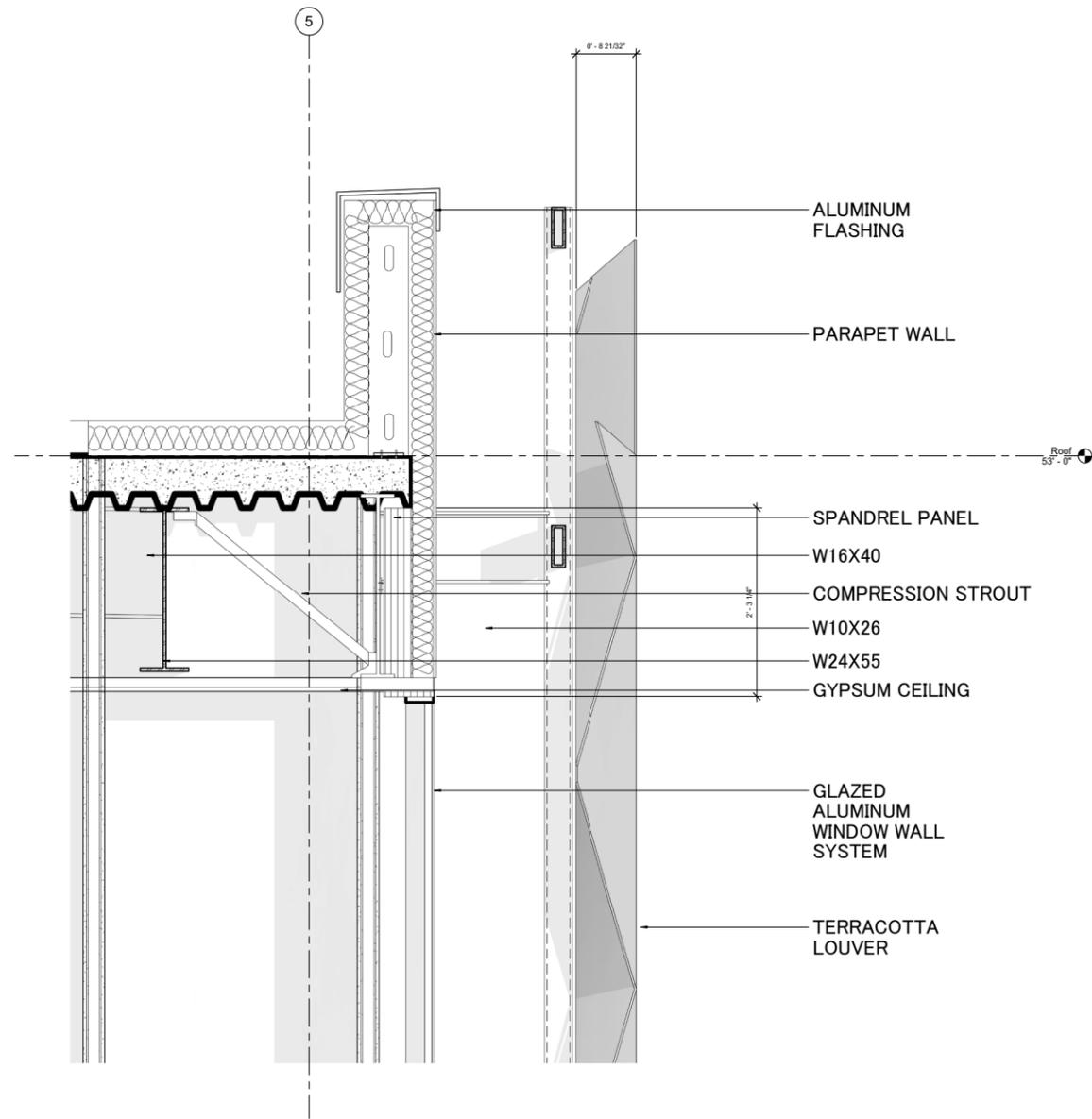
TERRACOTTA
LOUVER

TERRACOTTA FACADE CONNECTION DETAIL
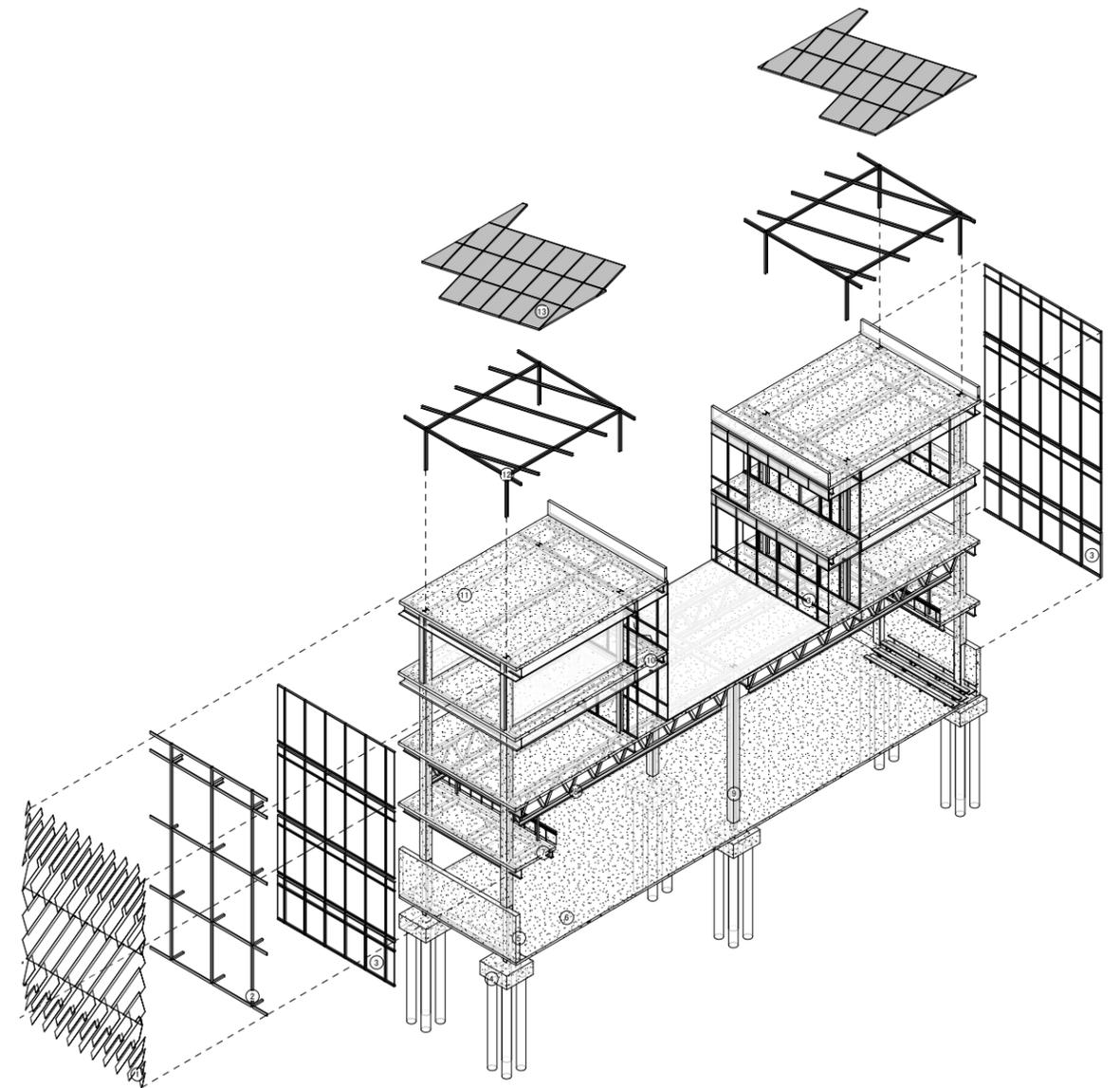
STRUCTURAL SYSTEM EXPLODED AXON

Asymmetric Column

Columbia University GSAPP

MArch I

Transitional Geometries - Josh Jordan

Fall 2021

—

The tile explores how the introduction of asymmetries to a pure geometric form creates variation once the tile is turned into an aggregated form.

By first adding a sloped surface to the top of the tile, numerous variations in stacking are created. Co-opting the initial mold with the addition of subtractive inserts create further variety and begin to abstract the original form creating openings as the tiles stack.

FACADE DETAILING AND DESIGN - ALLISON SHAHIDI, BISHER TABBAA, HENRY BLACK

Facade Detailing

Columbia University GSAPP

MArch I

Facade Detailing - Kevin Schorn

Spring 2022

Partners: Allison Shahidi, Bisher Tabbaa

—

This course focused on the detailed design of building cladding through an understanding of materials and their physical properties. We began the semester analyzing a specific cladding material's properties, fabrication, and implementation. We then looked at a previous project to further work out the details on. Using Ally and Bisher's housing studio project we developed the details for the atrium roof, operable balcony window wall, and a standard wall/window/slate cladding system detail.

Oasis Tower

Columbia University GSAPP

MArch I

Techniques of the Ultrareal - Joe Brennan

Fall 2020

Partners: Adeline Chum, Asher McGlothlin, Ben Diller-Schatz

—

This project was developed collectively with the skills learned throughout the semester in Ultrareal. We created a staircase that would act as a beacon in the desert, drawing travelers to the oasis. The staircase overpowers the lightweight structure as you move up to the observation deck at the top. We worked in Rhino to model the tower and then imported to 3DS Max to develop the scene. Material was developed within VRay; atmosphere, context, and plants were developed within 3DS max with material maps and Forest Pack

As a team we made a lot of changes to the initial design, building off each iteration to achieve the desired effect. Collectively we worked on a material palette that then began to drive the design and environment it would be placed in. With the design feedback of the group, I produced the final design for the tower and placed it within the landscape that Adeline had made. I used Forest Pack to populate the landscape and created the environmental effects within the render. No photoshop was used in the production of the rendering.

RENDERING

Food as Soft Power

Columbia University GSAPP

MArch I

Conflict Urbanism - Laura Kurgen

Spring 2021

Partners: Gizem Karagoz, Caroline Maxwell, Adam Vosburgh

—

While food can transcend cultural boundaries, it is also a site of conflict. This research focuses on the superfluous nature of corporate supply chains. In this study, the broader systemic fractures of the food system are revealed through the examination of corporate infrastructures' role in exacerbating food insecurity in the Hudson Valley during the COVID-19 pandemic.

How does food infrastructure perform as a tool of soft power? Our research illuminates the increasing vulnerability of food the further it travels from its source and the apparatuses of infrastructural dependency embedded within the Hudson Valley food system. By examining infrastructure and the injustices within it, we hope to render visible the systemic issues present in our broader food systems. The Covid-19 pandemic has exacerbated the inefficiencies and weaknesses within corporate food infrastructure, so the argument for a local, sustainable, and just food system becomes critical for our shared future.

Kingston

click here for full screen version of this map

Kingston Nodes on Supply Chains

We mapped nodes on a long and short supply chain for Kingston. In this map red being for points on a long supply chain, yellow for short, orange for both

Forms of Resistance

Forms of resistance to corporate supply chains include grassroots organization, local food pantries, community fridges, farmers markets, and meal delivery services. When corporate supply chains such as Walmart collapsed during the Covid-19 pandemic, local systems were able to continue operating which created community resilience despite the circumstances.

Conclusion

Kingston

click here for full screen version of this map

Long Chain - Travel Distance

Going off of publicly accessible information and then phone calls to Walmart itself we were able to make a few decent assumptions. The trips on the journey for a longer supply chain is a farm, a processing facility, distribution center, and Walmart. Three of Walmarts main suppliers are located in Washington State, New York State, and Canada, and they are all owned by or subsidiaries of Super Fresh Growers. For the domestically sourced apples, the trip from Washington state is 2800 miles, and the average distance of Sweet Tango's orchards (Sweet Tango is a subsidiary of Super Fresh Growers) is about 250 miles, all of their farms are located near the Canadian border. The Walmart distribution centers themselves are located in clusters around Schenectady and Scranton, 80 miles from Kingston. These long chains, supposedly the result of market efficiencies, instead express the logic of consolidated ownership structures.

Forms of Resistance

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Conclusion

Kingston

click here for full screen version of this map

Short Chain - Travel Distance

A primary orchard that sells its produce at Kingston Farmers market is Maynard farms, an 8 mile drive away. Maynard farms is one of thousands of small or mid-sized hudson valley farms whose produce are left out of larger supply chains because of their lack of access to large distributors, resulting in these "short chains" that are made through direct community links as an alternative infrastructure. The result of a food system running at peak market efficiency for consolidated actors is grocery stores stocked with products not from the incredible agricultural wealth they are surrounded by, the pricing of which makes them unaffordable to over 10% of the population.

Forms of Resistance

Forms of resistance to corporate supply chains include grassroots organization, local food pantries, community fridges, farmers markets, and meal delivery services. When corporate supply chains such as Walmart collapsed during the Covid-19 pandemic, local systems were able to continue operating which created community resilience despite the circumstances.

Conclusion

World of Matter

Mabe Bethonico, Paulo Tavares, et al.

2013

Book: Ephemeral Architectures and Falsified Cities

Columbia University GSAPP

MArch I

Utopian Visions - Luis Carranza

Fall 2020

Partners: Class Project

—

This research seminar set out to study utopias/ utopian communities conceived and planned throughout Latin America primarily in the 19th and 20th centuries. We looked in depth at the different forms proposed, the manifestos of their designers, and the context that engendered them and to which they responded. Students individually examined a Latin America utopia and the research was compiled into a book.

World of Matter is currently a group of 14 artists, researchers, journalists, filmmakers, activists and architects from around the world, that since 2013, have been exploring global ecologies and resource exploitation with an intent of shifting the conversation away from a capitalist narrative to a publicly engaged one. They are combating the notion that these natural resources are solely for human consumption and need to be consumed in ethical ways that consider the fragile system we exist within.

The project currently consists of a book of the same name published by the MIT Press and 27 works that range in topics like mining and its exploitation of resources and workers, cotton production and the influence of big industry, overfishing and its effect on migration, urban demand and politics effect on rural resources, planning as an export of the urban, and the water ecologies of the Nile. These projects make use of visual material for its accessibility in educating and raising public awareness on projects that increasingly touch on topics hidden from the public realm. The Utopia is thus represented in exhibitions, events, publications, and through photos, films, and writings on their online platform (www.worldofmatter.net).

Location: Minas Gerais, Brazil/ Quito, Ecuador

Type of Utopia: Rural/City, Ideal/ Conceptual

Utopian Attributes: Capitalocene focused, labor rights, land rights

Bibliography:
Arns (2015), Sarkis and Salgueiro (2020)

2000
Crutzen/Stoermer
Anthropocene Hypothesis

2016
Malm/Moore
Capitalocene Hypothesis

Biography

Mabe Bethonico has an MA and PHD in Fine Arts from the Royal Academy of Art in London and her artistic practice "involves long-term research projects resulting in visual and sound pieces, installations, lectures, publications and websites, using documentary sources and field recordings." She is Professor of Fine Arts at the Federal University of Minas Gerais, lectures and gives workshops worldwide.

World of Matter is Mabe Bethonico, Ursula Biemann, Uwe H. Martin, Helge Mooshammer & Peter Mörtenböck, Emily E. Scott, Paulo Tavares, Lonnie van Brummelen & Siebren de Haan. For this book we will focus on the works of the two Latin American members: Brazilian artist and researcher Mabe Bethonico and Brazilian architect and urbanist Paulo Tavares.

Mabe Bethonico's first project Mineral Exploitation, focuses on capitalism's history, exploitation of labor, and ecological destruction in the mines around Minas Gerais, Brazil. Working with the German philosopher Anselm Jappe they provide a visual and research analysis of Georgius Agricola wood cut cataloguing of mining processes titled De re metallica that mechanized that actions of mining in a way that predated Taylorism by three centuries. Anselm touches on the fact that Mining is one of the toughest and longest forms of labor saying "the harvest in agriculture will end with the last stalk - but if the worker is to accumulate gold for his boss, there is no limit to the work that is imposed on him, because there is no limit to the gold that can be accumulated."

"The harvest in agriculture will end with the last stalk - but if the worker is to accumulate gold for his boss, there is no limit to the work that is imposed on him, because there is no limit to the gold that can be accumulated."
- Anselm Jappe

(Facing)Georgius Agricola's Wood Cuts; Ministry of Labour and Employment Photographs of Mine Conditions

Biography

In 2008, the new constitution of Ecuador was created. With pressure from indeginous people, the new constitution added the Non-human Rights in which Nature, like humans, is defined as a subject of the law. Paulo explores this process through interviews, video archives, and writings.

In 1990 the philosopher Michel Serres wrote The Natural Contract. In this book he writes "we so-called developed nations are no longer fighting among ourselves; together we are all turning against the world. Literally a world war, and doubly so, since the whole world, meaning all men, imposes losses on the world, meaning all things. We shall thus conclude a peace treaty."

Paulo interviews the main actors in the fight between indigenous peoples and the government for land rights and non-human rights. This change takes the form of several protests in country and urban settings. He begins with an interview of Alberto Acosta and a video showing the expulsion of the military from indegenious lands. With this Acosta ties the rights of nature to the larger emancipation of humanity, a continuous expansion of rights. By ensuring the right to nature, we are ensuring a habitable world and thus the rights of humans to exist.

Paulo Tavares is a Brazilian architect and urbanist based in Quito and London whose work looks at the relations between conflict and space as they occur at multiple scales. He combines design, media-based cartographies and writing which has published and featured in shows in Glasgow, Berlin, and Teipei. He teaches architecture at the Universidad Católica de Ecuador - Facultad de Arquitectura, Diseño y Arte, Quito, and previously held teaching posts at the Centre for Research Architecture - Goldsmiths, and at the Visual Lab of the MA in Contemporary Art Theory, also at Goldsmiths, UK. Writings appeared in many publications worldwide and his work has been exhibited in various venues including CCA: Centre for Contemporary Arts - Glasgow, Haus der Kulturen der Welt - Berlin, Portikus - Frankfurt and the Taipei Biennial 2012.

humanity has turned into
the equivalent of a natural force

(Facing) Sorres Quote from Prologue: Worldly War video

"Nature or Pachamama, where life is reproduced and exists, has the right to exist, maintain and regenerate its vital cycles, structure, functions and evolutionary processes. Every person, people, community or nationality, can demand the enforcement of the rights of nature before public institutions"
    - The Rights of Nature